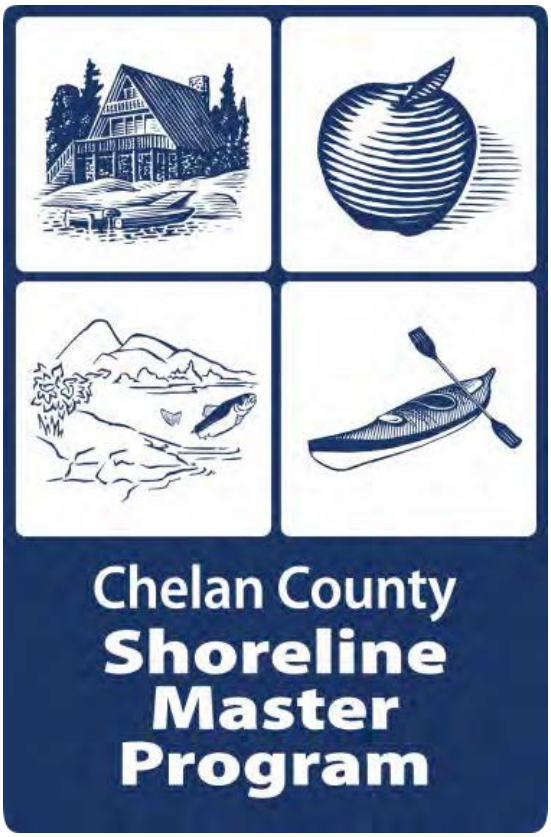

Chelan County Board of County Commissioners approved per Resolution 2021-076 on June 8, 2021.

WA Dept of Ecology approval effective September 30, 2021



Twin Lakes (1), Summer 2015

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SHORELINE MASTER PROGRAM CHELAN COUNTY

READER'S GUIDE

Chelan County and its Cities developed and adopted Shoreline Master Programs (SMPs) in 1975 for the purpose of "focusing comprehensive, coordinated planning attention at the critical land-water interface". That SMP was developed over 40 years ago and since then much has changed along Chelan County shorelines. In addition, knowledge of best development and conservation practices has evolved. There have also been changes in State laws and rules.

This SMP has been prepared to meet the requirements of the Shoreline Management Act (RCW 90.58), the implementing State rules codified as Chapter 173-26 and Chapter 173-27 of the Washington Administrative Code (WAC) "State Master Program Approval/Amendment Procedures and Master Program Guidelines" that were revised in 2017, and other applicable local, state, and federal laws.

The SMP is developed locally, but must meet the Shoreline Management Act and implementing State rules, and is subject to approval by the Washington State Department of Ecology (Ecology) before it can be implemented.

Chelan County and the Cities of Cashmere, Chelan, Entiat, Leavenworth, and Wenatchee conducted nine Vision Workshops in fall 2008 to capture citizen questions, concerns, goals and aspirations regarding shorelines. The Vision Workshop results have factored into the development of this SMP.

When reading the SMP, it is useful to consider the definitions of the following terms that are based on definitions in the State Shoreline Master Program Guidelines (WAC 173-26-020):

- Shall or must: means a mandate; the action must be done.
- Should: means that the particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and shoreline master program, against taking the action.
- May: means the action is acceptable, provided it conforms to the provisions of this shoreline master program and the Act.

In general, this SMP uses the word "should" in goals, objectives, and policies, and "shall" in the regulations. Additional definitions are located in Chapter 8.

Each chapter and section is related and, depending on the scope of a project, may apply to a specific use or development.

In June 2021, Chelan County completed the SMP Periodic Review process in coordination with Ecology pursuant to RCW 90.58.080. The process included a public workshop in September 2020. During the Periodic Review process, approximately 249 comments were received through April 2021, including comments regarding shoreline designation buffers that were modified as part of the 2019 SMP Update. It was determined that the buffer width modifications are consistent with the best available science and that shoreline buffers are adequately protected per the recommendations from BERK Consulting in the *Chelan County SMP Update Buffer and Vegetation Conservation Proposal Review* (2017). Chelan County has determined that any changes to the shoreline buffers are unnecessary to reflect changing local circumstances, new information or improved data. A locally initiated amendment to the shoreline buffers adopted in 2017 is outside of the scope of this periodic review process. Along with public testimony, an additional 10 written comments were accepted by the Board of County Commissioners in May 2021, and have been incorporated as appropriate.

1 AUTHORITY AND PURPOSE

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1.1 The Shoreline Management Act

Washington State's citizens voted to approve the Shoreline Management Act of 1971 in November 1972. The adoption of the Shoreline Management Act (Act) recognized

> *"that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization, protection, restoration, and preservation"* and that *"coordinated planning is necessary in order to protect the public interest associated with the shorelines of the state while, at the same time, recognizing and protecting private property rights consistent with the public interest"* (RCW 90.58.020).

The Act seeks to provide environmental protection for shorelines, preserve and enhance shoreline public access, and encourage appropriate development that supports water-oriented uses.

Under the Act, shoreline master programs are created and implemented based on a *"cooperative program of shoreline management between local government and the state"* (RCW 90.58.050). The roles are defined as:

> *"Local government shall have the primary responsibility for initiating the planning required by this chapter and administering the regulatory program consistent with the policy and provisions of this chapter. The Department [of Ecology] shall act primarily in a supportive and review capacity with an emphasis on providing assistance to local government and on insuring compliance with the policy and provisions of this chapter." (RCW 90.58.050)*

In recognition of the Act and citizen ideas collected through a local shoreline planning process, Chelan County has developed this SMP, and continually implements and administers it through shoreline permits and reviews. The

Washington State Department of Ecology (Ecology) reviews and approves local master programs and certain local permit decisions.

1.2 Authority

This SMP is enacted and administered according to the following state law and rules:

A. The Shoreline Management Act of 1971, Chapter 90.58 RCW;

B. State master program approval/amendment procedures and master program guidelines, WAC 173-26; and

C. Shoreline management permit and enforcement procedures, Chapter 173-27 WAC.

1.3 Applicability

All proposed uses and development occurring within shoreline jurisdiction must conform to the intent and requirements of the laws and rules cited in Section 1.2 and this SMP whether or not a permit or other form of authorization is required.

All policies, within this SMP or the appendices, are to guide the interpretation and enforcement of the SMP regulations. The policies are not regulations in themselves and, therefore, do not impose requirements beyond those set forth in the regulations.

A. This SMP applies to all development, the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, minerals or vegetation; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters of the state subject to Chapter 90.58 RCW at any stage of water level. Development does not include the following activities:

   1. Interior building improvements;
   2. Exterior structure maintenance activities, including painting and roofing, as long as it does not expand the existing footprint of the structure;
   3. Routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning and weeding;
   4. Maintenance of the following existing facilities that does not expand the affected area: septic tanks (routine cleaning), wells, and individual utility service connections;
   5. Dismantling or removing structures if there is no other associated development or redevelopment;
   6. Pursuant to RCW 90.58.355, any person conducting a remedial action at a facility pursuant to a consent decree, order, or agreed order issued

pursuant to RCW 70.305, or to Ecology when it conducts a remedial action under RCW 70.305;

7. Pursuant to RCW 90.58.355, any person installing site improvements for storm water treatment in an existing boatyard facility to meet requirements of a national pollutant discharge elimination system storm water general permit;
8. Washington State Department of Transportation projects and activities meeting the conditions of RCW 90.58.356;
9. Projects consistent with an environmental excellence program agreement pursuant to RCW 90.58.045 and RCW 43.21K;
10. Projects authorized through the Energy Facility Site Evaluation Council process, pursuant to RCW 80.50; and
11. Areas and uses in those areas that are under exclusive federal jurisdiction as established through federal or state statutes are not subject to the jurisdiction of RCW 90.58.

B. Pursuant to WAC 173-27-060, federal agency activities may be required by other federal laws to meet the permitting requirements of chapter 90.58 RCW.

C. This SMP shall apply to all nonfederal developments and uses undertaken on federal lands and on lands subject to nonfederal ownership, lease, or easement, even though such lands may fall within the external boundaries of a federal ownership pursuant to WAC 173-22-070 and WAC 173-27-060(3).

D. As recognized by RCW 90.58.350, the provisions of this SMP shall not affect treaty rights of Indian Nations or tribes.

E. The County may grant relief from SMP provisions for shoreline restoration projects in Urban Growth Areas (UGA) pursuant to RCW 90.58.580.

F. When other State or Federal agencies standards would be more restrictive and more protective of the ecological function, those standards should apply.

G. No structure or lot shall hereafter be used or occupied and no structure or part thereof shall be erected, moved, reconstructed, extended, enlarged or altered except in compliance with the provisions of the SMP.

1.4 Purpose and Intent

The purpose of this SMP is to:

A. Balance the promotion of the public health, safety, and general welfare of the community by providing comprehensive policies and effective, reasonable regulations for development, use and protection of jurisdictional shorelines with the recognition of and respect for private property rights and constitutional limitations on the regulation of private property and protection of those rights while implementing this SMP; and

B. Further assume and carry out the local government responsibilities established by the Act in RCW 90.58.050 including planning and administering the regulatory program; and

C. Protect against significant adverse effects to the land, its vegetation and wildlife, and the waters and their aquatic life within jurisdictional shorelines; and

D. Give preference to those uses that are consistent with the control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon the state's shoreline areas, as illustrated in use allowances of this SMP; and

E. Reduce use conflicts by including provisions to prohibit or apply special conditions to uses which are not consistent with the control of pollution and prevention of damage to the shoreline or are not unique to or dependent upon use of the shoreline, such as through application of vegetation management, water quality, restoration and similar standards. In implementing this provision, preference shall be given first to water- dependent uses, then to water-related uses and water-enjoyment uses in assigning permit types; and

F. Assure no net loss of ecological functions associated with the shoreline; and

G. Protect public rights of navigation; and

H. Maintain or recreate a high quality of environment along jurisdictional shorelines; and

I. Preserve and protect fragile natural resources and culturally significant features; and

J. Increase public access to publicly owned areas of the shorelines where increased use levels are desirable; and

K. Protect property rights and property values by limiting regulations that prohibit or prevent the private property owner from the use and enjoyment of their property; and

L. Protect public and private properties from adverse effects of improper development in shoreline areas; and

M. Prioritize and preserve local control over the administration and application of the SMP; and

N. Recognize the importance of informing the public about the basic rules of good behavior and private property rights associated with the use and enjoyment of all shorelines; and

O. Recognize that this SMP does not alter existing law regarding access to or trespassing on private property and does not give the general public any right to enter private property without the owner's permission.

1.5 Relationship to Other Codes, Ordinances and Plans

A. All applicable federal, state, and local laws shall apply to properties in the shoreline jurisdiction.

B. Except as otherwise stated, in addition to this SMP, the County comprehensive plan, zoning regulations, subdivision regulations, health regulations, and other adopted regulatory provisions apply within shoreline jurisdiction. In the event the provisions of this SMP conflict with provisions of other County regulations, the more protective of shoreline ecological functions and processes shall prevail.

    1. This SMP includes critical areas regulations applicable only in the shoreline jurisdiction, and shall control within shoreline jurisdiction over other County critical area regulations.

C. Consistent with RCW 36.70A.480, the goals and policies of this SMP approved under chapter 90.58 RCW shall be considered an element of Chelan County's comprehensive plan. All regulatory elements of this SMP, including, but not limited to definitions and use regulations, shall be considered a part of Chelan County's development regulations.

D. Appendix C, Restoration Plan, may be updated and amended at any time without requiring a formal SMP amendment.

1.6 Liberal Construction

As provided for in RCW 90.58.900, the Act is exempted from the rule of strict construction; the Act and this SMP shall therefore be liberally construed to give full effect to the purposes, goals, objectives, and policies for which they were enacted.

1.7 Severability

Should any section or provision of this SMP be declared invalid, such decision shall not affect the validity of any other remaining section or provisions of this SMP, or this SMP as a whole.

1.8 Effective Date

The SMP was hereby adopted by the Board of County Commissioners on June 8, 2021. This SMP and all amendments thereto shall become effective fourteen calendar days from the date of the Department of Ecology's written notice of final action to the County.

2 GOALS AND OBJECTIVES

Per WAC 173-26-186(3), all relevant policy goals must be addressed in the planning policies of master programs. This section contains shoreline goals and objectives. Additional goals and policies related to General Regulations and Shoreline Modifications and Uses are located in Appendix F. Goals express the ultimate aim of the County and citizens along their shorelines. An objective identifies a measurable step that moves toward achieving a long-term goal. Goals and objectives provide a framework upon which the more detailed SMP shoreline environmental designations and associated buffers, policies, regulations, and administrative procedures are based in subsequent chapters.

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2.1 Economic Development Element

Goal ED-1. Permit those commercial, industrial, recreational, and other developments requiring a shoreline location which may contribute to the economic well-being of Chelan County.

Objective ED-1.1. Encourage shoreline development that has a positive effect upon community economic and social activities.

Objective ED-1.2. Promote new water-dependent, water-related, and water-enjoyment economic development.

Goal ED-2. Encourage the protection and restoration of unique, fragile, and scenic elements in shoreline areas as a means to promote long-term economic well-being.

Objective ED-2.1. Promote environmental education.

Objective ED-2.2: Develop incentives for protection and restoration in shoreline areas without loss of economic development such as by allowing transfer of development rights to less sensitive areas.

2.2 Public Access Element

Goal PA-1. Ensure public access to shorelines:

- Is safe, convenient and diversified;
- Makes provisions for public access to publicly owned shoreline jurisdiction areas;
- Avoids endangering life or adverse effects on property or fragile natural features;
- Minimizes conflicts between the public and private property;
- Enables the public to enjoy the physical and aesthetic qualities of natural shorelines of the state which shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people;
- Is designed for persons with disabilities, where feasible, consistent with state and federal standards.

Objective PA-1.1. Increase public access to shorelines, via public properties, by developing and implementing parks, recreation, and trails plans.

Objective PA-1.2. Encourage public access as part of public shoreline development where appropriate as adopted in the Shoreline Public Access Plan.

Objective PA-1.4. Protect and enhance visual and physical access to shorelines where appropriate and in compliance with constitutional limitations.

Objective PA-1.5. Encourage development of public access by using tools such as acquisition of land, incentives, and enhancement of existing public land where public access could be developed.

2.3 Recreation Element

Goal REC-1. Promote diverse, convenient, and adequate recreational opportunities along shorelines for local residents and visitors.

Objective REC-1.1. Encourage cooperation among public agencies, non- profit groups, and private landowners and developers to increase and diversify recreational opportunities.

Objective REC-1.2. Ensure shoreline recreation facilities are preserved and enlarged as necessary to serve projected County growth in accordance with adopted levels of service.

Objective REC-1.3. Ensure recreation facilities are designed for persons with disabilities, where feasible, consistent with state and federal standards.

2.4 Circulation Element

Goal CIRC-1. Since major transportation and utility systems pre-exist near many shorelines, minimize conflicts between these systems and shoreline uses when considering circulation additions or modifications.

Objective CIRC-1.1. Encourage multiple modes of transportation, including non-motorized travel and water-dependent transportation.

Objective CIRC-1.2. Promote public access opportunities.

Objective CIRC-1.3. Encourage water-dependent transportation where appropriate.

Objective CIRC-1.4. Promote the design of new or expanded road corridors outside of shoreline jurisdiction unless there is no reasonably feasible alternative or location.

Objective CIRC-1.5. Promote the design of utilities within existing and new road/transportation corridors and outside shoreline jurisdiction unless water crossings are unavoidable or utilities are required for authorized shoreline uses consistent with this SMP.

2.5 Shoreline Use Element

Goal UE-1. Assure an appropriate pattern of sound development in suitable locations without diminishing the quality of the environment along shorelines.

Objective UE-1.1. Give preference along the shoreline to water-oriented and single-family residential uses, consistent with the control of pollution and prevention of damage to the shoreline environment. Followed by preference to water-dependent uses, then water-related uses and finally water- enjoyment uses.

Objective UE-1.2. Encourage shoreline uses and development that enhance and/or increase public access to the shoreline or provide significant public benefit.

Goal UE-2. Consider irrigated agriculture as a water-related use and a key factor in the economy of Chelan County. Agricultural lands should be conserved and protected from incompatible uses. Other shoreline uses should not jeopardize production on designated agricultural lands.

Objective UE-2.1. Protect current agricultural activities occurring on agricultural land.

Objective UE-2.2. Provide for new agricultural uses that do not have a significant adverse impact on other shoreline resources and values.

2.6 Conservation Element

Goal CONS-1. Protect shoreline resources by:

- Preserving unique and fragile environments, and scenic elements such as views of natural features that support area tourism; and
- Conserving non-renewable natural resources; and
- Managing renewable resources such as timber, water, and wildlife.

Objective CONS-1.1. Provide for no net loss of shoreline ecological function.

Goal CONS-2. Encourage the restoration of shoreline areas which have been modified, blighted, or otherwise disrupted by natural or human activities.

Objective CONS-2.1. Ensure restoration and enhancement is consistent with and prioritized based on adopted watershed and basin plans.

Objective CONS-2.2. Prohibit the introduction of invasive plant and animal species along shorelines, and encourage the removal of noxious and invasive weeds, trees, and noxious non-native animals.

2.7 Historic, Cultural, Scientific, and Educational Element

Goal HIST-1. Protect and restore areas having documented significant historic, cultural, educational or scientific values.

Objective HIST-1.1. Work with property owners to encourage the preservation of outstanding natural and scenic resources, environmentally sensitive areas, and documented significant historic and cultural resources.

Goal HIST-2. Protect shoreline features to prevent the destruction of, or damage to, a site having archaeological, historic, cultural, or scientific value through coordination and consultation with the appropriate local, state, tribal and federal authorities.

Objective HIST-2.1. Encourage cooperation among public and private parties in the identification, protection, and management of cultural resources.

Objective HIST-2.2. As appropriate, design and manage access to such sites in a manner that gives maximum protection to the resource.

Objective HIST-2.3. Provide opportunities for education related to archaeological, historical and cultural features when and/or where appropriate and incorporate into public and private management efforts, programs and development.

2.8 Flood Hazard Prevention Element

Goal FLOOD-1. Recognize the hydrologic functions of floodplains, and protect frequently flooded areas.

Objective FLOOD-1.1. Avoid or mitigate land use practices that may impede the flow of floodwater or cause danger to life or property. Mitigate the loss of floodplain storage capacity to avoid greater impact of flooding downstream.

Objective FLOOD-1.2. Implement the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

Objective FLOOD-1.3. Seek to map areas that are potential flood hazard areas and/or have experienced historical flooding events, but are not currently included in the Federal Emergency Management Agency's mapping efforts. Work with the Federal Emergency Management Agency to correct maps that are inaccurate.

Objective FLOOD-1.4. Prepare and implement channel migration zone plans, as appropriate.

Objective FLOOD-1.5. Coordinate shoreline jurisdiction flood hazard prevention policies and regulations with Growth Management Act provisions to protect critical areas including frequently flooded areas.

Objective FLOOD-1.6. Work with federal, state, regional and local agencies to address concerns related to Lake Chelan water levels, including concerns related to severe flood events.

Objective FLOOD-1.7. Monitor stream flows and consider any trends or changes in stream flow regimes due to changes in weather conditions.

2.9 Private Property Rights Element

Goal PRIVATE-1. Recognize and protect private property rights in shoreline uses and developments.

Objective PRIVATE-1.1. Public access to shoreline such as trail, bikeways or roads should consider protecting and preserving the privacy of private property owners when locating near private properties.

Objective PRIVATE-1.2. Planning policies should be pursued through the regulation of development of private property only to an extent that is consistent with all relevant constitutional and other legal limitations on the regulation of private property.

Objective PRIVATE-1.3. Processes should be designed to assure that proposed regulatory or administrative actions do not unconstitutionally infringe upon private property rights.

3 SHORELINE JURISDICTION AND ENVIRONMENT DESIGNATIONS

Shoreline jurisdiction covers most of Chelan County's rivers, creek, streams and lakes. The specific boundaries are found in Appendix A and Channel Migration Zone maps in Appendix D.

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3.1 Shoreline Jurisdiction

As defined by the Shoreline Management Act of 1971, shorelines include certain waters of the State plus their associated "shorelands." The waterbodies designated as shorelines by the State are streams, or segments of streams, whose mean annual flow is greater than 20 cubic feet per second (cfs) or lakes whose area is 20 acres or greater.

Shorelands are defined as *"those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter…."* (RCW 90.58.030)

Certain shoreline waterbodies and their associated shorelands have elevated status under the Act if they are lakes equal to or larger than 1,000 acres or they are streams and rivers in Eastern Washington that are "…downstream of a point where the annual flow is measured at two hundred cubic feet per second or more, or those portions of rivers east of the crest of the Cascade range downstream from the first three hundred square miles of drainage area, whichever is longer" (RCW 90.58.030(2)(e)(v)(B)). These waterbodies are considered to be "shorelines of statewide significance," and have unique supplemental provisions outlined in Section 3.4.

The upstream extent of shoreline jurisdiction for streams and those lakes that meet shoreline criteria are indicated on the Official Shoreline Maps included in Appendix A, Environmental Designation Maps, and as maintained by Chelan County in its GIS database. The purpose of the Official Shoreline Maps, and accompanying GIS databases, is to identify Shoreline Environment Designations. The maps only approximately identify or depict the lateral extent of shoreline jurisdiction. The actual lateral extent of the shoreline jurisdiction shall be determined on a case-by-case basis as defined in Chapter 8.

3.2 Shoreline Environment Designations

This SMP is consistent with the State designation requirement, WAC 173-26-211 deviating with respect only to some shoreline environment designation names. Each shoreline environment designation contains a purpose statement, designation criteria, and management policies components.

3.2.1. Natural Environmental Designation

A. **Purpose.** The purpose of the "Natural" shoreline environment designation is to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require that only very low-intensity uses be permitted in order to maintain the ecological functions and ecosystem-wide processes. Degraded shoreline areas within this environment should be planned for restoration.

B. **Designation criteria.** A "Natural" shoreline environment designation will be assigned to shoreline areas that are ecologically intact and therefore currently perform an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity; represent ecosystems and geologic types that are of particular scientific and educational interest; or are unable to support new development or uses without significant adverse impacts to ecological functions or risk to human safety.

   Such shoreline areas include largely undisturbed portions of shoreline areas, wetlands, and ecologically intact shoreline habitats. Natural shoreline environment designations are typically free of structural shoreline

modifications, structures, and intensive human uses. In forested areas, they generally include native vegetation with diverse plant communities, multiple canopy layers, and the presence of large woody debris available for recruitment to adjacent waterbodies.

C. **Management policies.** Development within the "Natural" shoreline environment designation shall be consistent with the following policies:

1. Any use that would substantially degrade the ecological functions or natural character of the shoreline area should be prohibited.
2. The following new uses should not be permitted in the Natural shoreline environment designation:
    a. Commercial uses;
    b. Industrial uses;
    c. Nonwater-oriented recreation; and
    d. Roads, utility corridors and parking areas that can be located outside of Natural shoreline environment designated shorelines.
3. Access may be permitted for scientific, historical, cultural, educational research uses, and low-intensity water-oriented recreational uses that do not impact the shoreline ecological functions.
4. Single-family residential development may be permitted as a conditional use within the Natural shoreline environment designation if the density and intensity of such use is limited as necessary to protect ecological functions and be consistent with the purpose of the environment.
5. Commercial forestry may be permitted as a conditional use in the Natural shoreline environment designation provided it meets the conditions of the State Forest Practices Act and its implementing rules and is conducted in a manner consistent with the purpose of this shoreline environment designation.
6. Agricultural uses of a very low-intensity nature may be consistent with the Natural shoreline environment designation when such use is subject to appropriate limitations or conditions to assure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.
7. New development or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions should be prohibited.
8. Subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions should not be permitted. That is, each new parcel must be able to support its intended development without significant ecological impacts to the shoreline ecological functions.

3.2.2. Conservancy Environmental Designation

A. **Purpose.** The purpose of the "Conservancy" shoreline environment designation is to retain shoreline ecological functions, and processes by avoiding forms of development that would be incompatible with existing functions and processes, conserve existing natural resources and valuable historic and cultural areas in order to provide for sustained resource use, achieve natural floodplain processes, and provide low-intensity recreational opportunities. Within the Conservancy shoreline environment designation, the overall intensity of development and use should remain low, thereby maintaining most of the area's natural character.

B. **Designation criteria.** The "Conservancy" shoreline environment designation will be applied to shoreline areas where any of the following characteristics apply and would be diminished unless development is strictly controlled:

1. Ecological functions and important ecological processes have not been substantially degraded by human activities;
2. The shoreline is supporting human uses that are subject to environmental limitations, such as properties that include or are adjacent to steep banks, floodplains, or channel migration zones;
3. The shoreline is of high recreational value or with unique historic, cultural or scenic resources; or
4. The shoreline has low-intensity water-dependent public access or recreational uses or is supporting forestry.

C. **Management policies.** Development within the "Conservancy" shoreline environment designation shall be consistent with the following policies:

1. Natural ecological processes should be protected, and renewable resources managed so that ecological functions and the resource base are maintained.
2. Opportunities for ecological restoration should be pursued, prioritizing those areas with the greatest potential to restore ecosystem-wide processes and functions.
3. Recreational or scenic values should be protected from incompatible development.
4. Public access and public recreation objectives should be implemented in the Conservancy shoreline environment designation whenever feasible.
5. New development should be designed and located to preclude the need for shoreline vegetation removal, flood control, hard stabilization, such as armoring, and other shoreline modifications.
6. Water-oriented uses should be given priority over nonwater-oriented uses. Subject to a Conditional Use Permit, low-intensity, water-oriented commercial and industrial uses may be permitted in the limited instances where those uses have located in the past or at unique sites in rural

communities that possess shoreline conditions and services to support the development. For shoreline areas adjacent to commercially navigable waters, water-dependent uses should be given highest priority.

7. Uses that preserve the natural character of the area or promote preservation of open space or sensitive lands either directly or over the long term should be the primary uses permitted in the shoreline environment designation.
8. Authorized uses should be limited to those compatible with each other and with conservation of shoreline ecological processes and resources.

3.2.3. Rural Environmental Designation

A. **Purpose.** The purpose of the "Rural" shoreline environment designation is to protect shoreline ecological functions in areas having a rural character characterized by open space and low-density development including, but not limited to: residences, agriculture, and active outdoor recreation. Uses should be compatible with the physical capabilities and limitations, natural resources, and shoreline ecological functions and processes of the area.

B. **Designation criteria.** The "Rural" shoreline environment designation is assigned to shoreline areas that possess high capabilities to support or currently do support active agriculture uses, or those areas appropriately planned for or occupied by low-density residential development that may be found in various Limited Areas of More Intense Rural Development (LAMIRD) zones. In addition, this designation provides for protection of lands with recreational value or unique historic or cultural resources. Areas where low-intensity outdoor recreation uses or developments would be appropriate and compatible with other uses and the physical environment, and where the shoreline has been developed with low-intensity water- oriented uses are also appropriate for designation as Rural.

C. **Management policies.** Development within the "Rural" shoreline environment designation shall be consistent with the following policies:

1. Industrial or commercial development should be limited to water- oriented commercial and industrial uses in the limited locations where such uses have been established or at sites in rural communities that possess appropriate shoreline conditions and services sufficient to support such developments.
2. Nonwater-dependent uses should provide a substantial benefit such as providing public access and/or restoring degraded shorelines.
3. Recreational access to the shoreline (both visual and physical) should be encouraged. Recreational facilities should be located and designed to minimize conflicts with agricultural activities.

4. Agriculture, aquaculture and forestry consistent with rural character and the maintenance of shoreline ecological functions and processes should be encouraged.
5. Agricultural practices should be conducted in a manner that will prevent pollution of the water and minimize erosion and sedimentation within the shoreline area.
6. New development should reflect the character of the surrounding area by limiting residential density, providing permanent open space and maintaining adequate buffers from the shoreline.

3.2.4. Urban Environmental Designation

A. **Purpose.** The purpose of the "Urban" shoreline environment designation is to accommodate a range and mixture of residential, and water-oriented commercial and institutional uses at moderate intensity and density levels, while protecting existing ecological functions and restoring ecological functions in areas that have been previously degraded. Water-dependent utilities and industrial uses are also accommodated. In addition, this designation provides for appropriate physical and visual public access and recreation uses.

B. **Designation criteria.** The "Urban" shoreline environment designation may be assigned to shoreline areas in LAMIRD zones and UGAs that are not affiliated with a City. The density and intensity of uses within this environment are balanced with a mix of open space and recreational and cultural facilities.

C. **Management policies.** Development within the "Urban" shoreline environment designation shall be consistent with the following policies:
   1. Emphasis should be given to development within already developed areas.
   2. Priority should be given to water-dependent and water-oriented uses over other uses.
   3. Emphasis should be given to developing visual and physical access to the shoreline in the Urban shoreline environment designation.
   4. Industrial and commercial facilities should be designed to permit pedestrian waterfront activities consistent with public safety and security.
   5. Aesthetic considerations should be actively promoted by means of sign control regulations, architectural design standards, planned unit development standards, landscaping requirements and other such means.
   6. Development should not significantly degrade the quality of the environment, including water quality and air quality, nor create conditions which would accentuate erosion, drainage problems or other adverse impacts.
   7. When considering amendments to increase the extent of Urban- designated shorelines, the County should consider the utilization of existing Urban

shoreline environment designations, projections of economic need, and the balance of water-oriented and nonwater-oriented uses.

3.2.5. Aquatic Environmental Designation

A. **Purpose.** The purpose of the "Aquatic" shoreline environment designation is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM.

B. **Designation criteria.** The "Aquatic" shoreline environment designation will be assigned to shoreline areas waterward of the OHWM.

C. **Management policies.** Development within the "Aquatic" shoreline environment designation shall be consistent with the following policies:

1. New over-water structures should be prohibited except for water-dependent uses, public access, necessary shoreline crossings, or ecological restoration.
2. The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.
3. In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple uses of over-water facilities should be encouraged.
4. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
5. Uses that adversely impact the ecological functions of critical freshwater habitats should not be permitted. Where those uses are necessary to achieve the objectives of RCW 90.58.020, their impacts should be mitigated according to the sequence defined in Chapter 4.2, Ecological Protection.
6. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

3.2.6. Official Shoreline Maps and Undesignated Shorelines

The Shoreline Jurisdiction Boundaries and Shoreline Environment Designations Maps, Appendix A, include a hard copy of the Official Shoreline Maps at the time of SMP adoption, which illustrate the delineation of shoreline jurisdiction and shoreline environment designations in Chelan County. The electronic files of the Official Shoreline Maps will be considered the official version and may be updated administratively as indicated within this SMP.

A. The actual location of the OHWM, floodplain, floodway, and wetland boundaries must be determined at the time a development is proposed.

Wetland boundaries are valid for five years from the date the delineation is made.

B. Permitted projects that commence prior to expiration of the determination may continue under the approved determination boundaries without conducting an additional evaluation. Floodplain and floodway boundaries should be assessed using FEMA maps and on-site elevation certificates. OHWM should be assessed using the definition adopted by the SMA.

C. In the event of a mapping error, the Administrator will rely upon WAC guidelines.

D. Correction of minor mapping inaccuracies may be made by the Administrator and incorporated into the Official Shoreline Maps without an SMP amendment, when the area of change is less than one acre in size.

E. All other areas of shoreline jurisdiction that are undesignated shall be assigned a Conservancy designation, until the shoreline can be re-designated through an SMP amendment process conducted consistent with WAC 173- 26-100 and SMP Section 7.16.

3.2.7 Interpretation of Environment Designation Boundaries

A. If disagreement develops as to the exact location of a shoreline environment designation boundary line, the Official Shoreline Maps shall prevail consistent with the following rules:

1. Boundaries indicated as approximately following lot, tract, or section lines shall be so construed.
2. In cases where boundary line adjustments or subdivisions occur, the designation applied to the parent parcel prior to the boundary line adjustment or subdivision shall not change.
3. Boundaries indicated as approximately following roads or railways shall be respectively construed to follow the nearest right-of-way edge.
4. Boundaries indicated as approximately parallel to or extensions of features indicated in (1), (2), or (3) above shall be so construed.

B. The Shoreline Administrator shall apply the shoreline environment designation approved through the SMP Update or Amendment process or as corrected by Section 3.2.6. Appeals of such interpretations may be filed pursuant to Section 7.13.

3.3 Shoreline Use Preferences

When determining allowable uses and resolving use conflicts on shorelines within jurisdiction, the preferences and priorities as listed in WAC 173-26- 201(2)(d) shall govern.

3.4 Shorelines of the State and Statewide Significance

The waterbodies designated as shorelines of the State are streams, or segments of streams, whose mean annual flow is greater than 20 cubic feet per second (cfs) or lakes whose area is 20 acres or greater. Shorelines of statewide significance include those lakes, whether natural, artificial, or a combination thereof, with a surface area greater than or equal to 1,000 acres measured from the OHWM, and natural rivers or segments thereof downstream of a point where the annual flow is measured at two hundred (200) cubic feet per second or more, or those portions of rivers downstream from the first three hundred (300) square miles of drainage area, whichever is longer.

3.4.1 Waterbodies in Shoreline Jurisdiction

The following tables provide a list of waterbodies in shoreline jurisdiction in the County, with shorelines of statewide significance marked by an asterisk. The shoreline jurisdiction, as defined in Chapter 8, is defined as *"those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of [RCW 90.58.030]…."See graphic illustrations Appendix G.*

Table 3.4-a. Streams and Rivers in Shoreline Jurisdiction

Shoreline Jurisdiction Streams and Rivers		
Agnes Creek	Jack Creek	Rainbow Creek
Basin Creek	Lake Creek	Rainy Creek
Big Meadow Creek	Lake Creek	Rimrock Creek
Boulder Creek 1	Leland Creek	Roaring Creek
Boulder Creek 2	Lightning Creek	Rock Creek
Bridge Creek	Little Wenatchee River*	Snowall Creek
Buck Creek	Mad River	South Fork Agnes Creek
Cady Creek	Maple Creek	South Fork Bridge Creek
Chelan River*	McAlester Creek	South Fork Chiwaukum Creek
Chiwaukum Creek	Meadow Creek	South Fork Flat Creek
Chiwawa River*	Mill Creek	Spruce Creek
Columbia River*	Mission Creek	Stehekin River*
Company Creek	Mountaineer Creek	Swamp Creek
Cottonwood Creek	Napeequa River	Thunder Creek
Cougar Creek	Nason Creek*	Tommy Creek
Doubtful Creek	North Fork Bridge Creek	Trapper Creek
Eightmile Creek	North Fork Entiat River	Trout Creek
Entiat River*	North Fork Thirtyfive Mile Creek	Twentyfive Mile Creek
Fish Creek, flows into Wenatchee River	Panther Creek	Wenatchee River*
Flat Creek	Park Creek	West Fork Agnes Creek
French Creek	Peshastin Creek	West Fork Flat Creek
Ibex Creek	Phelps Creek	White River*
Ice Creek	Pole Creek	Whitepine Creek
Icicle Creek*	Prince Creek	Wildhorse Creek
Indian Creek	Prospect Creek	
Ingalls Creek	Railroad Creek	

* Shorelines of statewide significance marked by an asterisk

Table 3.4-b. Lakes in Shoreline Jurisdiction

Shoreline Jurisdiction Lakes			
Antilon Lake	Heather Lake	Lost Lake	Stuart Lake
Spring Hill Reservoir (aka Black Lake or Wheeler Hill Reservoir)	Ice Lakes (1)	Lyman Lake	Surprise Lake
Chiwaukum Lake	Ice Lakes (2)	Meadow Lake	Theseus Lake
Colchuck Lake	Josephine Lake	Mirror Lake	Trapper Lake
Cortez Lake	Klonaqua Lakes (1) Lower	Nada Lake	Twin Lakes (1)
Cub Lake	Klonaqua Lakes (2) Upper	Perfection Lake	Twin Lakes (2)
Domke Lake	Lake Augusta	Rainy Lake	Unnamed Lake 1
Doubtful Lake	Lake Chelan*	Rock Island Pool*	Upper Wheeler Reservoir
Dry Lake (aka Grass Lake)	Lake Leland	Roses Lake (aka Alkali Lake)	Wanapum Dam*
Eightmile Lake	Lake Valhalla	Schaefer Lake	Wapato Lake
Entiat Lake*	Lake Victoria	Shield Lake	Wells Reservoir*
Fish Lake	Lake Wenatchee*	Snow Lake-Lower	White Rock Lakes (1)
Glasses Lake	Larch Lake	Snow Lake-Upper	
Green View Lake	Lichtenwasser Lake	Square Lake	
Hart Lake	Loch Eileen Lake	Stemilt Project Reservoir	

* Shorelines of statewide significance marked by an asterisk

3.4.2 Use Preferences for Shorelines of Statewide Significance

In accordance with RCW 90.58.020, the following management and administrative policies are hereby adopted for all shorelines of statewide significance in Chelan County, as defined in RCW 90.58.030(2)(e) and listed in Section 3.4.1 of this SMP. Consistent with the policy contained in RCW 90.58.020, preference shall be given to the uses in the following order of preference that are consistent with the statewide interest in such shorelines. These are uses that:

(1) Recognize and protect the statewide interest over local interest;

(2) Preserve the natural character of the shoreline;

(3) Result in long term over short term benefit;

(4) Protect the resources and ecology of the shoreline;

(5) Increase public access to publicly owned areas of the shorelines;

(6) Increase recreational opportunities for the public in the shoreline;

(7) Provide for any other element as defined in RCW 90.58.100 [County's Shoreline Master Program] deemed appropriate or necessary. (WAC 173-26-251(2))

3.5 Unincorporated City-Associated UGAs

A. Shoreline within UGAs will be regulated by this SMP until annexed into the City.

B. The County has authority to issue Shoreline Permits in the UGAs as established at the time of County adoption of this SMP.

3.6 Shoreline Use Matrix

This section contains the Use Matrix which outlines all uses within the shoreline jurisdiction as permitted, conditional or prohibited. Depending on the type of development, activity or use, a permitted use may also be exempt from the requirements of a Substantial Development Permit. A list of exempt actions is located in Chapter 7.5.

The following provisions apply to the Shoreline Use Matrix, Table 3.6-a:

A. Accessory uses not specifically assigned a permit type in Table 3.6-a shall be subject to the same shoreline permit process and SMP regulations as its primary use.

B. Unless otherwise noted in this SMP, an accessory use should only be approved after or concurrent with establishment of a primary use.

C. Where there is a conflict between the chart and the written provisions in this SMP, the written provisions shall apply.

D. Authorized uses and modifications are only permitted in shoreline jurisdiction where the underlying zoning permits for it and subject to the regulations of this SMP.

E. Any use, development or modification not classified in this Shoreline Master Program or not listed in the Use Matrix shall require a Shoreline Conditional Use Permit in addition to a Substantial Development Permit.

F. Uses and modifications identified as "SD/E" require either a Shoreline Substantial Development Permit or may be exempt if consistent with Section 7.6. Exempted uses and modifications shall be consistent with the applicable policies and regulations of this SMP and may require a letter of exemption from the Shoreline Administrator prior to commencing an exempt activity. If any part of a proposed development is not eligible for exemption, then a Substantial Development Permit is required for the entire proposed project.

G. Where a use or modification may occur in the Aquatic shoreline environment designation as indicated in Table 3.6-a but the adjacent shoreland environment requires a Conditional Use or prohibits the use, than the more restrictive permit process or prohibition applies to the Aquatic shoreline environment designation. For example, a marina may be permitted in the Aquatic shoreline environment designation, but would require a Shoreline Conditional Use Permit if the immediately upland shoreline environment designation is Conservancy; therefore, the marina would require a Shoreline Conditional Use Permit.

H. The permit process indicated below for each use or development applies to new, expanded, modified or replacement uses or developments. Non-conforming structures and uses are addressed in Chapter 6.

Table 3.6-a Shoreline Use Matrix

SD/E = Permitted, subject to Shoreline Substantial Development Permit or Shoreline Exemption SCUP = Shoreline Conditional Use Permit X = Prohibited	**Natural**	**Conservancy**	**Rural**	**Urban**	**Aquatic**
Agriculture					
Agriculture	X	SD/E	SD/E	SD/E	n/a
Agricultural-Commercial	X	SCUP	SD/E	SD/E	n/a
Aquaculture					
Non-commercial; low and medium intensity					
Temporary (seasonal up to 5 years , or less than 24 consecutive months)	SD/E	SD/E	SD/E	SD/E	SD/E
Permanent	SCUP	SD/E	SD/E	SD/E	SD/E
Non-commercial; high intensity	SCUP	SD/E	SD/E	SD/E	SD/E
Commercial	X	SCUP	SD/E	SD/E	SD/E
Boating Facilities: Marinas, Community Piers, and Boat Launches					
Community and public piers	X	SD/E	SD/E	SD/E	SD/E
Marinas and commercial piers	X	SD/E	SD/E	SD/E	SD/E
Public boat launch facility	X	SD/E	SD/E	SD/E	SD/E
Private commercial boat launch facility	X	SD/E	SD/E	SD/E	SD/E

SD/E = Permitted, subject to Shoreline Substantial Development Permit or Shoreline Exemption SCUP = Shoreline Conditional Use Permit X = Prohibited	Natural	Conservancy	Rural	Urban	Aquatic
Private community motorized/paved boat launch facility	X	X	SD/E	SD/E	SD/E
Private community non-motorized boat launches – (Hand launch areas of sand and cobble construction)	X	SCUP	SD/E	SD/E	SD/E
Breakwaters/jetties/rock weirs/groins	SCUP	SCUP	SCUP	SCUP	SCUP
Installed to protect or restore ecological functions	SD/E	SD/E	SD/E	SD/E	SD/E
Commercial Uses					
Water-dependent uses	X	SD/E	SD/E	SD/E	SD/E
Water-related	X	SD/E	SD/E	SD/E	SD/E
Water-enjoyment uses	X	SD/E	SD/E	SD/E	SD/E
Nonwater-oriented uses	X	X	SD/E	SD/E	n/a
Mixed use commercial	X	SD/E	SD/E	SD/E	n/a
Mixed use residential	X	SD/E	SD/E	SD/E	n/a
Dredging and dredge materials disposal					
Dredging [3]	n/a	n/a	n/a	n/a	SD/E
In-water disposal [3]	n/a	n/a	n/a	n/a	SCUP
Upland disposal outside of channel migration zone (CMZ)	X	SD/E	SD/E	SD/E	n/a
Upland disposal inside of CMZ	X	SCUP	SCUP	SCUP	n/a
Fill and Excavation					
Upland outside of CMZ	SD/E	SD/E	SD/E	SD/E	n/a
Fills installed to protect or restore ecological functions, such as woody debris, engineered log jams, or habitat-forming rock weirs	SD/E	SD/E	SD/E	SD/E	SD/E

SD/E = Permitted, subject to Shoreline Substantial Development Permit or Shoreline Exemption SCUP = Shoreline Conditional Use Permit X = Prohibited	Natural	Conservancy	Rural	Urban	Aquatic
Upland inside of CMZ	SCUP	SCUP	SCUP	SCUP	n/a
Fills installed to protect or restore ecological functions, such as woody debris, engineered log jams, or habitat-forming rock weirs	SD/E	SD/E	SD/E	SD/E	SD/E
In-water related to restoration [3]	n/a	n/a	n/a	n/a	SD/E
In-water not related to restoration [3]	n/a	n/a	n/a	n/a	SCUP
Forest Practices (which includes activities other than timber cutting)					
Forest Practice Conversions	SCUP	SD/E	SD/E	SD/E	n/a
Category IV, where there is a likelihood of conversion to non-forest uses	SCUP	SD/E	SD/E	SD/E	n/a
Industrial Uses					
Water-dependent uses	X	SCUP	SD/E	SD/E	SCUP
Water-related uses	X	SCUP	SD/E	SD/E	X
Nonwater-oriented uses	X	X	SD/E	SD/E	X
Institutional[1]					
Water-oriented	SCUP	SD/E	SD/E	SD/E	SCUP
Nonwater-oriented	SCUP	SCUP	SCUP	SCUP	X
In-Water Structures [3]	n/a	n/a	n/a	n/a	SCUP
Related to habitat and natural systems enhancement or support of non-commercial aquaculture [2]	n/a	n/a	n/a	n/a	SD/E
Mining					
Upland mining inside of CMZ	X	SCUP	SCUP	SCUP	n/a
In-water mining (commercial) [3]	n/a	n/a	n/a	n/a	SCUP
In-water mining (recreational) [3]	n/a	n/a	n/a	n/a	SD/E
Private Moorage Facilities					
Buoys	n/a	n/a	n/a	n/a	SD/E
Piers and docks (single and joint-use) [3]	n/a	n/a	n/a	n/a	SD/E

SD/E = Permitted, subject to Shoreline Substantial Development Permit or Shoreline Exemption SCUP = Shoreline Conditional Use Permit X = Prohibited	Natural	Conservancy	Rural	Urban	Aquatic
Watercraft lifts	n/a	n/a	n/a	n/a	SD/E
Private non-motorized boat launch facilities	X	SD/E	SD/E	SD/E	SD/E
Private motorized/paved boat launch facility	X	X	X	X	X
Recreational Uses					
Water- oriented	SCUP	SD/E	SD/E	SD/E	SD/E
Nonwater-oriented	X	SD/E	SD/E	SD/E	X
Residential Uses					
Single-Family Residence	SCUP	SD/E	SD/E	SD/E	n/a
Accessory Dwelling Unit	SD/E	SD/E	SD/E	SD/E	n/a
Multi-family	X	SD/E	SD/E	SD/E	n/a
Over-water	n/a	n/a	n/a	n/a	X
Floating Home	n/a	n/a	n/a	n/a	X
Houseboat	n/a	n/a	n/a	n/a	SCUP
Liveaboards	n/a	n/a	n/a	n/a	SD/E
Shoreline Habitat Projects					
Shoreline habitat and natural systems enhancement projects	SD/E	SD/E	SD/E	SD/E	SD/E
Shoreline Stabilization					
Bioengineering	SCUP	SD/E	SD/E	SD/E	SD/E
Hard structural shoreline stabilization	X	SD/E	SD/E	SD/E	SD/E
Related to habitat and natural systems enhancement or support of non-commercial aquaculture [2]	SD/E	SD/E	SD/E	SD/E	SD/E
Soft structural shoreline stabilization	X	SD/E	SD/E	SD/E	SD/E
Related to habitat and natural systems enhancement or support of non-commercial aquaculture[2]	SD/E	SD/E	SD/E	SD/E	SD/E

SD/E = Permitted, subject to Shoreline Substantial Development Permit or Shoreline Exemption SCUP = Shoreline Conditional Use Permit X = Prohibited	Natural	Conservancy	Rural	Urban	Aquatic
Flood Hazard Reduction					
Dikes, levees	X	SCUP	SCUP	SCUP	SCUP
Transportation Facilities					
Local	SCUP	SD/E	SD/E	SD/E	n/a
Regional	SCUP	SD/E	SD/E	SD/E	n/a
Parking	SCUP	SD/E	SD/E	SD/E	n/a
Bridges, Culverts [3]	n/a	n/a	n/a	n/a	SD/E
Utilities					
Small	SCUP	SD/E	SD/E	SD/E	SCUP
Large	SCUP	SCUP	SCUP	SCUP	SCUP

[1] Institutional uses shall comply with Commercial standards.

[2] Subject to applicable provisions in Section 5.4, Section 5.17 and/or Section 5.18.

[3] When authorized in the Aquatic Environmental Designation, associated uses and structures may occur landward of the OHWM.

3.7 Shoreline Development Standards

To preserve the existing and planned character of the shoreline consistent with the purposes of the shoreline environment designations, development standards are provided below. The following are in addition to the minimum setback distances listed within the Chelan County Zoning code:

Table 3.7-a Shoreline Development Standards

Standard[3]	Natural	Conservancy	Rural	Urban	Aquatic
Minimum Lot width – measured at OHWM	200′	100′	75′	60′	n/a
Side Yard Setback Minimum	5′	5′	5′	5′	5′[2]
Height Limit Maximum[4]	35′	35′	35′	60′[1]	15′

[1] Only where the underlying zoning district allows and with an approved view corridor analysis per this SMP.

[2] No setback is required for joint-use docks and associated uses, when consistent with this SMP.

[3] Zoning setbacks shall not apply to water-dependent uses.

[4] The following types of structures or structural parts are not subject to the building height limitations: aerials, belfries, chimneys, church spires, cupolas, domes, fire and hose towers, flagpoles, monuments, observation towers, radio, telecommunication and television towers, utility infrastructure, smoke stacks, water towers, windmills and other similar projections. None of these exemptions, except chimneys and flagpoles, shall be used for or attached to residential structures.

3.8 Shoreline Buffers

The size of the buffers is reflective of the quality of the natural environment and the goals to retain the ecological functions which protect the waters of Chelan County.

Due to the variety of land uses and activities on the shoreline, it is also appropriate that the shoreline buffers be modified for site specific conditions, as found below, see 3.8.2.

Shoreline buffers are areas of ecological protection. Vegetation removal or any use and development within the buffer shall not occur unless authorized within this SMP.

Shoreline Buffers are measured from the OHWM horizontally landward. The Administrator may require the applicant to mark/flag the OHWM, using a qualified professional, if the development is within 10′ of the buffer or the OHWM is not clearly denoted.

Table 3.8-a Shoreline Buffers

Shoreline Designations	Buffer (feet)
Natural Environment	150
Conservancy Environment	100
Rural Environment	100
Urban Environment	50
Aquatic Environment	n/a
Lower Lake Chelan Basin	50

3.8.1 Buffer Applicability

The following exceptions are uses permitted within the shoreline buffer. All uses and development may still require a permit and applicants are encouraged to contact the County prior to development activities:

A. **Water related uses,** see definition, such as agriculturally related water transportation systems.

B. **Water-dependent uses.** Consistent with the use allowances for each environment designation, water-dependent uses (such as marinas), modifications and activities may be located within shoreline buffers. Uses, developments and activities accessory to water-dependent uses should be located outside the applicable shoreline buffer unless one of the following conditions is met:

1. Proximity to the water-dependent project elements is critical to the successful implementation of the facility's purpose (e.g., a road to a boat launch facility, facilities that support non-commercial aquaculture); or
2. Parks or other public lands where high-intensity recreational development is primarily related to access for enjoyment and use of the water and the development does not conflict with or limit opportunities for other water-oriented uses; or
3. The site has topographical constraints where no other location of the development is feasible (e.g., the water-dependent use or activity is located on a parcel entirely or substantially encumbered by the required shoreline buffer).

   In these circumstances, uses and modifications accessory to water-dependent uses must be designed and located to minimize intrusion into the buffer and should also be consistent with Section 4.2, Ecological Protection and Section 4.4, Public Access.

C. **Subdivision.** Applicants with an approved preliminary subdivision as of the effective date of this SMP, or where a shoreline conditional use permit or shoreline variance is authorized, may conduct grading work necessary to finalize the subdivision approval.

3.8.2 Shoreline Buffer Width Modifications

Buffers may be administratively modified, only once, by one of the following tools. All buffer modifications shall be by written approval of the Shoreline Administrator. The Shoreline Administrator may attach conditions to any modified buffer, as necessary, to assure consistency with this SMP. Buffers shall not be reduced below 25' under these provisions. Buffer reductions below 25' shall require a shoreline variance.

A. **Lower Lake Chelan Basin.** The Lower Lake Chelan Basin, for the purposes of this section, shall be considered to begin at Box Canyon, extending southeast to the City of Chelan and extending northwest from the city limits to Deer Point. The 50' buffer may be modified to 25' buffer if the following standards are met:
   1. An enhanced on-site sewage system or public sewer is required; and
   2. If removing existing native vegetation, the applicant shall provide mitigation pursuant to Section 4.2 Ecological Protection (C).

B. **Common line.**[1] Shoreline buffers may be reduced to accommodate new single family residential development, and which are located adjacent to lakes or the Columbia River, using a common line measurement if lots are 100' or less in width, as measured at the OHWM.
   1. The common-line setback shall be measured from the OHWM to the closest point of the primary residential building's foundation for each adjoining waterfront lot. If an adjoining lot, tract, parcel is vacant or right-of-way the measurement shall be the required shoreline buffer.
   2. The two measurements shall be averaged to determine the common line setback for the proposed development lot.
   3. The buffer may be further reduced an additional 20% to accommodate decks and outdoor use areas provided that views from adjacent residences are not obstructed.
   4. The buffer shall not be reduced to less than 25 feet from the ordinary high water mark using this common line measurement.

C. **Site specific modification.** Reductions of up to 25% of the shoreline buffer may be approved if the following standards are met:
   1. A mitigation plan, pursuant to Section 4.2 Ecological Protection, indicates that enhancing the buffer will result in no-net-loss of function. A mitigation plan is not necessary when the applicant or qualified professional submits a report describing how the proposed development does not result in a net loss of ecological functions compared to the existing condition, such as, the replacement of a structure in the same footprint.

[1] Reference Illustrations in Appendix G

2. All proposals shall include a site plan illustrating the existing and proposed conditions and a plan for protection of the shoreline during construction activities.

D. **Buffer width averaging.** Shoreline buffer widths may be modified by averaging the buffer widths only where the applicant demonstrates all of the following:

1. The total area contained within the shoreline buffer after averaging is no less than that contained within the shoreline buffer width, outlined by the requirements of this SMP, prior to averaging; and,
2. The minimum shoreline buffer width at its narrowest point shall not be less than 75% of the shoreline buffer width established under this SMP or be less than twenty-five (25) feet, whichever is greater; and,
3. The need for shoreline buffer width averaging is not due to the landowner's own actions; and,
4. A qualified professional documents the following:
    a. That width averaging will not degrade the habitat structure, functions and values; and,
    b. The newly incorporated area provides habitat with at least equal habitat structure, functions and values to that area that it isreplacing.

E. **Barriers to ecological function.** Where an improved legally established road, open irrigation canal system, railway, or utility corridor, at least 20' wide, crosses a shoreline or critical area buffer, the Shoreline Administrator may approve a modification of the buffer width to the waterward edge of the corridor. This provision does not apply to private easements, driveways, farm access roads, etc.

F. **Restoration Plan.** Where a land owner has completed a fish enhancement project or restoration project from an approved Restoration or Enhancement Plan, consistent with Section 5.17 Shoreline Habitat and Natural System Enhancement Project Regulations, the buffer may be modified by 50% but no less than twenty-five (25) feet, whichever is less.

G. **Steep Slopes.** Where a shoreline waterbody is incised with steep slopes (40% or greater), greater than twenty feet in height measured from the ordinary high water mark and there is naturally a narrow riparian corridor and limited habitat, the Shoreline Administrator may reduce the buffer to 50' minimum from the top of slope provided that the applicant submits documentation prepared by a qualified professional finding that the shoreline ecological functions would be protected and that development will not be vulnerable to erosion or geologic hazards that would require shoreline structural improvements.

4 GENERAL REGULATIONS

Chapter 4 presents general regulations that apply to all developments, uses, or activities in any shoreline environment designation in order to protect environmental and cultural resources, reduce likelihood of harm to life or property from hazardous conditions, and promote access to shorelines.

Policies related to each type of use are located in Appendix F.

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4.1 Archaeological and Historic Resource Regulations

The following provisions apply to archaeological and historic resources that are either recorded at the State Department of Archaeology and Historic Preservation and/or by local jurisdictions or have been inadvertently uncovered. Development or uses that may impact such sites shall comply with WAC 25-48 and the following:

A. **Known archaeological resources.** In areas documented to contain archaeological resources, new permits shall require a site inspection or evaluation by a professional archaeologist in coordination with affected Indian tribes.

B. **Uncovered archaeological resources.** Developers and property owners shall immediately stop work and notify the County, the Washington State Department of Archaeology and Historic Preservation, and affected Indian tribes if archaeological resources are uncovered during excavation.

C. Applicants shall submit an Inadvertent Discovery Plan prior to commencing any development authorized by this SMP. A copy of the plan shall be kept on site during ground disturbing activities.

4.2 Ecological Protection and Critical Area Regulations

A. **Applicability**. The provisions of this Section and Appendix B, Critical Areas Regulations, shall apply to any use, alteration or development within shoreline jurisdiction to document a finding of no-net-loss. Additional mitigation requirements may be included within this SMP based on the proposed development or use to document a finding of no-net-loss.

B. **Mitigation sequencing**. Applicants shall demonstrate all reasonable efforts have been taken to avoid, minimize and then mitigate potential adverse impacts to ecological function resulting from new development and redevelopment in shorelines in the following sequence of steps listed in prioritized order:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project;
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and
6. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

Lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

C. **Mitigation required for impact.** Mitigation shall be required for all projects within shoreline jurisdiction that have adverse impacts remaining after application of mitigation sequencing per Section 4.2.B which result in a net loss of ecological functions. As part of the analysis of potential impacts, the applicant shall also evaluate whether the project may adversely affectexisting hydrologic connections between streams and/or wetlands, and either modify the project or mitigate any impacts as needed. Mitigation plans must meet the following requirements:

1. Mitigation plans shall be prepared by a qualified professional and shallbe consistent with the relevant mitigation plan requirements of the County in Appendix B, including a five-year monitoring plan or other monitoring

timeframe specified by local, state or federal permitting agencies, and scaled drawings of existing and proposed conditions.

2. Mitigation plans shall describe actions that will ensure no net loss of ecological functions, and shall describe the functions impacted and how the mitigation plan addresses those specific functions.
3. Mitigation must be designed to result in no net loss of ecological functions to the extent feasible. Mitigation for adverse impacts to shoreline ecological functions shall be required at a ratio of one unit of mitigation for one unit of impact area (1:1) or as required to meet the no net loss of ecological functions standard.
4. Mitigation plans and any required annual monitoring reports shall be prepared by the appropriate qualified professional. Except, any monitoring report required for single-family residence may be submitted at the end of years 1, 3 and 5 by the property owner if accompanied by an as-built plan, documentation of vegetation survival, and photographs.
5. Mitigation plans that include a vegetation component shall contain a performance standard of 90 percent survival for the first year of growth post installation, with no less than 80 percent survival at the end of the third year and fifth year.
6. Mitigation measures specified in the mitigation plan shall be maintained over the life of the use and/or development.

D. Cumulative effects.

1. In review of applications for shoreline conditional uses and variances, the County shall consider the cumulative impacts of individual uses and developments when determining whether a proposed use or development could cause a net loss of ecological functions. The geographic scope of the analysis shall include the shoreline waterbody potentially affected by the proposal within the bounds of the County's geographic authority, unless the Shoreline Administrator determines that a larger or smaller area of analysis is appropriate.
2. The Administrator shall have the authority to require the applicant/proponent to prepare special studies, assessments and analyses as necessary to identify and address cumulative impacts including, but not limited to, impacts on fish and wildlife habitat, public access/use, aesthetics, water quantity, water quality and other shoreline attributes.
3. Proponents of shoreline use and development shall take the following factors into account when assessing cumulative impacts:
    a. Current ecological functions and human factors influencing shoreline natural processes; and
    b. Reasonably foreseeable future use and development of the shoreline; and

c. Beneficial effects of any established regulatory programs under other local, state, and federal laws; and

d. Mitigation measures implemented in conjunction with the proposed project to avoid, reduce and/or compensate for adverse impacts.

4. The Administrator may add conditions as needed based on the findings of special studies, assessments and analyses completed to address any adverse cumulative effects and ensure that the project meets the review criteria.

E. **Restoration is not required**. Developments shall not be required to provide mitigation in excess of that necessary to assure that development will result in no net loss of shoreline ecological functions and will not have a significant adverse impact on other shoreline functions fostered by the policy of the Act.

F. **Alternative mitigation.** For any development proposal, applicants shall comply with relevant mitigation standards found in this SMP. Provided, applicants may submit a habitat management plan that demonstrates how an alternative mitigation approach meets the no net loss of ecological functions standard or alternative planting plan or mitigation measure are approved by other State and Federal agencies.

At a minimum, habitat management plans must contain information about existing and anticipated post-project conditions with a discussion of how the alternative design or mitigation approach is consistent with the SMA and this SMP.

G. **Alternative off-site mitigation.** The applicant may propose compensatory mitigation, if related to an established County program, such as in-lieu fee mitigation or mitigation banking.

H. **Location of mitigation.** When compensatory measures are appropriate pursuant to the mitigation priority sequence above, preferential consideration shall be given to measures that replace the impacted functions directly and in the immediate vicinity of the impact. However, alternative compensatory mitigation within the same watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on the Shoreline Restoration Plan, or Water Resource Inventory Area (WRIA) or comprehensive resource management plans applicable to the area of impact may be authorized if it would have a greater positive impact on ecological function. Authorization of compensatory mitigation measures may require appropriate safeguards, terms or conditions as necessary to ensure no net loss of ecological functions.

I. **Protection of critical areas and buffers.** Any critical areas found within shoreline jurisdiction, shall be regulated by Appendix B, Critical Areas Regulations. Unless otherwise stated, critical area buffers and shoreline buffers located within shoreline jurisdiction shall be protected and/or enhanced

pursuant to Section 4.5, Vegetation Conservation and all other applicable provisions of this SMP.

J. **Mitigation Private Moorage Facilities.** Mitigation shall be provided for new impacts resulting from construction of new private moorage facilities and modification or reconstruction of existing private moorage facilities at a one to one (1:1) ratio, excluding boatlifts and mooring buoys, except mitigation for development on Lake Chelan shall be calculated by subtracting any open spaces in the deck or grating from the total footprint, and then multiplying the resulting number by 0.25. The Administrator may require mitigation through Section 4.2 Ecological Protection to ensure no loss of ecological function.

1. Removal of any existing over-water and/or in-water structures that are not otherwise required to be removed.
2. Replacement of areas of existing solid over-water cover with grated material or use of grating on those altered portions of piers if they are not otherwise required to be grated.
3. Planting of native vegetation along the shoreline immediately landward of the OHWM consisting of trees and/or shrubs native to Chelan County with trees planted on 15-foot centers and/or shrubs planted on 6-foot centers. Native groundcover can be supplemental to the planted shoreline area, but does not count toward the total square footage requirement.
4. Removal or ecological improvement of hardened shoreline, including existing launch ramps or hard structural shoreline stabilization. Improvements may consist of softening the face and toe of the stabilization with soil, gravel and/or cobbles and incorporating vegetation or large woody debris.
5. Removal of man-made debris detrimental to ecological functions and ecosystem-wide processes waterward of the OHWM.
6. Placement of large woody debris if consistent with local, state and/or federal regulations, see Chelan County Code Chapter 13.28.
7. Participation in an approved mitigation banking or in-lieu-fee program when process is adopted by Chelan County.

4.3 Flood Hazard Reduction Regulations

The following provisions apply to actions taken to reduce flood damage or hazard and to uses, development, and shoreline modifications that may increase flood hazards.

Flood hazard reduction measures are a type of development which may consist of nonstructural measures, such as wetland restoration, dike removal, use relocation,

biotechnical measures, and storm water management programs, and of structural measures, such as dikes, levees, revetments, floodwalls, channel realignment.

Shoreline stabilization is not considered a type of flood hazard reduction measure when the primary purpose is to prevent erosion of land from currents and waves originating in the shoreline waterbody. Shoreline stabilization is addressed in Section 5.18.

All uses, developments and shoreline modifications have the potential to intensify flooding elsewhere, damage ecological functions critical for fish and wildlife species or impact bank stability and water quality. Therefore, uses, development and shoreline modifications within the floodplain, floodway or channel migration zone should be avoided whenever possible or adequately mitigated for impacts.

A. **Floodplain.** Uses, developments and shoreline modifications in floodplains shall be consistent with applicable flood hazard plans and regulations, including but not limited to Chelan County Code Chapter 3.20, and avoid significantly or cumulatively increasing flood hazards.

B. **Floodway.** All uses, developments and shoreline modifications are prohibited in the floodway, except the following:

    1. New structural flood hazard reduction measures, such as levees, in any shoreline jurisdiction shall be permitted only when:

        a. A structural engineer or qualified geologist, documents that structural flood hazard reduction measures are necessary to protect existing development and that nonstructural measures are not feasible; and,

        b. A qualified professional, documents that impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss of ecological functions, and that appropriate vegetation conservation actions are undertaken consistent with this SMP.

        c. Be placed landward of associated wetlands and designated buffers, except for actions that increase ecological functions, such as wetland restoration; provided no other alternative to reduce flood hazard to existing development is feasible. The need for, and analysis of feasible alternatives to, structural improvements shall be documented through a geotechnical analysis.

    2. New development in designated urban growth areas located upland of existing structures that prevent active channel movement and flooding.

    3. Modifications or additions to an existing nonagricultural legal use, provided that channel migration is not further limited and provided that such actions do not cause significant ecological impacts.

4. Existing and ongoing agricultural practices provided that no new restrictions to channel movement occur.
5. Public access is permitted in the CMZ and floodway when consistent with Section 4.4.
6. Removal of material, such as gravel, for flood management purposes shall be consistent with Section 5.8, Dredging and Dredge Material Disposal and Section 5.13, Mining.
7. Mining when conducted in a manner consistent with Section 5.13 Mining, and the shoreline environment designation.
8. Development or actions with a primary purpose of protecting or restoring ecological functions and ecosystem-wide processes.
9. Forest practices in compliance with the Washington State Forest Practices Act and its implementing rules.
10. Bridges, utility lines, public stormwater facilities and outfalls, and other public utility and transportation structures where no other feasible alternative exists or the alternative would result in unreasonable and disproportionate costs and the long-term maintenance or repair costs are not significantly different between options inside or outside of the floodway or channel migration zone.
11. Repair and maintenance of an existing legal use, provided that such actions do not cause significant ecological impacts or increase flood hazards to other uses.
12. Measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measures do not interfere with fluvial hydrological and geo-morphological processes normally acting in natural conditions, and that the measures include appropriate mitigation of impacts to ecological functions associated with the river or stream.

C. Channel migration zone (CMZ) Maps.

1. Channel migration zone maps prepared consistent with WAC 173-26-221(3)(b) are included in Appendix D of this SMP. The County shall utilize these maps and accompanying GIS databases in shoreline application reviews.
2. Applicants for shoreline use, development or modification may submit a site-specific channel migration zone study, documenting alternative channel migration boundaries, when prepared by a qualified professional. The report shall be consistent with WAC 173-26-221(3)(b) and may include, but is not limited to, historic aerial photographs, topographic mapping, flooding records, and field verification.

D. **Permitted uses in the CMZ.** Where appropriate and/or necessary within the channel migration zone (CMZ), new development, uses or subdivisions may be permitted when it can be reasonably foreseeable that the development or use would not require structural flood hazard reduction measures to be implemented within the floodway. Additionally, the Administrator may require the applicant to submit a study from a qualified professional to ensure that all critical areas, potential active channel movement or flooding questions have been addressed.

E. New structural flood hazard reduction measures are allowed in shoreline jurisdiction only when it is demonstrated by a scientific and engineering analysis that they are necessary to protect existing development, that nonstructural measures are not feasible, that impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss, and that appropriate vegetation conservation actions are undertaken consistent with WAC 173-26-221(5). Structural flood hazard reduction measures shall be consistent with the county's adopted comprehensive flood hazard management plan approved by the department that evaluates cumulative impacts to the watershed system.

F. Place new structural flood hazard reduction measures landward of the associated wetlands, and designated vegetation conservation areas, except for actions that increase ecological functions. Flood hazard reduction projects may only be authorized if it is determined that no other alternative to reduce flood hazard to existing development is feasible. The need for, and analysis of feasible alternatives to, structural improvements shall be documented through a geotechnical analysis.

G. New structural public flood hazard reduction measures, such as dikes and levees, should dedicate and improve public access pathways unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and unmitigable significant ecological impacts, unavoidable conflict with the proposed use, or a cost that is disproportionate and unreasonable to the total long-term cost of the development.

H. The removal of gravel for flood management purposes shall be consistent with the county's adopted flood hazard management plan and allowed only after a biological and geomorphological study shows that extraction has a long-term benefit to flood hazard reduction, and does not result in a net loss of ecological functions.

4.4 Public Access Regulations

A. **Inventory and needs assessment.** Chelan County has completed a Shoreline Public Access Plan (Appendix E) which provides a comprehensive inventory of existing public access and identifies areas of need, or "gap" areas. As of 2012, gap areas included the north shore of Lake Chelan, north of Wenatchee on the Columbia River between Rocky Reach Dam and Entiat, Malaga, Peshastin, and the north shore of Lake Wenatchee. Applicants may use the analysis criteria within Appendix E to re-evaluate gaps at the time of application/development.

B. **Applicability.** When shoreline development is proposed within the public access "gap" areas identified in the Shoreline Public Access Plan (Appendix E), the following shoreline uses and activities shall require public access unless excepted in section (C) below:

   1. Development consistent with WAC 173-26-221(4)(d)(iii);
   2. Development which is not a preferred shoreline use (e.g. non-water-oriented commercial or industrial development);
   3. Development proposed by local government(s), Port Districts, State agencies or Public Utility Districts;

C. **Exceptions.** The following types of development are not required to provide public access when approved by the Shoreline Administrator:

   1. Single-family residences and other exempt development;
   2. Development within non-gap areas, as defined by the Shoreline Public Access Plan, Appendix E;
   3. Development which does not lessen existing public access;
   4. Proposed development where the applicant demonstrates to the satisfaction of the Administrator that one of the following criteria are met and feasible alternatives have been considered:
      a. Unavoidable health or safety hazards to the public exist that cannot be prevented by any practical means.
      b. Inherent security requirements of the use cannot be satisfied through the application of alternative design features or other solutions.
      c. Adverse impacts to shoreline ecological processes and functions that cannot be mitigated will result from the public access.
      d. Significant unavoidable conflict between any access regulations and the proposed use and/or adjacent uses would occur and cannot be mitigated.

D. **Types of Public Access.** Public access may include direct access to the water, offsite improvements to existing or new public access or visual. Public access

may include viewing platforms, trails/paths, stairs, bridges, boat ramps, docks, fishing stations for cleaning or interpretive displays or signage.

E. **Standards.** When developing public access, the applicant shall demonstrate compliance with adopted road and pedestrian facilities in Chelan County Code Title 15, or as approved by the Shoreline Administrator. Additionally, the Shoreline Administrator may require buffers between public access and adjoining private property, screening landscaping or fencing, or other mitigation to lessen the impact to surrounding private property.

F. **Nexus and proportionality.** When a public access is required, the County shall document the need for the public access in relation to the impact of the shoreline development/use.

4.5 Vegetation Conservation and Shoreline Buffer Regulations

Shoreline vegetation provides ecological and aesthetic functions valued by the public and important to habitat and water quality. Vegetation Conservation identifies ways to consider and protect those functions while using the shorelines.

Shoreline buffers provide an area to retain shoreline vegetation and ensure a continued level of ecological function. Uses and development within the shoreline buffer which result in the loss of vegetation may reduce function. Vegetation removal within shoreline buffer that is not permitted without the appropriate review and approvals may be subject to enforcement provisions in Section 7.15, Enforcement.

A. **Conserve vegetation.** Shoreline developments shall address conservation and maintenance of vegetation within the required buffer through compliance with this Section. Uses and modifications must be designed and located to ensure that the development will not result in a net loss of shoreline ecological functions or have significant adverse impacts to shoreline uses and vegetation, resources, and values provided for in RCW 90.58.020.

B. **Adverse impacts on vegetation.** Actions that result in an adverse impact are not permitted unless mitigated for through an approved permit. Adverse impacts to shoreline vegetation are considered to occur when vegetation is removed within the buffers that would reduce the performance of any of the shoreline functions.

C. **Native plant list**. Chelan County maintains a list of suggested native plants to be utilized in restoration or mitigation plantings. Property owners may choose species from this list when native plants are desired or required, or may use other native species identified by the Washington Native Plant Society, Washington Department of Natural Resources Natural Heritage Program,

Washington Department of Fish and Wildlife, or other agency or entity that has expertise.

D. **Water-dependent uses.** Consistent with the use allowances for each shoreline environment designation, water-dependent uses, modifications and activities may be located in shoreline buffers when consistent with this SMP. These uses may result in the modification of the vegetation.

   Accessory uses, developments and activities should be located outside of the shoreline buffer unless consistent with Section 4.2, Ecological Protection and one of the following:

   1. Proximity to the water-dependent project elements is critical to the successful implementation of the facility's purpose and the elements are supportive of the water-dependent use and have no other utility (e.g., a road to a boat launch facility, facilities that support non-commercial aquaculture);
   2. In parks or on other public lands where high-intensity recreational development is already legally established and whose use is primarily related to access to, enjoyment and use of the water, they do not conflict with or limit opportunities for other water-oriented uses; or
   3. The applicant's lot/site has topographical constraints where no other location of the development is feasible (e.g., the water-dependent use or activity is located on a parcel entirely or substantially encumbered by the required buffer).

E. **Passive activities.** Education, scientific research, and passive recreational activities, including, but not limited to: fishing, bird watching, hiking, hunting, boating, horseback riding, snowshoe or cross-country skiing, swimming, canoeing, and bicycling, are permitted within shoreline jurisdiction and within established shoreline and critical area buffers.

F. Tree Removal.

   1. Where trees, within the shoreline buffer, pose a significant safety hazard as indicated in a written report by a certified arborist or other qualified professional or as approved by the Administrator, they may be removed if the hazard cannot be removed by topping or other technique that maintains some habitat function. Stumps shall be retained in the ground to provide soil stabilization unless another soil stabilization technique is utilized immediately after stump removal. The Administrator may require revegetation for removed trees.
   2. Removal of non-hazard trees in the shoreline buffer is permitted if associated with an approved mitigation and management plan, approved use/development, public access, or view corridor.
   3. Tree removal which is proposed as part of an approved use or development shall be minimized through site design and mitigation.

G. **Residential view corridors**. The development or maintenance of view corridors can provide opportunities for visual access to waterbodies associated with privately owned waterfront lots. One view corridor, limited to 25 percent of the width of the lot frontage, or 25 feet, whichever distance is less, may be permitted per privately owned lot, when consistent with the provisions of Section 4.2, Ecological Protection; Appendix B, Critical Areas Regulations; and this Section. A mitigation and management plan, as required by section 4.2 Ecological Protection, must be submitted for review and approval. The Administrator may waive the requirement for a mitigation and management plan where it can be demonstrated that there will be no net loss of ecological function to the shoreline.

1. In addition to the submittal of a complete mitigation and management plan, an applicant must submit the following materials:
    a. A graphic and/or site photos for the entire shoreline frontage which demonstrates that the existing or proposed development does not or will not have a view corridor of the waterbody, taking into account site topography and the location of existing shoreline vegetation on the parcel.
    b. Demonstration that the view corridor will include the existing shoreline physical access corridor to minimize alteration of the shoreline buffer.
2. View corridors must also be consistent with the following standards:
    a. Native vegetation removal may be permitted only as needed to create or maintain the view corridor, provided that the view corridor is located to minimize removal of native trees and shrubs, in that order.
    b. Pruning or removal of vegetation waterward of the OHWM is prohibited.
    c. Non-native vegetation within a view corridor may be removed when the mitigation and management plan can demonstrate a net gain in site ecological functions, and where any impacts are mitigated.
    d. Whenever possible, view corridors shall be located in areas dominated with non-native vegetation and invasive species.
    e. Only one view corridor is permitted for a property. Limitations and guidelines for maintenance shall be established in the mitigation and management plan.

H. **Fire Protection Options**. Property owners with existing structures may request fire protection measures which are recommended through an adopted wildfire protection plan or from the Washington Department of Natural Resources, Cascadia Conservation District, or other similar group/agency.

Property owners may remove vegetation to reduce fire risk with a Shoreline Substantial Development Permit. These provisions are intended to support fire

suppression protection (similar to Firewise standards) and shall not be used for the development of trails or yard areas. The Administrator shall review the proposal based on:

a. The ability of the proposal to reduce fire risk and/or fire spread for the site and the surrounding properties; and,

b. The impact to the vegetation and habitat function which may require mitigation to ensure no-net-loss.

1. **Vegetation Removal to Protect Existing Residential Structures.** The following activities are allowed:

a. Clearing of flammable native and non-native vegetation within 5 feet of existing residential structures, legally established appurtenances and stationary propane tanks is allowed.

b. Within 30 feet of existing residential structures, legally established appurtenances and stationary propane tanks, native trees may be trimmed to the lesser of 10 feet or one third of the tree height from the ground.

c. Wildfire fuel reduction activities may be applied for the protection of an existing residential structure.

I. **Non-native vegetation.** With the exception of hand removal or spot- spraying of invasive or noxious weeds, the determination of whether non- native vegetation removal may be permitted in a shoreline buffer or critical area buffer must be evaluated in conformance with Section 4.2, Ecological Protection and Appendix B, Critical Areas Regulations. Such removal of noxious weeds and/or invasive species shall be incorporated in mitigation plans, as necessary, to prevent erosion and facilitate establishment of a stable community of native plants.

J. **Cultural and historic resources protection.** Fill and other shoreline modifications may be permitted in shoreline and critical areas buffers when necessary to protect cultural or historic resources when nonstructural measures, planting vegetation, or installing on-site drainage improvements are not feasible or not sufficient to avoid continued degradation, disturbance or erosion of a site. Cultural resource protection projects shall be coordinated with any affected Indian tribes and comply with applicable provisions of Section 4.1 of this SMP.

4.6 Water Quality, Stormwater and Nonpoint Pollution Regulations

A. **Applicability.** The following section applies to all development and uses in shorelines of the state that affect water quality.

B. **Requirements for new development.** New development, excluding overwater structures and shoreline stabilization, shall manage stormwater to avoid and minimize potential adverse effects on shoreline ecological functions through the use of best management practices and/or through compliance with the current Stormwater Management Manual for Eastern Washington, or a local equivalent stormwater manual in effect at the time if applicable to the project. When the Stormwater Management Manual or a local equivalent stormwater manual applies, deviations from the standards may be approved where it can be demonstrated through County Code that off-site facilities would provide better treatment. Additionally, new development is encouraged to implement low impact development or other similar techniques.

C. **Maintain storm drainage facilities.** Maintenance of storm drainage facilities on private property shall be the responsibility of the property owner(s). This responsibility and the provision for maintenance shall be clearly stated on any recorded subdivision, short plat, or binding site plan map, building permit, property conveyance documents, maintenance agreements and/or improvement plans.

D. **Use BMPs.** Best management practices (BMPs) for control of erosion and sedimentation shall be implemented for all development in shoreline jurisdiction through an approved temporary erosion and sediment control (TESC) plan or Stormwater Pollution Prevention Plan, identified in the Stormwater Management Manual for Eastern Washington, as amended or the most recent adopted stormwater manual, or administrative conditions, in accordance with the current federal, state, and/or local stormwater management standards in effect at the time.

E. **Sewage management.** On-site sewage systems shall be located and designed to meet all applicable water quality, utility, and health standards, in addition to requirements outlined below.

    1. On-site wastewater treatment systems shall be located landward of designated shoreline buffers and subject to regulations administered by the Chelan-Douglas Health District. In instances where shoreline buffers are less than 100 feet to the OHWM, an approval from the Chelan- Douglas Health District is required. Buffer reductions shall be the minimum necessary and shall be based on feasibility, lot size, or lot configuration. Where residential structures are permitted within 100 feet of the OHWM, tightlines from structures or septic tanks may be located within 100 feet from the OHWM.

    2. Large On-site Sewage Systems (LOSS) shall be subject to regulations administered by the Washington State Department of Ecology or Department of Health as required by rule adopted under RCW 70.118B.020.

3. All individual and community on-site wastewater (sewage) treatment systems including septic tanks and drainfields or alternative systems approved and inspected by the Chelan-Douglas Health District, the Washington Department of Ecology, or Washington Department of Health, shall be located landward of designated shoreline buffers.

5 SHORELINE MODIFICATIONS AND USES

Chapter 5 presents general regulations that apply to particular developments, uses, or activities in any shoreline environment designation.

Policies related to each type of use are located in Appendix F.

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5.1 General Upland Shoreline Modification and Use Regulations

This section provides standards addressing preferred layouts of shoreline development and appropriate signage serving the intended use and recognizing shoreline locations.

A. **Preference for water-oriented facility location.** Shoreline developments shall locate the water-oriented portions of their developments along the shoreline and place all other facilities landward or outside shoreline jurisdiction.

B. **Minimize changes to topography.** To the extent feasible, design of structures, and motorized and nonmotorized vehicular improvements, shall conform to natural contours and minimize

disturbance to soils and native vegetation and natural features while meeting applicable government standards.

C. **Building heights.** Building heights above 35 feet, require authorization via a Shoreline Conditional Use Permit pursuant to Section 7.7 of this SMP.

D. **Illegal structure(s)/material removal.** The removal of structures or material associated with a code enforcement action (identified by the County, State or Federal agency), and any related restoration, does not require a shoreline substantial development or conditional use permit if done in compliance with an approved Restoration and/or Mitigation and Monitoring Plan.

E. **Lighting.** Exterior lighting shall be designed and operated to avoid illuminating nearby properties; prevent glare on adjacent properties, public areas or roadways to avoid infringing on the use and enjoyment of such areas; and to prevent hazards.

1. Methods of controlling spillover light include, but are not limited to, limits on height of structure, limits on light levels of fixtures, light shields, review of type of light and brightness of light, setbacks, buffer areas and screening.
2. Lighting shall be directed away from critical areas, unless necessary for public health and safety.

F. Sign regulations.

1. The following signs are permitted within shoreline environmental buffers when associated with a permitted use and meeting the standards of this section. Sign outside of the shoreline environmental buffer shall conform to the zoning code.
    a. Signs required by law or for public safety shall not be subject to limitations with respect to the number, location, lighting and/or size, provided that they are the minimum necessary to achieve the intended purpose.
    b. Educational and recreational signs associated with a public use.
    c. Building-mounted signs may not exceed the building height or be greater than 56 square feet.
    d. Signs of any size may be placed in the form of a mural on conforming structures.
    e. Water-dependent commercial or industrial uses may have a maximum of two signs no greater than a combined total of 56 square feet.
    f. Directional signs may be posted in all shoreline buffers so long as each sign is no larger than 6 square feet.
    g. Real estate “sale signs”.
2. Sign Standards:
    a. Signs shall comply with lighting standards of subsection 5.1.E.

b. Signs or other devices which flash, blink, flutter, rotate, oscillate, or otherwise purposely fluctuate in lighting or position, in order to attract attention through their distractive character are prohibited in any shoreline environmental buffer. Except, pennants, banners and other devices of seasonal, holiday, or special event character may be utilized on a temporary basis if not more than thirty calendar days.

c. Signs shall not be posted or painted on natural features such as trees, rocks, and hillsides, etc., within shoreline jurisdiction, excluding Numeral Mountain (Entiat) or Painted Rock (Lake Chelan).

3. Moved Signs: Signs that are moved, replaced, or altered in size or placement shall conform with this SMP.

G. **Pools.** Pools and other upland recreational uses that utilize chemically treated water shall be managed consistent with the Washington State Department of Ecology guidelines for draining pools to sanitary sewer systems or approved septic system designed to process chemically treated water. If these options are unavailable, chemically-treated water shall be disposed of in a manner that does not flow off into or impact native riparian vegetation or nearby surface waters. If discharge to the ground will result in flows to nearby ditches or storm sewer, increase the time of water in the pool with no added chlorination to at least two weeks to allow chlorine to dissipate. Infiltration of water shall be limited to either 100 feet landward of the OHWM or landward of half of the lot as measured from the OHWM.

H. **Mitigation.** All shoreline development, modifications and uses are subject to the mitigation sequencing requirements in Section 4.2, Ecological Protection and all regulations of this SMP.

I. **Other Standards.** Based on the specific project, all other applicable standards of this SMP shall apply.

5.2 General Aquatic Shoreline Modification and Use Regulations

These regulations apply to all development, modifications and uses taking place waterward of the OHWM, including, but not limited to, installation of new structures, repair or maintenance of existing structures, replacement projects, restoration projects, and aquatic vegetation removal.

A. **Siting and design requirements.** In-water structures and activities shall be sited and designed to avoid the need for future shoreline stabilization activities and dredging, giving due consideration:

1. To watershed functions and processes; and,
2. To protecting and restoring priority habitat and species; and,
3. To modifications being the minimum size necessary.

B. **Timing restrictions.** Projects involving in-water work shall comply with timing restrictions as set forth by state and federal project approvals.

C. **Structure removal.** Removal of existing in-water structures and materials shall be accomplished in a manner which ensures materials do not re-enter the waterbody.

D. **Illegal structure(s)/material removal.** The removal of in-water structures or material associated with a code enforcement action (identified by the County, State or Federal agency), and any related restoration, may be authorized by written approval of the Shoreline Administrator without a shoreline substantial development or conditional use permit if done in compliance with an approved Restoration and/or Mitigation and Monitoring Plan.

E. **Below-OHWM excavations.** Any trenches, depressions, or holes created below the OHWM shall be backfilled prior to inundation by high water or wave action.

F. **Disposal of waste material.** Waste material, such as construction debris, silt, excess dirt or overburden resulting from in-water structure installation, shall be deposited outside of the shoreline jurisdiction in an approved upland disposal site. Proposals to temporarily store waste material or re-use waste materials within shoreline jurisdiction may be approved provided:

   1. That best management practices are adequate to prevent erosion or water quality degradation; and,
   2. That an on-site location outside of shoreline jurisdiction is not available.
   3. The Administrator shall define the date of removal and may condition the site for restoration.

G. **Hazardous materials.** Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, fresh cement, sediments, sediment- laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the waterbody during in-water activities. Necessary refueling of motorized equipment, other than watercraft, shall be conducted outside of shoreline buffers and a minimum of 100 feet from the OHWM if feasible. Appropriate spill clean-up materials must be on-site at all times, and any spills must be contained and cleaned immediately after discovery.

H. **Over- and in-water materials**. All materials that may come in contact with water shall be constructed of materials, such as untreated or approved treated wood, concrete, approved plastic composites or steel which will not adversely affect water quality or aquatic plants or animals. Materials used for decking or other structural components shall be approved by applicable state or federal agencies for contact with water to avoid discharge of pollutants from wave splash, rain, or runoff. Wood treated with creosote or pentachlorophenol is prohibited in shoreline waterbodies and other waters.

I. **Over-and in-water structures.** All over- and in-water structures shall be constructed and maintained in a safe and sound condition. Abandoned or unsafe structures or materials, including treated wood, pilings, derelict structures, vessels, buoys, and equipment, shall be repaired or removed by the owner within 180 days, or as required by the Building Official.

J. **Prevent siltation of adjacent areas.** In-water work shall be conducted in a manner that causes little or no siltation to adjacent areas. A sediment control curtain shall be deployed in those instances where siltation is possible. The curtain shall be maintained during project installation and/or through the time of re-vegetation, as determined by the Administrator.

K. **Concrete management.** Fresh concrete or concrete by-products shall not be permitted to enter the waterbody. All forms used for concrete placement shall be completely sealed to prevent concrete from entering the waterbody.

L. **Protection of bank and vegetation**. Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to perform the in-water work. All disturbed areas shall be restored and protected from erosion using vegetation or other means approved by the Administrator.

M. **Trash and unauthorized fill removal required.** All trash and unauthorized fill, including, but not limited to, concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass, and paper, found below the OHWM at the time of project implementation shall be removed.

   Where the trash or fill is visibly providing some habitat function, consultation with Washington Department of Fish and Wildlife and/or the U.S. Army Corps of Engineers should occur before removal.

   Disposal shall occur in an approved upland location, outside of shoreline jurisdiction if feasible, but at a minimum landward of the OHWM and the channel migration zone.

N. **Notifications of distressed or killed fish.** If at any time, as a result of in- water work, fish are observed to be in distress or killed, immediate notification shall be made to appropriate state or federal agencies, including the Washington Department of Fish and Wildlife (phone 1-800-258-5990), National Marine Fisheries Service and/or U.S. Fish and Wildlife Service. Activities related to the fish distress or kill shall not resume until cleared by Department of Fish and Wildlife.

O. **Notification of water quality impacts.** If at any time, as a result of in-water work, water quality problems develop, immediate notification shall be made to the appropriate state or federal agency(ies), including Ecology, National Marine Fisheries Service and/or U.S. Fish and Wildlife Service.

P. **Retain natural features.** Natural in-water features such as snags, uprooted trees, or stumps should be left in place unless it can be demonstrated that they

are actually causing bank erosion, higher flood stages, or a hazard to navigation or human safety.

Q. **Floatation materials.** During maintenance, existing un-encapsulated floatation material must be replaced with floatation material encapsulated within a commercially manufactured shell, typically polyethylene or another material specifically approved for use in aquatic environments.

R. **Mitigation.** All aquatic shoreline development, modifications and uses are subject to the mitigation sequencing requirements in Section 4.2, Ecological Protection and all regulations of this SMP.

S. **Other Standards.** Based on the specific project, all other applicable standards of this SMP shall apply.

5.3 Agriculture Regulations

A. **Existing agriculture.** The provisions of this SMP do not limit or require modification of agricultural activities as of April 22, 1975, the original date of adoption of the County SMP.

B. **Applicability.** SMP provisions shall apply in the following cases:

1. New and expanding agricultural activities on non-agricultural lands; and,
2. Conversion of non-agricultural lands to agricultural activities; and,
3. Shoreline development within or adjacent to designated agricultural resource lands, as defined by the zoning map; and,
4. Non-agricultural activities on agricultural land.

C. Development standards.

1. Feedlots shall comply with the following standards.
   a. Shall be located outside of shoreline buffers, vegetation conservation areas, and 100-year floodplains.
   b. Shall have a minimum of four feet between the ground surface and the upper surface of the water table.
   c. Shall be conditioned to meet best management practices provided by federal or state agencies.
2. Agricultural-Commercial Uses. Agricultural-commercial uses shall be consistent with Commercial use standards in Section 5.7 Commercial Development and this SMP.
3. Non-agricultural activities on agricultural lands. New non-agricultural activities proposed on agricultural lands shall be consistent with other applicable shoreline standards, for example Commercial or Industrial, and this SMP.

D. **Mitigate impacts to agricultural operations.** Shoreline development within or adjacent to designated agricultural resource lands shall be required to provide

for mitigation, such as fencing, planting of trees as buffers, landscaping, dust control, and appropriate spraying for pest control or the removal of fruit-bearing trees, to address impacts to agricultural operations, surrounding uses and ecological function.

E. **Groundwater protection.** Agricultural activities shall incorporate best management practices concerning waste disposal, fertilizer use, pesticide use, and stream corridor management. Technical assistance may be available from the Cascadia Conservation District, WSU cooperative extension.

F. **New agricultural uses.** New agricultural uses which require alteration of the contour of the Shorelands, other than normal cultivation, shall not be considered normal or necessary farming or ranching activities and shall comply with Section 5.9, Fill and Excavation.

G. **New agricultural uses on non-agricultural land.** New agricultural uses on non-agricultural lands are permitted where specified in Table 3.6-a and when consistent with this SMP.

5.4 Aquaculture Regulations

A. **Location.** Aquaculture development and uses shall comply with the following locational guidelines:

1. Water-dependent portions of commercial and non-commercial aquaculture facilities and their necessary accessories may be located waterward of the OHWM or in the shoreline buffer. Water intakes and discharge structures, pump stations, water and power conveyances, and fish collection and discharge structures are all considered water-dependent or accessory to water-dependent.
2. All other elements of aquaculture facilities shall be located outside the shoreline buffer, unless proximity to the water-dependent project elements is critical to the successful implementation of the facility's purpose and are supportive of the water-dependent use and have no other utility, such as, tank cover buildings, emergency power generators, and maintenance shops/laboratories.
3. Sites shall be selected to avoid and minimize the need for and degree of floodplain or floodway alteration, channel migration zone alteration, shoreline stabilization, native vegetation removal, and/or wetland alteration.

   Commercial aquaculture operations may be required to submit a site alternatives analysis.

   Non-commercial aquaculture operations shall only be required to demonstrate that the location of the proposed facilities on the available site avoids and minimizes impacts to any on-site critical areas and habitats to the maximum extent feasible.

4. Aquacultural facilities shall be designed and located so as not to spread disease to native aquatic life or establish new non-native species.

5. To the extent that a location in channel migration zones, floodplains or floodways, or wetlands is permitted after application of mitigation sequencing and compliance with Appendix B, aquaculture facilities shall have the following order of preference, low-intensity, moderate-intensity and high-intensity.

B. **Substrate modification.** Aquaculture that involves substantial aquatic substrate modification or sedimentation through dredging, trenching, digging, or other similar mechanisms, shall not be permitted in areas where the proposal would have long-term adverse impacts on Fish and Wildlife Habitat Conservation Areas.

If substrate modification will not have long-term adverse impacts or the adverse impacts will be short-term, the applicant shall demonstrate that the degree of proposed substrate modification is the minimum necessary for feasible aquaculture operations.

C. **Mitigation sequencing.** New and expanded aquaculture proposals shall comply with mitigation sequencing requirements as outlined in Section 4.2, Ecological Protection and other general standards in Chapter 4. Aquaculture activities that would have a significant adverse impact on natural, dynamic shoreline processes, or that would result in a net loss of shoreline ecological functions, shall be prohibited. Aquaculture practices shall be designed to minimize use of artificial substances and shall use chemical compounds that are least persistent and have the least impact on plants, animals and water quality.

D. **New aquatic species.** New aquatic species that were not previously found or cultivated in Chelan County shall not be introduced into fresh waters without prior written approval of the Director of the Washington Department of Fish and Wildlife and the Director of the Washington Department of Health.

E. **Fish kill.** In the event of a fish kill at the site of a net pen facility, the aquaculture operator shall immediately report to the Chelan-Douglas Health District and Washington Department of Fish and Wildlife stating the cause of death and shall detail remedial action(s) to be implemented to prevent reoccurrence.

F. **U.S. Coast Guard requirements.** All floating and submerged aquaculture structures and facilities in navigable waters shall be marked in accordance with U.S. Coast Guard requirements.

G. **Coordination with Tribes.** The rights of treaty tribes to aquatic resources within their usual and accustomed areas shall be addressed through direct coordination between the applicant and the affected tribe(s) during the permit review process.

H. **Submerged and floating structures.** The installation of submerged structures and floating structures shall be permitted only when the applicant demonstrates that no alternative method of operation is feasible.

I. **Potential impacts.** If uncertainty exists regarding potential impacts of a proposed aquaculture activity, and for all experimental aquaculture activities, baseline and periodic operational monitoring by a qualified professional may be required, at the applicant's expense, and shall continue until adequate information is available to determine the success of the project and/or the magnitude of any probable significant adverse environmental impacts. Permits for such activities shall include specific performance measures and provisions for adjustment or termination of the project at any time if monitoring indicates significant, adverse environmental impacts that cannot be adequately mitigated.

J. **Over-water structures.** For water-dependent portions of aquaculture projects which may require over-water structures, storage of necessary tools and apparatus waterward of the OHWM shall be limited to the minimum size necessary to provide for equipment needed for the immediate and regular operation of the facility. Materials that are not necessary for the immediate and regular operation of the facility shall be stored outside of the shoreline buffer.

K. **Permanent instream facilities.** Permanent water-dependent instream facilities must be properly anchored to prevent the channel from migrating around it and causing erosion or creating a safety hazard, and must evaluate and mitigate any potential adverse effects on adjacent properties upstream and downstream.

L. **Product processing.** No processing of any aquaculture product, except for the sorting or culling of the cultured organism and the washing or removal of surface materials or organisms after harvest, shall occur in or over the water unless specifically approved by permit. All other processing and processing facilities shall be located on land and shall be subject to the regulations of Section 5.7 Commercial Development and/or Section 5.11 Industry, and this SMP.

M. **Waste disposal.** Aquaculture wastes, including waste from fish containment areas, shall be disposed of in a manner that will ensure strict compliance with all applicable governmental waste and wastewater disposal standards, including, but not limited to, the Federal Clean Water Act, Section 401, and the Washington State Water Pollution Control Act (RCW 90.48).

N. **Construction, maintenance and bonding.** Aquaculture structures and equipment shall be of sound construction and shall be so maintained.

Abandoned or unsafe structures and/or equipment shall be removed or repaired promptly by the owner.

Where any structure might constitute a potential hazard to the public in the future, the County may require the posting of a bond commensurate with the cost of removal or repair. The local government may abate an abandoned or unsafe structure, following notice to the owner, if the owner fails to respond in thirty calendar days and may impose a lien on the related shoreline property or other assets in an amount equal to the cost of the abatement. Bonding requirements shall not duplicate requirements of other agencies.

5.5 Boating Facilities Regulations

Public, community or private boating facilities, including marinas, community docks (serving five or more dwelling units), public docks, and boat launch facilities, shall be subject to the policies and regulations of this Section.

Facilities serving four or fewer dwelling units are located in Section 5.14, Private Moorage Facilities.

A. Locational standards.

1. New boating facilities shall not be permitted in areas where dredging will be required to create or maintain the new facility or where a flood hazard will be created.
2. Expansions shall be located and designed to minimize the need for new or maintenance dredging.
3. Boating facilities shall be designed such that any moored boats will be located in water depths which prevent prop scour, unless the applicant can demonstrate that prop scour will not adversely impact aquatic vegetation or increase suspended sediment loads.
4. Boating facilities shall be located and designed in a manner that eliminates the need for shoreline stabilization. When the need for stabilization is unavoidable only the minimum necessary shoreline stabilization to adequately protect facilities shall be permitted.
5. Launch ramps shall be located where:
    a. There is adequate water mixing and flushing; and,
    b. It will not adversely affect flood channel capacity or otherwise create a flood hazard; and,
    c. Water depths are adequate to eliminate or minimize the need for dredging or filling; and,
    d. Outside of critical areas or salmonid spawning habitat areas, unless mitigated and approved by the Administrator.
6. Boating facilities shall be located only where adequate water, power and/or wastewater collection and treatment are available or where they can be provided concurrent with the development.

7. Boating facilities shall be located where existing public infrastructure is adequate to accommodate expected levels of traffic to and from the facility, or the applicant must implement necessary improvements to public infrastructure consistent with County level of service standards and road standards.
8. Long-term boat storage located landward of the OHWM is regulated as a non-water-oriented commercial use under Section 5.7 Commercial Development.
9. Boat trailer storage associated with a boat launch facility (either launch ramp, crane, hoist or similar device) may be regulated as a water-related commercial use.
10. Boat storage shall be located landward of the shoreline environmental buffers.

B. Subdivisions and ownership.

1. For all subdivisions or other divisions of land that results in 2 or more dwellings, excluding Accessory Dwelling Units, only joint use or community dock facilities may be permitted. Access shall be noted on a Notice to Title and determined at the time of construction based on agency standards.
2. A site for shared moorage at a community dock should be owned in undivided interest by property owners or managed by a homeowner's association as a common easement within the residential community that is served by the dock.

C. Facility design.

1. Boating facilities shall meet the following standards:
    a. No part of a community dock or marina shall be wider than 8 feet with the exception of floats with wave attenuation design which may be up to 12 feet wide.
    b. Marinas and community docks shall be no longer than 250 feet measured perpendicularly from the OHWM unless a variance is obtained.
    c. New boating facilities with overwater structures shall be located in water sufficiently deep to prevent the structure from grounding at the lowest low water, or stoppers must be installed to prevent grounding. This requirement does not apply in Lake Chelan, provided the boating facility is not located over native aquatic or emergent vegetation, or over spawning and holding areas for priority resident fish species.
    d. New boating facilities with overwater structures on the Columbia River and Lake Wenatchee shall include grating materials that have been approved by state and federal resource agencies, unless the applicant can demonstrate that the height, orientation and width of the overwater

structure results in illumination of the area below the overwater structure. Floats shall include grating over areas that are not underlain by float tubs.

2. Launch ramps shall be designed and constructed using methods/technology approved by state and federal resource agencies. At a minimum, they shall minimize the obstruction of currents, alteration of sediment transport, and the accumulation of drift logs and debris.
3. Expansion of boating facilities shall comply with applicable dimensional, design, materials and mitigation standards for new boating facilities as described in this Section.
4. Any proposed buoys are subject to the regulations in Section 5.14.E.
5. Public access shall be considered in the design:
    a. Boating facilities shall be designed so that lawfully existing or planned public shoreline access is not blocked, obstructed nor made dangerous.
    b. New marinas shall provide physical and/or visual public access, see Section 4.4. Features for access could include, but are not limited to, walk-on access, fishing platforms, and underwater diving and viewing platforms.
6. Covered moorage is permitted; however, on State-owned aquatic land, for Lake Chelan (below 1079), an approved permit/agreement from the Department of Natural Resources is required prior to placement.
7. Accessory uses at boating facilities shall be limited to water-oriented uses or uses that support physical or visual shoreline access.
8. Accessory development, such as, parking, non-hazardous waste storage and treatment, stormwater management facilities, and utilities is encouraged be located outside the shoreline buffer unless where these are necessary to support the water-oriented use.
9. Parking and vehicle access.
    a. Public boat launch facilities shall include parking spaces for boat trailers commensurate with projected demand.
    b. All new parking and vehicle access areas shall not be placed in shoreline environmental buffers or critical area buffers, except as permitted for accessing water-dependent elements of the boat launch.
    c. Existing parking within the shoreline environmental buffers or critical area buffers may only be expanded to accommodate needed ADA compliance.
    d. All boating facilities shall provide parking facilities commensurate with projected demand and consistent with Section 5.19.

D. Site operation.

1. New and modified public marinas shall provide a pump-out facility or document alternative options.
2. Marinas, pier, open water moorage and anchorage areas, or other moorage facilities located on state-owned aquatic lands, shall be limited to ten percent (10%) of the total number of slips in a marina for residential uses, as required under WAC 332-30-171.

E. Waste disposal.

1. Discharge of solid waste or sewage into a waterbody is prohibited.
2. Garbage or litter receptacles shall be provided and maintained by the operator at several locations convenient to users.
3. Marinas shall provide adequate restroom and sewage disposal facilities (pump out, holding, and/or treatment facilities) in compliance with applicable health regulations.
4. Disposal or discarding of fish-cleaning wastes, scrap fish, viscera, or unused bait into water or in other than designated garbage receptacles is prohibited.
5. Marina operators shall post all regulations pertaining to handling, disposal and reporting of waste, sewage, fuel, oil or toxic materials where all users may easily read them.
6. Fail-safe facilities and procedures for receiving, storing, dispensing, and disposing of oil or hazardous products, as well as a spill response plan for oil and other products, shall be required for new marinas and expansion or reconfiguration of existing marinas. Compliance with Federal or State law may fulfill this requirement. Rules for spill prevention and response, including reporting requirements, shall be posted on site.
7. Boating facilities providing fuel or storing other toxic and hazardous waste on site must provide secondary containment.

5.6 Breakwaters, Jetties, Groins, Weirs and Barbs Regulations

Breakwaters, jetties, groins, weirs and barbs are generally intended to protect harbors, moorages, navigation activity, or stream banks or bed from wave and wind action or stream flow by creating slow or stillwater areas along shore. A secondary purpose is to protect shorelines from wave- or flow- caused erosion.

These types of developments are separate from Shoreline Stabilization regulations, Section 5.18, which are intended to reduce or prevent erosion of uplands or beaches.

A. **Limitations on groins**. Groins are prohibited except as a component of a professionally designed community or public beach management program

that encompasses an entire reach for which alternatives are infeasible, or where installed to protect or restore shoreline ecological functions or processes.

B. **Limit size of structures**. The size of breakwaters, jetties, groins, weirs and barbs shall be limited to the minimum necessary as determined by a qualified professional to provide protection for the structure or use it is intended to protect.

C. **Use less-impacting alternatives**. Jetties and breakwaters are prohibited except as an integral component of a professionally designed marina, boat launch or public park facility. Where permitted, floating, portable or submerged breakwater structures, or smaller discontinuous structures, are preferred where physical conditions make such alternatives with less impact feasible.

D. **Professional design**. Proposed designs for new or expanded structures shall be designed and certified by a qualified professional, including an engineer, hydrologist, or geomorphologist. The design shall be done in a manner which protects critical areas.

E. **In-water structures.** Development of breakwaters, jetties, groins, weirs, and barbs is also subject to provisions in Section 5.12 In-water Structures and this SMP.

F. **State-owned aquatic lands**. Proposals for breakwaters shall be consistent with the Washington Department of Natural Resources Aquatic Land Management standards (WAC 332-30, RCW 79.105).

5.7 Commercial Development

A. **Water-oriented uses allowed.** Water-dependent, water-related, and water-enjoyment uses are permitted where allowed by zoning and this SMP. Water-dependent commercial uses shall be given preference over water-related and water-enjoyment uses.

B. **Nonwater-oriented commercial uses**. Nonwater-oriented uses, including but not limited to agricultural commercial**,** may be located with water-oriented commercial uses provided:

1. The mixed-use project includes one or more water-dependent uses; and,
2. Water-dependent commercial uses as well as other water-oriented commercial uses have preferential locations along the shoreline; and,
3. A finding can be made that adequate provisions have been provided for roads, ingress and egress, stormwater, parking and loading, domestic and irrigation water, sanitary facilities, power, fire protection, and other necessary facilities, improvements or services consistent with this SMP; and,
4. A finding can be made that noise, light, heat, steam, erosion, water quality, glare, odors, wastes, dust and related impacts on adjacent properties and to the vicinity can be mitigated or avoided; and,

5. Where such use provides a significant public benefit with respect to the Act's objectives, such as providing public access and ecological restoration and meets one of the following conditions:
    1. The use is part of a mixed-use project that includes water-dependent uses; or
    2. Navigability is severely limited at the proposed site, such as not available for commercial navigation.

C. **Nonwater-oriented commercial uses not on a shoreline.** Nonwater-oriented commercial uses may be permitted if the site is physically separated from the shoreline by another property or public right of way.

D. **Overwater uses.** Nonwater-dependent commercial uses shall not be located over water except in existing structures or in the limited instances where they are auxiliary to and necessary in support of water-dependent uses.

E. **Accessory uses to water-oriented commercial activities.** Accessory commercial development, including but not limited to parking, storage and service areas, and circulation, that does not require a shoreline location shall be located landward of the water-oriented portions of the development and outside the shoreline environmental buffers, except:
    1. Accessory uses may be allowed in existing structures or where necessary in support of water-oriented uses.

F. **Public access.** Public access may be required, see Section 4.4 Public Access.

5.8 Dredging and Dredge Material Disposal Regulations

As regulated in this SMP, dredging is the excavation or displacement of the bottom or shoreline of a waterbody (waterward of the OHWM) for purposes of flood control, navigation, utility installation (excluding on-site utility features serving a primary use, which are "accessory utilities" and shall be considered a part of the primary use), the construction or modification of essential public facilities and regional transportation facilities, and/or restoration (of which the primary restoration element is sediment/soil removal rather than being incidental to the primary restoration purpose). This section is not intended to cover other excavations waterward of the OHWM that are incidental to construction of an otherwise authorized use or modification (e.g., bulkhead replacements, large woody debris installations, boat launch ramp installation, pile placement).

All dredging and dredge material disposal on state-owned aquatic lands must also comply with Washington Department of Natural Resources standards and regulations.

A. **Siting and design.** New development shall be sited and designed to first avoid or, secondly, to minimize the need for new and maintenance dredging.

B. **Dredging activities.** Dredging shall only be permitted for the following activities:

1. Development of new or expanded moorages or water-dependent industrial uses when there are no feasible alternatives or other alternatives may have a greater ecological impact.
2. Where necessary for assuring safe and efficient accommodation of existing navigational uses and then only when significant ecological impacts are minimized and when mitigation is provided.
3. Where associated with an approved action under this SMP.
    a. Dredging shall be prohibited for the primary purpose of obtaining fill material, except that permitted under Section 5.13, Mining or when necessary for restoration of ecological functions under Section 5.8(B)(4) Dredging and Dredge Material Disposal. The project must be either associated with a MTCA or CERCLA habitat restoration project or, if approved through a Shoreline Conditional Use Permit, any other significant habitat enhancement project.
4. Development of essential public facilities when there are no feasible alternatives.
5. Maintenance of irrigation reservoirs, drains, canals, or ditches for agricultural purposes. The Administrator may approve five-year management plans addressing maintenance dredging, use of best management practices, and other measures to assure no-net-loss of shoreline ecological functions.
6. Restoration or enhancement of shoreline ecological functions and processes benefiting water quality and/or fish and wildlife habitat.
7. Trenching to allow the installation of underground utilities (excluding "accessory utilities" associated with a primary use) if no practicable alternative exists, and:
    a. Impacts to fish and wildlife habitat are minimized to the maximum extent possible.
    b. The utility installation shall not increase or decrease the natural rate, extent, or opportunity of channel migration.
    c. Appropriate best management practices are employed to prevent water quality impacts or other environmental degradation.
8. Establishing, expanding, relocating or reconfiguring navigation channels and basins where necessary to assure safe and efficient accommodation of existing navigational uses.
9. Maintenance dredging of established navigation channels and basins, which shall be restricted to maintaining previously dredged and/or existing authorized location, depth, and width.

10. Flood hazard reduction, including dam maintenance.

C. **Maintain ecological functions and processes**. The physical alignment and ecological functions and processes of shoreline waterbodies shall be maintained, except to improve hydraulic function, water quality, fish or wildlife habitat, or fish passage.

D. **Mitigation.** Projects shall be consistent with the mitigation sequencing steps outlined in Section 4.2, Ecological Protection.

E. **Conditions may be applied.** Limitations on dredge or disposal operation may be imposed to reduce proximity impacts, protect the public safety and assure compatibility with the interests of other shoreline users. Conditions may include, but are not limited to, limits on periods and hours of operation, type of machinery, and may require provision of landscaped buffer strips and/or fencing to address noise and visual impacts at land disposal or transfer sites.

F. **Review.** Substrate modifications shall compile with Section 5.2, General Aquatic Shoreline Modification, Section 5.9, Fill and Excavation, and this SMP.

G. **Disposal of dredge material.** Dredge material disposal within shoreline jurisdiction is permitted under the following conditions:

1. Shoreline ecological functions and processes will be preserved, restored or enhanced, including protection of surface and groundwater; and
2. Erosion, sedimentation, floodwaters or runoff will not increase adverse impacts to shoreline ecological functions and processes or property.

H. **Disposal of dredge material within channel migration zone.** Disposal of dredge material on shorelands or wetlands within a river's channel migration zone requires a Shoreline Conditional Use Permit. This provision is not intended to address discharge of dredge material into the flowing current of the river or in deep water within the channel where it does not substantially affect the geohydrologic character of the channel migration zone.

I. Open water dredge disposal.

1. Dredge material disposal in open waters may be approved when authorized by applicable agencies and when meeting one of the following conditions:
   a. Land disposal is infeasible, less consistent with this SMP, or prohibited by law; or
   b. Nearshore disposal as part of a program to restore or enhance shoreline ecological functions and processes is not feasible.
2. Dredge materials approved for disposal in open waters shall comply with the following conditions:
   a. Offshore habitat will be protected, restored, or enhanced;
   b. Adverse effects on water quality or biologic resources from contaminated materials will be mitigated;

c. Shifting and dispersal of dredge material will be minimal; and
d. Water quality will not be adversely affected.

5.9 Fill and Excavation Regulations

Fill and excavation regulations in this section apply to all development and uses within the shoreline jurisdiction, in both aquatic and upland environments.

All fill and excavation on state-owned aquatic lands must also comply with Washington Department of Natural Resources standards and regulations.

A. **Protect ecological function.** All fills and excavations shall be located, designed and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration.
   1. Fill and excavation shall be minimized to the maximum extent practicable and necessary to accommodate approved shoreline uses and development activities that are consistent with this SMP.
   2. When fill or excavation causes adverse impacts to ecological functions, a mitigation plan must be prepared and implemented consistent with Section 4.2 Ecological Protection.

B. **Aquatic fill and excavation.** Fill and excavation waterward of the OHWM shall only be permitted when consistent with Table 3.6-a, and only in support of the following approved shoreline use and development activities:
   1. Water-dependent uses (including water-dependent non-commercial aquaculture), public access, and cleanup and disposal of contaminated sediments as part of an environmental clean-up plan; or
   2. Disposal of dredged material considered suitable under, and conducted in accordance with, the Dredged Material Management Program of the Department of Natural Resources and/or the Dredged Material Management Office of the U.S. Army Corps of Engineers, see Section 5.8 Dredging and Dredge Material Disposal; or
   3. Expansion or alteration of transportation facilities of statewide significance, as defined in RCW 81.112.020, currently located on the shoreline where alternatives to fill are infeasible; or
   4. Ecological restoration or enhancement, including, but not limited to, beach nourishment, habitat creation, culvert upgrades to improve fish and flow passage, or bank restoration when consistent with an approved restoration plan; or
   5. Protection of cultural or historic resources when fill is the most feasible method to avoid continued degradation, disturbance or erosion of a site. Such fills must be coordinated with any affected Tribes; or

6. All fills and excavation waterward of the OHWM not associated with ecological restoration, shall require a Shoreline Conditional Use Permit, excluding docks when constructed in the dry.

C. **Upland fill and excavation**. Fills and excavation upland of the OHWM are permitted as part of an approved shoreline use or modification, consistent with Table 3.6-a, provided they are conducted per the requirements of Section 4.5, Vegetation Conservation, Section 4.2 Ecological Protection, and Appendix B, Critical Areas. Fill in shoreline buffers is permitted when necessary to support a use or modification that is permitted within a buffer when necessary to provide protection to cultural or historic resources. Fill or exaction shall:

1. Be the minimum necessary to implement the approved use or modification; and,
2. Not significantly change the topography in a manner that adversely affects the hydrology, ecological function or increases the risk of slope failure.

D. **Shoreline stabilization.** Fills or excavation shall not be located where shoreline stabilization will be necessary to protect materials placed or removed, except when part of an approved plan for protection of cultural or historic resources.

E. **Physical and visual consistency.** Fills, beach nourishment and excavation shall be designed to blend physically and visually with existing topography. The Shoreline Administrator may require native vegetation, specific building materials and/or design changes to reduce impacts to topography and visual impacts.

F. **Maximum slopes.** Cut and fill slopes shall be sloped no steeper than one foot vertical for every two feet horizontal (1:2) unless a specific engineering analysis has been provided.

G. **Erosion control.** A temporary erosion and sediment control (TESC) plan, including BMPs, consistent with the Stormwater Management Manual for Eastern Washington, or approved equivalent, shall be provided for all proposed fill and excavation activities, and approved by the Shoreline Administrator prior to commencement of activity. Disturbed areas shall be immediately protected from erosion using weed-free straw, mulches, hydroseed, or similar methods and revegetated, as applicable.

5.10 Forest Practices Regulations

A. **Conversion to other use.** Preparatory work associated with the conversion of land to non-forestry uses and/or developments shall limit the conversion to the minimum necessary to accomplish the purpose and intent of the shoreline environment designation and associated buffers, general policies and regulations, and specific shoreline modification and use policies on the subject property.

A forest practice that only involves timber cutting is not a development under the Act and does not require a Shoreline Substantial Development Permit or a shoreline exemption. A forest practice that includes activities other than timber cutting may be a development under the Act and may require a Substantial Development Permit, as required by WAC 222-50-020.

Shoreline permit applications shall demonstrate compliance with performance standards in this subsection and the Washington State Forest Practices Rules per WAC Title 222.

B. **State and local forest practice regulations.** All forest practices, including forest conversions, undertaken on shorelines shall comply with the applicable policies and provisions of the Forest Practices Act, RCW 76.09 as amended, and any regulations adopted pursuant, WAC 222.

C. **General Tree Management.** Forest management activities that minimize the potential for catastrophic wildfires and hazard tree removal are permitted consistent with any applicable state and local forest practice regulations and Section 4.5, Vegetation Conservation and 4.2 Ecological Protection.

D. **Selective cutting – shorelines of statewide significance.** Within shoreline jurisdiction along shorelines of statewide significance, only selective commercial timber cutting may be permitted so that no more than thirty percent (30%) of the merchantable timber may be harvested in any 10-year period. Alternative harvesting methods may be authorized if topography, soil conditions or silviculture practices necessary for regeneration render selective logging ecologically detrimental.

Other Selective Cutting is permitted to prevent an epidemic of insects or disease infestations in the area or to adjoining areas when no other means of epidemic control will work; or clean up and restore an area devastated by disaster such as extensive windfall or fire.

The Administrator may require a Habitat Plan and/or Mitigation Plan and revegetation for any selective cutting activity.

5.11 Industrial Regulations

A. **Nonwater-oriented industrial uses limited.** Nonwater-oriented industrial uses are permitted if the site is physically separated from the shoreline by another property or public right-of-way or railroad.

B. **Shoreline properties.** On properties fronting the shoreline, nonwater- oriented industrial development is prohibited in shoreline jurisdiction, except where such use provides a significant public benefit with respect to the Act's objectives, such as providing public access and ecological restoration, and meets one of the following conditions:

1. The use is part of a mixed-use project that includes water-dependent uses; or

2. Navigability is severely limited at the proposed site, such as, not available for commercial navigation.

C. **Accessory uses to water-dependent or water-related industrial activities.** Accessory industrial development that is not water-dependent and does not require a shoreline location shall be located upland of the water-dependent or water-related portions of the development and outside the shoreline environmental buffer. Accessory development includes, but is not limited to, parking, warehousing, open-air storage, waste storage and treatment, and transportation corridors.

D. **Public access.** Public access may be required, see Section 4.4 Public Access.

E. **Clean up and Restoration**. Industrial development and redevelopment are encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated. Federal and state requirements for hazardous materials clean up or management shall be addressed.

5.12 In-Water Structure Regulations

In-water structures include those placed by humans within streams, rivers and lakes for hydroelectric generation, irrigation, water supply, flood control, transportation, utilities, fish habitat enhancement, or other purposes. Structures placed waterward of the OHWM have the potential to cause water impoundment or the diversion, obstruction, or modification of water, and are therefore regulated by this section.

A. **Prohibited projects.** Channelization projects that damage fish and wildlife resources, degrade recreation and aesthetic resources, result in a net loss of ecological functions or result in high flood stages and velocities are prohibited.

B. **Soil stabilization.** Upland cut-and-fill slopes and back-filled areas resulting from installation of in-water structures shall be consistent with Section 5.18 Shoreline Stabilization.

C. **Water quality.** In-water structures shall be constructed and maintained in a manner that does not degrade the quality of affected waters. No motor vehicles, appliances, other similar structures or parts thereof; nor structure demolition debris; nor any other solid waste shall be used as in-water structures.

D. **Protect functions, processes and cultural resources.** In-stream structures shall provide for the protection and preservation of ecosystem-wide processes, ecological functions, and cultural resources. The location and planning of in-stream structures shall give due consideration to watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.

E. **Design.** In-water structures shall be designed by a qualified professional. In-water structures shall allow for natural groundwater movement and surface

runoff, and shall preserve valuable recreation resources and aesthetic values such as point and channel bars, islands, and braided channels. In-water structures shall not be a safety hazard or obstruct water navigation as determined by the Shoreline Administrator.

F. **Dam siting and design.** The design of all dams and the suitability of the proposed site for dam construction shall be certified by a professional engineer licensed in the State of Washington. The professional design shall include a maintenance schedule. Evaluation of the suitability of the dam shall include a downstream safety analysis.

G. **Dam maintenance agreement and bond.** For all dams that are not regulated by either the Federal Energy Regulatory Commission licensing procedures, or the Ecology reservoir permit requirements, a construction bond and maintenance agreement shall be filed with the County prior to construction. The bond or surety shall be approved by the Shoreline Administrator and shall be in a form acceptable to the County. The construction bond shall be equal to at least one hundred fifty percent of the estimated cost of the improvement(s) to be performed, to be utilized by the County to perform any necessary work and to reimburse the County for documented administrative costs associated with action on the device.

   To determine this value, the applicant must submit two cost estimates for the improvements to be performed. If costs incurred by the County exceed the amount provided by the assurance device, the property owner shall reimburse the County in full, or the County may file a lien against the subject property for the amount of any deficit.

   The maintenance agreement shall specify who is responsible for maintenance, shall incorporate the maintenance schedule specified by the design engineer, shall require annual inspections by a civil engineer licensed in the State of Washington, and shall stipulate abandonment procedures which shall include, where appropriate, provisions for site restoration.

5.13 Mining Regulations

A. **Location.** Permitted mining activities may be permitted if consistent with the following locational guidelines:

   1. Mining waterward of the OHWM shall not be permitted within shoreline jurisdiction within 400 feet upstream of any fish or aquaculture facility, or dam.
   2. Mining may be permitted in designated fish and wildlife habitat areas only as a part of an approved flood control program or in conjunction with a habitat restoration or enhancement plan.

3. Mining locations shall be consistent with designated mineral resource lands of long-term significance and based on documentation that mining is dependent on the shoreline location or a portion thereof.
    a. This demonstration may rely on analysis or studies prepared for purposes of comprehensive plan designations, and may be integrated with any relevant environmental review conducted under SEPA (Chapter 43.21C RCW), or otherwise be shown in a manner consistent with RCW 90.58.100(1) and WAC 173- 26-201(2)(a), as amended.

B. **Impacts.** Mining operations or uses shall not cause impairment or loss of floodwater storage, wetland, or other stream corridor features and habitats. Mitigation shall provide for the feature's replacement at equal value consistent with Section 4.2 Ecological Protection.

C. **Surface mine reclamation plans.** For mining proposals that meet the definition of surface mine in RCW 78.44.031, a reclamation plan that complies with the provision of RCW 78.44, Surface mining, shall be included with any shoreline permit application.
    1. In reviewing reclamation plans together with permit applications, the Shoreline Administrator shall determine whether or not the reclamation plan is also consistent with this SMP, the Shoreline Restoration Plan, and other local regulations.
    2. An inconsistent reclamation plan shall constitute sufficient grounds for denial of a shoreline permit, provided, the applicant shall be given reasonable opportunity to revise the plan.

D. **Reclaimed site use.** Subsequent use of reclaimed sites shall be consistent with the provisions of this SMP.

E. **Adverse Ecological and Flood Hazard Impacts.** Mining is prohibited waterward of the OHWM of the Columbia River.

    Mining waterward of the OHWM of other waterbodies, or in the floodplain or channel migration zone of any shoreline waterbody shall not be permitted unless:
    1. Removal of specified quantities of sand and gravel or other materials at specific locations will not adversely affect the natural processes of gravel transportation for the system as a whole; and
    2. The mining and any associated permitted activities will not have significant adverse impacts to habitat for priority species nor cause a net loss of ecological functions of the shoreline.
    3. Such uses will not divert flood flows causing channel-shift or erosion, accelerate or amplify the flooding of downstream flood hazard areas, increase the flooding threat to upstream flood hazard areas, or in any other way threaten public or private properties.

The determinations required by this Section shall be made consistent with RCW 90.58.100(1) and WAC 173-26-201(2)(a).

F. **Continuation of mining at existing site.** In considering renewal, extension or reauthorization of other mining operations waterward of the OHWM shall comply with this SMP.

G. **Recreational mining.** Mining using hand-held mineral prospecting tools, such as gold pans, and more intensive recreational mining, using devices such as suction dredges, shall follow the requirements of the Washington Department of Fish and Wildlife's Gold and Fish Pamphlet, including any applicable timing restrictions. Any recreational mining activities that do not follow the requirements described therein are required to obtain a Conditional Use Permit.

H. **State-owned aquatic lands.** Mining proposals shall be consistent with the Washington Department of Natural Resources Surface Mine Reclamation standards (WAC 332-18, RCW 78.44).

5.14 Private Moorage Facilities Regulations

The purpose of this section is to provide polices and regulations for the location and design of private docks, watercraft lifts, swim floats, buoys, moorage piles, and boat launches serving four or fewer residential dwellings.

Boating Facilities serving five or more dwelling units are regulated in Section 5.5 Boating Facilities.

A. **Location standards**. Docks, swim floats, buoys, watercraft lifts, and moorage piles shall be located according to the following criteria:

1. Sited to avoid adversely impacting shoreline ecological functions or processes.
2. Spaced and oriented in a manner that minimizes hazards and obstructions to public navigation rights.

B. **General design standards**. Docks, watercraft lifts, and moorage piles shall be designed according to the following criteria:

1. Joint-use requirements. If moorage is to be provided as part of residential development of two or more waterfront dwelling units or lots or as part of a subdivision created after May 3, 1994, joint-use dock facilities shall be required, rather than permit individual docks for each residence.
2. For a subdivision where one of the lots is already developed with a single-use dock, a second single-use dock may be permitted within the same subdivision.
3. If a joint-use dock is provided, the applicant shall file a legally enforceable joint use agreement or other legal instrument that, at a minimum, addresses the following:

i. Provisions for maintenance and operation;

ii. Easements or tracts for joint-use access; and

iii. Provisions for joint use for all benefiting parties.

4. Lighting associated with overwater structures shall be beamed, hooded or directed to avoid causing glare on adjacent properties or waterbodies. Illumination levels shall be the minimum necessary for safety.

5. Temporary moorages may be permitted for vessels used in the construction of shoreline facilities. The design and construction of temporary moorages shall be such that upon termination of the project, the aquatic habitat in the affected area can be returned to its original (pre-construction) condition within one year.

6. Skirting may be permitted when a qualified professional documents a site specific need and appropriate mitigation of ecological impacts consistent with Section 4.2 Ecological Protection and this SMP.

7. Privately owned covered docks or other covered structures are not permitted waterward of the OHWM due, in part, to visual impacts and reduced light penetration to the water, except canopies over watercraft lifts may be permitted per Section 5.14.F.

8. If a dock is provided with a safety railing, such railing shall meet International Building Code requirements and shall be an open framework.

9. Moorage facilities shall be marked with reflectors, or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night.

10. Private moorage for float planes may be permitted as an accessory to existing or concurrently proposed moorage where construction and operation would not adversely affect shoreline functions or processes, including wildlife use, or interfere with navigation.

11. Parking or loading/unloading zone may be required by the Administrator to ensure safe access and use of the dock.

C. **Dock dimensional and materials standards**. The following dimensional standards shall apply to all new Private Moorage Facilities.

Table 5.14-a. Dimensional/Construction Standards for Docks

Prior to designing a dock/pier or other water recreational development, consultation with the US Army Corp of Engineers, Department of Fish and Wildlife and the Department of Ecology is encouraged to ensure compliance with the most restrictive dimensional/construction standards.

Dimension/ Specification	**Columbia River***
Width	Piers and ramps shall not exceed 5 feet in width. Floats shall not exceed 8 feet in width. Dock finger extensions shall not exceed 2 feet in width.
Length	The length of the pier and/or ramp must be sufficient to extend the float such that water depth at the landward edge of floats is sufficient for safe boat moorage (minimum 12′ in depth).
Area	Equal to the maximum width and length
Design	Single-use dock float(s), separate from pier and/or ramp sections, shall not exceed 8′ x 20′ or a total of 160 square feet Joint-use dock float(s), separate from pier and/or ramp sections, shall not exceed 8′ x 40′ or a total of 320 square feet
Height	The bottom of any piers or the landward edge of any ramp must be at least 2 feet above the OHWM.
Pilings	Piling shall be cured prior to placement in the water. Pilings shall not be treated with pentachlorophenol, creosote, copper naphthalene, chromate copper arsenate, or comparably toxic compounds. Pilings shall not extend beyond the end of the dock.
Decking/Materials	Grating or clear translucent material shall cover the entire surface area of the pier, ramp and/or float.
Floats	Flotation materials shall be permanently encapsulated within a commercially manufactured shell, typically polyethylene or another material specifically approved for use in aquatic environments. Floats may be designed with wave attenuation methods.
Mooring Buoys	Each waterfront single-family residence or parcel may be permitted one moorage buoy, see standards below.
Boat/Watercraft Lifts	Permitted, see standards below.
Swim floats	One per waterfront parcel.

Dimension/ Specification	Lake Chelan*
Width	Piers and floats shall not exceed 8 feet in width; it is recommended that the width is 6 feet. Ramps shall not exceed 4 feet in width. Dock finger extensions shall not exceed 2 feet in width.
Length	The length of the dock shall not exceed 55 feet or such that water depth at the water ward edge of dock is sufficient for safe boat moorage (minimum 12' in depth).
Area	320 square feet for single use docks. This number may be increased by 6 square feet for each additional foot of length beyond 55 feet necessary to reach 12 feet of water depth. 450 square feet for joint use docks. This number may be increased by 6 square feet for each additional foot of length beyond 55 feet necessary to reach 12 feet of water depth.
Height	No standard
Pilings	Pilings shall not be treated with pentachlorophenol, creosote, copper naphthalene, chromate copper arsenate, or comparably toxic compounds. Pilings shall not extend beyond the end of the dock.
Decking/Materials	Planks or grating are permitted.
Floats	Flotation materials shall be permanently encapsulated within a commercially manufactured shell, typically polyethylene or another material specifically approved for use in aquatic environments. The placement of clean approved fill materials, or grading, may be used under a flotation dock to ensure a safe transition of the dock during the changes in the lake level. Floats may be designed with wave attenuation methods.
Mooring Buoys	Each waterfront single-family residence or parcel may be permitted two moorage buoys, see standards below.
Boat/Watercraft Lifts	Permitted, see standards below.
Swim floats	One per waterfront parcel, see standards below.

Dimension/ Specification	Other Waterbodies (Lakes)
Width	Piers and floats shall not exceed 8 feet in width. Ramps shall not exceed 4 feet in width. Dock finger extensions shall not exceed 2 feet in width.
Length	The length of the dock shall not exceed the length necessary in order for the end of the dock to reach a water depth of 12 feet measured at ordinary high water.
Area	Equal to the maximum width and length
Design	Single-use dock float(s), separate from pier and/or ramp sections, shall not exceed 8′ x 20′ or a total of 160 square feet Joint-use dock float(s), separate from pier and/or ramp sections, shall not exceed 8′ x 40′ or a total of 320 square feet
Height	No standard.
Pilings	Pilings shall not be treated with pentachlorophenol, creosote, copper naphthalene, chromate copper arsenate, or comparably toxic compounds. Pilings shall not extend beyond the end of the dock.
Decking/Materials	Grating or clear translucent material shall cover the entire surface area of the pier, ramp and/or float.
Floats	Flotation materials shall be permanently encapsulated within a commercially manufactured shell, typically polyethylene or another material specifically approved for use in aquatic environments. Floats may be designed with wave attenuation methods.
Mooring Buoys	Each waterfront single-family residence or parcel may be permitted two moorage buoys, see standards below.
Boat/Watercraft Lifts	Permitted, see standards below.
Swim floats	One per waterfront parcel, see standards below.

D. **Mooring piles**. Mooring piles are located adjacent to docks to provide a supplementary point to which a boat could be tied for additional security and stability. They are preferred over dock finger extensions or other decked over-water structures that often serve the same purpose, and are not independent locations for moorage. Mooring piles may be permitted as an accessory to docks, provided:

1. All piles shall be located not farther than 20 feet to the side of a dock, and must be at least 10 feet from side property lines, unless consistent with B.3 of this Section and this SMP.
2. In no case may a pile be placed farther waterward than the end of the dock.

3. The height of the piles shall be between 2 and 6 feet above the OHWM.
4. Mooring piles shall be marked with reflectors, or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night.

E. Mooring buoys.

1. Mooring buoys shall be placed at a distance specified by State and Federal agencies with authority to avoid nearshore habitat and to minimize obstruction to navigation. However, buoys shall be anchored at least 25 feet from side property lines or at the center of a parcel when the lot is less than 50 feet wide.
2. At a minimum, the buoy shall be placed so that the boat will not ground during the waterbody's typical moorage season, June 1st through September 1st, and will be in water at least 7 feet deep at ordinary high water.
3. A radius of 20 feet from the proposed buoy shall be clear of existing buoys, docks, and other hazards.
4. Anchor, buoy, and moored vessel shall not be located over or within 25 feet of vegetated shallows (except where such vegetation is limited to State-designated noxious weeds).
5. Anchors and other design features shall meet Washington Department of Fish and Wildlife and/or Department of Natural Resources standards.

F. **Watercraft lifts**. Watercraft lifts may be permitted in the aquatic environment provided that:

1. To the extent practicable, lifts shall be oriented in a north-south direction to minimize shading impacts.
2. Watercraft lifts must be located at least 10 feet from side property lines, unless consistent with B.3 of this Section and this SMP.
3. A maximum of two lifts are permitted per property (e.g., six lifts if the dock is shared by three property owners). Dual jet-ski lifts shall be considered one lift.
4. Canopies over watercraft lifts may be permitted.

G. Swim floats.

1. Private swim floats should be no longer than 8 feet and no wider than 8 feet.
2. Anchors and other design features shall meet Washington Department of Fish and Wildlife and/or Department of Natural Resources standards.
3. Swim floats shall be placed at a distance specified by State and Federal agencies to avoid nearshore habitat and to minimize obstruction to navigation, and shall be located at least 10 feet from side property lines, unless consistent with B.3 of this Section and this SMP.

H. **Private boat launch facilities**.

Private boat launches of sand or cobble construction shall meet the following minimum standards:

1. Boat launch facilities shall be located in the least sensitive portion of any lot and avoid significant vegetation removal.
2. Launch ramps shall be 10′ or less in width and extend into the water no more than 6′ below the OHWM. Administrative exceptions may be considered when applicants submit supporting information.
3. Property owners are encouraged to pursue joint-use boat launch facilities rather than a launch serving only one property.
4. The use of car, truck or trailer to launch from private sand or cobble boat launches is prohibited.

I. **Mitigation.** Projects shall be consistent with the mitigation requirements of Section 4.2, Ecological Protection.

5.15 Recreational Regulations

A. **Design.** Recreational uses and facilities shall be designed to be primarily related to access, enjoyment and use of the water and shorelines of the state.

B. Houseboat.

1. Houseboats may be permitted, for non-commercial activities, when moored for a time period of not more than fourteen days during any sixty-day period at any one dock or facility with a pumpout station.
2. Houseboats may be permitted, for commercial rentals, if the upland property is zoned commercial and when moored at a facility with a pumpout station.
3. Houseboats moored on state-owned aquatic lands shall comply with WAC 332-30-171.

C. **Accessory uses.** Accessory uses and support facilities such as maintenance facilities and parking lots shall be consolidated and located in upland areas outside shoreline, wetland and shoreline buffers to the extent feasible, except for access to water-dependent facilities such as boat launches.

D. **Public access.** Public access may be required, see Section 4.4 Public Access.

E. **Compatibility with adjacent private properties.** Recreational facilities shall provide landscaping, signs and/or fencing to buffer surrounding private properties.

F. **Adequate utilities and services.** Proposals for recreational development shall include facilities for water supply, wastewater, and garbage disposal.

G. **Management Plans.** A five-year recreation management plan is required for new recreation proposals or redevelopment of parks greater than one-half acre within the shoreline jurisdiction.

1. New recreation proposals or redevelopment of park areas shall prepare a plan that minimally contains the following categories, when applicable. Each category shall include standards which describe the management objective or desired outcome for habitat conditions, specific performance requirements for each standard, baseline conditions and corrective actions that would be implemented if the performance requirement(s) is not met. Plans shall be approved by the Shoreline Administrator.

    a. Description of in-stream or in-lake habitat protection measures, and commitment to implement mitigation for any new or expanded development that has adverse impacts;

    b. Description of shoreline, wetland and buffer protection measures, and commitment to implement mitigation for any new or expanded development that has adverse impacts;

    c. Description of site-appropriate water use management activities, including use of less water-dependent landscaping, maximizing the efficiency of the application system, and reducing the area irrigated;

    d. Description of stormwater management practices to treat stormwater runoff to reduce both water quantity and water quality impacts, including maximizing use of infiltration, bio-filtration, and detention;

    e. Description of erosion and sediment control practices that prevent off-site movement of sediment for new construction, stored soils, and potential surface erosion areas; and

    f. Description of chemical and nutrient use and containment practices that demonstrate minimization of overall inputs of these contaminants, restrict the type of inputs, and develop an acceptable method of application through a comprehensive management program, such as Integrated Pest Management (IPM).

H. **Commercial water recreation:** Water recreation such as commercial boating, floating, jet-skiing, and similar activities may be permitted where specifically authorized on public properties or waters of the state, or on private commercial recreation areas authorized to facilitate the use or activity.

I. Public parks and public recreation lands and facilities.

1. Public parks and recreation, including trails, shall be consistent with Section 4.4 Public Access and the following standards:

    a. Impervious Surfaces and Stormwater shall comply with Section 4.6 Water Quality, Stormwater and Nonpoint Pollution and the following:

        - New and expanded pollution-generating impervious surfaces shall provide water quality treatment before discharging stormwater

through use of oil-water separators, bioswales, or other approved technique. This provision does not apply to boat launches.

- Treated runoff from pollution-generating impervious surfaces and runoff from non-pollution-generating impervious surfaces shall be infiltrated if feasible.

b. Parking shall comply with Section 5.19 Transportation Facilities and the following:
   - New parking accessory to shoreline parks shall be at least 50 feet upland of the OHWM, except where a minimum number of parking spaces are provided closer to accommodate those with disabilities or where parking is provided in existing impervious surfaces.
   - Expanded parking shall be expanded in the following order of preference: 1) upland of the shoreline environmental buffer, 2) landward of existing parking and 3) laterally of the existing parking on existing impervious surface. ADA Parking may be placed within 50 feet of the OHWM.

c. Vegetation Management shall be consistent with Section 4.5 and the following:
   - New and expanded uses in shoreline jurisdiction shall be located to avoid and minimize intrusion into buffer areas, as well as avoid tree and shrub removal.
   - Tree and shrub removal in the shoreline buffer shall be mitigated at a 1:1 ratio consistent with Section 4.5.
   - Landscape designs for new and modified recreation facilities in shoreline jurisdiction shall incorporate (1) development or supplementation of a native vegetated wildlife corridor; and, (2) development or supplementation of native vegetation adjacent to the water's edge; and, (3) screening parking areas from views from the water or the park, and (4) discouragement of wildlife that may directly or indirectly interfere with park use or human health (e.g., geese).

d. Lighting:
   - Outdoor lighting fixtures and accent lighting shall be shielded and aimed downward, and shall be installed at the minimum height necessary. The shield shall mask the direct horizontal surface of the light source. The light shall be aimed to ensure that the illumination is pointing downward onto the ground surface, with no escaping direct light permitted to contribute to light pollution by shining upward into the sky.

- Outdoor lighting fixtures and accent lighting shall not directly illuminate streams, rivers or lakes, unless it is a navigational light subject to state or federal regulations.

5.16 Residential Regulations

A. **Subdivisions and plats.** Subdivisions and plats shall:

1. Comply with all applicable subdivision, critical area, zoning regulations and this SMP.
2. Be designed to preclude the need for new hard or soft shoreline stabilization, Section 5.18 Shoreline Stabilization, or flood hazard reduction, see Section 4.3 Flood Hazard Reduction.
3. Be required to cluster residential units and structures where necessary to avoid critical areas and to preserve natural features.
4. Identify locations for public or community access when consistent with Section 4.4 Public Access.
5. Lot configurations shall plan for building sites behind the required shoreline buffer. Shoreline buffer modification, defined in Section 3.8.2 Shoreline Buffers, shall be determined at the time of residential development; not at the time of subdivision.
6. Land subdivisions shall be designed to assure that future development of the created lots will not require shoreline stabilization.
7. Designed, configured and developed in a manner that assures that no net loss of ecological functions results from the plat or subdivision at full build-out of all lots.

B. **Residential development.** Residential development including accessory uses and appurtenant structures shall meet the following standards:

1. Structures shall meet the height requirements of Section 3.7 Shoreline Development Standards. Height shall be calculated from natural or existing grade to the highest point of the structure, excluding chimneys, antennas and similar structures, see definition of height.
2. All residential development shall be located or designed in such a manner as to prevent degradation of water quality from stormwater runoff:
   a. Design shall consider Section 4.5 Vegetation Conservation and Section 4.6 Water Quality and Stormwater.
   b. When necessary, the applicant may be required to demonstrate mitigation of impacts consistent with Section 4.2 Ecological Protection.
3. Shoreline view corridors may be authorized consistent to Section 4.5 Vegetation Conservation.
4. All residential development requiring fill and/or excavation shall comply with Section 5.9 Fill and Excavation, excluding single-family residential

development. Additionally, appurtenances may be exempt if not exceeding two hundred fifty cubic yards and not placing fill in any wetland or waterward of the ordinary high water mark.

5. Accessory uses and structures shall be located outside of the shoreline buffer, unless the structure is, or supports, a water-dependent use. Storage structures, used to support water-related activities, are not water-dependent uses.
6. All residential development shall be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements, including bluff walls and other stabilization structures, are not required to protect such structures and uses. The Administrator may require a geological analysis to document compliance.
7. Trails, ramps, and stairs including handrails may be placed within the shoreline buffer and landward of the OHWM, when associated with a water dependent development or use and shall require a Shoreline Substantial Development Permit or a written Shoreline Exemption, as applicable. Trails, ramps, and stairs within the buffer are limited to five feet in width. The total area of trails, ramps, and stairs within the buffer is limited to 5 times the standard buffer width.

C. L**iveaboards.** Liveaboards shall be accommodated only in marinas equipped with the necessary facilities, including disposal of sewage, oil, gray water and solid waste. Liveaboards shall be located and operated such that navigation and lawful public access on those waters is not obstructed or made hazardous. Liveaboards moored on State-owned aquatic lands shall comply with all other provisions in WAC 332-30-171.

D. **Accessory uses.** Residential accessory uses or appurtenances shall not be located in required shoreline buffers unless specifically authorized by this SMP or through a Shoreline Variance permit.

5.17 Shoreline Habitat and Natural Systems Enhancement Project Regulations

Shoreline habitat and natural systems enhancement and restoration projects include those activities proposed and conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority and native species in shoreline jurisdiction. Examples of shoreline habitat and natural systems enhancement projects include floodplain restoration projects, fish passage barrier removal or improvement, and projects to increase shoreline habitat complexity, shoreline stabilization projects, streamlined fish enhancement projects per RCW 77.55.181 and projects identified in the Shoreline Restoration Plan.

A. **Approved plan.** Restoration and enhancement shall be carried out in accordance with an approved shoreline restoration plan completed by a qualified professional.

B. **Protect adjacent resources.** All shoreline restoration and enhancement projects shall protect the integrity of adjacent natural resources, including aquatic habitats and water quality.

C. **Maintenance and monitoring.** Long-term maintenance and monitoring (minimum of three years, but preferably longer) shall be arranged by the project applicant and be included in restoration or enhancement proposals.

D. **Adverse effects.** Shoreline restoration and enhancement may be permitted if the project applicant demonstrates that no significant change to sediment transport or river current will result and that the enhancement will not adversely affect ecological processes, properties, or habitat.

E. **Use of best information and BMPs.** Shoreline restoration and enhancement projects shall be designed using the most current, accurate, and complete scientific and technical information, and implemented using best management practices.

F. **Public use of waters.** Shoreline restoration and enhancement shall not significantly interfere with the normal public use of the navigable waters of the state, as determined by the Shoreline Administrator, without appropriate mitigation.

G. **Relief for OHWM shifts.** Applicants seeking to perform restoration projects are advised to work with the County to assess whether and how the proposed project may be granted relief under RCW 90.58.580, in the event that the project shifts the OHWM landward.

5.18 Shoreline Stabilization Regulations

Shoreline stabilization includes actions taken to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes, such as current, flood, wind, or wave action. These actions include structural and nonstructural methods. Nonstructural methods include shoreline buffers or setbacks, relocation of the structure to be protected, groundwater management, planning and regulatory measures to avoid the need for structural stabilization.

Because Lake Chelan is a unique environment due to the artificial raising and lowering of the water level and much of the shoreline is stabilized with hard structural methods, it is treated differently under these regulations than other waterbodies. Because the lake level is drawn down for over half the year, existing stabilization structures are effectively disconnected from the lake and therefore have less impact than those on other waterbodies.

A. **General**. The purpose of this section is to provide standards and guidelines for the location and design of hard structural and soft structural shoreline stabilization measures that have the potential to adversely impact the shoreline natural environment.

1. New development shall be located and designed to avoid the need for future shoreline stabilization to the extent feasible.
2. New development on steep slopes or bluffs shall be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated by a geotechnical analysis.
3. In all cases, the feasibility of soft structural shoreline stabilization shall be evaluated prior to new hard structural stabilization.
4. The placement of new shoreline stabilization structure or fill landward of a failing shoreline stabilization structure shall be considered a new structure.
5. Enlargement of existing structural shoreline stabilization shall include additions to or increases in size (such as height, width, length, or depth) to existing shoreline stabilization measures shall be considered new structures.
6. New shoreline stabilization activities shall demonstrate consistency with the Washington State Integrated Streambank Protection Guidelines.

B. **Repair and Maintenance.** Repair and maintenance of existingnonconforming hard structural stabilization may include replacement when comparable to its original condition including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment. Anchoring bolts used for existing structures, tied to supports landward of the OHWM may be considered repair and maintenance. Replacement walls or bulkheads shall not encroach waterward of the ordinary high-water mark or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.

C. **Replacement.** Replacement occurs when the development exceeds the repair and maintenance requirements. All replacement shall be considered new shoreline stabilization measure subject to the requirements of Section 5.18, except:

1. A geotechnical analysis is not required for replacements of existing hard or soft structural shoreline stabilization with a similar or softer measure if the applicant demonstrates need, per Section 7.4(G)(2), to protect principal uses or structures from erosion caused by waves or other natural processes operating at or waterward of the OHWM.

2. Replacement of hard structural shoreline stabilization measures shall be in the same location or further landward of the OHWM.

D. **New or enlarged structural shoreline stabilization.** New or enlarged structural stabilization measures shall not be allowed except when necessity is demonstrated in the following manner:

1. To protect an existing primary structure, including residences, when conclusive evidence, documented by a geotechnical analysis, is provided that the structure is in danger from shoreline erosion caused by currents or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without or geotechnical analysis, is not demonstration of need. The geotechnical analysis shall evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering hard or soft structural shoreline stabilization. OR
2. In support of water-dependent and new nonwater-dependent development, including single-family residences, when all of the conditions below apply:
   a. The erosion is not being caused by upland conditions, such as drainage and the loss of vegetation.
   b. Nonstructural measures, such as placing the proposed development farther from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion impacts.
   c. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical analysis. The damage must be caused by natural processes, such as currents or waves. OR
3. In support of water-dependent development when all of the conditions below apply:
   a. The erosion is not being caused by upland conditions, such as drainage and the loss of vegetation.
   b. Nonstructural measures, such as planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or impacts.
   c. The need to protect primary structures, including residences, from damage due to erosion is demonstrated through a geotechnical analysis. OR
4. To protect projects for the restoration of ecological functions or for hazardous substance remediation projects pursuant to Chapter 70.105D RCW when all of the following conditions apply: nonstructural measures, planting vegetation, or installing on- site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or impacts;

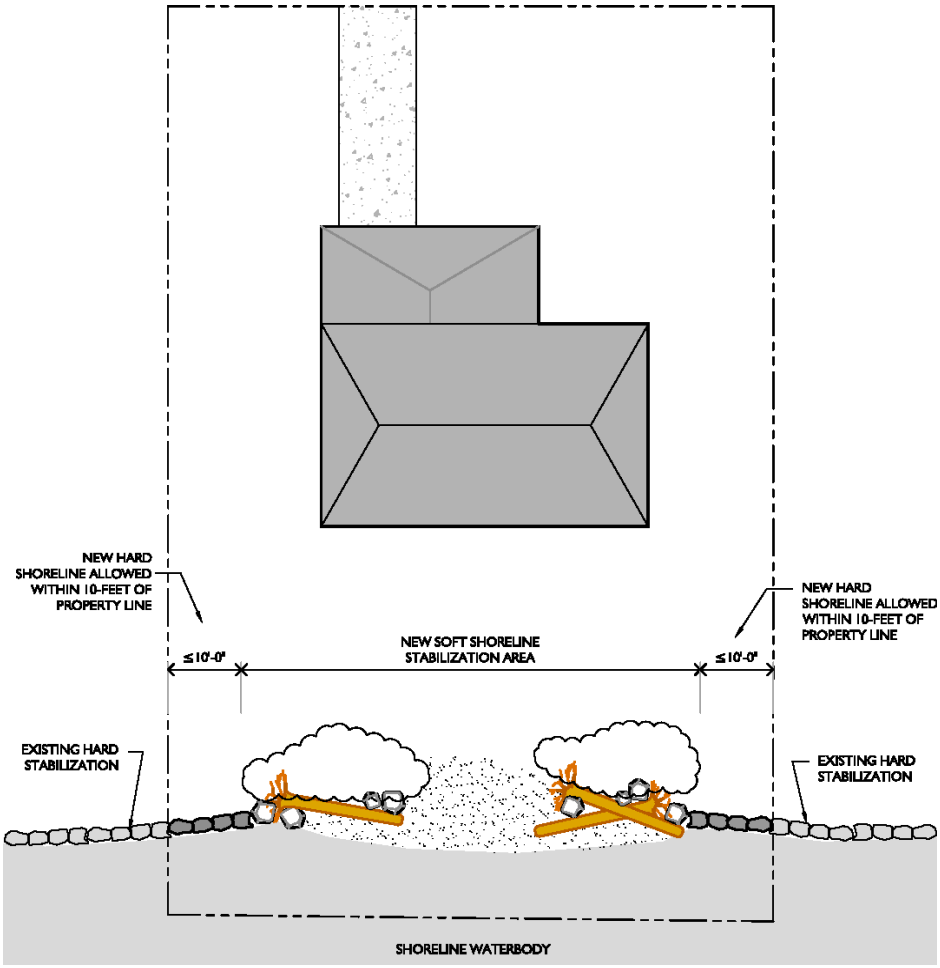
and the erosion control structure will not result in a net loss of shoreline ecological functions. OR

5. To protect cultural or historic resources when nonstructural measures, planting vegetation, or installing on-site drainage improvements are not feasible or not sufficient to avoid continued degradation, disturbance or erosion of a site. Cultural resource protection projects shall be coordinated with any affected Tribes and comply with applicable provisions of Section 4.1.

E. **Wave Attenuation.** When a wave attenuator is designed to dissipate wave action, it may be added to an existing stabilization structure.

F. **General design standards**. Geotechnical reports pursuant to this section that address the need to prevent potential damage to a primary structure shall address the necessity for shoreline stabilization by estimating time frames and rates of erosion and report on the urgency associated with the specific situation. As a general matter, hard armoring solutions should not be authorized except when a report confirms that there is a significant possibility that such a structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is that immediate, would foreclose the opportunity to use measures that avoid impacts on ecological functions. Thus, where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as the three years, that report may still be used to justify more immediate authorization to protect against erosion using soft measures. When a hard or soft structural shoreline stabilization measure is demonstrated to be necessary, the following design standards shall be incorporated into the stabilization design:

1. Areas of transition between hard and soft structural shoreline stabilization measures should, limit hard structural shoreline stabilization measures to the portion or portions of the site necessary to protect or support existing shoreline structures or trees, or where necessary to connect to existing shoreline stabilization measures on adjacent properties. Hardened shorelines may extend no more than 10' into where soft structural shoreline is used, unless documented as necessary by a qualified professional.



2. New structural shoreline stabilization measures shall include measures installed to address erosion impacts.
3. Excavation and fill activities, for enlarged or replacement of structural shoreline stabilization measures, should be landward of the existing OHWM to the maximum extent practicable.
    a. Where not practicable because of overriding safety or environmental concerns, conduct necessary excavation and fill activities waterward of the existing OHWM as needed to implement a soft structural shoreline stabilization technique or to mitigate the impacts of hard structural shoreline stabilization.
    b. Fill material waterward of the OHWM may be sand, gravel, cobble or boulders provided the placement of boulders does not effectively present a continuous wall or face to oncoming waves (also known as rip rap).

4. The shoreline stabilization measure shall be designed to not significantly interfere with normal surface and/or subsurface drainage into the adjacent waterbody.
5. Stairs or other water access measures may be incorporated into the shoreline stabilization (e.g., steps integrated into the bulkhead, coved area with shallow entry), and may be placed within the shoreline buffer and landward of the OHWM, when associated with a water dependent development or use, and shall require a Shoreline Substantial Development Permit or a written Shoreline Exemption, as applicable.
6. When public access requires structural shoreline stabilization measures, provisions for safe access to the water shall be incorporated into the shoreline stabilization structure design (e.g., steps integrated into the bulkhead, coved area with shallow entry). Access measures should not extend farther waterward than the face of the shoreline stabilization measure and the OHWM.
7. Shoreline stabilization measures shall not extend waterward of the OHWM more than the minimum amount necessary to achieve effective stabilization, except for those elements that enhance shoreline ecological functions and minimize impacts.
8. When shoreline stabilization measures are intended to improve ecological functions but shift the OHWM landward:
    a. Applicants may seek relief from shoreline master program development standards under RCW 90.58.580.
    b. If repair or replacement shoreline stabilization measures intended to improve ecological functions shift the OHWM landward of the pre-modification location and result in expansion of the shoreline jurisdiction on any property other than the subject property, the plan shall not be approved until the applicant submits a copy of a statement signed by the property owners of all affected properties, in a form approved by the County and recorded at the Chelan County Auditor's Office, consenting to the shoreline jurisdiction creation and/or increase on such property.
9. Limit the size of stabilization measures to the minimum necessary. Use measures designed to assure no net loss of shoreline ecological functions. Soft approaches shall be used unless demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.

G. **Mitigation.** All shoreline stabilization measures shall minimize and mitigate any adverse impacts to ecological functions consistent with Section 4.2, Ecological Protection and Appendix B, Critical Areas Regulations, and as follows:

1. Short-term, such as construction activity, adverse impacts may include minimization techniques including but not limited to, compliance with appropriate timing restrictions, use of best management practices to prevent water quality impacts related to upland or in-water work, and stabilization of exposed soils following construction.
2. Long-term adverse impacts to ecological functions should incorporate the following measures into the design:
    a. Limiting the size of hard structural shoreline stabilization measures to the minimum necessary, including height, depth, and mass.
    b. Shifting the hard structural shoreline stabilization landward and/or sloping the hard structural shoreline stabilization landward to provide some dissipation of wave energy and increase the quality or quantity of nearshore shallow-water habitat.
3. New shoreline stabilization measures shall mitigate any adverse impacts to ecological functions by incorporating restoration of appropriate substrate conditions waterward of the OHWM, to include substrate composition and gradient. The material should be sized and placed to remain stable during a two-year flood event on rivers and under typical boat- and wind-driven wave conditions on lakes, including storm events.

H. **Specific hard structural shoreline stabilization design standards**. When hard structural shoreline stabilization measures are necessary, the following standards shall be incorporated into the design:
1. When no hard structural shoreline stabilization is present on the adjacent properties, new stabilization shall tie in with the existing contours of the adjoining properties, as feasible, such that the proposed stabilization would not cause erosion of the adjoining properties.
2. When hard structural shoreline stabilization is present on adjacent properties, the proposed stabilization may tie in flush with existing stabilization measures on adjoining properties, provided
    a. That the new stabilization does not extend waterward of the OHWM, except as necessary to make the connection to the adjoining stabilization with no net intrusion into the waterbody nor net creation of uplands.
    b. The length of hard structural shoreline stabilization transition area to adjacent properties should be no more than 10 feet.
3. Fill behind hard structural shoreline stabilization shall be limited to 1 cubic yard per running foot of stabilization. Any filling in excess of this amount shall be considered a regulated activity subject Section 5.9 Fill and Excavation and the requirement for obtaining a Shoreline Substantial Development Permit or Shoreline Conditional Use Permit.

I. **Specific soft structural shoreline stabilization design standards**. In addition to applicable general design standards, the following standards shall be incorporated into the design:

1. The soft shoreline stabilization design shall provide sufficient protection of adjacent properties by tying in with the existing contours of the adjoining properties to prevent erosion at the property line, provided the stabilization measure does not extend onto the adjacent property.
2. Soft shoreline stabilization projects may include hard structural components when determined necessary by a qualified professional.
3. The soft shoreline stabilization design shall size and arrange any gravels, cobbles, logs, and boulders so that the project remains stable during a two-year flood event on rivers and under typical boat- and wind-driven wave conditions on lakes, including storm events, and dissipates wave and current energy, without presenting extended linear faces to oncoming waves or currents.

5.19 Transportation Facilities Regulations

A. **Roads and railroads limited in shoreline jurisdiction.** Where other options are available and feasible, new roads, road expansions or railroads shall not be built within shoreline jurisdiction. If subdivisions are being proposed, new road placement shall be evaluated at the time of the plat application.

B. **Criteria if roads or railroads are unavoidable.** When railroads, roads or road expansions are unavoidable in the shoreline jurisdiction, proposed transportation facilities shall be planned, located, and designed to achieve the following:

1. Minimize possible adverse effects on unique or fragile shoreline features; and,
2. Maintain no net loss of shoreline ecological functions and implement mitigation standards of Section 4.2, Ecological Protection and Section 4.5, Vegetation Conservation; and,
3. Avoid adverse impacts on existing water-dependent uses; and,
4. Setback from the OHWM is the maximum feasible unless necessary for functionality or the cost of modification would add more than 20% to the total project cost.

C. **Visual access.** Public roads, within shoreline jurisdiction, shall, where possible, provide and maintain visual access to scenic vistas. Visual access may include, but is not limited to, turn-outs, rest areas, and picnic areas.

D. **Shoreline crossings.** Shoreline crossings and culverts shall be designed to minimize impact to shoreline buffer and aquatic habitat, ensure adequate water flow, and shall allow for fish passage when required by a State or Federal

agency. Crossings shall occur as near to perpendicular with the waterbody as possible, unless an alternate path would minimize disturbance of native vegetation or result in avoidance of other critical areas such as wetlands.

E. **Shoreline crossings for private property.** Crossings that are to be used solely for access to private property shall be designed, located, and constructed to provide access to more than one lot or parcel of property, where feasible, to minimize the number of crossings.

F. **Construction standards.** Construction standards of the appropriate governmental agency, together with SMP standards, shall be conditions for granting shoreline permits. Seasonal work windows may be required based on federal or state requirements, or if the proposal involves crossing shorelines or altering the waterbody.

G. **Parking facilities.** Parking facilities in shorelines are not a preferred use and may be permitted only as necessary to support an authorized use and when minimizing environmental and visual impacts. New or expanded parking areas shall:

1. Shall be consistent with the number of spaces and dimensional standards of the zoning code.
2. Be sited outside of shoreline jurisdiction unless no feasible alternative location exists; for example, where a property does not extend outside jurisdiction;
3. Be planted or landscaped to provide a visual and noise buffer for adjoining dissimilar uses or scenic areas. The Shoreline Administrator may condition proposals to incorporate the following performance standards:
    a. Select native species that have minimal demands for water, minimal vulnerability to pests, and minimal demands for fertilizers; and
    b. Determination of minimum or average buffer width and location; and
    c. Require monitoring report.
4. Observe critical area and shoreline buffers. Parking shall be located outside critical area and shoreline buffers unless one of the following is met:
    a. ADA parking requirement are not met and placing the limited number of needed ADA parking spaces within the shoreline buffer facilitates better and safer public access to the shoreline.
    b. Parking is associated with permitted uses and the applicant's lot/site has topographical constraints where no other location outside the buffer is feasible.
    c. In the above cases, parking shall be located as far upland from the OHWM as feasible, recognizing the limited supply of shoreline areas

and parking necessary in buffer shall follow mitigation sequencing; and

d. Be designed to incorporate low-impact development practices, such as pervious surfaces and bioswales, to the extent feasible.

H. **Modifications of existing roads and parking areas:** Existing roads and parking areas shall meet the following requirements:

1. Non-paved surface (e.g. gravel) may be paved provided such facilities comply with all applicable water quality, stormwater, landscaping, and other applicable requirements of this SMP.
2. Roadways or paved parking areas shall be designed to incorporate low-impact development practices, such as pervious surfaces and bioswales.
3. Roadways may be expanded in width to meet the minimum standards of the road classification.
4. The Shoreline Administrator may condition the proposal to provide a maintenance plan that promotes best management practices to protect ecological function.

I. **Private driveways:** A driveway for an individual single family home is considered a residential appurtenance and is considered part of the primary use, and subject to Residential standards of this SMP. Private driveways or private roads serving five or more homes are subject to the new or modification road standards of this Section.

5.20 Utilities Regulations

Utilities provisions apply to services and facilities that produce, convey, store, or process power, gas, sewage, stormwater, communications, oil, waste, and the like. On-site utility features serving a primary use, such as a water, sewer or gas line to a residence, are "accessory utilities" and shall be considered a part of the primary use. Consult standards of the primary use of the property, e.g. Residential, Commercial, Industrial, or Recreational, for any additional standards relevant to the placement of accessory activities such as utilities. Water intake and water and/or fish conveyances between a waterbody and an aquaculture facility are not considered a “utility” under this section of the SMP; consult standards for Aquaculture.

A. **Design considerations.** Utility systems are permitted provided such systems:

1. Are designed and constructed to meet all adopted engineering standards of the County; and,
2. Transmission facilities for the conveyance of services, such as power lines, cables and pipelines, shall be located outside of the shoreline area where feasible; and,

3. Utilities should be located in existing rights of way and corridors whenever possible; and,
4. Avoid paralleling the shoreline or following a down-valley course near the channel, except where located in an existing road or easement footprint; and,
5. Do not alter processes affecting the rate of channel migration or shoreline erosion; the Shoreline Administrator may require a monitoring plan and adaptive management measures prepared by a qualified professional as appropriate.

B. **Preference – existing footprints.** Preference shall be given to utility systems contained within the footprint of an existing right-of-way or utility easement over new locations for utility systems.

C. **Undergrounding.**[2] All permanent utility systems, excluding electric transmission lines in excess of 15kV, utilities attached to undersides of bridges, and public stormwater facilities, outfalls, and associated structures, shall be underground except where environmental or geological conditions makes undergrounding prohibitive.

D. **Minimum clearing.** Where utility systems must be located in shoreline jurisdiction areas, clearing necessary for installation or maintenance shall be kept to the minimum width necessary to prevent interference by trees and other vegetation with proposed transmission facilities. Impacts associated with removal of vegetation or clearing shall be mitigated on the property.

E. **Restoration of disturbed areas.** Upon completion of utility system installation, or any maintenance project, the disturbed area shall be regraded to compatibility with the natural terrain and replanted to prevent erosion and provide appropriate vegetative cover, including meeting standards of Section 4.5, Vegetation Conservation and Appendix B, Critical Areas Regulations.

F. **Underwater utilities.** If an underwater location is necessary, the following performance standards apply:
1. The design, installation and operation shall minimize impacts to the waterway or the resident aquatic ecosystems.
2. Seasonal work windows may be made a condition of approval.
3. Standards of Section 5.8, Dredging and Dredge Material Disposal; Section 4.2, Ecological Protection; Section 4.5 Vegetation Conservation; Section 5.2 General Aquatic Shoreline Modification and Use and this SMP shall be met.
4. All federal or state permits shall be obtained.
5. A maintenance schedule and emergency repair protocol shall be prepared and kept on file, with amendments submitted to the County.

[2] It is the intent of this regulation that the utility provided will provide for an inclusive public input process and analysis of visual impacts.

G. **Nonwater-oriented processing and production facilities.** Nonwater-oriented utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities that are nonwater-oriented, shall not be permitted in shoreline jurisdiction unless it can be demonstrated that no other feasible option is available. Continued use and necessary modification or expansion of existing non-water oriented facilities shall be permitted in the shoreline jurisdiction.

   Where no other practical alternative exists, a mitigation plan shall be prepared by a qualified professional, and be consistent with the provisions of Section 4.2, Ecological Protection, and appropriate requirements of Appendix B Critical Areas.

H. **Outfall design principles.** New and reconfigured outfalls shall be located to avoid impacts to existing native aquatic vegetation attached to or rooted in substrate. The diffuser or discharge point(s) for new or expanded outfalls must be located offshore and at a buffer distance beyond the near shore/littoral area, to avoid impacts to those areas. The Shoreline Administrator may require a mixing zone analysis for the outfall from a qualified party to determine the diffuser or discharge point. The outfall pipe shall be subsurface within the near shore.

6 NONCONFORMING LOTS, STRUCTURES AND USES

Nonconforming structures and use are reviewed according to this Chapter and applicable SMP Sections.

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6.1 Policies

The following policies on nonconforming structures, uses, and lots are intended to guide the application of County nonconforming standards:

A. **Intent of chapter.** This chapter is intended to encourage the continuance of nonconforming uses. Uses, lots, and structures rendered nonconforming by the adoption of this SMP may be continued and maintained in reasonable repair, subject to the conditions of this chapter.

B. **Expansion of nonconforming structures.** Owners of nonconforming structures that wish to expand the structure should not increase the nonconformity.

C. **No-net-loss of ecological function.** The SMP no-net-loss of ecological function objective should guide review of proposed expansions or other changes to nonconforming uses and structures.

D. **Balance historic character.** Support a balance of historic character of the community with conformity to SMP rules when considering changes to nonconforming uses, structures, and lots.

E. **Continuation of nonconforming uses, lots, and structures.** Uses, lots, and structures rendered nonconforming by the adoption of this SMP may be continued and maintained.

F. **Conformance with County standards.** No use of any structure or premises shall hereafter be commenced, and no structure or part of a structure shall

be erected, changed, expanded, moved, reconstructed, extended, enlarged, remodeled, repaired, or altered, except in conformity with all current Chelan County development regulations including this SMP.

6.2 Regulations

The nonconforming regulations in this Chapter shall apply to all nonconforming uses, lots and structures. Determination of status may be obtained with written approval of the Shoreline Administrator. The Shoreline Administrator may attach conditions, as necessary, to assure consistency with this SMP.

6.2.1 Nonconforming Lots

In any shoreline environment designation, any use or structure as permitted by County zoning and by this SMP may be erected on a Legal Lot of Record which does not meet the minimum lot size or width requirements of the shoreline environment designation or zoning district in which it is located.

6.2.2 Discontinuance of Nonconforming Use

If a nonconforming use has been discontinued or inactive for a period of twelve consecutive months or greater, the nonconforming status is terminated, and any future use of the land or structures shall be in conformity with the provisions of this SMP.

6.2.3 Structural Restoration and Replacement

If a structure is damaged or destroyed by accident, act of nature, or public enemy, it may be permitted to be rebuilt within the same footprint, or a different location if not increasing the footprint and becoming less nonconforming in relation to this SMP.

A. In all cases, the applicant must submit a building permit to the Chelan County Department of Community Development within three years after the date of damage or destruction. If a building permit application is not submitted within three years, all future structures shall be required to be in conformity with this SMP.

In all cases, the Administrator may require revegetation consistent with Section 4.2, Ecological Protection and Critical Area Regulations.

6.2.4 Pre-existing Residential Structures

The following standards shall apply to legally established residential structures and appurtenant structures which are nonconforming with regard to setbacks, buffers or yards; area; bulk; height or density:

A. Structures may be maintained and repaired; and,
B. Upon approval of a shoreline administrative application showing no net loss of shoreline ecological function, structures may be replaced enlarged or

expanded in height or behind, laterally, provided there is no increase of the nonconformity waterward (in the direction of the water); and,

C. Structures may change class of occupancy when consistent with the zoning district; and,

D. Cabanas, overwater residential structures, may be repaired, maintained, replaced and altered provided that the footprint of the overwater structure does not increase;and,

E. All structure modifications shall meet the standards for geological hazards, floodplain and other federal, state or local requirements.

6.2.5 Structural Modifications, Maintenance and Repair

A. A nonconforming structure may be physically maintained and repaired. All maintenance shall conform to all current building codes.

B. Remodeling, alterations, or repairs to a nonconforming structure must occur within an existing structure footprint.

6.2.6 Boating Facilities and Private Moorage Facilities

A. Repair or replacement of a legally established Boating Facility or Private Moorage Facility, is permitted, in the same location and size, when consistent with the current building material standards and the following criteria:

1. Replacement of decking, greater than 50% of the surface, shall be done with an approved surface or approved mitigation; and,
2. All appropriate Federal and State agencies authorize the proposal; and,
3. Replaced piles and decking materials shall meet the spacing and material specifications of this SMP.

6.2.7 Shoreline Stabilization Repair and Maintenance

Shoreline stabilization structures determined non-conforming may be modified consistent with Section 5.18 Shoreline Stabilization.

6.2.8 Structural Expansion

Any structural expansion, excluding those authorized in sub-section 6.2.4, shall not increase the existing nonconformity impact on environmental or road conditions or encroach on shoreline buffers or critical areas.

6.2.9 Completion of a Building/Structure/Activity

Any permit determined complete or issued by the County prior to the effective date of the SMP may be developed as set forth in the permit approval. If the permit becomes invalid/void prior to development of improvements or uses, the provisions of this SMP shall be in effect on the subject property/proposal.

7 SHORELINE PERMITS, PROCEDURES AND ADMINISTRATION

Permit procedures are a combination of this SMP and Chelan County Code Chapter 14.

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7.1 Roles and Responsibilities

7.1.1 Shoreline Master Program Administrator

A. The Shoreline Master Program Administrator is the Community Development Director or designee and shall have overall administrative responsibility of this SMP.

B. The Shoreline Master Program Administrator or designee is hereby vested with the authority to:

1. Administer this SMP.
2. Grant, grant with conditions, or deny Shoreline Exemptions and Shoreline Administrative Determinations.
3. Grant, grant with conditions, or deny Shoreline Substantial Development Permits, except, the applicant may request a Substantial Development Permit be reviewed by the Hearing Examiner.
    b. Administrative reviewed applications shall be subject to the "full administrative review" provisions of Chelan County Code 14.10.030.
    c. Hearing examiner reviewed application shall be subject to the "Quasi-judicial review" provisions of Chelan County Code 14.10.040.
4. Grant, grant with conditions, or deny time extensions and minor revisions to approved Shoreline Substantial Development Permits, Conditional Use Permits, Variances and Exemption permits.
5. Make interpretations of the policies and regulations of this SMP.
6. Make field inspections as needed, and prepare or require reports on shoreline permit applications.
7. Make written recommendations to the Hearing Examiner regarding Shoreline Substantial Development Permits, Variances and Shoreline Conditional Use Permits.
8. Make recommendations regarding SMP amendments to the Planning Commission and Board of County Commissioners.
9. Collect fees for permits as provided in County resolution. The determination of which fees are required shall be made by the Board of County Commissioners.

7.1.2 SEPA Official

The responsible SEPA official or designee is authorized to conduct environmental review of all use and development activities subject to this SMP, pursuant to WAC 197-11 and RCW 43.21C. The responsible SEPA official is designated in accordance with the County's SEPA implementation ordinance.

7.1.3 Hearing Examiner

The Hearing Examiner shall have the authority to:

A. Grant, grant with conditions, or deny Shoreline Substantial Development Permits, Variances, and Shoreline Conditional Use Permits under this SMP.

B. The Hearing Examiner shall also decide on appeals of administrative decisions issued by the Administrator of this SMP.

7.1.4 Planning Commission

The Planning Commission is vested with the responsibility to review the Master Program as part of regular SMP updates required by RCW 90.58.080 and make recommendations for amendments thereof to the Board of County Commissioners.

7.1.5 Board of County Commissioners

The Board of County Commissioners is vested with authority to:

A. Initiate an amendment to this SMP according to the procedures prescribed in WAC 173-26-100.

B. Approve, approve with conditions or deny all amendments to this SMP, after consideration of the recommendation of the Planning Commission. Note: Amendments shall become effective fourteen days from the date of the Department of Ecology's s written notice of final action to the County.

7.2 Interpretation

The Administrator shall provide administrative interpretations in accordance with the Act, the guidelines and Chelan County Code Section 14.04.020. The County shall consult with Ecology to ensure that any formal written interpretations are consistent with the purpose and intent of chapter 90.58 RCW and 173-26 WAC.

7.3 Statutory Noticing Requirements

A. The County shall provide notice in accordance with RCW 90.58.143, WAC 173-27-110 and -120; WAC 173-27-120 is related to limited utility extensions and bulkheads for a single-family residence and appurtenant structures.

B. Applicants shall follow the application process requirements of Chelan County Code Chapter 14.08.

7.4 Application Requirements

A. Applicants are encouraged to review Chapter 3 use matrix and development standards tables as well as applicable standards of Chapters 4, 5, and 6, and any applicable permit exemptions in Section 7.6, when developing application materials.

B. Application for a shoreline exemption shall use the JARPA form with site plans detailing current conditions and proposed changes including development details.

C. A complete application for a Shoreline Substantial Development, Shoreline Conditional Use, or Shoreline Variance Permit shall contain, at a minimum, the information listed in WAC 173-27-180:

1. The name, address and phone number of the applicant. The applicant should be the owner of the property or the primary proponent of the project and not the representative of the owner or primary proponent.
2. The name, address and phone number of the owner and applicant or applicant's representative.
3. Location of the property. This shall, at a minimum, include the property address and identification of the section, township and range to the nearest quarter, quarter section or latitude and longitude to the nearest minute. All applications for projects located in open water areas away from land shall provide a longitude and latitude location.
4. Identification of the name of the shoreline (water body) that the site of the proposal is associated with. This should be the water body from which jurisdiction of the act over the project is derived.
5. A general description of the proposed project that includes the proposed use or uses and the activities necessary to accomplish the project.
6. A general description of the property as it now exists including its physical characteristics and improvements and structures.
7. A general description of the vicinity of the proposed project including identification of the adjacent uses, structures and improvements, intensity of development and physical characteristics.
8. A site development plan consisting of maps and elevation drawings, drawn to an engineer's scale, or other approved scale, to depict clearly all required information, photographs and text which shall include:
    a. The boundary of the parcel(s) of land upon which the development is proposed.
    b. The OHWM of all water bodies located adjacent to or within the boundary of the project. This may be an approximate location provided, that for any development where a determination of consistency with the applicable regulations requires a precise location of the OHWM the mark shall be located precisely and the biological and hydrological basis for the location as indicated on the plans shall be included in the development plan. Where the OHWM is neither adjacent to or within the boundary of the project, the plan shall indicate the distance and direction to the nearest OHWM of a shoreline.

c. Existing and proposed land contours. The contours shall be at intervals sufficient to accurately determine the existing character of the property and the extent of proposed change to the land that is necessary for the development. Areas within the boundary that will not be altered by the development may be indicated as such and contours approximated for that area.

d. A delineation of all wetland areas that will be altered or used as a part of the development.

e. A general indication of the character of vegetation found on the site.

f. The dimensions and locations of all existing and proposed structures and improvements including but not limited to; buildings, paved or graveled areas, roads, trails, view corridors, utilities, septic tanks and drainfields, material stockpiles or surcharge, and stormwater management facilities.

g. Where applicable, a landscaping plan for the project.

h. Where applicable, plans for development of areas on or off the site as mitigation for impacts associated with the proposed project shall be included and contain information consistent with the requirements of this section.

i. Quantity, source and composition of any fill material that is placed on the site whether temporary or permanent.

j. Quantity, composition and destination of any excavated or dredged material.

k. A vicinity map showing the relationship of the property and proposed development or use to roads, utilities, existing developments and uses on adjacent properties.

l. Where applicable, a depiction of the impacts to views from existing residential uses and public areas.

m. On all variance applications the plans shall clearly indicate where development could occur without approval of a variance, the physical features and circumstances on the property that provide a basis for the request, and the location of adjacent structures and uses.

D. **Additional Submittal requirements for Section 5.15 Recreational Development permits.** In addition to subsection C above, applicants shall provide:

1. Drawings of existing park facilities, including a narrative that identifies area (square feet) and description of trails, parking, native vegetation, campsites, recreational facilities (ball parks, picnic table, grilling areas), upland vegetation and lawn areas.

2. Drawings of proposed park facilities, including a narrative that identifies area (square feet) and description of trails, parking, native vegetation, campsites, recreational facilities (ball parks, picnic table, grilling areas), upland vegetation and lawn areas.
3. Any increases in impervious surfaces (trail size, parking facilities, recreational facilities, etc.) shall be accompanied by a needs analysis that addressed the requirement for increased public facilities, what size facilities are needed by existing and projected park users, and the nearest locations of similar facilities.
4. Expansion of public/park facilities shall be accompanied by a mitigation plan that addresses the design elements and the design and management standards above, addresses critical area impacts, and addresses the incorporation of applicable SMP restoration goals that have been accomplished by the development, and demonstrates a net improvement in ecological shoreline functions.

E. **Additional Submittal requirements for Section 5.8 Dredging permits.** In addition to subsection C above, applicants shall provide:
1. A description of the purpose of the proposed dredging and an analysis of compliance with the policies and regulations of this SMP.
2. An analysis of the existing shoreline and potential adverse impacts, including the following:
   a. A site plan map outlining the perimeter of the proposed dredge area. The map must also include the existing bathymetry and have data points at a minimum of 2-foot depth increments.
   b. A detailed description of the existing physical character, shoreline geomorphology, and biological resources provided by the area proposed to be dredged. This description should include information on the stability of bedlands adjacent to proposed dredging and spoils disposal areas.
   c. A detailed description of potential adverse impacts to ecological functions and processes.
   d. A mitigation plan to address any identified adverse impacts to ecological functions or processes.
3. A detailed description of the physical, chemical and biological characteristics of the dredge materials to be removed, including:
   a. Physical analysis of material to be dredged (material composition and amount, grain size, organic materials present, source of material,etc.).
   b. Chemical analysis of material to be dredged (volatile solids, chemical oxygen demand (COD), grease and oil content, mercury, lead and zinc content, etc.).

c. Biological analysis of material to be dredged.

4. A description of the method of materials removal, including facilities for settlement and movement.
5. Dredging procedure, including the estimated length of time it will take to complete dredging, method of dredging, and amount of materials removed.
6. Frequency and quantity of project maintenance dredging.
7. Detailed plans for dredge spoil disposal, including specific land disposal sites and relevant information on the disposal site, including, but not limited to:
   a. Dredge material disposal area;
   b. Physical characteristics including location, topography, existing drainage patterns, surface and ground water;
   c. Size and capacity of disposal site;
   d. Means of transportation to the disposal site;
   e. Proposed dewatering and stabilization of dredged material;
   f. Methods of controlling erosion and sedimentation; and
   g. Future use of the site and conformance with land use policies and regulations.
8. Plan for disposal of maintenance spoils for at least a 50-year period, if applicable.
9. Hydraulic modeling studies sufficient to identify existing geo-hydraulic patterns and probable effects of dredging.

F. **Additional Submittal requirements for Section 5.13 Mining permits.** Application for permits for mining operations shall be accompanied by operation plans, reclamation plans and analysis of environmental impacts sufficient to make a determination as to whether the project will result in net loss of shoreline ecological functions and processes during the course of mining and after reclamation.

G. **Additional Submittal requirements for Section 5.18 Shoreline Stabilization permits**. In addition to submitting an application for the appropriate shoreline permit, the applicant shall submit the following as part of a request to construct a new, enlarged, or replacement shoreline stabilization measure:

1. For a new or enlarged hard or soft structural shoreline stabilization measure, a geotechnical analysis prepared by a qualified professional with an engineering license. The analysis shall include the following:
   a. An assessment of the necessity for structural shoreline stabilization by estimating time frames and rates of erosion and reporting on the urgency associated with the specific situation. New hard structural

shoreline stabilization measures shall not be authorized, except when an analysis confirms that that there is a significant possibility that an existing structure will be damaged within three years as a result of shoreline erosion in the absence of such hard structural shoreline stabilization measures, or where waiting until the need is immediate results in the loss of opportunity to use measures that would avoid impacts on ecological functions. Where the geotechnical analysis confirms a need to prevent potential damage to a primary structure, but the need is not as immediate (within three years), that analysis may still be used to justify more immediate authorization to protect against erosion using soft measures.

b. An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the OHWM.

c. An assessment of alternative measures to shoreline stabilization, including:

   i. Placing any proposed new developments farther upland of the OHWM.

   ii. Placing structural shoreline stabilization measures upland of the OHWM.

   iii. Correcting any on-site groundwater or drainage issues that may be causing shoreline erosion.

d. Where structural shoreline stabilization is determined to be necessary, the assessment must evaluate the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures. Soft shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.

e. Design recommendations for minimum sizing of hard structural or soft structural shoreline stabilization materials, including gravel and cobble substrates necessary to dissipate wave energy, eliminate scour, and provide long-term shoreline stability.

2. For replacements of existing hard structural shoreline stabilization measures with a similar measure, the applicant shall submit a written narrative providing a demonstration of need. The narrative must be prepared by a qualified professional. The demonstration of need shall consist of the following:

   a. An assessment of the necessity for continued structural shoreline stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch or flow velocities, and location of the nearest primary structure.

b. An assessment of erosion potential resulting from the action of waves or other natural processes operating at or waterward of the OHWM in the absence of the hard structural shoreline stabilization.

c. An assessment of alternative measures to shoreline stabilization, including:

i. Placing any proposed new developments farther upland of the OHWM.

ii. Relocating the structural shoreline stabilization measures farther upland of the OHWM.

iii. Correcting any on-site groundwater or drainage issues that may be causing shoreline erosion.

d. An assessment of the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures. Soft structural shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.

e. Design recommendations for minimizing impacts of any necessary hard structural shoreline stabilization.

3. A demonstration of need may be waived when an existing hard structural shoreline stabilization measure is proposed to be repaired or replaced using soft structural shoreline stabilization measures, resulting in significant restoration of shoreline ecological functions or processes.

4. For all structural shoreline stabilization measures, including soft structural shoreline stabilization, detailed construction plans, including, but not limited to, the following shall be provided:

a. Plan and cross-section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and OHWMs.

b. Detailed construction sequence and specifications for all materials, including gravels, cobbles, boulders, logs, and vegetation. The sizing and placement of all materials shall be selected to accomplish the following objectives:

i. Protect the primary structures from erosion and other damage over the long term, and accommodate the normal amount of alteration from currents and wind- or boat-driven waves;

ii. Allow safe passage and migration of fish and wildlife; and

iii. Minimize or eliminate juvenile salmon predator habitat.

c. For projects that include native vegetation, a detailed five-year vegetation maintenance and monitoring program to include the following:

i. Goals and objectives of the shoreline stabilization plan;

ii. Success criteria by which the implemented plan will be assessed;

iii. A five-year maintenance and monitoring plan, consisting of at least one site visit per year by a qualified professional, with annual progress reports submitted to the Shoreline Administrator and all other agencies with authority;

iv. A performance standard of 90 percent survival for the first year of growth post installation, with no less than 80 percent survival at the end of the third and fifth years; and

v. A contingency plan and a bond in an amount and form acceptable to the County in case of failure.

H. **Additional Requirements.** The Shoreline Master Program Administrator may require additional specific information depending on the nature of the proposal and the presence of sensitive ecological features or issues related to compliance with other County requirements, and the provisions of this SMP.

7.5 Shoreline Substantial Development Permits

7.5.1 Permit Required

A Shoreline Substantial Development Permit shall be required for all development of shorelines, except when specifically exempted by statute, all proposed uses and development occurring within shoreline jurisdiction must conform to RCW 90.58, the Shoreline Management Act, and this master program, see Section 7.6 Exemptions.

7.5.2 Permit Review Criteria

In order for the permit to be approved, the decision maker must find that the proposal is affirmatively consistent with the following:

A. How is the proposal consistent with the policies and procedures of the Act (RCW 90.58)?

B. How is the proposal consistent with the provisions of Chapter 173-27 WAC, Shoreline Management Permit and Enforcement Procedures?

C. How is the proposal consistent with this SMP?

7.6 Exemptions from Shoreline Substantial Development Permits

7.6.1 Compliance with Applicable Regulations Required

An exemption from the Shoreline Substantial Development Permit process is not an exemption from compliance with the Act or this SMP, or from any other regulatory requirements. To be authorized, all uses and development must be consistent with the policies, requirements and procedures of this SMP and the Act.

7.6.2 Interpretation of Exemptions

A. Exemptions shall be construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemption from the Shoreline Substantial Development Permit process.

B. A development or use that is listed as a conditional use pursuant to this SMP or is an unlisted use, must obtain a Shoreline Conditional Use Permit even though the development or use does not require a Shoreline Substantial Development Permit. When a development or use is proposed that does not comply with the bulk, dimensional and performance standards of this SMP, such development or use can only be authorized by approval of a Shoreline Variance.

C. The burden of proof that a development or use is exempt from the permit process is on the applicant. The County may require the applicant to provide additional documentation to support their exemption request.

D. If any part of a proposed development is not eligible for exemption, then a Shoreline Substantial Development Permit is required for the entire proposed development project.

E. The County may attach conditions to the approval of exempted developments and/or uses as necessary to assure consistency of the project with the Act and this SMP. Additionally, nothing shall interfere with the County's ability to require compliance with all other applicable laws and plans.

7.6.3 Exemptions

The County shall exempt from the Shoreline Substantial Development Permit requirement the shoreline developments listed below, or as thereafter amended in WAC 173-27-040; RCW 90.58.030 (3)(e), 90.58.140(9), 90.58.147, 90.58.355 and 90.58.515. Written Letters of Exemption may be required for exempt activities and shall be issued consistent with Section 7.6.4.

A. Any development of which the total cost or fair market value, whichever is higher, does not exceed $7,047 or dollar value as amended by the State of Washington Office of Financial Management. For purposes of determining whether or not a permit is required, the total cost or fair market value shall be based on the value of development that is occurring on shorelines of the state as defined in RCW 90.58.030 (2)(c). The total cost or fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials.

B. Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition, including but not

limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment.

C. Construction of the normal protective bulkhead common to single-family residences. A "normal protective" bulkhead includes those structural and nonstructural developments installed at or near, and parallel to, the OHWM for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion. A normal protective bulkhead is not exempt if constructed for the purpose of creating dry land. When a vertical or near vertical wall is being constructed or reconstructed, not more than one cubic yard of fill per one foot of wall may be used as backfill. When an existing bulkhead is being repaired by construction of a vertical wall fronting the existing wall, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new footings. When a bulkhead has deteriorated such that an OHWM has been established by the presence and action of water landward of the bulkhead then the replacement bulkhead must be located at or near the actual OHWM. Beach nourishment and bioengineered erosion control projects may be considered a normal protective bulkhead when any structural elements are consistent with the above requirements and when the project has been approved by the department of fish and wildlife.

D. Emergency construction necessary to protect property from damage by the elements. An "emergency" is an unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with this chapter. Emergency construction does not include development of new permanent protective structures where none previously existed. Where new protective structures are deemed by the administrator to be the appropriate means to address the emergency situation, upon abatement of the emergency situation the new structure shall be removed or any permit which would have been required, absent an emergency, pursuant to chapter 90.58 RCW, WAC 173-27-040, or this Shoreline Master Program, obtained. All emergency construction shall be consistent with the policies of chapter 90.58 RCW and this Shoreline Master Program. As a general matter, flooding or other seasonal events that can be anticipated and may occur but that are not imminent are not anemergency;

E. Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on shorelands, construction of a barn or similar agricultural structure, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities, and irrigation channels: Provided, that a feedlot of any size, all processing plants, other activities of a commercial nature, alteration of the contour of the shorelands by leveling or filling other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations;

F. Construction or modification of navigational aids such as channel markers and anchor buoys;

G. Construction on shorelands by an owner, lessee or contract purchaser of a single-family residence for their own use or for the use of their family, which residence does not exceed a height of thirty-five feet above average grade level and which meets all requirements of the state agency or local government having authority thereof, including applicable requirements imposed pursuant to chapter 90.58 RCW, WAC 173-27 and this SMP. See Chapter 8 for definitions of single-family residence and residential appurtenances. Construction authorized under this exemption shall be located landward of the OHWM;

H. Construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of single-family and multiple-family residences. In fresh waters, the fair market value of the dock does not exceed twenty-two thousand five hundred dollars ($22,500) for docks that are constructed to replace existing docks, are of equal or lesser square footage than the existing dock being replaced; or eleven thousand two hundred dollars ($11,200) for all other docks, or as otherwise amended by the State per WAC 173-27-040.

I. Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as a part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water from the irrigation of lands;

J. The marking of property lines or corners on state-owned lands, when such marking does not significantly interfere with normal public use of the surface of the water;

K. Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on September 8, 1975, which were created, developed or utilized primarily as a part of an agricultural drainage or diking system;

L. Any project with a certification from the governor pursuant to chapter 80.50 RCW, Energy Facilities -Site Locations;

M. Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under this chapter, if:

1. The activity does not interfere with the normal public use of the surface waters;
2. The activity will have no significant adverse impact on the environment including but not limited to fish, wildlife, fish or wildlife habitat, water quality, and aesthetic values;
3. The activity does not involve the installation of any structure, and upon completion of the activity the vegetation and land configuration of the site are restored to conditions existing before the activity;
4. A private entity seeking development authorization under this section first posts a performance bond or provides other evidence of financial responsibility to the County to ensure that the site is restored to preexisting conditions; and
5. The activity is not subject to the permit requirements of RCW 90.58.550, Oil or natural gas exploration in marine waters;

N. The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020, through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Department of Agriculture or the Department of Ecology jointly with other state agencies under chapter 43.21C RCW;

O. Watershed restoration projects as defined below. The County shall review the projects for consistency with the Shoreline Master Program in an expeditious manner and shall issue its decision along with any conditions within forty- five calendar days of receiving all materials necessary to review the request for exemption from the applicant. No fee may be charged for accepting and processing requests for exemption for watershed restoration projects as used in this section.

1. "Watershed restoration project" means a public or private project authorized by the sponsor of a watershed restoration plan that implements the plan or a part of the plan and consists of one or more of the following activities:
   a. A project that involves less than ten (10) miles of stream reach, in which less than twenty-five (25) cubic yards of sand, gravel, or soil is removed, imported, disturbed or discharged, and in which no existing vegetation

is removed except as minimally necessary to facilitate additional plantings; or

b. A project for the restoration of an eroded or unstable stream bank that employs the principles of bioengineering, including limited use of rock as a stabilization only at the toe of the bank, and with primary emphasis on using native vegetation to control the erosive forces of flowing water; or

c. A project primarily designed to improve fish and wildlife habitat, remove or reduce impediments to migration of fish, or enhance the fishery resource available for use by all of the citizens of the state, provided that any structure, other than a bridge or culvert or instream habitat enhancement structure associated with the project, is less than two hundred square feet in floor area and is located above the OHWM of the stream.

2. "Watershed restoration plan" means a plan developed or sponsored by the Washington Departments of Fish and Wildlife, Ecology, Natural Resources, or Transportation; a federally recognized Indian tribe acting within and pursuant to its authority; a city; a county; or a conservation district that provides a general program and implementation measures or actions for the preservation, restoration, re-creation, or enhancement of the natural resources, character, and ecology of a stream, stream segment, drainage area, or watershed for which agency and public review has been conducted pursuant to chapter 43.21C RCW, the State Environmental Policy Act;

P. A public or private project that is designed to improve fish or wildlife habitat or fish passage, when all of the following apply:

1. The project has been approved in writing by the State of Washington Department of Fish and Wildlife;

2. The project has received Hydraulic Project Approval (HPA) by the State of Washington Department of Fish and Wildlife pursuant to chapter 77.55 RCW; and

3. The County has determined that the project is substantially consistent with this SMP. The County shall make such determination in a timely manner and provide it by letter to the project proponent. Fish habitat enhancement projects that conform to the provisions of RCW 77.55.181 are determined to be consistent with local shoreline master programs, as follows.

a. In order to receive the permit review and approval process created in this section, a fish habitat enhancement project must meet the criteria under P.3.a.i and ii of this subsection:

i. A fish habitat enhancement project must be a project to accomplish one or more of the following tasks:

- Elimination of human-made fish passage barriers, including culvert repair and replacement; or
- Restoration of an eroded or unstable streambank employing the principle of bioengineering, including limited use of rock as a stabilization only at the toe of the bank, and with primary emphasis on using native vegetation to control the erosive forces of flowing water; or
- Placement of woody debris or other instream structures that benefit naturally reproducing fish stocks.

  The Washington Department of Fish and Wildlife shall develop size or scale threshold tests to determine if projects accomplishing any of these tasks should be evaluated under the process created in this section or under other project review and approval processes. A project proposal shall not be reviewed under the process created in this section if the Department of Fish and Wildlife determines that the scale of the project raises concerns regarding public health and safety; and

ii. A fish habitat enhancement project must be approved in one of the following ways:
- By the Washington Department of Fish and Wildlife pursuant to chapter 77.95 or 77.100 RCW; or
- By the sponsor of a watershed restoration plan as provided in chapter 89.08 RCW; or
- By the Department of Fish and Wildlife as a Department of Fish and Wildlife-sponsored fish habitat enhancement or restoration project; or
- Through the review and approval process for the Jobs for the Environment program; or
- Through the review and approval process for conservation district-sponsored projects, where the project complies with design standards established by the conservation commission through interagency agreement with the United States Fish and Wildlife Service and the Natural Resources Conservation Service; or
- Through a formal grant program established by the legislature or the Washington Department of Fish and Wildlife for fish habitat enhancement or restoration; and
- Through other formal review and approval processes established by the legislature.

b. Fish habitat enhancement projects meeting the criteria of P.3.a of this subsection are expected to result in beneficial impacts to the environment. Decisions pertaining to fish habitat enhancement projects meeting the criteria of Section 7.6.3.P.3.a of this subsection and being reviewed and approved according to the provisions of this section are not subject to the requirements of RCW 43.21C.030(2)(c).

c. A Hydraulic Project Approval (HPA) permit is required for projects that meet the criteria of Section 7.6.3.P.3.a of this subsection and are being reviewed and approved under this section. An applicant shall use a Joint Aquatic Resources Permit Application (JARPA) form developed by the Office of Regulatory Assistance to apply for approval under this chapter. On the same day, the applicant shall provide copies of the completed application form to the Washington Department of Fish and Wildlife and to the County. The County shall accept the application as notice of the proposed project. The Washington Department of Fish and Wildlife shall provide a fifteen- day comment period during which it will receive comments regarding environmental impacts. Within forty-five calendar days, the Department of Fish and Wildlife shall either issue a permit, with or without conditions, deny approval, or make a determination that the review and approval process created by this section is not appropriate for the proposed project. The Department of Fish and Wildlife shall base this determination on identification during the comment period of adverse impacts that cannot be mitigated by the conditioning of a permit. If the Department of Fish and Wildlife determines that the review and approval process created by this section is not appropriate for the proposed project, the Department of Fish and Wildlife shall notify the applicant and the County of its determination. The applicant may reapply for approval of the project under other review and approval processes.

d. Any person aggrieved by the approval, denial, conditioning, or modification of a permit under this section may formally appeal the decision to the Hydraulic Appeals Board pursuant to the provisions of this chapter.

e. The County may not require permits or charge fees for fish habitat enhancement projects that meet the criteria of Section 7.6.3.P.3.a of this subsection and that are reviewed and approved according to the provisions of this section.

Q. The external or internal retrofitting of an existing structure with the exclusive purpose of compliance with the Americans with Disabilities Act of 1990 (42 U.S.C Sec. 12101 et seq.) or to otherwise provide physical access to the structure by individuals with disabilities.

7.6.4 Letters of Exemption

Letters of exemption are required for exempt actions which require a US Army Corps of Engineers Section 10 permit or a Section 404 permit under the Federal Water Pollution Control Act; additionally, property owners may request a written letter of exemption.

7.7 Shoreline Conditional Use Permits

7.7.1 Purpose and Review Process

This section provides procedures and criteria guiding the review of shoreline conditional use permits, which require careful review to ensure the use can be properly installed and operated in a manner that meets the goals of the Act and this Program in accordance with any needed performance standards. After a Shoreline Conditional Use application has been approved by the County, the County shall submit the permit to Ecology for Ecology's approval, approval with conditions, or denial. Ecology shall review the file in accordance with WAC 173-27-200.

7.7.2 Determinations of Conditional Use Permits

A. Uses specifically classified or set forth in this Shoreline Master Program as conditional uses shall be subject to review and conditions by the Hearing Examiner and by the Department of Ecology.

B. Other uses which are not classified or listed or set forth in this SMP may be authorized as conditional uses provided the applicant can demonstrate consistency with this SMP.

C. Uses which are specifically prohibited by this SMP may not be authorized as a conditional use.

7.7.3 Review Criteria

A. **Conditional use criteria.** An applicant proposing a conditional use shall affirmatively demonstrate compliance with review criteria below or as thereafter amended in WAC 173-27-160.

1. How is the proposed use consistent with the policies of RCW 90.58.020 and this SMP?
2. How will the proposed use avoid interference with the normal public use of public shorelines?
3. How will the proposed use of the site and design of the project be compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and this SMP?
4. How will the proposed use cause no significant adverse effects to the shoreline environment in which it is to be located?
5. How will the public interest suffer no substantial detrimental effect?

B. **Additional criteria for exceeding maximum height**.

1. Heights Greater than 35 Feet: Per WAC 173-27-180(9)(l), applicants for structures exceeding 35 feet in height shall provide a depiction of the impacts to views from substantial numbers of residences and publicareas. To mitigate impacts, site design shall provide for view corridors between buildings through the use of building separation, setbacks, upper story setbacks, pitched roofs, and other mitigation. In order to determine appropriate view corridor location, applicants shall review the Shoreline Public Access Plan (Appendix E), location of Federal- or State- designated scenic highways, government-prepared view studies, or applicant-prepared studies. The minimum width of a view corridor shall be 25% of the lot width or 25 feet, whichever is less.
2. View Analysis Standards: In the case of heights proposed above 35 feet, the following view analysis standards and procedures apply:
    a. The applicant shall prepare a view analysis addressing such considerations as cumulative view obstruction of the proposed development combined with those of other developments that exceed 35 feet in height within a 1,000-foot radius of the subject property. The cumulative impact analysis shall address overall views that are lost, compromised, and/or retained; available view corridors; and surface water views lost, compromised, and/or retained. For phased developments, the view analysis shall be prepared in the first phase and include all proposed buildings.
3. Applicants proposing to exceed maximum height limits shall:
    a. Demonstrate through photographs, videos, photo-based simulations, or computer-generated simulations that the proposed development will obstruct less than 30% of the view of the shoreline enjoyed by a substantial number of residences or from public properties on areas adjoining such shorelines?
    b. Demonstrate that the orientation of structures on the subject property diminishes the potential view impact? For example, side yard setbacks may need to be increased. No side yard setbacks shall be reduced to accommodate the proposed structure.
    c. Documented that the overriding considerations of the public interest will be served.
    d. Provide a cumulative impact analysis addressing the overall views that are lost, compromised, and/or retained; available view corridors; and surface water views lost, compromised, and/or retained.

C. **Consideration of cumulative impact.** In the granting of all Shoreline Conditional Use Permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if Shoreline

Conditional Use Permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

1. The County may require that the applicant submit a cumulative impact analysis, prepared by a qualified professional:
    a. Documenting other properties or uses on the same waterbody that are similarly situated and could request a similar Shoreline Conditional Use Permit;
    b. Demonstrating consistency with the policies of RCW 90.58.020 (Legislative findings); and
    c. Demonstrating no substantial adverse effects to the shoreline environment and achievement of no-net-loss of ecological function.

7.8 Shoreline Variance Permits

7.8.1 Purpose and Review Process

The purpose of a variance is to grant relief to specific bulk or dimensional requirements set forth in this Shoreline Master Program where there are extraordinary or unique circumstances relating to the property such that the strict implementation of this Shoreline Master Program would impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020. Variances from the use regulations of the SMP are prohibited.

After a Shoreline Variance application has been approved by the County, the County shall submit the permit to Ecology for Ecology's approval, approval with conditions, or denial. Ecology shall review the file in accordance with WAC 173-27-200.

7.8.2 Review Criteria

Shoreline Variances may be authorized, provided the applicant can demonstrate compliance with the following criteria or as thereafter amended in WAC 173-27-170. Applicants are encouraged to consider the options, such as buffer averaging or buffer reduction and optimally implement mitigation sequencing prior to applying for a Shoreline Variance.

A. **General provisions.** Shoreline Variance permits should be granted in circumstances where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020.

B. **Shoreline variances landward of the OHWM.** Shoreline Variance permits for development and/or uses that will be located landward of the OHWM, as defined in RCW 90.58.030(2)(c), and/or landward of any wetland as defined in RCW 90.58.030(2)(h), may be authorized provided the applicant demonstrates affirmatively all of the following:

1. How would the strict application of the bulk, dimensional or performance standards set forth in this SMP preclude or significantly interfere with reasonable use of the property?
2. How is the hardship described in Section 7.8.2.B.1 above specifically related to the property, and is the hardship the result of unique conditions such as irregular lot shape, size, or natural features and the application of this SMP, and not, for example, from deed restrictions or the applicant's own actions?
3. How is the design of the project compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and this SMP, and will the project design not cause adverse impacts to the shoreline environment?
4. How will the variance not constitute a grant of special privilege not enjoyed by the other properties in the area?
5. How is the variance requested the minimum necessary to afford relief?
6. How will the public interest suffer no substantial detrimental effect?

C. **Shoreline variances waterward of OHWM.** Shoreline Variance permits for development and/or uses that will be located waterward of the OHWM, as defined in RCW 90.58.030(2)(b), or within any wetland as defined in RCW 90.58.030(2)(h), may be authorized provided the applicant demonstrates affirmatively all of the following:
   1. How would the strict application of the bulk, dimensional or performance standards set forth in this SMP preclude all reasonable use of the property?
   2. How is the proposal consistent with the criteria established under subsection 7.8.2.B.2 through B.6 of this section?
   3. How will the public rights of navigation and use of the shorelines not be adversely affected?

D. **Cumulative impacts.** In the granting of all Shoreline Variance Permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. The County may require that the applicant submit a cumulative impact analysis prepared by a qualified professional for the subject of the variance:
   1. Documenting other properties or uses on the same waterbody that are similarly situated and could request a similar variance;
   2. Demonstrating consistency with the policies of RCW 90.58.020; and
   3. Demonstrating no substantial adverse effects to the shoreline environment and achievement of no-net-loss of shoreline ecological function. For example, if variances were granted to other developments in the area where similar circumstances exist, the total of the variances shall also remain consistent with the policies of the Act and shall not cause substantial adverse effects to the shoreline environment.

The County shall determine whether the additional potential for variances will produce substantial adverse effects to the shoreline environment considering the characteristics of the proposed variance request, the ability to achieve no-net-loss of ecological function principles, and capability of accommodating preferred shoreline uses in the future if the variance and cumulative potential requests occur.

7.9 Permit Conditions

The following conditions may apply to any decision as appropriate to implement this SMP.

A. **Conditions.** In granting, revising, or extending a shoreline permit, the Administrator or Hearing Examiner may attach such conditions, modifications, or restrictions thereto regarding the location, character, and other elements of the proposed development deemed necessary to prevent undesirable effects of the proposed development or activity and/or to assure consistency of the project with the Act and this SMP.

B. **Compliance conditions.** Nothing shall interfere with the County's ability to require compliance with all other applicable Federal, State, and local permits and approvals.

C. **Uncertain effects.** In cases involving uncertain effects, a condition may be imposed to require monitoring with future review or re-evaluation to assure conformance with the Act and this SMP.

D. Shorelines of Statewide Significance

Consistent with the use preferences for shorelines of statewide significance contained in RCW 90.58.020, the County may condition decisions on the following policies in order of decreasing priority:

1. Recognize and protect the state-wide interest over local interest.
    a. Solicit and consider comments from state agencies, affected Tribes, adjacent local governments' land areas, citizen's advisory committees and local officials, and state-wide interest groups.
2. Preserve the natural character of the shoreline.
    a. Evaluate and protect or restore existing diversity of vegetation and habitat values, wetlands, and habitat corridors and habitats for State-listed "priority species."
3. Support actions that result in long-term benefits over short-term benefits.
    a. Evaluate the short-term economic gain or convenience of developments relative to the long-term and potentially costly impairments to the natural shoreline. Preserve resources and values of shorelines of statewide significance for future generations and restrict

or prohibit development that would irretrievably damage shoreline resources.

4. Protect the resources and ecology of the shoreline.
    a. All shoreline development should be located, designed, constructed and managed consistent with mitigation sequencing provisions outlined in Section 4.2, Ecological Protection, to minimize adverse impacts to regionally important wildlife resources, including spawning, nesting, rearing and habitat areas, and migratory routes and result in no net loss of shoreline ecosystems and ecosystem-wide processes.
5. Increase public access to publicly owned areas of the shoreline.
    a. On public lands, give priority to developing paths and trails to shoreline areas and linear access along the shorelines, especially those trail corridors that would be a regional recreational and transportation resource. Increase public access opportunities for those with disabilities consistent with the Americans with Disabilities Act.
6. Increase recreational opportunities for the public on the shoreline.
    a. Plan for and encourage development of facilities for public recreational use of the shoreline. When possible, reserve areas for lodging and related facilities on uplands with provisions for appropriate public access to the shoreline.

7.10 Duration of Permits

Time duration requirements for Shoreline Substantial Development Permits, Shoreline Exemptions, Shoreline Variances, and Shoreline Conditional Use Permits shall be consistent with the following provisions.

A. **General provisions.** Upon a finding of good cause, based on the requirements and circumstances of the project proposed and consistent with the policy and provisions of this SMP, the County may adopt different time limits from those set forth in Sections 7.10.B and C of this section as a part of an action on a Shoreline Substantial Development Permit.

B. **Commencement.** Construction activities shall be commenced or, where no construction activities are involved, the use or activity shall be commenced within two years of the effective date of a Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, or Shoreline Variance. Commencement means taking the action on the shoreline project for which the permit was granted. For example, beginning actual construction or opening a public boat launch facility would constitute commencement.

C. **Termination.** Authorization to conduct development activities shall terminate five years after the effective date of decision for a Shoreline Exemption,

Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, or Shoreline Variance, unless extended pursuant to subsection D.

D. **Extension.** The County may authorize a single extension for a period not to exceed one year based on reasonable factors, if a request for extension has been filed before the expiration date; notice of the proposed extension shall be given to parties of record and to Ecology. Any change to the time limits of a permit other than those authorized by RCW 90.58.143 as amended shall require a new permit. Time extensions authorized by RCW 90.58.143 shall require the applicant, prior to the date of termination, to be responsible for informing the Administrator of the pendency of other permit applications filed with agencies and of any related administrative and legal actions on any permit or approval.

E. **Effective date.** The effective date of a Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, or Shoreline Variance shall be the date of filing as provided in RCW 90.58.140(6); the permit time periods do not include the time during which a use or activity was not actually pursued due to the pendency of administrative appeals or legal actions or due to the need to obtain any other government permits and approvals for the development that authorize the development to proceed, including all reasonably related administrative or legal actions on any such permits or approvals. Shoreline Exemptions are an Administrative action appealable to the Hearing Examiner with an effective date matching the date of decision.

7.11 Initiation of Development

A. **Authorization to begin construction.** Each permit for a Substantial Development, Shoreline Conditional Use or Shoreline Variance issued by the County shall contain a provision that construction pursuant to the permit shall not begin and is not authorized until twenty-one calendar days from the date of filing with Ecology as defined in RCW 90.58.140(6) and WAC 173-27- 130, or until all review proceedings initiated within twenty-one calendar days from the date of filing of the decision have expired, except as provided in RCW 90.58.140 (5)(a) - (d).

   The date of filing for a Substantial Development Permit means that date Ecology received the decision.

   With regard to a permit for a Shoreline Variance or a Shoreline Conditional Use, the date of filing means the date Ecology transmits/mails the Ecology decision to the County.

B. **Forms.** Permits for Substantial Development, Shoreline Conditional Use, Shoreline Exemption or Shoreline Variance may be in any form prescribed and used by the County including a combined permit application form. Such forms will be supplied by the County.

C. **Notice of Decision.** A permit data sheet shall be submitted to Ecology with each shoreline permit. The permit data sheet form shall be consistent with WAC 173-27-990.

7.12 Review Process

The application shall be reviewed by the County in accordance with Chelan County Code Chapter 14.06, 14.08, and 14.10 and WAC 173-27, and in accordance with the SMA, and regulations and guidelines of this SMP.

7.13 Appeals

7.13.1 Appeals of Shoreline Administrator Determinations and Decisions

A. Administrative review decisions and exemption letters by the Shoreline Administrator, may be the subject of an appeal to the Hearing Examiner by any aggrieved person. Such appeals shall be an open record hearing before the Hearing Examiner.

B. Appeals must be submitted within ten working days after the date of decision or written interpretation together with the applicable appeal fee. Appeals submitted by the applicant or aggrieved person shall contain:

1. The decision or interpretation being appealed, including the file number reference and the specific objections in the decision document;
2. The name and address of the appellant and interest(s) in the application or proposed development;
3. The specific reasons why the appellant believes the decision or interpretation to be erroneous, including identification of each finding of fact, each conclusion, and each condition or action ordered which the appellant alleges is erroneous. The appellant shall have the burden of proving the decision or interpretation is erroneous;
4. The specific relief sought by the appellant; and
5. The appeal fee established by the County.

C. Per WAC 173-27-120, the County shall comply with special procedures for limited utility extensions and bulkheads. If there is an appeal of the decision to grant or deny the permit to the County legislative authority, the appeal shall be finally determined by the legislative authority within thirty calendar days.

7.13.2 Appeals to Shorelines Hearings Board

Appeals to the Shorelines Hearings Board of a final decision on a Shoreline Conditional Use Permit, Shoreline Variance, or a decision on an appeal of an administrative action already appealed to the County Hearing Examiner, may be filed by the applicant or any aggrieved party pursuant to RCW 90.58.180 within 21

calendar days of filing of the final decision by Ecology as provided for in RCW 90.58.140(6).

7.14 Amendments to Permits

7.14.1 Revision – When Required

A permit revision is required whenever the applicant proposes substantive changes to the design, terms or conditions of a project from that which is approved in the permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, this SMP, and/or the policies and provisions of chapter 90.58 RCW. Changes which are not substantive in effect do not require approval of a revision.

When an applicant seeks to revise a permit, the County shall request from the applicant detailed plans and text describing the proposed changes. Proposed changes must be within the scope and intent of the original permit, otherwise a new permit is required, pursuant to Section 7.14.2.

A. "Within the scope and intent of the original permit" means all of the following:
    1. No additional over water construction is involved except that pier, dock, or float construction may be increased by five hundred (500) square feet or ten percent (10%) from the provisions of the original permit, whichever is less;
    2. Ground area and height coverage may be increased a maximum of ten percent (10%) from the provisions of the original permit;
    3. The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of this SMP except as authorized under a Shoreline Variance granted as the original permit or a part thereof;
    4. Additional or revised landscaping is consistent with any conditions attached to the original permit and with this SMP;
    5. The use authorized pursuant to the original permit is not changed; and
    6. No adverse environmental impact will be caused by the project revision.

7.14.2 Filing of Revision

A. The revision decision from the County, including the revised site plans and text, shall be sent to Ecology and all parties of record.

B. If the revision to the original permit involves a Shoreline Conditional Use Permit or Shoreline Variance, the County shall submit the revision decision to Ecology for final approval, approval with conditions, or denial. Ecology shall render and transmit to the County and the applicant its final decision within fifteen calendar days of the date of Ecology's receipt of the submittal from the County. The County shall notify parties of record of Ecology's final decision.

7.14.3 Effective Date of Revised Permit

The revised permit is effective immediately upon final decision by the County or, when required, upon final action by Ecology.

7.14.4 Appeal of Revised Permit

A. **Filing.** Appeals of a revised permit shall be in accordance with RCW 90.58.180 and shall be filed within twenty-one calendar days from the date of receipt of the County's action by Ecology or, when appropriate under Section 7.7 for Conditional Use Permits and Section 7.8 for Variances, the date Ecology's final decision is transmitted to the County and the applicant.

B. **Basis of appeals.** Appeals shall be based only upon contentions of noncompliance with the provisions of Section 7.14.1 based on the revised portion of the permit.

C. **Risk.** Construction undertaken pursuant to that portion of a revised permit not authorized under the original permit is at the applicant's own risk until the expiration of the appeals deadline.

D. **Scope of decision.** If an appeal is successful in proving that a revision is not within the scope and intent of the original permit, the decision shall have no bearing on the original permit.

7.15 Enforcement

The County shall apply Title 16 of the Chelan County Code for all enforcement actions, pursuant to WAC 173-27-260, whenever a person has violated any provision of the Act or any master program or other regulation promulgated under the Act.

7.16 Amendments to Shoreline Master Program

7.16.1 General

A. This Shoreline Master Program carries out the policies of the Shoreline Management Act for Chelan County. It shall be reviewed and amended as appropriate in accordance with the review periods required in the Act and in order to:

   1. To assure that this SMP complies with applicable law and guidelines in effect at the time of the review; and
   2. To assure consistency of this SMP with the County's comprehensive plan and development regulations adopted under chapter 36.70A RCW, if applicable, and other local requirements.

B. This SMP and all amendments thereto shall become effective fourteen calendar days from the date of the Department of Ecology's s written notice of final action to the County.

C. The SMP Element of the Chelan County Comprehensive Plan may be amended annually. The SMP regulations may be amended as needed.

7.16.2 Amendment Process and Criteria

A. **Initiation**. Future amendments to this SMP may be initiated either by any person, resident, property owner, business owner, governmental or non-governmental agency, Shoreline Administrator, Planning Commission, or Board of County Commissioners as appropriate.

B. **Application**. Applications for SMP amendments shall specify the changes requested and any and all reasons therefore. Applications shall be made on forms specified by the County. Such applications shall contain information specified in the County's procedures for Comprehensive Plan and/or development regulation amendments pursuant to Chelan County Code Title 14 and RCW 36.70A, the Growth Management Act.

C. Public Review Process – Minimum Requirements. The County shall process amendments in accordance with the procedures of the Shoreline Management Act, Growth Management Act, and implementing rules including, but not limited to, RCW 90.58.080, WAC 173-26-100, RCW 36.70A.106 and 130, and Part Six, Chapter 365-196 WAC.

D. **Roles and Responsibilities**. Proposals for amendment of this SMP shall be heard by the Planning Commission, per the provisions of Section 7.1.4. After conducting a hearing and evaluating testimony regarding the application, including a recommendation from the Shoreline Administrator per Section 7.1.1, the Planning Commission shall submit its recommendation to the Board of County Commissioners, who shall approve or deny the proposed amendment consistent with Section 7.1.5.

E. **Finding**. Prior to approval, the County shall make a finding that the amendment would accomplish all of the following criteria:

1. The proposed amendment would make this Program more consistent with the Act and/or any applicable Department of Ecology Guidelines;
2. The proposed amendment would make this Program more equitable in its application to persons or property due to changed conditions in an area;
3. This Program and any future amendment hereto shall ensure no net loss of shoreline ecological functions and processes on a programmatic basis in accordance with the baseline functions present as of the effective date of this SMP.

F. **Final Process Step.** After approval or disapproval of a Program amendment by the Department of Ecology as provided in RCW 90.58.090, the County shall publish a notice that the Program amendment has been approved or disapproved by Ecology pursuant to the notice publication requirements of RCW 36.70A.290.

8 DEFINITIONS

The terms used throughout this Shoreline Master Program shall be defined and interpreted as indicated below. When consistent with the context, words used in the present tense shall include the future; the singular shall include the plural, and the plural the singular. Definitions established by WAC 173 have been incorporated herein and should these definitions in the WAC be amended, the most current WAC definition shall apply. Except where specifically defined in this chapter, the RCW or the WAC, all words used in this Shoreline Master Program shall carry their customary meanings.

A

ACCESSORY. Any use or development incidental to and subordinate to a primary use or development.

ACCESSORY STRUCTURE. Any structure that is incidental and subordinate to a primary use, such as barns, garages, storage sheds, drainfields, stairways, sheds, gazebos, patios, and other similar uses.

ACCESSORY USE. Any use that is subordinate and incidental to the primary use and which functionally supports the primary use activity.

ACCESSORY DWELLING UNIT. See Residential Uses.

ACT. The Washington State Shoreline Management Act, chapter 90.58 RCW.

ADEQUATE. Sufficient to satisfy an adopted requirement. If the County does not have an adopted requirement, adequate means to meet a need or demand generated by the proposed shoreline development or use as determined by the authority responsible to determine compliance with the Shoreline Master Program per Chapter 7.

ADMINISTRATOR OR SHORELINE ADMINISTRATOR. Administrator or Shoreline Administrator means the director of the County's Community Development Department or designated representative, who is vested with the duty of administering Shoreline Master Program regulations within the County's area of authority.

ADVERSE IMPACT. An impact that can be measured or is tangible and has a reasonable likelihood of causing moderate or greater harm to ecological functions

or processes or other elements of the shoreline environment. See also SIGNIFICANT ECOLOGICAL IMPACT

AGRICULTURAL ACTIVITIES. Agricultural uses and practices including, but not limited to: producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation.

AGRICULTURAL-COMMERCIAL. The following activities are considered agricultural-commercial activities:

A. "Agricultural tourism" refers to the act of visiting a working farm or any agricultural, horticultural or agribusiness operation for the purpose of enjoyment, education or active involvement in the activities of the farm or operation.
B. "Nursery" means land or structures, such as greenhouses, used to raise plants, flowers and shrubs for sale.
C. "Roadside stand" means a temporary use which is primarily engaged in the sale of fresh agricultural products, locally grown on- or off-site, but may include, incidental to fresh produce sale, the sale of limited prepackaged food products and non-food items. This use is to be seasonal in duration, open for the duration of the harvest season.
D. "Value added operation" means any activity or process that allows farmers to retain ownership and that alters the original agricultural product or commodity for the purpose of gaining a marketing advantage. Value added operations may include bagging, packaging, bundling, pre-cutting, food and beverage service, etc.
E. "Winery" means a facility where fruit or other products are processed (i.e., crushed, blended, aged, and/or bottled) and may include as incidental and/or accessory to the principal use a tasting room, food and beverage service, places of public/private assembly, and/or retail sales area.

AGRICULTURAL EQUIPMENT AND AGRICULTURAL FACILITIES. Include, but are not limited to:

A. The following used in agricultural operations: Equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion, withdrawal, conveyance, and use equipment and facilities including, but not limited to, pumps, pipes, tapes, canals, ditches, and drains;
B. Corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands;
C. Farm residences and associated equipment, lands, and facilities; and
D. Roadside stands and on-farm markets for marketing fruit or vegetables.

AGRICULTURAL LAND. Areas on which agricultural activities are conducted as of the date of adoption of this SMP pursuant to the State Shoreline Guidelines WAC 173-26 as evidenced by aerial photography or other documentation. After the effective date of this SMP, land converted to agricultural use is subject to compliance with the requirements herein.

AGRICULTURAL PRODUCTS. Includes, but is not limited to, horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within twenty (20) years of planting; and livestock including both the animals themselves and animal products including, but not limited to, meat, upland finfish, poultry and poultry products, and dairy products.

ALTERATION. Any human induced change in an existing condition of a shoreline, critical area and/or its buffer. Alterations include, but are not limited to grading, filling, channelizing, dredging, clearing (vegetation), draining, construction, compaction, excavation, or any other activity that changes the character of the area.

AMENDMENT. A revision, update, addition, deletion, and/or reenactment to an existing shoreline master program or to a permit as appropriate.

ANADROMOUS FISH. Fish species that spend most of their lifecycle in saltwater, but return to freshwater to reproduce.

APPLICABLE. The shoreline goal, objective, policy, or standard is relevant or appropriate, or the shoreline development meets the threshold upon which a

requirement is based as determined by the authority responsible to determine compliance with the Shoreline Master Program per Chapter 7.

APPURTENANCE, RESIDENTIAL. Improvement necessarily connected to the use and enjoyment of a single-family residence when located landward of the OHWM, the perimeter of a wetland and outside their corresponding required buffers. Appurtenances may include, but are not limited to, a garage and/or shop; driveway; utilities; water craft storage (upland); swimming pools; hot tubs; sport courts; retaining walls when necessary to protect the residence and appurtenant structures from erosion; fences; saunas; cabanas; gazebos, antennas; decks; walkways; stairs, pump houses and installation of a septic tank and drainfield and grading which does not exceed two hundred fifty cubic yards and which does not involve placement of fill in any wetland or waterward of the OHWM.

AQUATIC. Pertaining to those areas and associated plant and wildlife habitat waterward of the OHWM.

AQUACULTURE. Aquaculture is defined as the propagation and rearing of aquatic organisms in controlled or selected aquatic environments for any commercial, recreational, or public purpose. The broad term "aquaculture" refers to the breeding, rearing, and harvesting of plants and animals in all types of water environments, including ponds, rivers, and lakes. Aquaculture can take place in the natural environment or in a manmade environment. Using aquacultural techniques and technologies, researchers and the aquaculture industry are "growing," "producing," "culturing," "ranching", and "farming" all types of freshwater species. Aquaculture can be classified as either commercial aquaculture or non-commercial aquaculture.

A. Commercial Aquaculture: Commercial aquaculture is defined as the rearing of aquatic organisms, including the incidental preparation of these products for human use, with the goal of maximizing profit.
B. Non-Commercial Aquaculture: Non-commercial aquaculture is defined as fish and wildlife activities that are not primarily for profit and are supported by a recognized federal, tribal, or state resource manager.
    1. Low Intensity Non-Commercial Aquaculture: Activities which support non-commercial aquaculture, including well and water supply development, surveys, ground disturbance of less than 10 cubic yards, no permanent structures, and minimal land clearing.
    2. Medium Intensity Non-Commercial Aquaculture: Activities which support non-commercial aquaculture, including well and water supply development, surveys, development of acclimation ponds or other acclimation vessels, and removable/portable structures.

3. High Intensity Non-Commercial Aquaculture: Activities which support non-commercial aquaculture including well and water supply development, surveys, development of acclimation ponds, and permanent structures.

ARCHAEOLOGICAL OBJECT. An object that comprises the physical evidence of an indigenous and subsequent culture including material remains of past human life including monuments, symbols, tools, facilities, graves, skeletal remains and technological by-products.

ARCHAEOLOGICAL RESOURCE. All sites, objects, structures, artifacts, implements and locations of prehistorical or archaeological interest.

ARCHAEOLOGICAL SITE. A geographic locality in Washington, including, but not limited to, submerged and submersible lands and the bed of the sea within the state's authority, that contains archaeological objects.

ARCHAEOLOGICAL. The systematic scientific study of humankind's past through remains.

ARCHAEOLOGIST, PROFESSIONAL. A person who meets qualification standards promulgated by Department of Archaeology and Historic Preservation and the National Park Service and published in 36 CFR Part 61 and which define minimum education and experience required to perform identification, evaluation, registration and treatment activities for archaeological sites. In some cases, additional areas or levels of expertise may be needed, depending on the complexity of the task and the nature of the properties involved.

ASSOCIATED WETLANDS. Wetlands that are in proximity to lakes, rivers or streams that are subject to the Act and either influence or are influenced by such waters. Factors used to determine proximity and influence include, but are not limited to: location contiguous to a shoreline waterbody, formation by tidally influenced geo-hydraulic processes, presence of a surface connection including through a culvert or tide gate, location in part or whole within the floodplain of a shoreline, periodic inundation, and/or hydraulic continuity.

AUTHORIZED USE. Any use permitted in shoreline jurisdiction either by appropriate shoreline permit or exemption.

AVERAGE GRADE LEVEL. The average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under

the proposed building or structure. In the case of structures to be built over water, average grade level shall be the elevation of the ordinary high water mark. Calculation of the average grade level shall be made by averaging the ground elevations at the midpoint of all exterior walls of the proposed building or structure.

B

BARB. Used primarily in streams, barbs are low relief projections from a bank, angled upstream, to redirect flow away from the bank towards the center of the channel. As opposed to groins or jetties, barbs are not barrier types of structures; they function by re-directing flows that pass over the top of the structure.

BEACH. The zone of unconsolidated material that is moved by waves and wind currents, including areas both above and below the OHWM.

BEACH ENHANCEMENT/RESTORATION. Process of restoring a beach to a state more closely resembling a natural beach, using beach feeding, vegetation, drift sills and other nonintrusive means as applicable. See also ENHANCEMENT.

BERM. A linear mound or series of mounds of sand and/or gravel generally paralleling the water at or landward of the OHWM. Also, a linear mound used to screen an adjacent activity, such as a parking lot, from transmitting excess noise and glare.

BEST MANAGEMENT PRACTICES. Conservation practices or systems of practices and management measures, often promulgated by state and federal agencies or the County, that:

A. Control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxins, and sediment;
B. Minimize adverse impacts to surface water and ground water flow, circulation patterns, and to the chemical, physical, and biological characteristics of waters, wetlands, and other fish and wildlife habitats;
C. Control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw material.

BIOENGINEERING. The use of biological elements, such as the planting of vegetation, often in conjunction with engineered systems, to provide a structural shoreline stabilization measure with minimal negative impact to the shoreline ecology.

BIOFILTRATION SYSTEM. A stormwater or other drainage treatment system that utilizes as a primary feature the ability of plant life to screen out and metabolize

sediment and pollutants. Typically, biofiltration systems are designed to include swales, retention ponds and other vegetative features.

BOATHOUSE. Any roofed and enclosed structure built over water for storage of watercraft or float planes. See also COVERED MOORAGE.

BOATING FACILITIES. Developments and uses that support access to shoreline waters for purposes of boating, including marinas, community docks serving five or more single-family residences or multi-family units, public piers, and community or public boat launch facilities.

BOAT LAUNCH FACILITY. Any structure or apparatus used for transferring watercraft between uplands and the water. Boat launches are typically launch ramps, but may also include other mechanisms such as a hoist or crane often used at dry storage locations. See also LAUNCH RAMP.

BOG. A wet, spongy, poorly drained area which is usually rich in very specialized plants, contains a high percentage of organic remnants and residues, and frequently is associated with a spring, seepage area, or other subsurface water source. A bog sometimes represents the final stage of the natural process of eutrophication by which lakes and other bodies of water are very slowly transformed into land areas.

BREAKWATER. An aquatic structure that is generally built parallel to shore, but may be built perpendicular to the shoreline, that may or may not be connected to land, and may be floating or stationary. The primary purpose is to protect harbors, moorages and navigation activity from wave and wind action by creating stillwater areas along shore. A secondary purpose is to protect shorelines from wave caused erosion. See also JETTIES.

BUFFER, SHORELINE BUFFER. The area adjacent to a shoreline that separates and protects the waterbody from adverse impacts associated with adjacent land uses. It is designed and designated to remain vegetated in an undisturbed and natural condition to protect an adjacent aquatic or wetland site from upland impacts, to provide habitat for wildlife, to afford limited public or private access, and to accommodate certain other specified uses that benefit from a shoreline location. A buffer measured landward, in a horizontal direction perpendicular to the OHWM of the shoreline waterbody.

BUILDING. Any combination of materials constructed, placed or erected permanently on the ground or attached to something having a permanent location

on the ground, for the purpose of shelter, support or enclosure of persons, animals or property, or when supporting any use, occupancy or function. Excluded from this definition are residential fences and retaining walls less than two feet in height For structures waterward of the OHWM, see OVER- WATER STRUCTURES.

BULKHEAD. A solid wall erected generally parallel to and at or near the OHWM for the purpose of protecting adjacent uplands from waves or current action. A bulkhead is an example of hard structural shoreline stabilization and may include a wave return.

BUOY, MOORING. An anchored float for the purpose of mooring vessels.

BUOY, NAVIGATION. An anchored float for the purpose of identifying navigational hazards or directing watercraft traffic.

C

CHANNEL MIGRATION ZONE (CMZ). The area along a river or stream within which the channel(s) can reasonably be expected to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river or stream and its surroundings. It encompasses that area of current and historic lateral stream channel movement that is subject to erosion, bank destabilization, rapid stream incision, and/or channel shifting, as well as adjacent areas that are susceptible to channel erosion.

CHANNELIZATION. The straightening, relocation, deepening or lining of stream channels, including construction of continuous revetments or levees for the purpose of preventing gradual, natural meander progression.

CLEARING. The destruction or removal of vegetation ground cover, shrubs and trees including, but not limited to, root material removal and/or topsoil removal.

COMMERCIAL DEVELOPMENT. Those developments whose primary use is for retail, service or other commercial business activities. Included in this definition are developments including but not limited to hotels, motels, bed and breakfast establishments, or other commercial accommodations, shops, restaurants, banks, professional offices, grocery stores, laundromats, recreational vehicle parks, and indoor or outdoor commercial recreation facilities.

COMMERCIAL USES. Commercial uses are those activities engaged in commerce and trade and involving the exchange of money, including but not limited to,

retail, services, wholesale, or business trade activities. Examples include, but are not limited to, hotels, motels, or other commercial accommodations, grocery stores, restaurants, shops, commercial recreation facilities, and offices.

COMMON LINE SETBACK. A setback measured perpendicularly landward of the ordinary high water mark (OHWM) which is determined by averaging the setbacks of structures existing on waterfront lots which are adjacent to the one upon which the development is to be built.

COMMUNITY ACCESS. The ability of all property owners or members of a residential development to reach and use the waters of the State, the water/land interface, and associated shoreline area. It includes physical access that is either lateral (areas paralleling the shore) or perpendicular (an easement or community corridor to the shore), and/or visual access facilitated by scenic roads and overlooks, viewing platforms, and other community sites or facilities. Community access is not intended for the general public.

COMMUNITY DOCK. A private water-dependent facility designed for moorage of pleasure craft as its primary use that serves a specified residential development of five or more single-family residences or multi-family units. Other water-enjoyment uses, such as fishing or viewing, may occur on community docks. Community docks are different from marinas.

CONDITIONAL USE, SHORELINE. A use, development, or substantial development which is classified as a Conditional Use or is not classified within this SMP.

CONSERVATION. The prudent management of rivers, streams, wetlands, wildlife and other environmental resources in order to preserve and protect them. This includes the careful use of natural resources to prevent depletion or harm to the environment.

CONSERVATION EASEMENT. A legal agreement that the property owner enters into to restrict uses of the land for purposes of natural resources conservation. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property.

CONTAMINANT. Any chemical, physical, biological, or radiological substance that does not occur naturally in ground water, air, or soil or that occurs at concentrations greater than those in the natural levels.

COUNTY. Chelan County, Washington.

CRITICAL AQUIFER RECHARGE AREA. Areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge.

CRITICAL AREAS. Critical areas are defined pursuant to RCW 36.70A.030 and WAC 365-190-030 as critical aquifer recharge areas, wetlands, geologically hazardous areas, frequently flooded areas and fish and wildlife habitat conservation areas.

CRITICAL HABITAT. Habitat areas with which endangered, threatened, sensitive or monitored plant, fish, or wildlife species have a primary association (e.g., feeding, breeding, rearing of young, migrating). Such areas are identified in reference to lists, categories, and definitions promulgated by the Washington Department of Fish and Wildlife as identified in WAC 232-12-011 or 232-12-014; in the Priority Habitat and Species (PHS) program of the Department of Fish and Wildlife; or by rules and regulations adopted by the U.S. Fish and Wildlife Service, National Marine Fisheries Service, or other agency with authority for such designations.

CUMULATIVE IMPACTS. Cumulative impacts are the results of incremental actions when added to past, present, and reasonably foreseeable future actions. Cumulative impacts can be deemed substantial and subject to mitigation conditions even though they may be comprised of individual actions having relatively minor impacts.

D

DAHP. The State of Washington Department of Archaeology and Historic Preservation.

DEPARTMENT OF ECOLOGY or ECOLOGY. The Washington State Department of Ecology.

DEVELOPMENT. A use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, minerals or vegetation; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters of the state subject to Chapter 90.58 RCW at any stage of water level. Development does not include the following activities:

A. Interior building improvements;

B. Exterior structure maintenance activities, including painting and roofing as long as it does not expand the existing footprint of the structure;
C. Routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning and weeding; and
D. Maintenance of the following existing facilities that does not expand the affected area: septic tanks (routine cleaning), wells, and individual utility service connections.
E. Dismantling or removing structures if there is no other associated development or re-development.

DEVELOPMENT REGULATIONS. The controls placed on development or land uses by local government, including, but not limited to, zoning ordinances, critical areas ordinances, all portions of a shoreline master program other than goals and policies approved or adopted under Chapter 90.58 RCW, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto.

DIKE. An artificial embankment or revetment normally set back from the bank or channel in the floodplain for the purpose of keeping floodwaters from inundating adjacent land.

DOCK. All platform structures or anchored devices in, suspended over, or floating on waterbodies to provide moorage for pleasure craft (including watercraft and float planes) or landing for water-dependent recreation including, but not limited to, piers, floats, swim floats, float plane moorages, and water ski jumps. Excluded are launch ramps. Docks often consist of a nearshore pier with a ramp to an offshore float. See also PIER.

DOCUMENT OF RECORD. The most current shoreline master program officially approved or adopted by rule by the Department of Ecology for a given local government, including any changes resulting from appeals filed pursuant to RCW 90.58.190.

DREDGING. Excavation or displacement of the bottom or shoreline of a waterbody (waterward of the OHWM) for purposes of flood control, navigation, utility installation (excluding on-site utility features serving a primary use, which are "accessory utilities" and shall be considered a part of the primary use), the construction or modification of essential public facilities and regional transportation facilities, and/or restoration (of which the primary restoration element is sediment/soil removal rather than being incidental to the primary restoration purpose). Dredging, as regulated in this SMP under Section 5.8, is not intended to cover other excavations waterward of the ordinary high water mark

(OHWM) that are incidental to construction of an otherwise authorized use or modification (e.g., , bulkhead replacements, large woody debris installations, boat launch ramp installation, pile placement).

E

ECOLOGICAL FUNCTIONS (or SHORELINE FUNCTIONS). The work performed or role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem.

ECOLOGY. See DEPARTMENT OF ECOLOGY.

ECOSYSTEM-WIDE PROCESSES. The suite of naturally occurring physical and geologic processes of erosion, transport, and deposition and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat and the associated ecological functions.

EMBANKMENT. A wall or bank of earth or stone built to prevent a river flooding an area.

EMERGENCY/EMERGENCY CONSTRUCTION. An unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with the master program. Emergency construction is construed narrowly as that which is necessary to protect property and facilities from the elements. Emergency construction does not include development of new permanent protective structures where none previously existed. Where new protective structures are deemed by the administrator to be the appropriate means to address the emergency situation, upon abatement of the emergency situation the new structure shall be removed or any permit which would have been required, absent an emergency, pursuant to Chapter 90.58 RCW, these regulations, or this SMP, shall be obtained. All emergency construction shall be consistent with the policies of Chapter 90.58 RCW and this SMP. As a general matter, flooding or seasonal events that can be anticipated and may occur but that are not an imminent emergency.

ENHANCEMENT. Alteration of an existing resource to improve or increase its characteristics, functions, or processes without degrading other existing ecological functions. Enhancements are to be distinguished from resource creation or restoration projects. See also BEACH ENHANCEMENT/RESTORATION.

EROSION. The wearing a way of land by the action of natural forces.

ESSENTIAL PUBLIC FACILITIES: Essential public facilities include those facilities that are typically difficult to site, such as airports, state education facilities, and state or regional transportation facilities as defined in RCW 47.06.140, regional transit authority facilities, as defined in RCW 81.112.020, state and local correctional facilities, solid waste handling facilities, and in-patient facilities including substance abuse facilities, mental health facilities, group homes, and secure community transition facilities as defined in RCW 30 71.09.020.

EXCAVATION. The disturbance or displacement of unconsolidated earth material such as silt, sand, gravel, soil, rock or other material. In addition to upland excavation, this definition covers excavations waterward of the ordinary high water mark (OHWM) that are incidental to construction of an otherwise authorized use or modification (e.g., bulkhead replacements, large woody debris installations, boat launch ramp installation, pile placement). See also DREDGING.

EXEMPTION. Certain specific developments as listed in WAC 173-27-040 are exempt from the definition of substantial developments are therefore exempt from the Shoreline Substantial Development Permit process of the SMA. An activity that is exempt must still be carried out in compliance with policies and standards of the Act and this SMP and may require an exemption permit.

EXISTING AND ONGOING AGRICULTURAL ACTIVITIES. Those activities conducted on lands defined in RCW 36.70A.030 and those activities involved in the production of crops and livestock, including, but not limited to, operation and maintenance of existing farm and stock ponds or drainage ditches, irrigation systems, changes between agricultural activities, and maintenance or repair of existing serviceable structures and facilities. Forest practices are not included in this definition. See also ACRICULTURAL ACTIVITIES.

F

FAIR MARKET VALUE. The open market bid price for conducting the work, using the equipment and facilities, and purchase of the goods, services, and materials necessary to accomplish the development. This would normally equate to the cost of hiring a contractor to undertake the development from start to finish, including the cost of labor, materials, equipment and facility usage, transportation, and contractor overhead and profit. The fair market value of the development shall include the fair market value of any donated, contributed, or found labor, equipment, or materials.

FEASIBLE. For the purpose of this master program, that an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions:

A. The action can be accomplished with technologies and methods that have been used in similar circumstances, or studies or tests have demonstrated that such approaches are currently available and likely to achieve the intended results.
B. The action provides a reasonable likelihood of achieving its intended purpose.
C. The action does not physically preclude achieving the project's primary intended legal use.

In cases where these guidelines require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant.

In determining an action's infeasibility, the County may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

FEED LOT. A confined area or structure for feeding, breeding or holding livestock for eventual sale or slaughter and in which animal waste accumulates faster than it can naturally dissipate without creating a potential for a health hazard, particularly with regard to surface and groundwater; but not including barns, pens or other structures used in a dairy operation or structures on farms holding livestock primarily during winter periods.

FILL. The addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

FINGERS or DOCK FINGERS. Narrow extensions of piers perpendicular to the pier or float that provide additional watercraft moorage.

FISH AND WILDLIFE HABITAT CONSERVATION AREAS. Areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitats or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness.

Fish and wildlife habitat conservation areas does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company, except where

irrigation water is conveyed through a natural channel feature as part of its delivery.

FISH HABITAT ENHANCEMENT PROJECT. Projects which provide a benefit to fish habitat as defined under RCW 77.55.030.

FLOATING HOMES. Any floating structure that is designed, or has been substantially and structurally remodeled or redesigned, to serve primarily as a residence. "Floating homes" include house barges, or any floating structures that serve primarily as a residence and do not qualify as a vessel. A floating structure that is used as a residence and is capable of navigation, but is not designed primarily for navigation, nor normally is capable of self-propulsion and use as a means of transportation is a floating home, not a vessel.

FLOATS. A detached, anchored platform that is free to rise and fall with water levels, used for boat mooring, swimming (including a SWIM FLOAT) or similar recreational activities that is not anchored to the shoreline or accessed directly from the shoreline.

FLOAT, SWIM. A floating platform designed and intended expressly for facilitating safe swimming. Swim floats are anchored in deeper waters, are not connected to uplands, and are not motorized. Water ski/wake board jumps are also considered swim floats.

FLOOD CONTROL WORKS. Methods or facilities designed to reduce flooding of adjacent lands, to control or divert stream flow, to retard bank erosion, or to create a reservoir.

A. Nonstructural measures include, but are not limited to, shoreline buffers, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures, storm water management programs, land or easement acquisition, voluntary protection and enhancement projects, or incentive programs.
B. Structural measures include, but are not limited to, dikes, levees, revetments, floodwalls, channel realignment, or embankments.

FLOODPLAIN. Synonymous with one hundred-year floodplain and means that land area susceptible to inundation with a one percent chance of being equaled or exceeded in any given year, as defined by the FEMA maps. The limit of this area shall be based upon flood ordinance regulation maps or a reasonable method which meets the objectives of the Act.

FLOODWAY. The area established in federal emergency management agency flood insurance rate maps or floodway maps; or consists of those portions of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative groundcover condition, or topography, or other indicators of flooding that occur with reasonable regularity, although not necessarily annually. Regardless of the method used to identify the floodway, the floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.

FOREST PRACTICES. Any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber, including but not limited to: road and trail construction; harvesting, final and intermediate; pre-commercial thinning and fire protection; reforestation; fertilization; prevention and suppression of diseases and insects; salvage of trees; and brush control. Forest practices do not include preparatory work such as tree marking, surveying and road flagging, and removal or harvesting of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, mushrooms, and other products which cannot normally be expected to result in damage to forest soils, timber, or public resources.

FREQUENTLY FLOODED AREA. Lands in the flood plain subject to at least a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and areas where high groundwater forms ponds on the ground surface

FRONTAGE. Property line which abuts the principal means of access to property.

G

GEOLOGICALLY HAZARDOUS AREA. Areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to siting commercial, residential, or industrial development consistent with public health or safety concerns.

GEOTECHNICAL ANALYSIS. A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the

adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists with professional expertise about the regional and local shoreline geology and processes.

GEOTECHNICAL REPORT. See GEOTECHNICAL ANALYSIS.

GRADE. See average grade level.

GRADING. The movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

GRAY WATER**.** Sewage from bathtubs, showers, bathroom sinks, washing machines, dishwashers, and kitchen sinks. It includes sewage from any source in a residence or structure that has not come into contact with toilet wastes.

GROINS. A barrier type of structure extending from the backshore or stream bank into a waterbody for the purpose of the protection of a shoreline and adjacent uplands by influencing the movement of water or deposition of materials. In lake environments, groins are typically used to trap sediment for the purpose of preserving a depositional feature, such as a beach. In a stream environment, groins may serve a variety of functions, including bank protection, pool formation, and increased roughness, and may include rock structures, debris jams, or pilings that collect wood debris. See also BARB and WEIR.

GROUNDWATER. All water that exists beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water within the boundaries of the state, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves.

GROWTH MANAGEMENT ACT. RCW 36.70A and 36.70B, as amended.

GUIDELINES. Those standards adopted by the Department of Ecology into the Washington Administrative Code (WAC) to implement the policy of Chapter

90.58 RCW for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards also provide criteria for local governments and the Department of Ecology in developing and amending master programs.

H

HABITAT. The place, including physical and biotic conditions, where a plant or animal usually occurs or could occur and is fundamentally linked to the actual or potential distribution and abundance of species. A species may use a habitat or a structural component of the habitat for all or part of its lifecycle, and may adapt to use various habitats. Habitat is scale-dependent and refers to a large geographic area, a species' home range, a local setting, or a site-specific feature. Habitat may perform a specific function for a species or multiple species, and may include those elements necessary for one or more species to feed, migrate, breed, or travel.

HARD STRUCTURAL SHORELINE STABILIZATION. Shoreline erosion control practices using hardened structures that armor and stabilize the shoreline from further erosion. Hard structural shoreline stabilization typically uses concrete, boulders, dimensional lumber or other materials to construct linear, vertical or near-vertical faces. These include bulkheads, rip-rap, groins, and similar structures.

HEIGHT. The vertical dimension measured from average grade to the highest point of a structure; provided that, antennas, chimneys, and similar appurtenances shall not be used in calculating height. Temporary construction equipment is excluded in this calculation.

HIGH INTENSITY. Land uses which are associated with moderate or high levels of human disturbance or substantial wetland or shoreline habitat impacts including, but not limited to, medium- and high-density residential, multifamily residential, active recreation (e.g. golf courses, ball fields), and commercial and industrial land uses.

HISTORIC PRESERVATION PROFESSIONAL. Individuals who meet standards promulgated by the DAHP as well as the National Park Service and published in 36 CFR Part 61.

HOUSEBOAT. Any vessel as defined in RCW 88.02.310. For registration and certificate of ownership purposes, a houseboat does not include any building on a float used in whole or in part for human habitation as a single-family dwelling which is not powered by self-propulsion by mechanical means or wind.

HYDROLOGICAL. Referring to the science related to the waters of the earth including surface and ground water movement, evaporation and precipitation. Hydrological functions in shoreline include, water movement, storage, flow variability, channel movement and reconfiguration, recruitment and transport of sediment and large wood, and nutrient and pollutant transport, removal and deposition.

I

IMPACT. See SIGNIFICANT ECOLOGICAL IMPACT.

IMPERVIOUS SURFACE. A hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater. For purposes of determining whether thresholds for application of core elements are exceeded, open, uncovered retention or detention facilities shall not be considered as impervious surfaces. Open, uncovered retention or detention facilities shall be considered impervious surfaces for purposes of runoff modeling.

INDUSTRIAL DEVELOPMENT. Facilities for processing, manufacturing, and storage of finished or semi-finished goods, including but not limited to oil, metal or mineral product refining, power generating facilities, including hydropower, ship building and major repair, storage and repair of large trucks and other large vehicles or heavy equipment, related storage of fuels, commercial storage and repair of fishing gear, warehousing construction contractors' offices and material/equipment storage yards, wholesale trade or storage, and log storage on land or water, together with necessary accessory uses such as parking, loading, and waste storage and treatment. Excluded from this definition are mining including onsite processing of raw materials, and off site utility, solid waste, road or railway development, and methane digesters that are accessory to an agricultural use.

INDUSTRIAL USES. The production, processing, manufacturing, or fabrication of goods or materials, including warehousing and storage of materials or production.

INFILTRATION. The passage or movement of water into the soil surface.

INSTITUTIONAL. Those public and/or private facilities including, but not limited to, police and fire stations, libraries, activity centers, schools, educational centers, water-oriented research facilities, and similar uses.

IN-WATER STRUCTURE. Structure placed by humans within a stream, river or lake waterward of the OHWM that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-water structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, recreation (e.g., docks, boatlifts), or other purpose. Note that the listed recreation-related in-water structures have a very limited capacity to affect water flows and are exclusively regulated under SMP Sections 5.5 Boating Facilities and 5.14 Private Moorage Facilities.

INVASIVE SPECIES. A species that is 1) non-native (or alien) to Chelan County and 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes).

J

JETTIES. A barrier type of structure generally built singly or in pairs perpendicular to the shoreline at harbor entrances or river mouths to prevent sediment from depositing in the harbor or channel. They also protect channels and inlets from crosscurrents and storm waves. See also BREAKWATERS.

JOINT-USE DOCKS. Those constructed and utilized by two, three or four property owners, whether on adjacent lots as single-family residences or as multi-family units, or by a homeowner's association. Marinas, public docks and community docks that serve more than four single-family residences or multi-family units are regulated under Section 5.5 Boating Facilities. Residential joint- use docks are regulated under Section 5.14 Private Moorage Facilities.

L

LAKE. A body of standing water in a depression of land or expanded part of a river, including reservoirs, of twenty acres or greater in total area. A lake is bounded by the OHWM or, where a stream enters a lake, the extension of the elevation of the lake's OHWM within the stream. Where the OHWM cannot be found, it shall be the line of mean high water.

LANDING. An intermediate platform on a flight of stairs.

LARGE WOODY DEBRIS. Logs, limbs, or root wads 4 inches or larger in diameter, delivered to waterbodies.

LAUNCH RAMP. An inclined slab, set of pads, rails, planks, or graded slope which extends waterward of the OHWM, and is used for transferring watercraft between uplands and the water with trailers or occasionally by hand. See also BOAT LAUNCH FACILITY.

LEGAL LOT OF RECORD. A lot which meets one of the following criteria:

(1) created by a recorded subdivision or short subdivision; or (2) greater than twenty acres in size meeting the requirements for an exempt parcel as defined in the Chelan County Subdivision Code; or (3) having an approved certificate of exemption or boundary adjustment; or (4) created prior to October 17, 2000.

LEGALLY ESTABLISHED. A use or structure in compliance with the laws and rules in effect at the time of creation of the use or structure.

LEVEE. A natural or artificial embankment on the bank of a stream or river for the purpose of keeping floodwaters from inundating adjacent land. Some levees have revetments on their sides.

LIMITED UTILITY EXTENSION. For the purposes of Chapter 7, the extension of a utility service that:

A. Is categorically exempt under chapter 43.21C RCW for one or more of the following: Natural gas, electricity, telephone, water, or sewer;
B. Will serve an existing use in compliance with WAC 173-27; and
C. Will not extend more than two thousand five hundred linear feet within the shorelines of the state.

LIVEABOARD. A floating vessel that serves as a residence, and is self-powered by sail or motor.

LOW INTENSITY. Land uses that are associated with low levels of human disturbance or low wetland or shoreline habitat impacts including, but not limited to, agriculture or forest management uses, single-family residential and related accessory structures, and home occupational uses.

LOW-IMPACT DEVELOPMENT (LID). Low-impact development (LID) is a term used to describe a land planning and engineering design approach to manage stormwater runoff. LID emphasizes conservation and use of on-site natural features to protect water quality. This approach implements engineered small-scale hydrologic controls to replicate the pre-development hydrologic regime of

watersheds through infiltrating, filtering, storing, evaporating, and detaining runoff close to its source.

M

MAINTENANCE, NORMAL. Those usual acts to prevent a decline, lapse, or cessation from a legally established condition. See REPAIR, NORMAL.

MARINA. A public or private water-dependent wet moorage facility for pleasure craft and/or commercial craft where goods, moorage or services related to boating may be sold commercially or provided for a fee, e.g. yacht club, etc. Dry storage and launching facilities, either launch ramp, crane or hoist, may also be provided. Marinas may be open to the general public or restricted on the basis of property ownership or membership. Community docks that do not provide nonwater-oriented uses or water-oriented commercial services, other than to the specific residential community served by the community dock, are not considered marinas.

MARSH. A low flat wetland area on which the vegetation consists mainly of herbaceous plants such as cattails, bulrushes, tules, sedges, skunk cabbage or other hydrophytic plants. Shallow water usually stands on a marsh at least during part of the year.

MAY. Refers to actions that are acceptable, provided they conform to the provisions of this master program and the Act.

MINERAL EXTRACTION. The removal of topsoil, gravel, rock, clay, sand or other earth material, including accessory activities such as washing, sorting, screening, crushing and stockpiling. Not included is the leveling, grading, filling, or removal of materials during the course of normal site preparation for an approved use (e.g., residential subdivision, commercial development, etc.) subject to the provisions of this SMP.

MITIGATION (or MITIGATION SEQUENCING). The process of avoiding, reducing, or compensating for the environmental impact(s) of a proposal, see Section 4.2.

MIXED USE. A combination of uses within the same building or site as a part of an integrated development project with functional interrelationships and coherent physical design.

MIXED USE COMMERCIAL. Developments that include water-dependent commercial uses combined with water-related, water-enjoyment uses and/or

nonwater-oriented commercial uses. Mixed-use developments can be a tool for water-dependent activities, civic revitalization, and public access to the shoreline.

MIXED USE RESIDENTIAL. Mixed use developments that include water-dependent and water-oriented commercial uses together with single-family or multi-family uses while promoting public access for significant numbers of the public and/or providing an ecological restoration resulting in a public benefit. This mix of uses is intended to reduce transportation trips, use land efficiently, and provide for waterfront commerce and housing options.

MODIFICATION. A change or alteration in existing materials, including structures, plans and uses.

MODIFICATION, SHORELINE. Those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a dike, breakwater, dock, weir, dredged basin, fill, bulkhead, or other shoreline structures. They can include other actions, such as clearing, grading, or application of chemicals.

MOORAGE FACILITY. Any device or structure used to secure a boat or a vessel, including docks, piers, floats, piles, watercraft lifts or buoys.

MOORAGE PILE. A permanent vertical column generally located in open waters, often in close proximity to a dock or pier, to which the vessel is tied to prevent it from excessive movement generated by wind, or wind- or boat-driven waves.

MULTI-FAMILY DWELLING (OR RESIDENCE). A building containing two or more dwelling units, including, but not limited to, duplexes, apartments and condominiums.

MUST. A mandate; the action is required. See SHALL.

N

NATIVE VEGETATION. Vegetation that tolerates and/or requires moist conditions and periodic free flowing water thus creating a transitional zone between aquatic and terrestrial habitats which provides cover, shade and food sources for aquatic and terrestrial insects for fish species. Native vegetation and their root systems stabilizes stream banks, attenuates high water flows, provides wildlife habitat and travel corridors, and provides a source of limbs and other woody debris to terrestrial and aquatic ecosystems, which, in turn, stabilize stream beds.

NAVIGABLE WATERS. Navigable waters of the United States are those waters that are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity.

NECESSARY: A word describing an element that is essential, indispensable or needed to achieve a certain result or effect.

NO NET LOSS. A public policy goal and requirement to maintain the aggregate total of the County's shoreline ecological functions at its current level of environmental resource productivity. For purposes of reviewing and approving this SMP, "current" is equivalent to the date of the Final Shoreline Inventory and Analysis Report June 21, 2011. As a development and/or mitigation standard, no net loss requires that the impacts of a particular shoreline development and/or use, whether permitted or exempt, be identified and prevented or mitigated, such that it has no resulting adverse impacts on shoreline ecological functions or processes relative to the legal condition just prior to the proposed development and/or use.

NONCONFORMING USE. An existing shoreline use that was lawfully established prior to the effective date of the act or the applicable master program, but which does not conform to present use regulations.

NONCONFORMING DEVELOPMENT OR NONCONFORMING STRUCTURE. An existing structure that was lawfully constructed at the time it was built but is not fully consistent with present regulations such as setbacks, buffers or yards; area; bulk; height or density standards.

NONCONFORMING LOT. A lot that met dimensional requirements of the applicable master program at the time of its establishment but now contains less than the required width, depth or area.

NONPOINT POLLUTION. Pollution that enters any waters of the state from any dispersed land-based or water-based activities, including, but not limited to, atmospheric deposition, surface water runoff from agricultural lands, urban areas, or forest lands, subsurface or underground sources, or discharges from boats or marine vessels not otherwise regulated under the National Pollutant Discharge Elimination System program.

NONWATER-ORIENTED USES. Those uses that are not water-dependent, water-related, or water-enjoyment.

NORMAL MAINTENANCE. See MAINTENANCE, NORMAL and REPAIR, NORMAL"

NORMAL PROTECTIVE BULKHEAD. Those structural and nonstructural developments installed at or near, and parallel to, the OHWM for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion.

NORMAL REPAIR. See REPAIR, NORMAL and MAINTENANCE, NORMAL

NOXIOUS WEEDS. A special sub-class of invasive plant species listed as Class A or B by the Chelan County Noxious Weed Control Board.

O

OFF-SITE REPLACEMENT/MITIGATION. To replace wetlands or other shoreline environmental resources away from the site on which a resource has been impacted by a regulated activity.

ORDINARY HIGH WATER MARK (OHWM). That mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the Department of Ecology: provided, that in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining fresh water shall be the line of mean high water.
The OHWM for Lake Cortez is established by court order, Chelan County Superior Court cause number 95-2-01084-3, as the 872.88' elevation.

OVERWATER STRUCTURES. Any structure located above the water surface waterward of the OHWM. Common examples include, but are not limited to, residential docks, marinas, and pedestrian or vehicular bridges over waterways.

P

PARTY OF RECORD. All persons, agencies, or organizations who have submitted written or verbal comments in response to a notice of application, made oral comments in a formal public hearing conducted on the application, or notified local government of their desire to receive a copy of the final decision on a permit and who have provided an address for delivery of such notice by mail or email.

PERIODIC. Occurring at regular intervals.

PERSON. An individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, or agency of the state or local governmental unit however designated.

PIER. Fixed platform above the water and supported by piles, usually perpendicular to the shoreline. See also DOCK.

PRIMARY USE. Uses or activities on a shoreline site that is identified as serving the main purpose of the site in terms of its land occupancy or use intensity, and any other uses within the site are supportive or accessory to it.

PRIMARY STRUCTURE. A structure accommodating the main or principal use of the site on which the structure is situated, including a detached garage associated with the primary structure or a road, bridge or utility which is necessary to support the primary use. This term does not include accessory uses or structures.

PRIORITY HABITAT. A habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes: Comparatively high fish or wildlife density; comparatively high fish or wildlife species diversity; fish spawning habitat; important wildlife habitat; important fish or wildlife seasonal range; important fish or wildlife movement corridor; rearing and foraging habitat; refuge; limited availability; high vulnerability to habitat alteration; unique or dependent species; or shellfish bed. A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife. A priority habitat may also be described by a successional stage. Alternatively, a priority habitat may consist of a specific habitat element (such as talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife.

PRIORITY SPECIES. "Priority species" means species requiring protective measures and/or management guidelines to ensure their persistence at genetically

viable population levels. Priority species are those that meet any of the criteria listed below.

A. Criterion 1. State-listed or state proposed species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232- 12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by the department of fish and wildlife (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.

B. Criterion 2. Vulnerable aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate. Examples include heron colonies, seabird concentrations, and marine mammal congregations.

C. Criterion 3. Species of recreational, commercial, and/or tribal importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.

D. Criterion 4. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

PROVISIONS. Policies, regulations, standards, guideline criteria or designations.

PUBLIC ACCESS. The public's ability to reach and use the State's public waters, the water/land interface, and associated shoreline area. It includes physical access that is either lateral (areas paralleling the shore) or perpendicular (an easement or public corridor to the shore), and visual access facilitated by means such as scenic roads and overlooks, viewing platform, and other public sites or facilities. See also COMMUNITY ACCESS.

PUBLIC FACILITIES. Facilities that include streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools.

PUBLIC INTEREST. The interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected such as an effect on public property or on health, safety, or general welfare resulting from a use or development.

Q

QUALIFIED PROFESSIONAL. A person with expertise and training appropriate for the relevant subject. A qualified professional must have obtained a B.S. or B.A.

or equivalent degree in biology, soil science, engineering, environmental studies, fisheries, geology, hydrology, geomorphology or related field, and at least five years of related work experience. Specific qualified professionals must also meet the following criteria, or any other criteria included in Appendix B, Critical Areas Regulations:

A. A qualified professional providing a geotechnical analysis as required under Section 5.18 of this Master Program must be a licensed engineer in the State of Washington, with specific training in geology, hydrology and/or geomorphology.
B. A qualified professional providing a demonstration of need as required under Section 5.18 of this Master Program must have a M.S. or equivalent degree in geology, hydrology, or geomorphology.
C. A qualified professional for wetlands means a biologist who has a degree in biology, ecology, botany, or a closely related field, or has been certified as a Professional Wetland Scientist, and a minimum of five (5) years of professional experience in wetland identification and assessment in Eastern Washington.
D. A qualified professional for habitat conservation areas means a biologist who has a degree in wildlife biology, ecology, fisheries, or closely related field and a minimum of five (5) years professional experience related to the subject species/habitat type.
E. A qualified professional for geologically hazardous areas must be a geologist licensed in the state of Washington pursuant to RCW 18.220. If an engineering geologist is required, by the Administrator, they must be licensed as a civil engineer pursuant to Chapter 18.43 RCW.
F. A qualified professional for critical aquifer recharge areas means a Washington State licensed hydro-geologist, geologist, or engineer.
G. A qualified professional for vegetation management must be a registered landscape architect, certified arborist, biologist, or professional forester with a corresponding degree or certification.
H. A qualified professional for channel migration zone assessment and mapping means a Washington State licensed geologist, or engineer.

R

RAMP. Walkway that connects a pier or land to a float, often used in areas where water levels change due to seasonal variations. LAUNCH RAMP is defined above.

RCW. Revised Code of Washington.

REASONABLE. Reasonable means acceptable and according to common sense or normal practice.

RECREATION. An experience or activity in which an individual engages for personal enjoyment and satisfaction. Most shore-based outdoor recreation such as:

fishing, hunting, beach combing, and rock climbing; various forms of boating, swimming, hiking, bicycling, horseback riding, camping, picnicking, watching or recording activities such as photography, painting, bird watching or viewing of water or shorelines, nature study and related activities.

RECREATIONAL USES. Uses which offer activities, pastimes, and outdoor experiences, including, but are not limited to, parks, camps, camping clubs, launch ramps, golf courses, viewpoints, viewpoint platforms, trails, public access facilities, public parks and athletic fields, hunting blinds, and other low- intensity use outdoor recreation areas. Recreational Uses that do not require a shoreline location, nor are related to the water, nor provide significant public access, are considered nonwater-oriented. For example, a recreation use solely offering indoor activities would be considered nonwater-oriented.

REPAIR, NORMAL. To restore a development or structure to a state comparable to its original, legally established condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment. See also MAINTENANCE, NORMAL.

RESIDENTIAL USES. Buildings, structures or portions thereof that are designed and used as a place for human habitation. Included are single, duplex or multi-family dwellings, accessory dwelling units, apartment/condominium buildings, manufactured homes, modular homes, and other structures that serve to house people. Excluded are recreational vehicles. This definition includes accessory uses common to normal residential use, including but not limited to, residential appurtenances, home occupations, family day care homes, and adult care homes. Additionally, “residential use" means any noncommercial habitation of a vessel, also known as a liveaboard or houseboat.

Also see APPURTENANCE, RESIDENTIAL.

RESTORE (RESTORATION or ECOLOGICAL RESTORATION).

Reestablishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including but not limited to re-vegetation, removal of intrusive shoreline structures, and removal or

treatment of toxic materials. Restoration does not imply a requirement for returning the shoreline area to aboriginal or pre-European settlement conditions.

REVETMENT. Facing of rock, concrete, etc., built to protect a steep slope, cliff, embankment, or shore structure against erosion by waves or currents.

RIPRAP. A layer, facing, or protective mound of dense, hard, angular rock used to prevent erosion, scour, or sloughing of a structure or embankment for revetments, armoring or hardening of shorelines, or other flood/erosion control works.

ROAD. Road shall mean and include contiguous streets, alleys, sidewalks, curbs and gutters, planting strips, roads, highways, thoroughfares, parkways, bridges, viaducts, public grounds and public improvements within the County's territory. Lands for public right of ways are reserved for use and maintenance of the road system. Bridges are roads which cross over water. Sidewalks or paths independent of the rest of typical roadway cross-sections shall be considered trails.

RUNOFF. Water that is not absorbed into the soil but rather flows along the ground surface following the topography.

S

SANITARY SEWER. A system designed to accept sewage to be deposited into and carried off by a system of lateral sewers, drains, and pipes to a common point, or points, for transfer to treatment or disposal.

SEDIMENT. The fine grained material deposited by water or wind.

SEPA (STATE ENVIRONMENTAL POLICY ACT). see RCW 43.21c and WAC 197-11

SETBACK. The distance between property line and the foundation wall or load-bearing member of the primary structure. Meaning is distinct from BUFFER.

SETBACK, SIDE. The distance between side lot line and the foundation wall of the primary structure.

SEWAGE: Any urine, feces, and the water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places.

SHALL. A mandate; the action must be done. See also MUST.

SHORELANDS or SHORELAND AREAS. Those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the Department of Ecology.

SHORELINE AREAS. All "shorelines of the state" and "shorelands" as defined in RCW 90.58.030.

SHORELINE ENVIRONMENT DESIGNATIONS. The classifications of shorelines established by local shoreline master programs in order to provide a uniform basis for applying policies and use regulations within distinctively different shoreline areas.

SHORELINE FUNCTIONS. See ecological functions.

SHORELINE JURISDICTION. All "shorelines of the state" and "shorelands" as defined in RCW 90.58.030.

SHORELINE MANAGEMENT ACT. Washington's Shoreline Management Act was passed by the State Legislature in 1971 and adopted by voters in 1972. The overarching goal of the Act is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." There are three basic policy areas to the Act: shoreline use, environmental protection and public access. The Act emphasizes accommodation of appropriate uses that require a shoreline location, protection of shoreline environmental resources and protection of the public's right to access and use the shorelines (RCW 90.58.020).

SHORELINE MASTER PROGRAM, MASTER PROGRAM, or SMP. A comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies articulated in RCW 90.58.020.

SHORELINE PERMIT. A Shoreline Substantial Development Permit, Shoreline Conditional Use Permit, revision, or Shoreline Variance Permit or any combination thereof or a shoreline exemption.

SHORELINE PROPERTY. An individual property wholly or partially within shoreline jurisdiction.

SHORELINE STABILIZATION. Structural or non-structural modifications to the existing shoreline intended to reduce or prevent erosion of uplands or beaches. They are generally located parallel to the shoreline at or near the OHWM.

SHORELINE VEGETATION. Vegetation that tolerates and/or requires moist conditions and periodic free flowing water thus creating a transitional zone between aquatic and terrestrial habitats which provides cover, shade and food sources for aquatic and terrestrial insects for fish species. Shoreline vegetation and their root systems stabilizes stream banks, attenuates high water flows, provides wildlife habitat and travel corridors, and provides a source of limbs and other woody debris to terrestrial and aquatic ecosystems, which, in turn, stabilize stream beds.

SHORELINES HEARINGS BOARD (SHB). A six member quasi-judicial body, created by the SMA, which hears appeals by any aggrieved party on the issuance of a shoreline permit, enforcement penalty and appeals by local government on Department of Ecology approval of master programs, rules, regulations, guidelines or designations under the SMA.

SHORELINES OF STATEWIDE SIGNIFICANCE. A select category of shorelines of the state, defined in RCW 90.58.030(2)(f), where special policies apply. This includes lakes (whether natural, artificial, or a combination thereof) with a surface area of 1,000 acres or more and natural rivers or segments of natural rivers that have either a mean annual flow of 200 cubic feet per second or more or the portion downstream from the first 300 square miles of drainage areas, whichever is greater.

SHORELINES OF THE STATE. The total of all "shorelines" and "shorelines of state-wide significance" within the state.

SHORELINES. All of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of state-wide significance; (ii) shorelines on areas of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream areas; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes.

SHOULD. The particular action is required unless there is a demonstrated, compelling reason, based on policy of the Act and this SMP, against taking the action.

SIGN. A board or other display containing words and/or symbols used to identify or advertise a place of business or to convey information. Excluded from this definition are signs required by law and the flags of national and state governments.

SIGNIFICANT ECOLOGICAL IMPACT. An effect or consequence of an action if any of the following apply:

A. The action measurably or noticeably reduces or harms an ecological function or ecosystem-wide process.
B. Scientific evidence or objective analysis indicates the action could cause reduction or harm to those ecological functions or ecosystem-wide processes under foreseeable conditions.
C. Scientific evidence indicates the action could contribute to a measurable or noticeable reduction or harm to ecological functions or ecosystem-wide processes as part of cumulative impacts, due to similar actions that are occurring or are likely to occur.

SIGNIFICANT VEGETATION REMOVAL. The removal or alteration of trees, shrubs, and/or groundcover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts to functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

SINGLE-FAMILY RESIDENCE. A single dwelling designed for and occupied by one family including those structures and developments within a contiguous ownership which are a normal appurtenance.

SMA. The Shoreline Management Act of 1971, Chapter 90.58 RCW, as amended.

SMP. See SHORELINE MASTER PROGRAM.

SOFT STRUCTURAL SHORELINE STABILIZATION: Shoreline erosion control and restoration practices that contribute to restoration, protection or enhancement of shoreline ecological functions. Soft structural shoreline stabilization typically includes a mix of gravels, cobbles, boulders, logs and native vegetation placed to provide shore stability in a non-linear, generally sloping arrangement. Linear,

vertical faces are an indicator of HARD STRUCTURAL SHORELINE STABILIZATION (see above definition).

STATE MASTER PROGRAM. The cumulative total of all shoreline master programs and amendments thereto approved or adopted by rule by Ecology.

STORMWATER. That portion of precipitation that does not normally percolate into the ground or evaporate but flows via overland flow, interflow, channels, or pipes into a defined surface water channel or constructed infiltration facility.

STORMWATER FACILITY: A constructed component of a stormwater drainage system designed or constructed to perform a particular function or multiple functions. Stormwater facilities include, but are not limited to: pipes, swales, ditches, culverts, street gutters, detention ponds, retention ponds, constructed wetlands, infiltration devices, catch basins, oil/water separators, and biofiltration swales.

STREAM. Any portion of a channel, bed, bank, or bottom waterward of the ordinary high water line of waters of the state, including areas in which fish may spawn, reside, or pass, and tributary waters with defined bed or banks, which influence the quality of fish habitat downstream. This includes watercourses which flow on an intermittent basis or which fluctuate in level during the year and applies to the entire bed of such watercourse whether or not the water is at peak level. This definition does not include irrigation ditches, canals, storm water run-off devices, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans. A shoreline stream is a naturally occurring body of periodic or continuously flowing water where: a) the mean annual flow is greater than twenty cubic feet per second and b) the water is contained within a channel. A channel is an open conduit either naturally or artificially created. This definition does not include artificially created irrigation, return flow, or stockwatering channels.

STRUCTURE. A permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above or below the surface of the ground or water, except for vessels. Structure includes, but is not limited to, stairs and staircases.

SUBDIVISION. For this SMP, Subdivision is used as a generic term inclusive of short subdivision and major subdivision, meaning the division or redivision of land for the purpose of sale, lease or conveyance.

SUBSTANTIAL DEVELOPMENT, SHORELINE. Any development which meets the criteria of RCW 90.58.030(3)(e). See also DEVELOPMENT and EXEMPTION.

SUBSTANTIALLY DEGRADE. See SIGNIFICANT ECOLOGICAL IMPACT

SURFACE WATER. All water that exists on the land surface, including streams, lakes or reservoirs, or other bodies of water within the boundaries of the state.

SWALE. A vegetated drainage channel that is designed to remove various pollutants from storm water runoff through biofiltration.

SWAMP. A depressed area flooded most of the year to a depth greater than that of a marsh and characterized by areas of open water amid soft, wetland masses vegetated with trees and shrubs. Extensive grass vegetation is not characteristic.

T

TERRESTRIAL. Of or relating to land as distinct from air or water.

TRAIL. Trails are clearly identified paved, semi-paved or unpaved but defined (e.g. gravel) pathways for pedestrians in a natural or urban setting used for recreational or circulation purposes. A trail by itself is not considered a road.

TRANSPORTATION FACILITIES. Roads and railways, including their related bridges and culverts, transportation structures, public transit and bus facilities, pedestrian transportation including foot bridges over rivers/streams and trails, fills, embankments, causeways, truck terminals and rail switchyards, sidings, spurs, air fields and other associated minor facilities. Not included are, highway rest areas, ship terminals, nor logging roads.

Local transportation refers to facilities provide direct access to abutting land and to higher order roads.

Regional transportation refers to facilities serving more than one city or community or major destinations.

U

UNAVOIDABLE. Adverse impacts that remain after all appropriate mitigation sequencing measures have been implemented.

UPLAND. Generally described as the dry land area above and landward of the OHWM.

UTILITIES. Lines and facilities related to the provision, distribution, collection, transmission or disposal of water, stormwater (not associated with a Single- family

residence or its appurtenances), sanitary sewage, oil, gas, power, and telephone cable, and includes facilities for the generation of electricity. On-site utility features serving a primary use, such as a water, sewer or gas line to a residence, are "accessory utilities" and shall be considered a part of the primary use. Also see "LIMITED UTILITY FACILITIES".

A. "Large" utilities serve more than one community (e.g. more than one neighborhood, town, city or other defined place) or major attractions. Examples include, but are not limited to, 230 kv power transmission lines, natural gas transmission lines, and regional water storage tanks and reservoirs, regional water transmission lines or regional sewer collectors and interceptors. They may also include facilities serving an entire community, such as subregional switching stations (one hundred fifteen (115) kv and smaller), and municipal sewer, water, and storm water facilities.

B. "Small" utilities serve adjacent properties and include, but are not limited to, power lines not specified under "large" utilities, water, sanitary sewer, and storm water conveyance and facilities, fiber optic cable, pump stations and hydrants, switching boxes, and other structures normally found in a street right-of-way. On-site utility features serving primary use such as a water, sewer, or gas line to a residence are accessory utilities and shall be considered part of the primary use.

V

VARIANCE, SHORELINE. A means to grant relief from the specific bulk, dimensional, or performance standards set forth in this master program where there are circumstances relating to the physical character or configuration of property such that the strict implementation of the master program will impose unnecessary hardships on the applicant or thwart the policies set forth in this SMP and RCW 90.58.020; variance is not a means to vary a use of a shoreline.

VESSEL. A floating structure that is designed primarily for navigation, is normally capable of self propulsion and use as a means of transportation, and meets all applicable laws and regulations pertaining to navigation and safety equipment on vessels, including, but not limited to, registration as a vessel by an appropriate government agency.

VISUAL ACCESS. The ability of the general public to view the water and the shoreline from adjacent locations.

VIEW CORRIDOR. The line of sight (identified as to height, width, and distance) of an observer looking toward shoreline from upland locations, public spaces, such as parks, trails, or streets that have particular significance in preserving the unique character of the shoreline.

W

WAC. Washington Administrative Code.

WASTE STORAGE AND TREATMENT. Facilities for collecting and treating, as an accessory use only, garbage, solid waste or sewage generated by the development and its users. This definition does not include municipal sewage treatment facilities.

WATERBODY. A body of still or flowing water, fresh or marine, bounded by the OHWM.

WATERCRAFT LIFT. An in-water structure used for the dry berthing of vessels above the water level and lowering of vessels into the water. A watercraft lift is generally a manufactured unit without a canopy cover and may be placed in the water adjacent to a pier or float, and may be floating or ground-based. Watercraft lifts include, but are not limited to, lifts for motorized boats, kayaks, canoes, jet skis, and float planes. A watercraft lift is different from a hoist or crane used for the launching of vessels.

WATER-DEPENDENT USE. A use or portion of a use which cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operations. Examples of water-dependent uses may include but are not limited to ship cargo terminal loading areas, ferry and passenger terminals, barge loading facilities, ship building and dry docking, marinas, boating facilities, private moorage facilities, aquaculture, float plane facilities, sewer outfalls, hydroelectric generating plants and water diversion facilities, such as agricultural pumphouses.

WATER-ENJOYMENT USE. A recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which through location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water- enjoyment use, the use must be open to the general public and the shoreline- oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment. Primary water-enjoyment uses may include, but are not limited to, parks, viewing and walking piers and other improvements facilitating public access to the shorelines of the State, including public view or fishing platforms; and general water-enjoyment uses may include, but are not limited to restaurants, museums, aquariums, scientific/ecological reserves, resorts/hotels (as part of

mixed use development or with significant public access or restoration components), and mixed-use commercial/office.

WATERFRONT. A parcel of property which includes within its boundary a physical interface with the existing shoreline of a body of water.

WATER-ORIENTED USE. A use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses.

WATER QUALITY. The physical characteristics of water within shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics. Where used in this SMP, the term "water quantity" refers only to development and uses regulated under this SMP and affecting water quantity, such as impervious surfaces and storm water handling practices. Water quantity, for purposes of this master program, does not mean the withdrawal of ground water or diversion of surface water pursuant to RCW 90.03.250 through 90.03.340.

WATER-RELATED USE. A use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because:

A. The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or
B. The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

Examples of water-related uses may include warehousing of goods transported by water, fish processing plants, gravel storage when transported by barge, log storage, and agriculturally related water transportation systems.

WATERSHED. A geographic region within which water drains into a particular river, stream or body of water.

WATERSHED RESTORATION PLAN. A plan, developed or sponsored by the Department of Fish and Wildlife, the Department of Ecology, the Department of Natural Resources, the Department of Transportation, a federally recognized Indian tribe acting within and pursuant to its authority, a city, a county, or a conservation district that provides a general program and implementation measures or actions for the preservation, restoration, re-creation, or enhancement of the natural resources, character, and ecology of a stream, stream segment,

drainage area, or watershed for which agency and public review has been conducted pursuant to chapter 43.21C RCW, the State Environmental Policy Act.

WATERSHED RESTORATION PROJECT. A public or private project authorized by the sponsor of a watershed restoration plan that implements the plan or a part of the plan and consists of one or more of the following activities:

A. A project that involves less than 10 miles of stream or lake reach, in which less than 25 cubic yards of sand, gravel, or soil is removed, imported, disturbed or discharged, and in which no existing vegetation is removed except as minimally necessary to facilitate additional plantings; or
B. A project for the restoration of an eroded or unstable stream bank or lake shore that employs the principles of bioengineering, including limited use of rock as a stabilization only at the toe of the bank, and with primary emphasis on using native vegetation to control the erosive forces of wave energy; or
C. A project primarily designed to improve fish and wildlife habitat, remove or reduce impediments to migration of fish, or enhance the fishery resource available for use by all of the citizens of the state, provided that any structure (e.g., project equipment shed), other than a bridge or culvert or in-water habitat enhancement structure associated with the project, is less than 200 square feet in floor area and is located above the ordinary high water mark (OHWM) of the stream or lake.

WAVE ATTENUATION. Attenuation is a general term that refers to any reduction in the strength of a signal. A wave attenuator may be added to a float to reduce wave action. A wave attenuator float is also known as a submersed or floating breakwater.

WEIR. A structure generally built across a stream channel for the purpose of diverting water or trapping sediment or other moving objects transported by water.

WETLAND OR WETLANDS. Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support—and that under normal circumstances do support—a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those

artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.

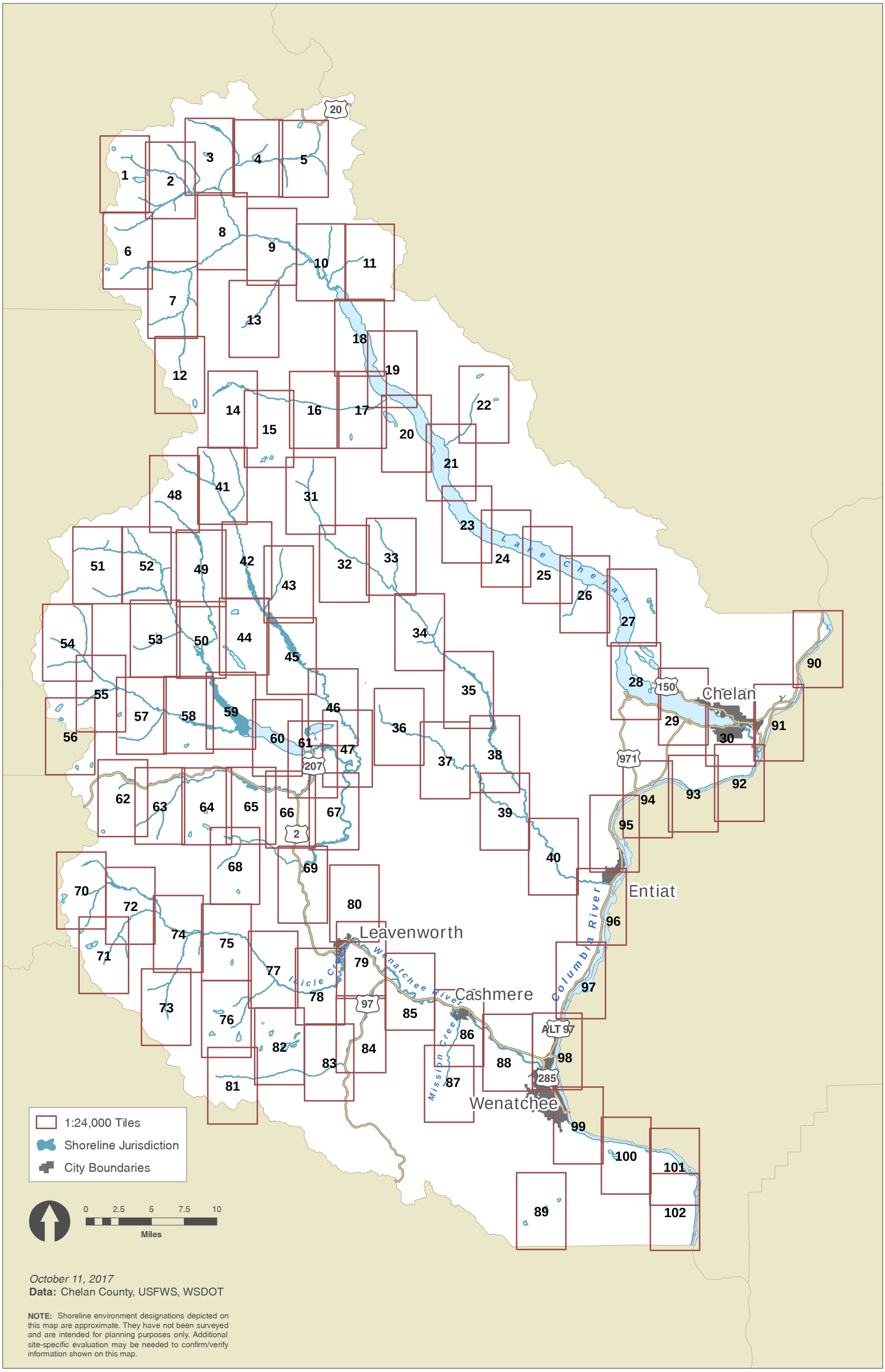
Z

ZONING. The system of land use and development regulations and related provisions of Chelan County, the City of Cashmere, the City of Chelan, the City of Entiat, the City of Leavenworth, the City of Wenatchee, and any other future Cities that may incorporate.

Universal Note

In addition, the definitions and concepts set forth in RCW 90.58.030, as amended, and implementing rules in the Washington Administrative Code, as amended, shall also apply as used herein.

APPENDIX A: SHORELINE DESIGNATION MAPS



Chelan County SMP Designations

Map 1 of 102

Soldier Boy Creek
Doubtful Lake
Doubtful Creek
Pelton Creek
Basin Creek
Stehekin River
Cottonwood Creek
Trapper Lake
West Fork Flat Creek
Middle Fork Cascade River
Drop Creek
T: 35 R: 14
T: 35 R: 15
T: 34 R: 14
T: 34 R: 15
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6
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Map 2

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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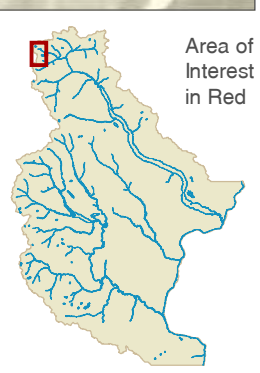
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 2 of 102

Map 1 | Map 3

T: 35 R: 15

33 34 35 36 6

4 3 2 1 7

Park Creek

Stehekin River

Cottonwood Creek

9 10 11 12 18

Trapper Lake

T: 34 R: 15

16 15 14 13 19

Stehekin River

Park Creek

21 22 23 24 30

Flat Creek

West Fork Flat Creek

South Fork Flat Creek

T: 34 R: 16

28 27 26 25 31

Map 1 | Map 3

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
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0 0.25 0.5

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October 12, 2017

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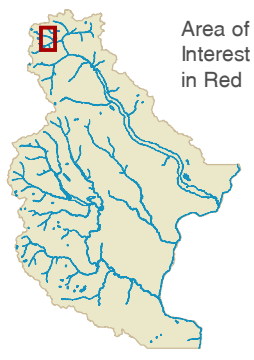
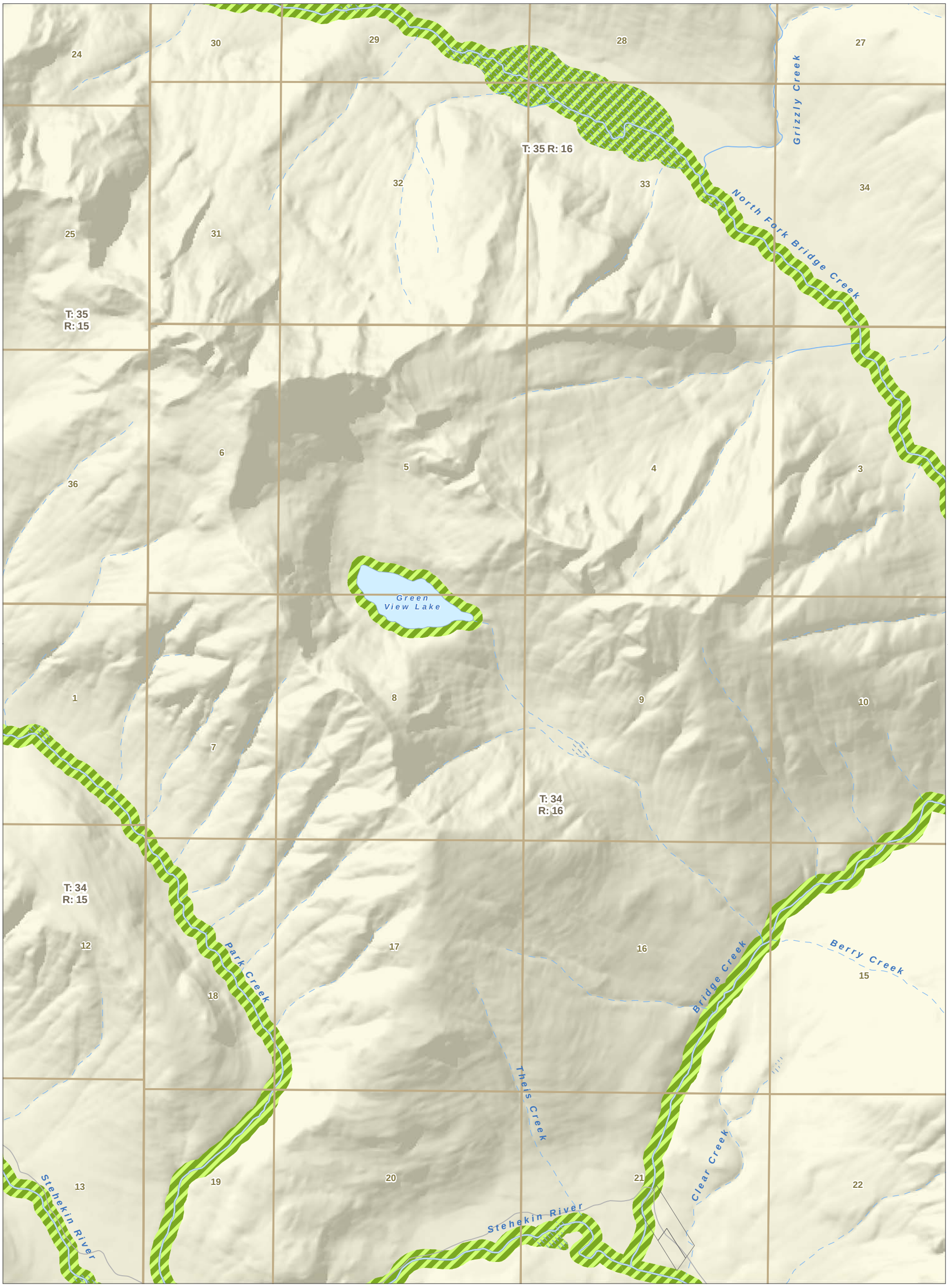


Chelan County SMP Designations

Map 3 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
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- Parcels
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0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 4 of 102

Map 3

Falls Creek
North Fork Bridge Creek
Maple Creek
Waddell Creek
Bridge Creek
Sixteen Creek
Berry Creek
Waddell Creek
Waddell Creek

T: 35 R: 16
T: 35 R: 17
T: 34 R: 16
T: 34 R: 17

27 26 25 30 29
34 35 36 31 32
3 2 1 6 5
10 11 12 7 8
15 14 13 18 17
22 23 24 19 20

Map 3
Map 5
Map 3

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
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0 0.25 0.5
Miles

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October 12, 2017

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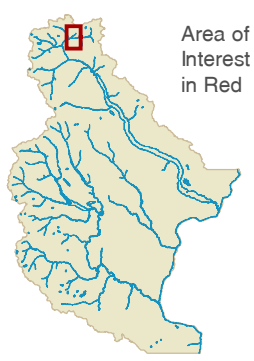
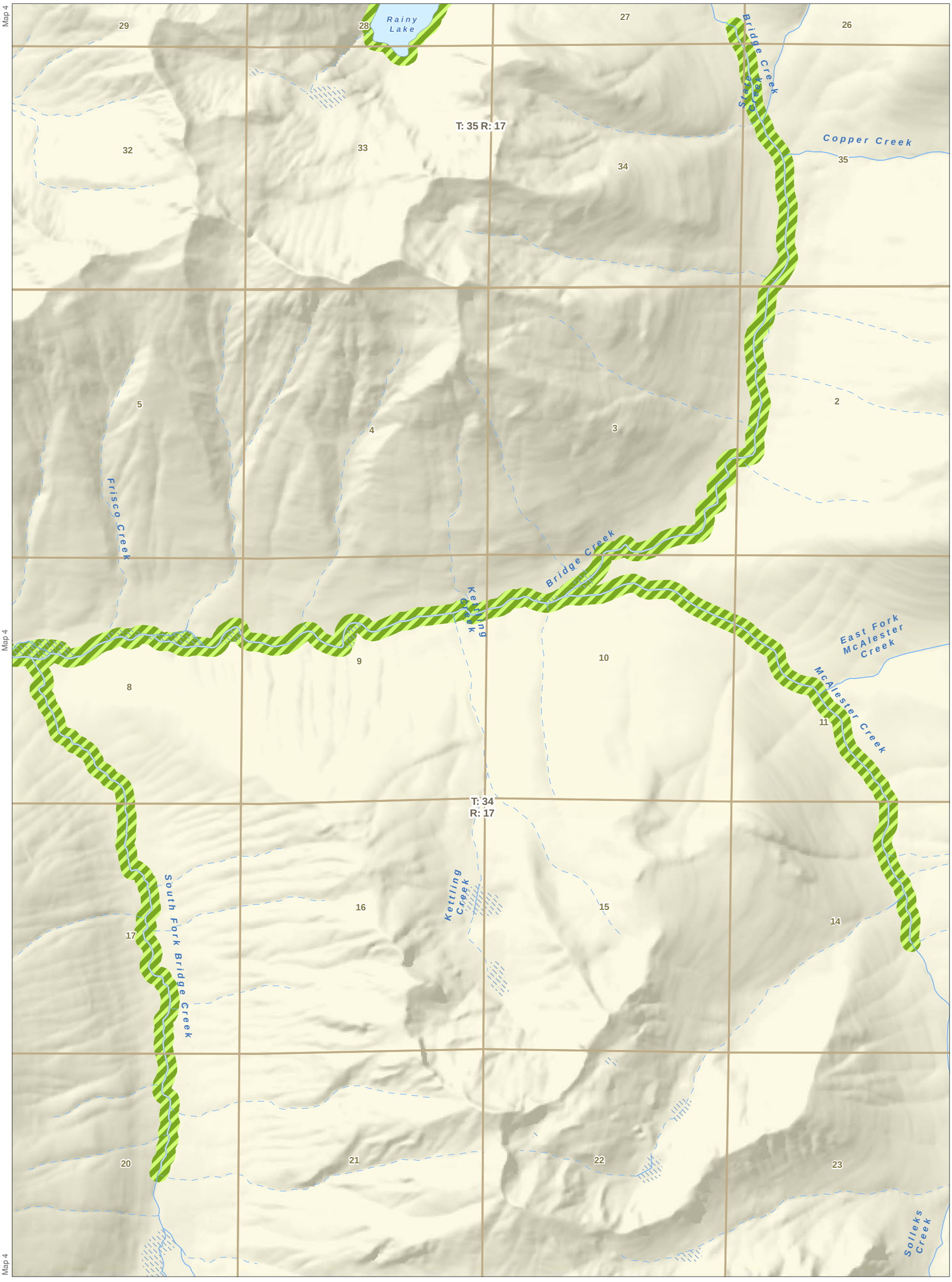


Chelan County SMP Designations



Map 4

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 6 of 102

Map 1

Map 1

Map 2

Map 1

Map 1

Map 2

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels

- Parcels
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- Non Fish-Bearing Streams

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0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 7 of 102

Map 6

Map 8

West Fork Agnes Creek
Icy Creek
Helebore Creek
Sisters Creek
Agnes Creek
Yellow Creek
South Fork Agnes Creek
Swamp Creek
Spruce Creek
T: 33 R: 16
T: 33 R: 15
T: 32 R: 16
T: 32 R: 15

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
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- SMA Streams
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- Non Fish-Bearing Streams
- Townships
- Sections
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- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 8 of 102

Map 3

Map 4

Map 9

T: 34 R: 16

T: 33 R: 16

Stehekin River

Buzzard Creek

Canim Creek

McGregor Creek

Arrow Creek

Junction Creek

Coon Creek

Agnes Creek

Weaset Creek

Cabin Creek

Pass Creek

29 28 27 26 30

32 33 34 35 31

5 4 3 2 6

8 9 10 11 7

17 16 15 14 18

20 21 22 23 19

Map 3

Map 3

Map 4

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
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- Parcels
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0 0.25 0.5

Miles

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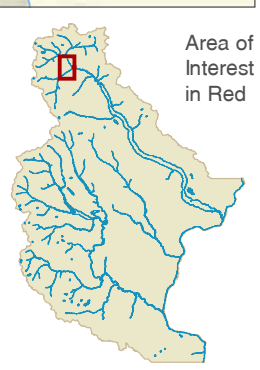
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 9 of 102

Map 8

T: 34 R: 16
T: 34 R: 17
T: 33 R: 16
T: 33 R: 17
35
36
31
32
33
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17
16
14
23
24
19
20
21
26
25
30
29
28
Coon Creek
Stehekin River
Cabin Creek
Sun Creek
Moon Creek
Battalion Creek
Company Creek

Map 8
Map 10
Map 8

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
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- Non Fish-Bearing Streams
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0 0.25 0.5
Miles

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October 12, 2017

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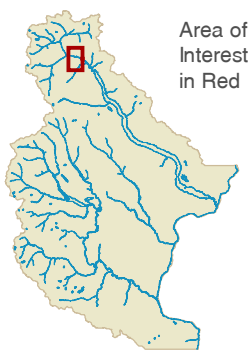
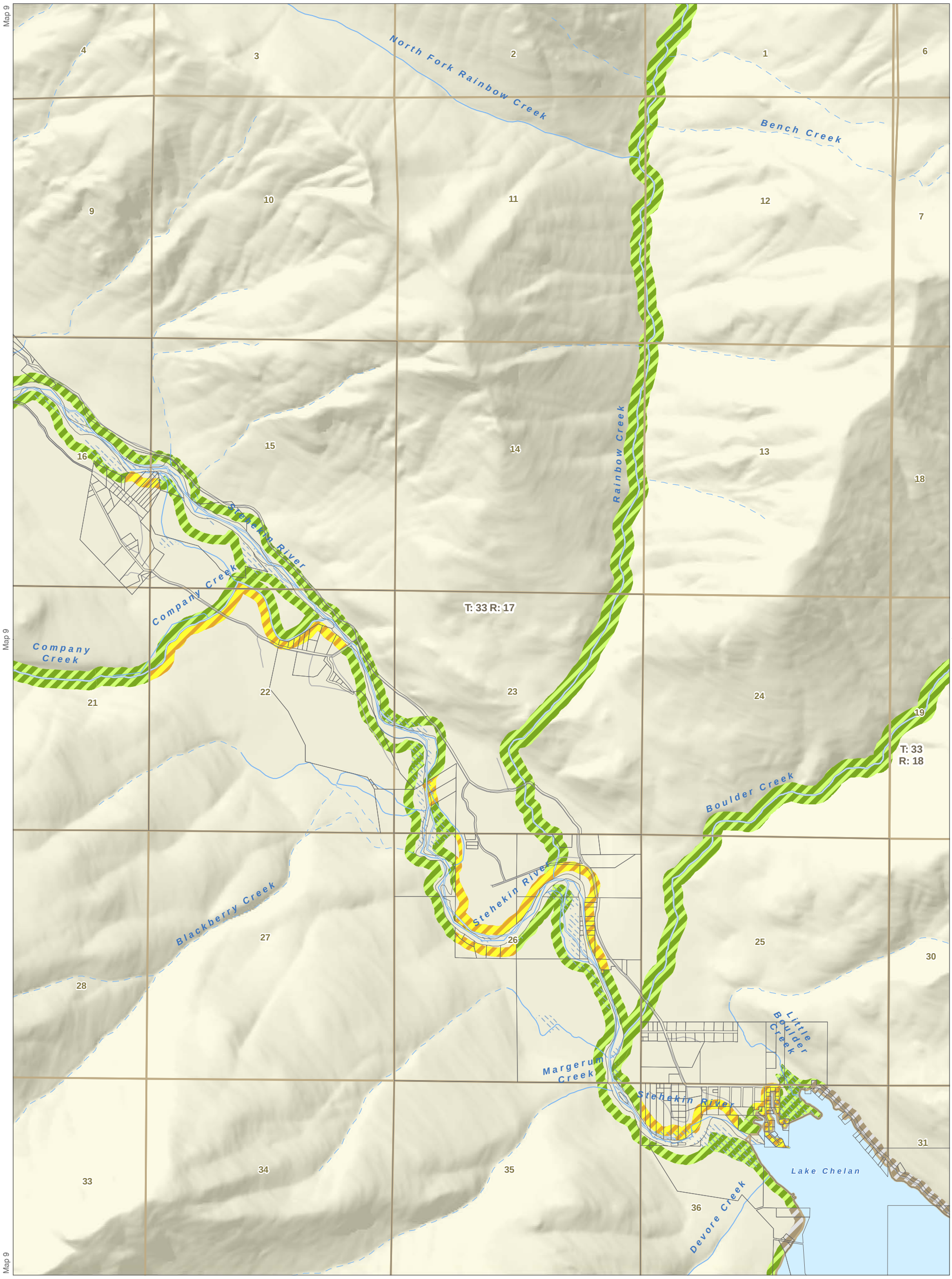


Chelan County SMP Designations

Map 10 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 11 of 102

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
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0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 12 of 102

Map 7

Map 7

Glacier Creek

South Fork Agnes Creek

Railroad Creek

Lyman Lake

Miners Creek

T: 32 R: 15

T: 32 R: 16

T: 31 R: 15

T: 31 R: 16

22 23 24 19 20
27 26 25 30 29
34 35 36 31 32
34 2 1 6 5
3 10 11 12 7 8
13 18 17

Map 7

Map 7

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
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0 0.25 0.5

Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT

Area of Interest in Red

Chelan County SMP Designations

Map 13 of 102

Map 9

Cabin Creek
Pass Creek
Company Creek
Hilgard Creek
Sable Creek
Hilgard Creek

34 35 36 30 29 31 32
T: 33 R: 16
T: 33 R: 17
3 2 1 6
10 11 12 7
T: 32 R: 16
T: 32 R: 17
15 14 13 18
22 23 24 19
27 26 25 30

Map 9

Map 9

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
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0 0.25 0.5
Miles

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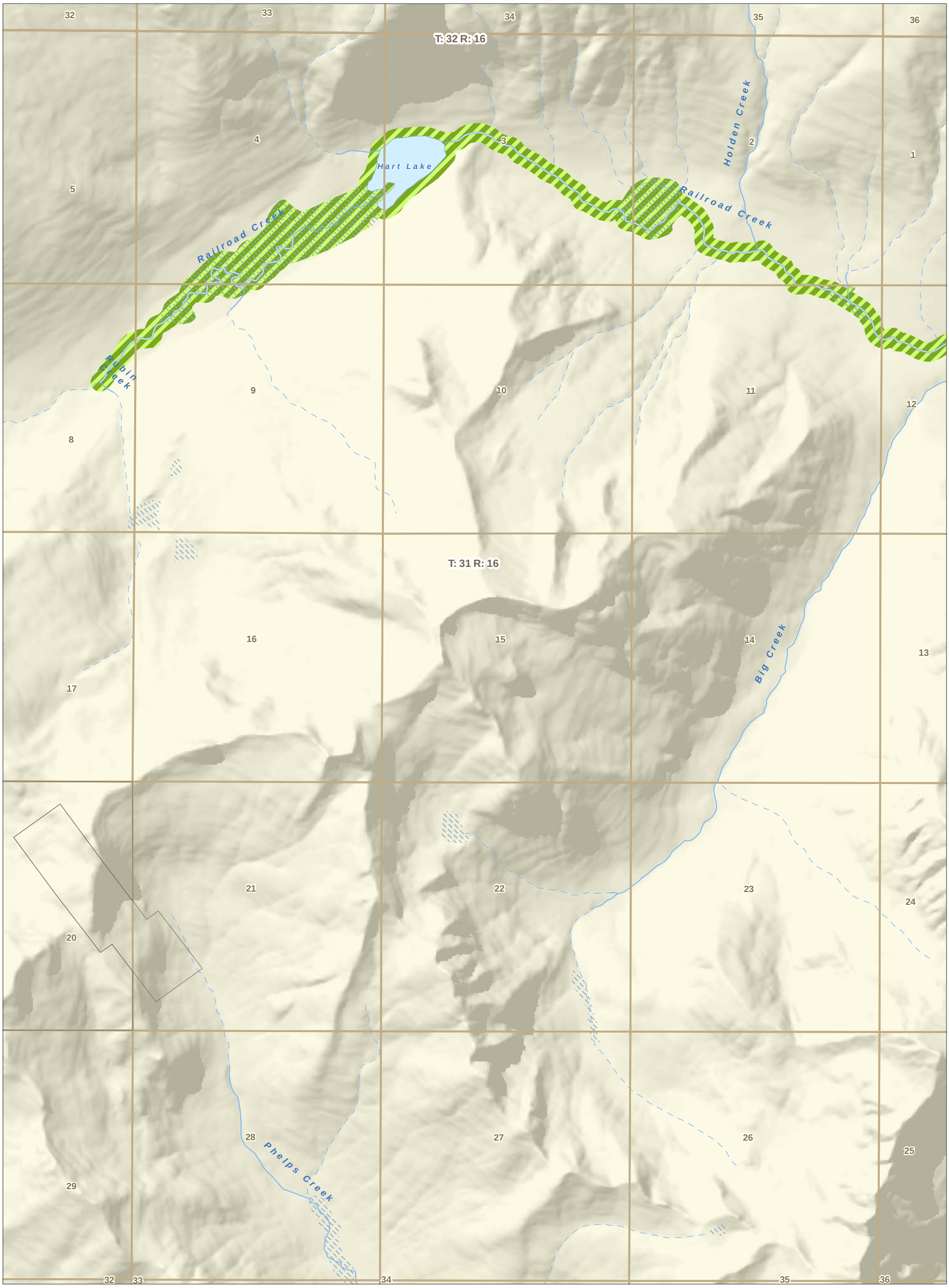
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 14 of 102



Chelan County Shoreline Environment Designations

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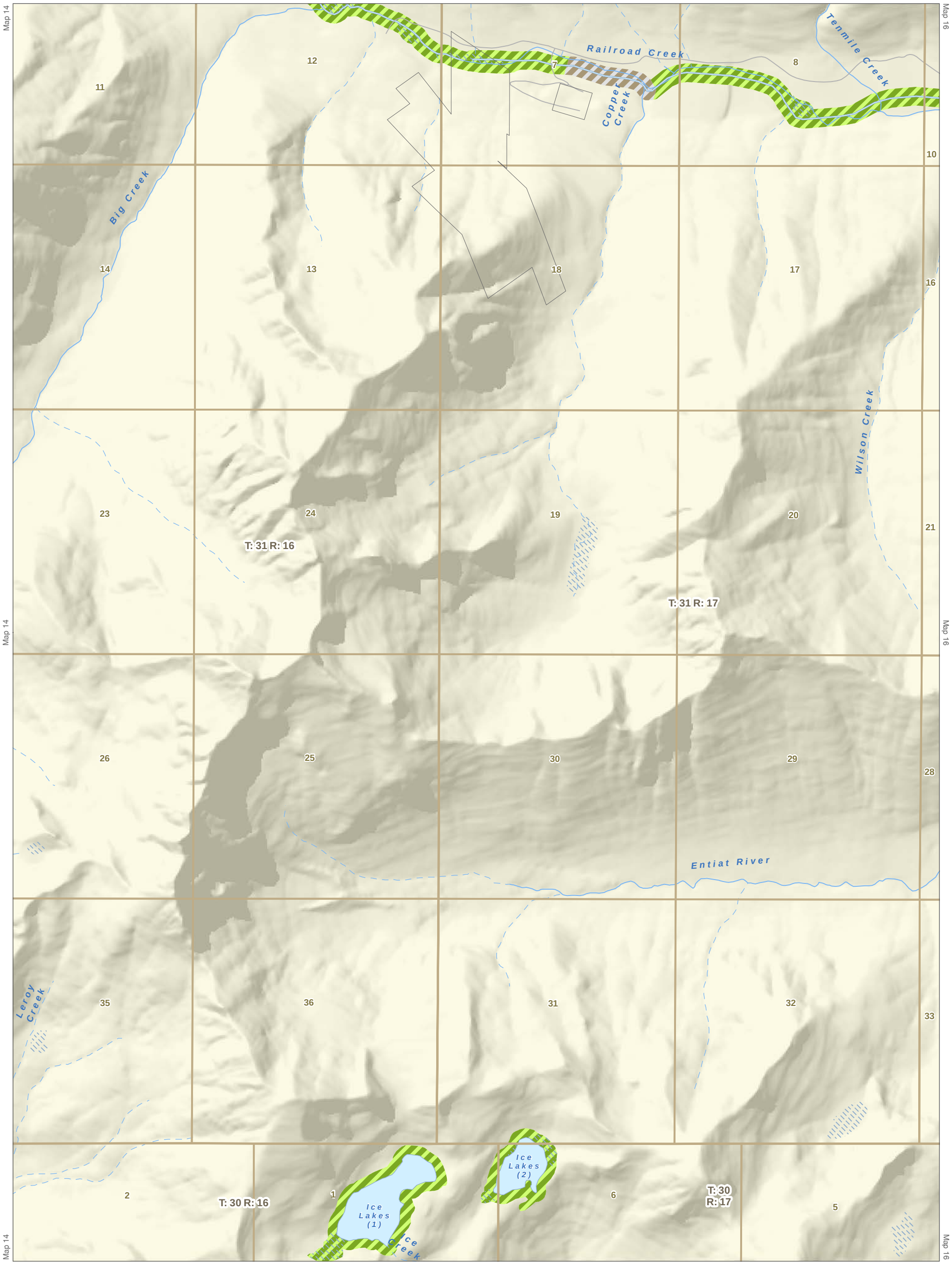
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 15 of 102



Chelan County Shoreline Environment Designations

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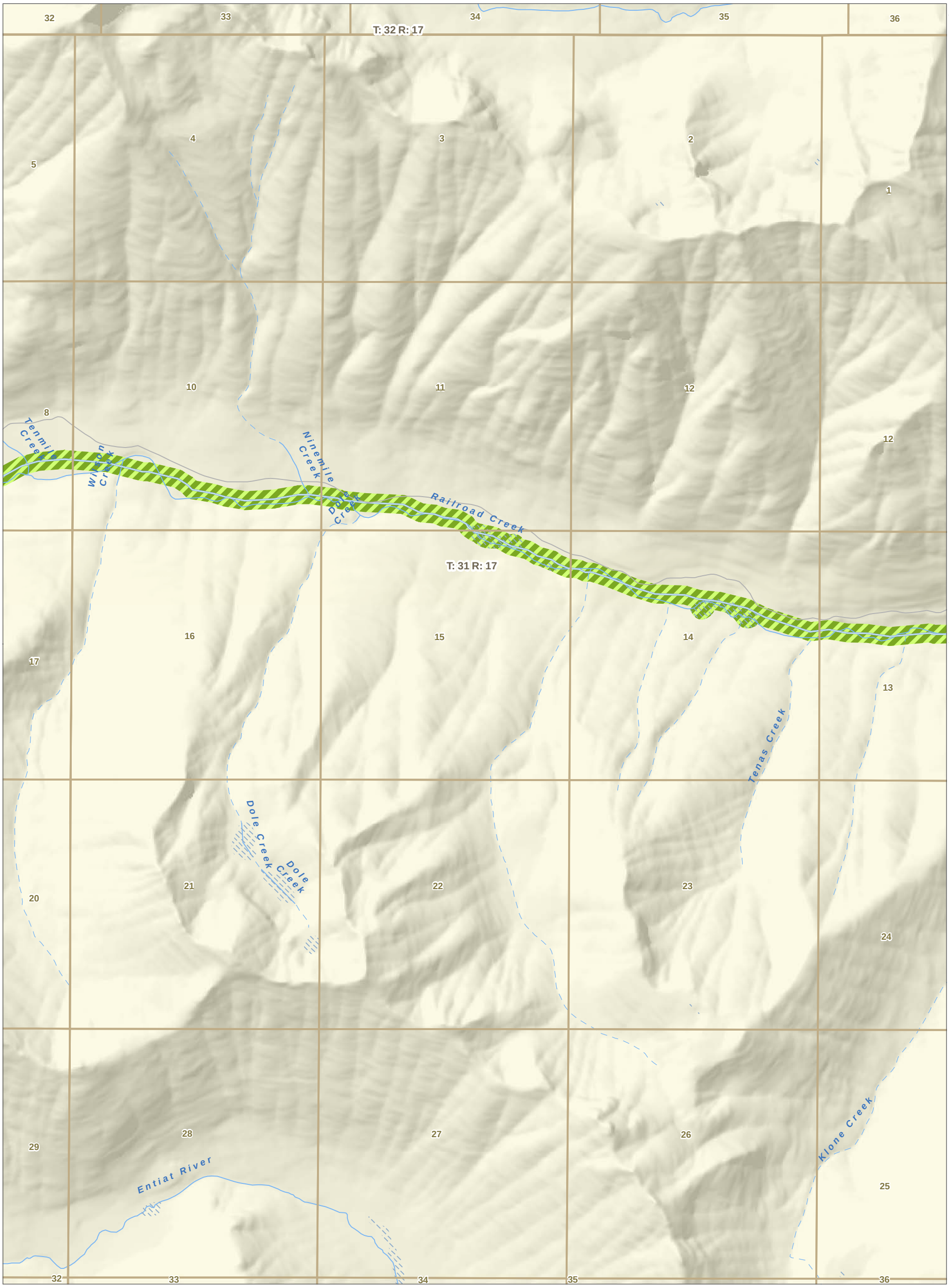
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 16 of 102



Chelan County Shoreline Environment Designations

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0 0.25 0.5
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October 12, 2017

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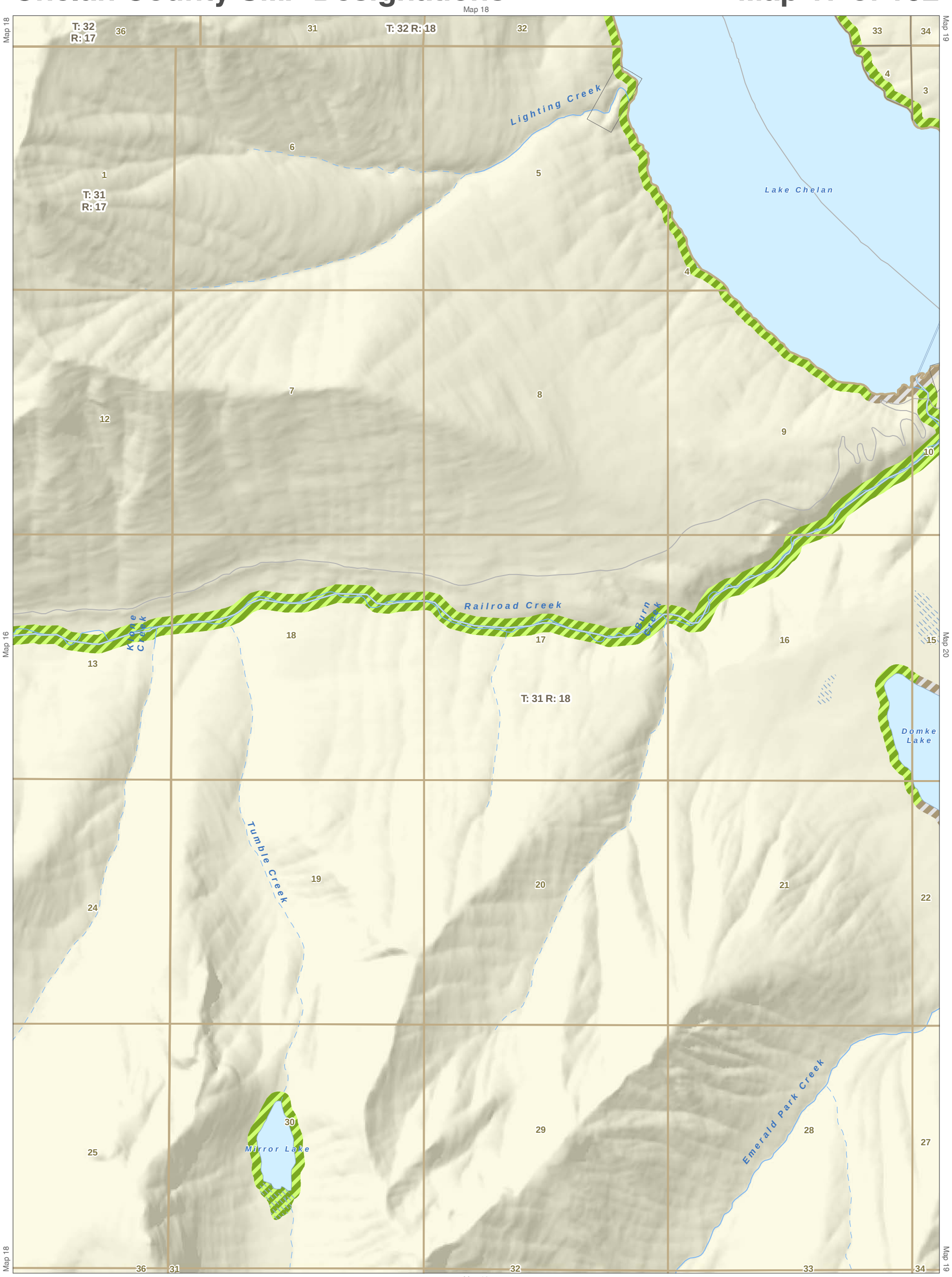
Chelan County SMP Designations

Map 17 of 102



Chelan County Shoreline Environment Designations

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0 0.25 0.5
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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 18 of 102

Map 10 | Map 11 | Map 19

Onemile Creek
Castle Creek
Canyon Creek
Lake Chelan
Fourmile Creek
Hunts Creek
Bridal Veil Creek
Riddle Creek
Fish Creek
T: 32 R: 17
T: 32 R: 18

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
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- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 19 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
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- Railroads

0 0.25 0.5
Miles

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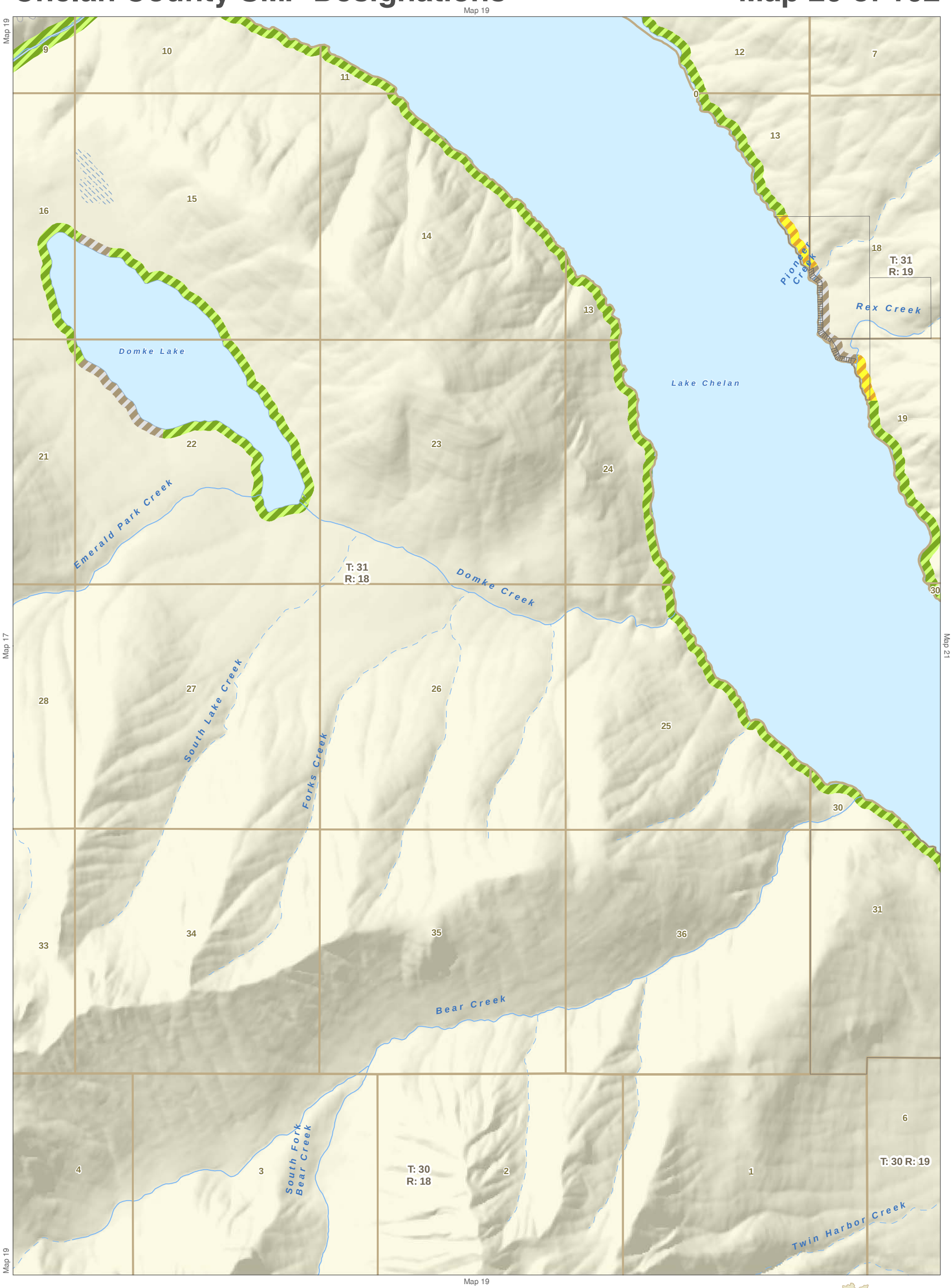
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 20 of 102



Chelan County Shoreline Environment Designations

- Natural
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- Parcels
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0 0.25 0.5
Miles

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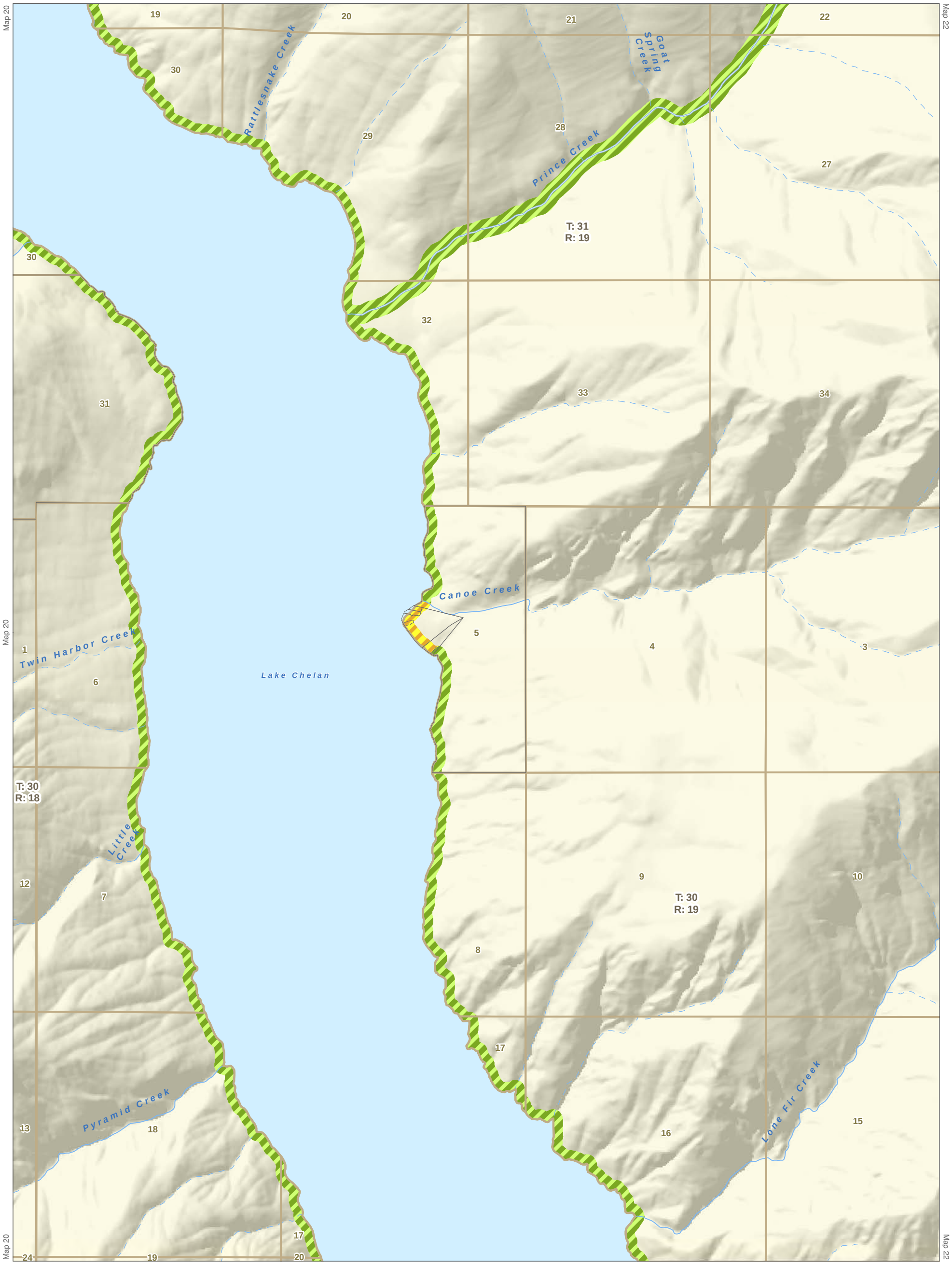
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 21 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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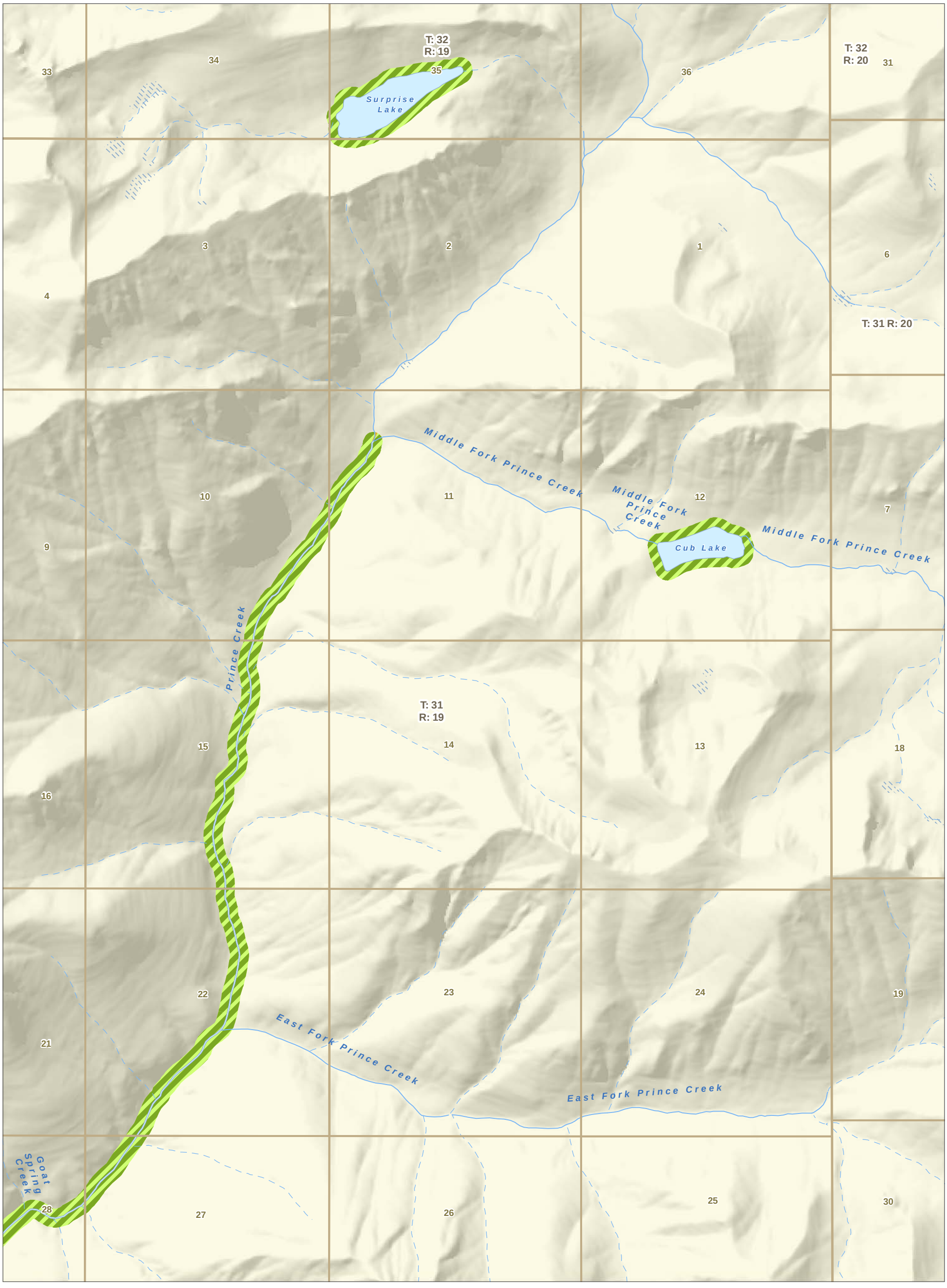
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 22 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

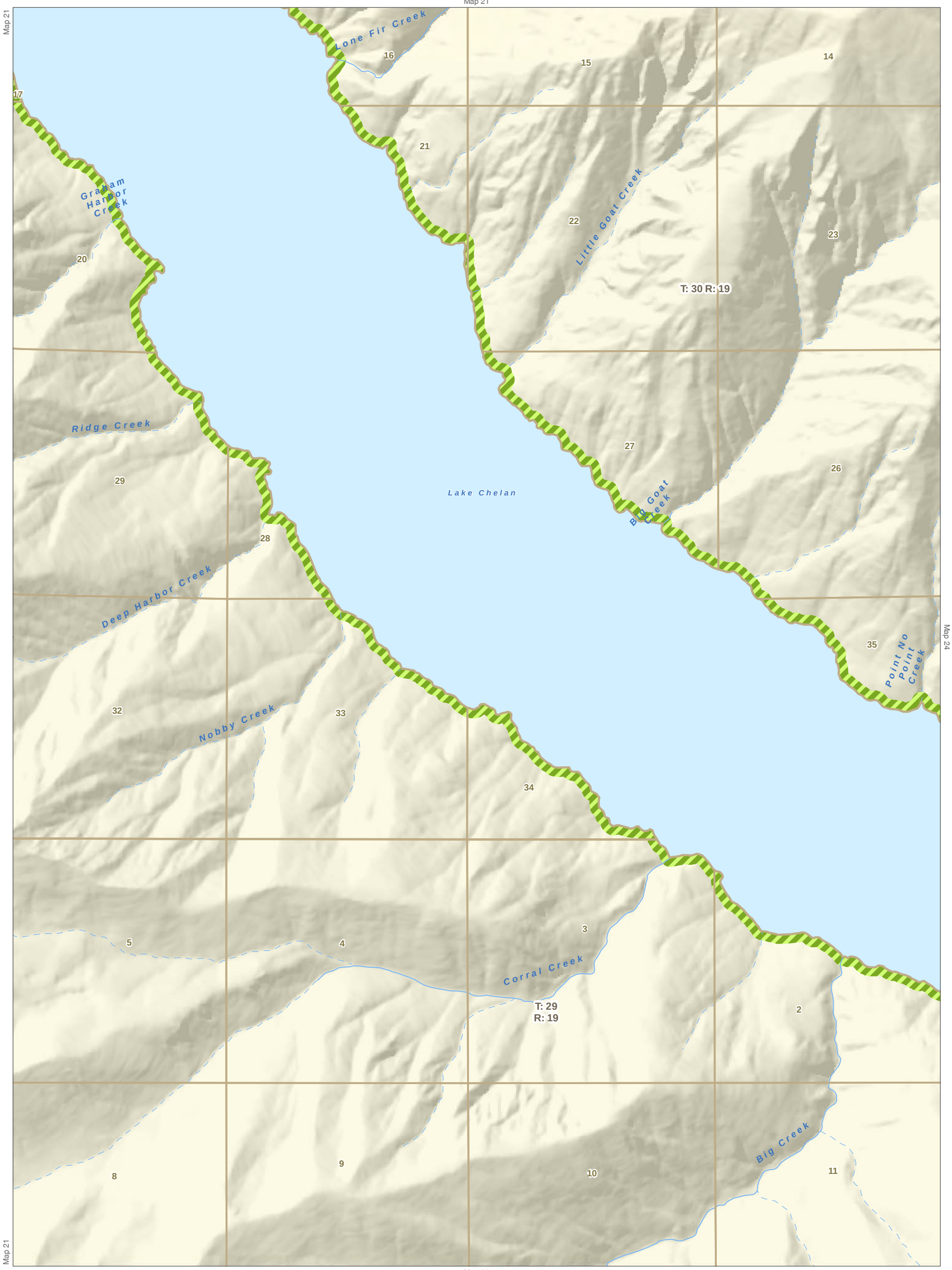
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 23 of 102

Map 21



Map 21

Map 24

Map 21

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 23

Map 25

Point No Point Creek
Safety Harbor Creek
Falls Creek
Big Creek
Little Big Creek
Still Creek
Lake Chelan

T: 30 R: 19
T: 30 R: 20
T: 29 R: 19
T: 29 R: 20

26 25 30 29 28
35 36 31 32 33
6 5
2 1 6
11 12 7 8
14 13 18 17
23 24 19 20

Map 23

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 24

Falls Creek
Falls Creek
Coyote Creek
T: 30 R: 20
Lake Chelan
Camas Creek
Still Creek
Darby Draw
T: 29 R: 20
32
33
34
35
36
5
4
3
2
1
10
11
12
8
9
17
16
15
14
20
21
22
23
24
29
28
27
26
25

Map 24
Map 26
Map 24

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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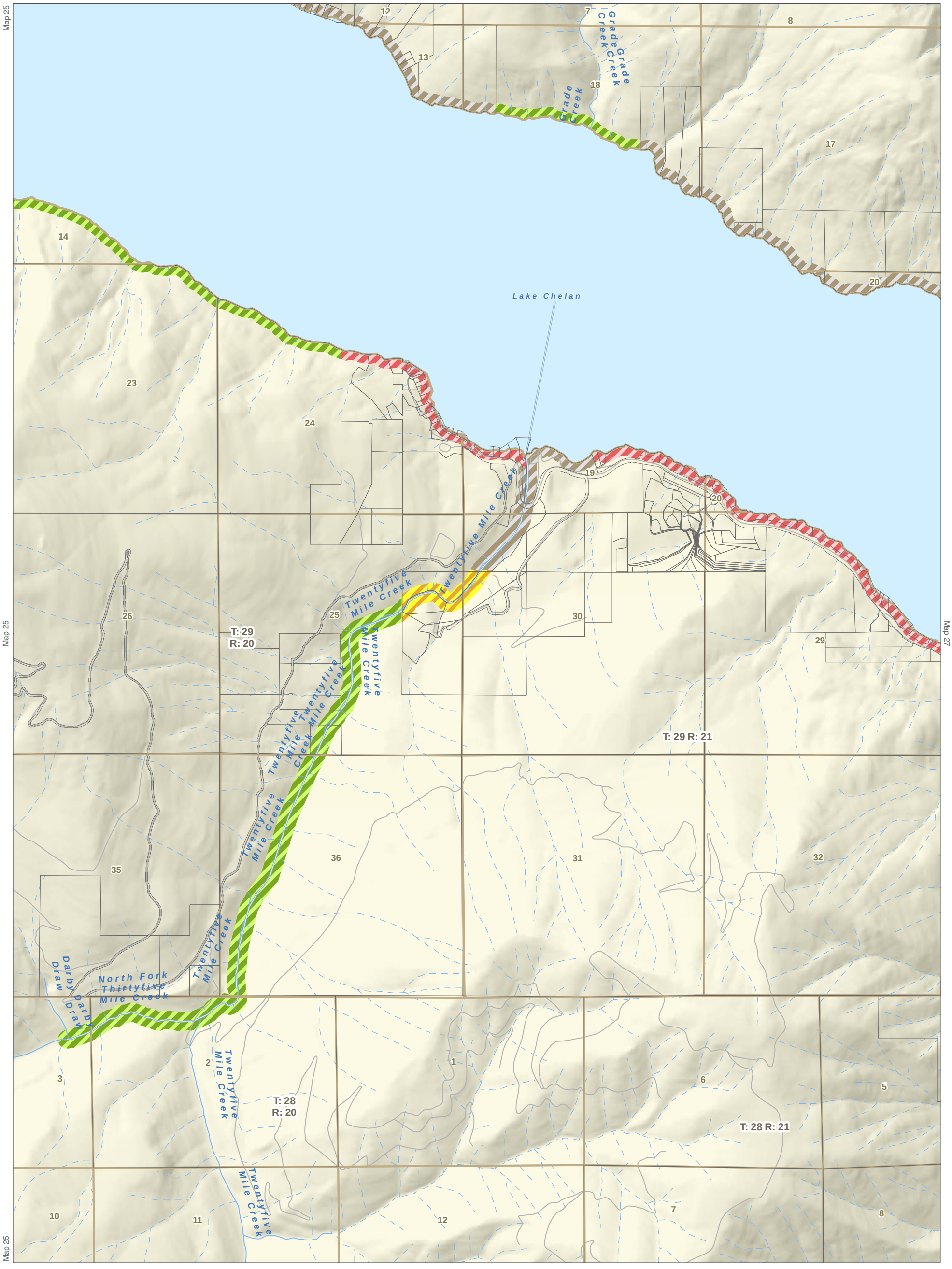
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 26 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
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- Fish-Bearing Streams
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- Highways
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- Railroads

0 0.25 0.5
Miles

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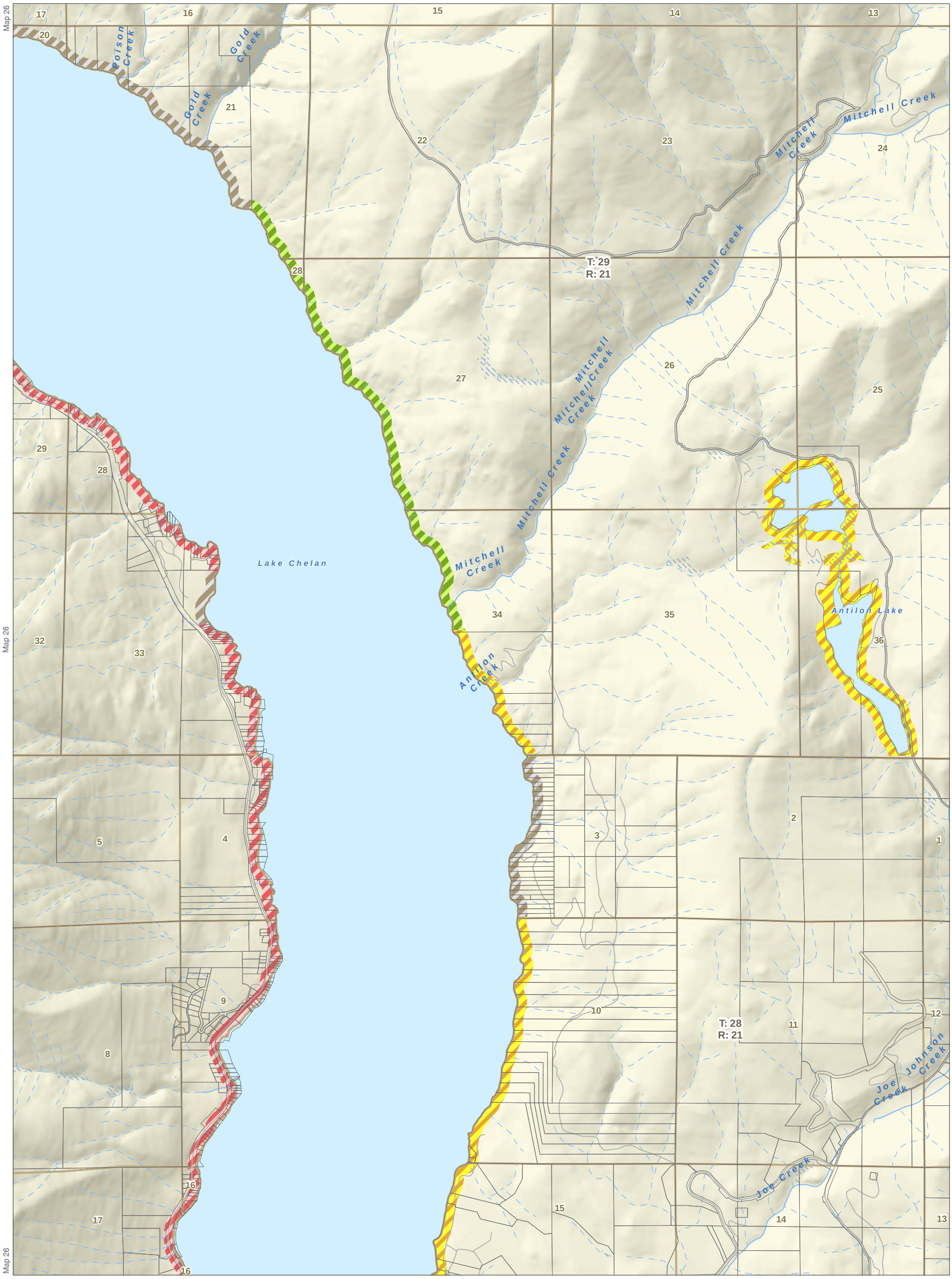
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 27 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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0 0.25 0.5
Miles

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October 12, 2017

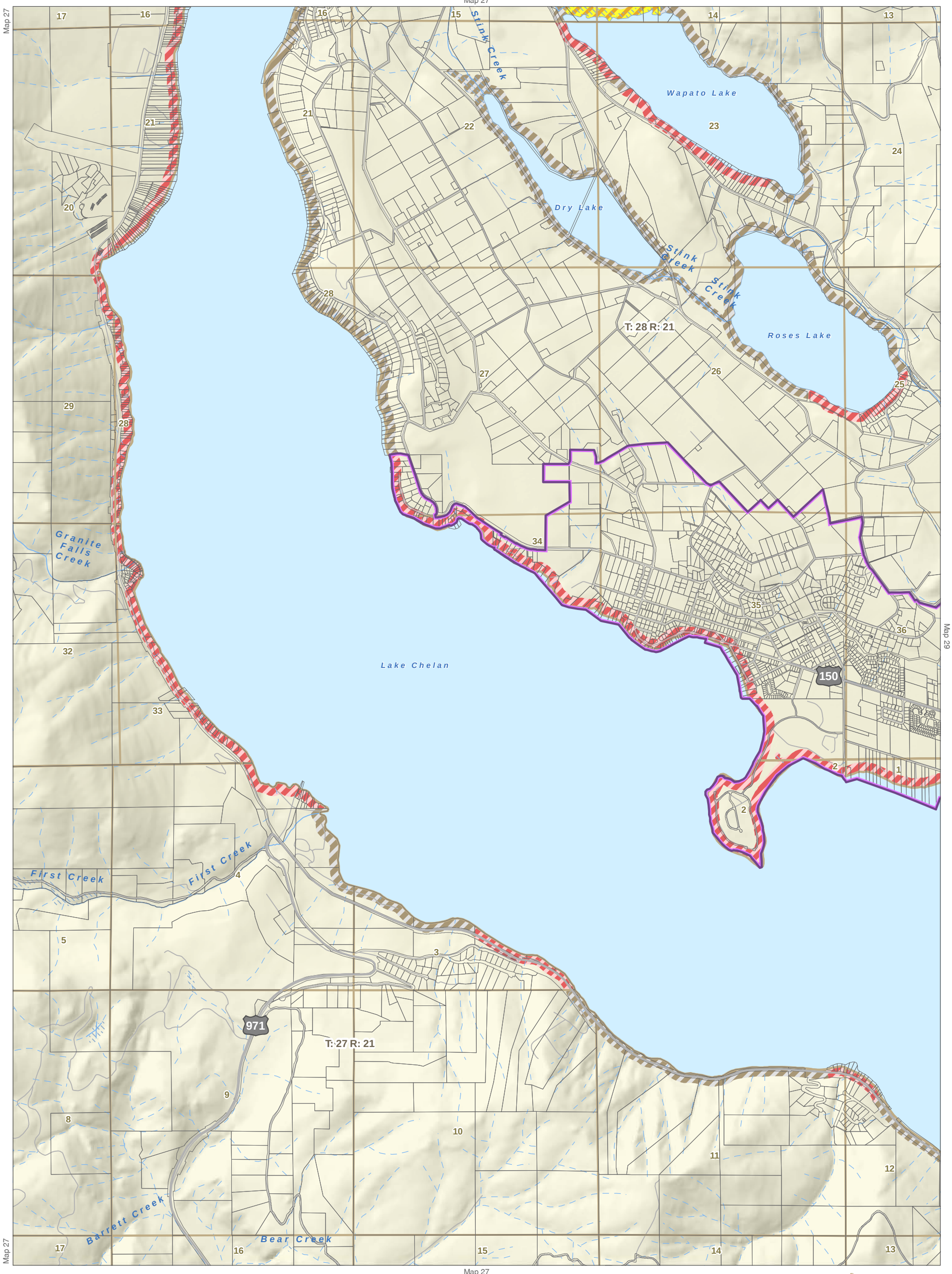
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 28 of 102

Map 27



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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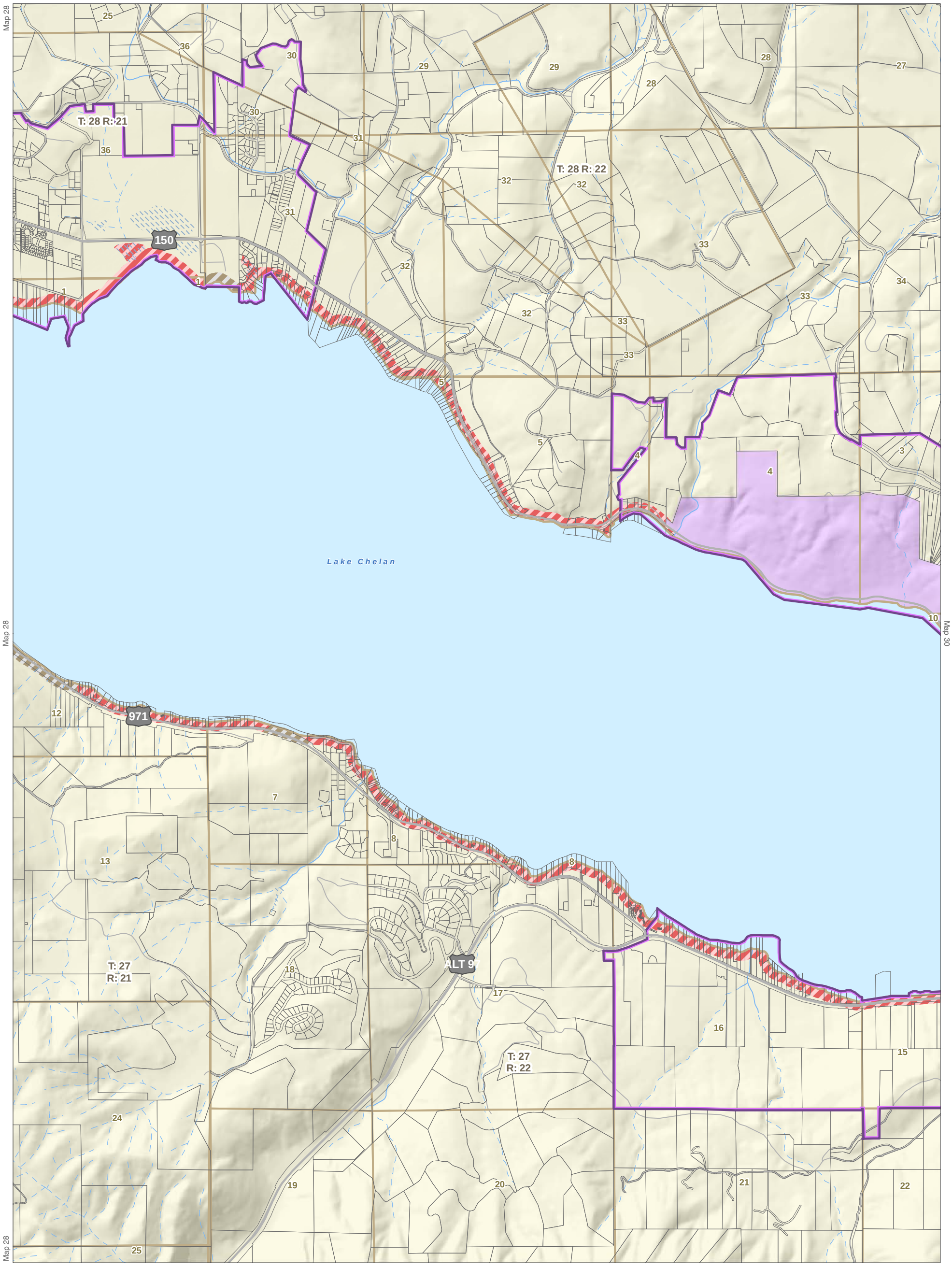
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 28



Map 30

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 30 of 102

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 15

Cool Creek
Pinnacle Creek
Aurora Creek
Entiat River
Pomas Creek
Ice Creek
T: 30
R: 17
Snow Brushy Creek
Choral Creek
Entiat River
Larch Lakes Creek
Larch Lakes Creek
Cow Creek
Entiat River
Entiat River
Anthem Creek

5 4 3 2
8 9 10 11
17 16 15 14
20 21 22 23
29 28 27 26
32 33 34 35

Map 15

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
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- Railroads

0 0.25 0.5
Miles

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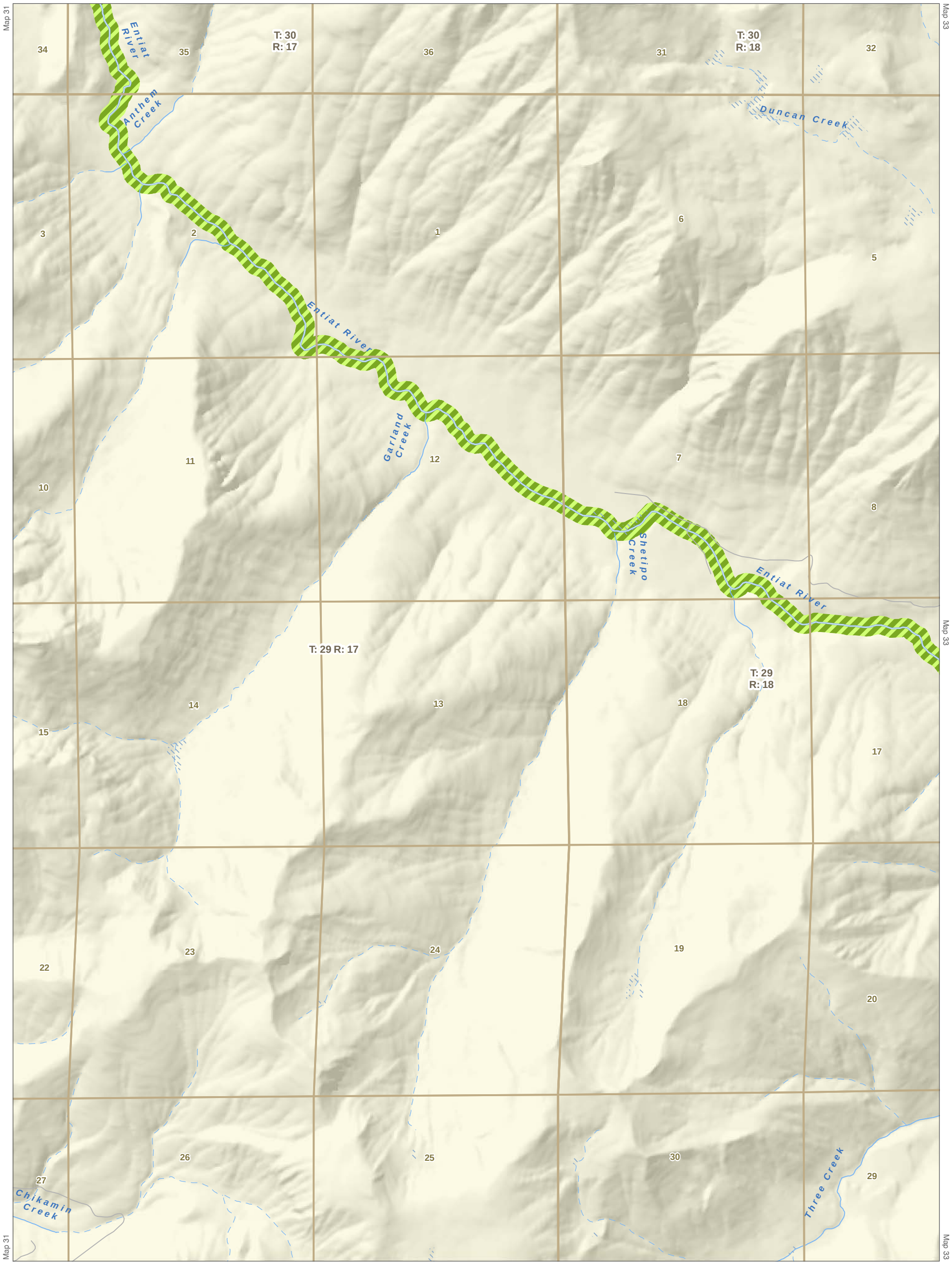
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 32 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 33 of 102

Map 32

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 34 of 102

Map 33



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 35 of 102

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
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- Railroads

0 0.25 0.5
Miles

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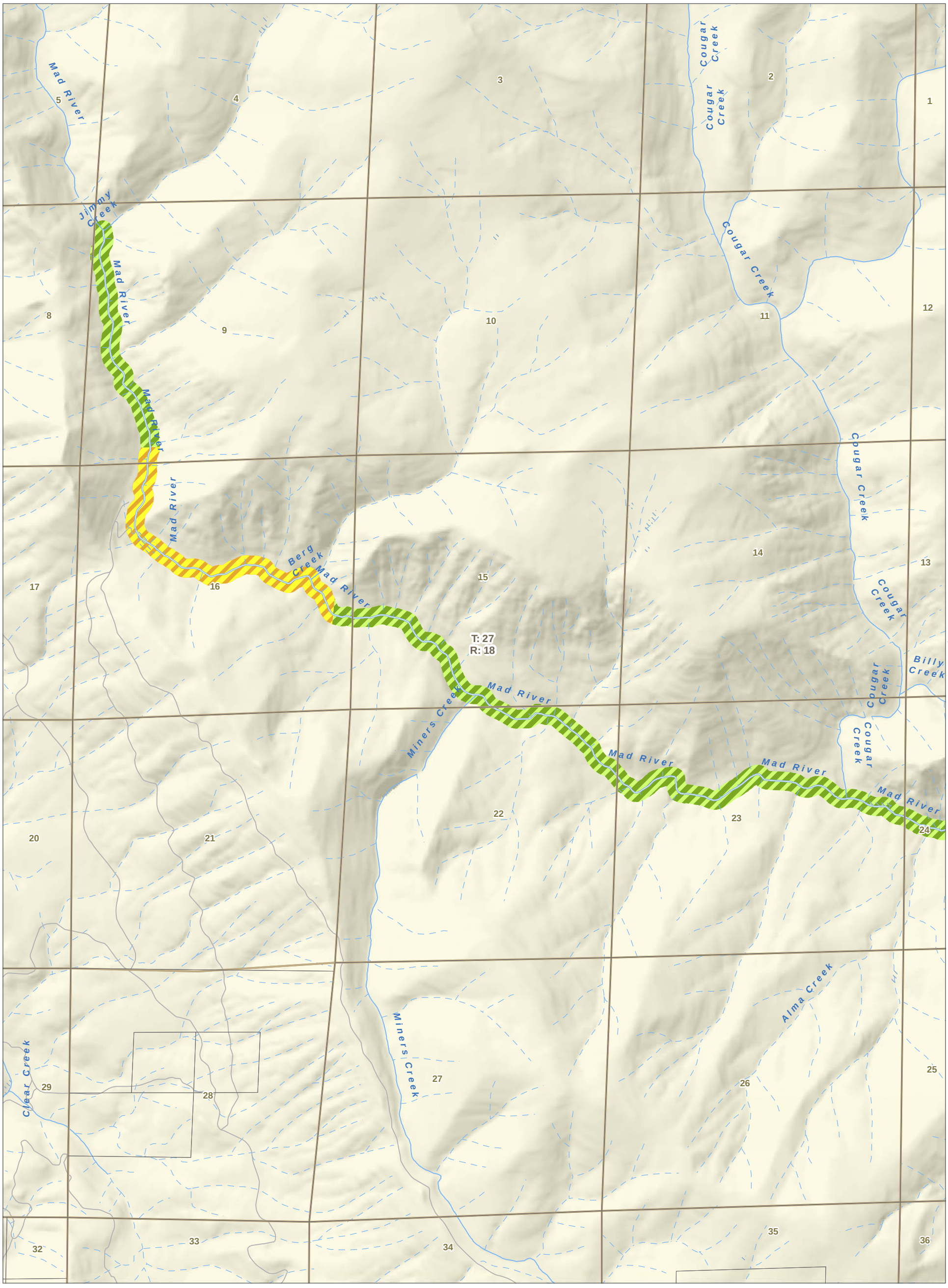
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 36 of 102



Map 37

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
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- Sections
- Highways
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 37 of 102

Map 35

Map 36

Map 38

Billy Creek

Young Creek

Young Creek

Young Creek

Windy Creek

Windy Creek

Windy Creek

Windy Creek

Mad River

Mad River

Mad River

Mad River

Mad River

Mad River

Alma Creek

Young Creek Creek

Young Creek Creek

Miners Creek

Hornet Creek

Hornet Creek

Hornet Creek

Hornet Creek

Hornet Creek

Indian Creek

T: 27 R: 18

T: 27 R: 19

T: 26 R: 18

T: 26 R: 19

14 13 18 17 16

23 24 19 20 21

26 25 30 29 28

35 36 31 32 33

2 1 6 5 4

12 7 8 9

Map 36

Map 38

Map 35

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
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- Railroads

0 0.25 0.5

Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 35

Map 37

Map 35

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels

- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams

- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

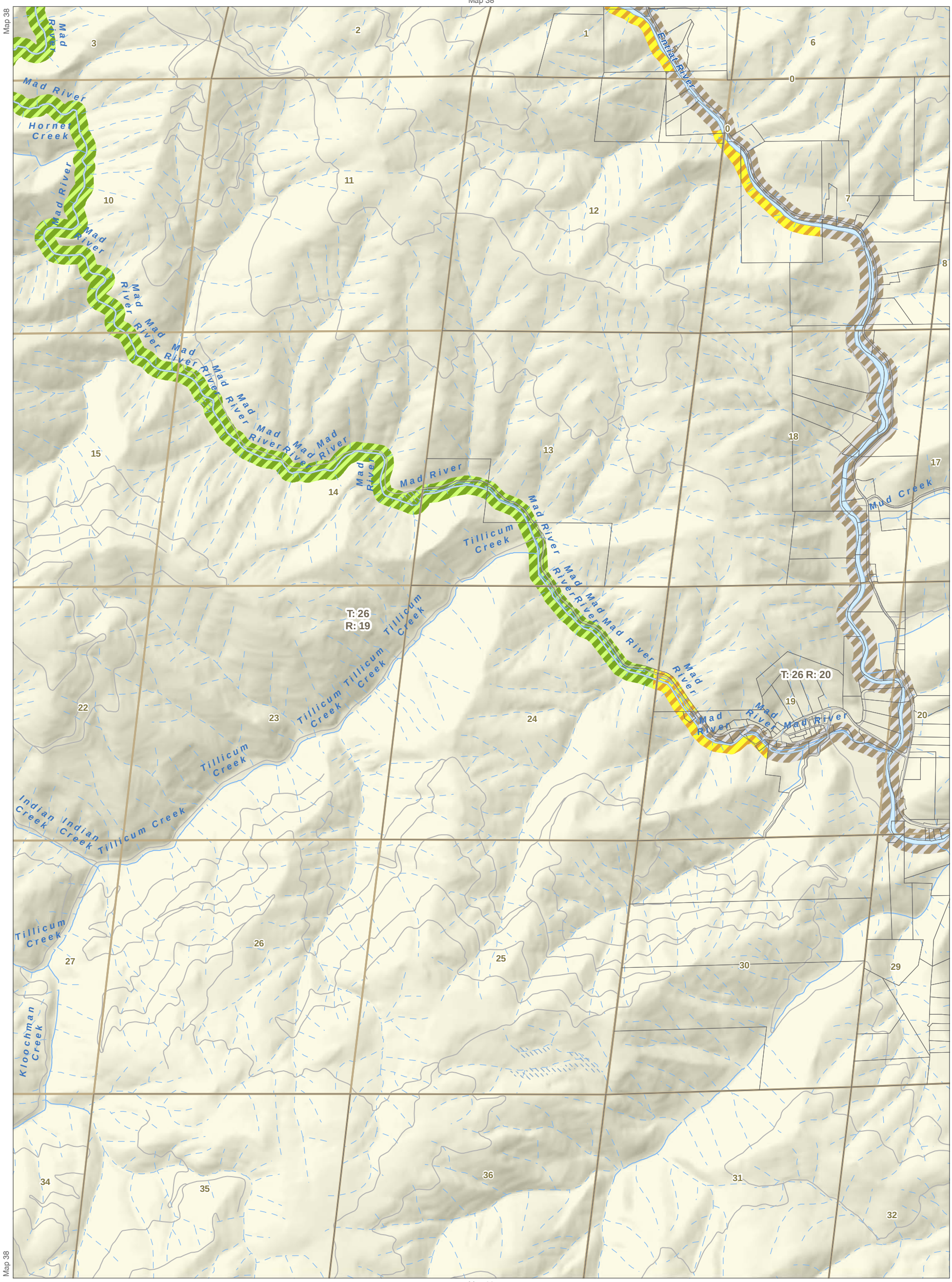
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 39 of 102

Map 38



Map 38

Map 38

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
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- Highways
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT

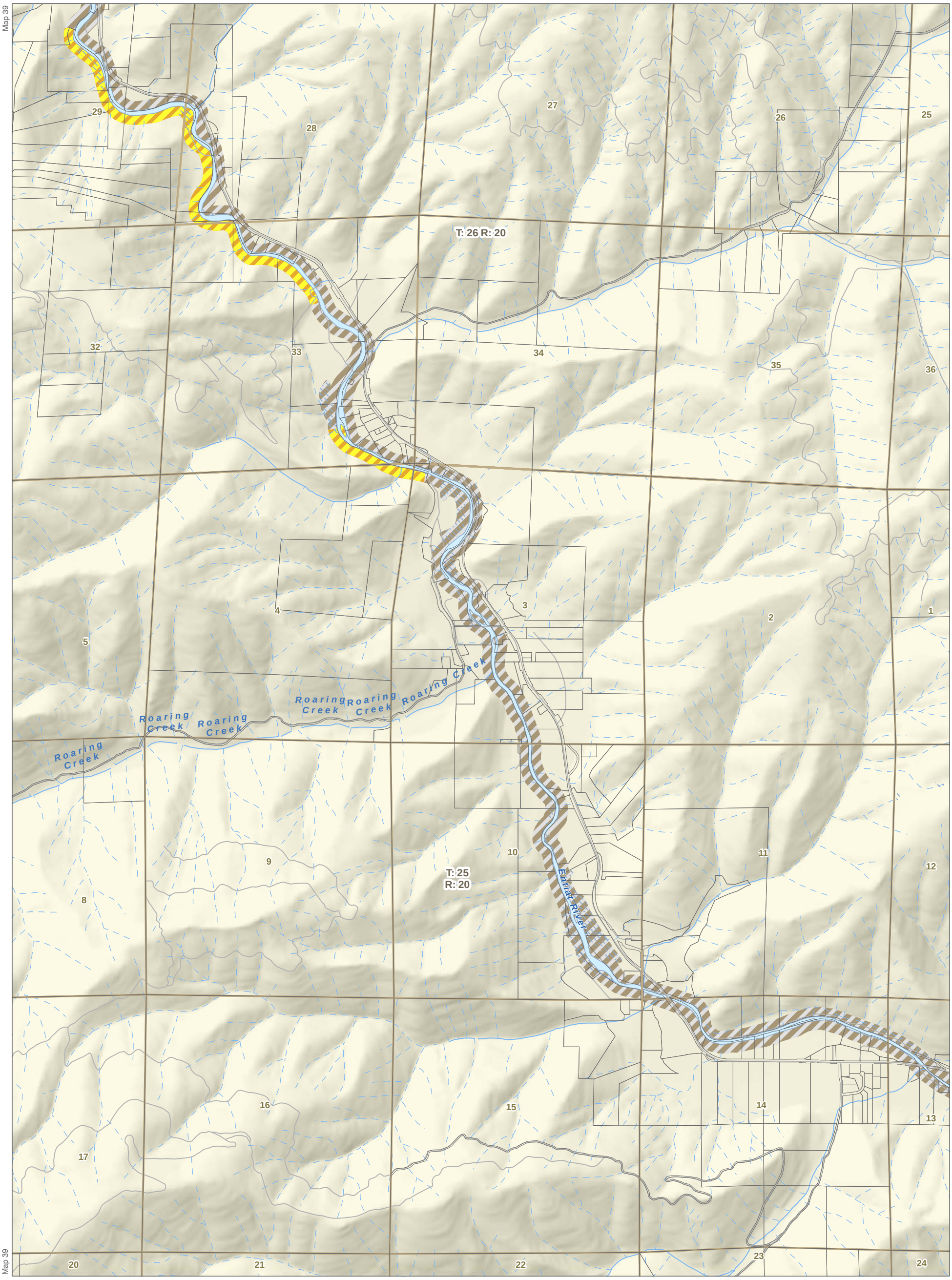


Area of Interest in Red

Chelan County SMP Designations

Map 40 of 102

Map 39



Map 39

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 14

Map 15

Map 48

T: 31 R: 16

T: 30 R: 16

Leroy Creek

Buck Creek

Buck Creek

Chiwawa River

Alpine Creek

James Creek

Chipmunk Creek

Phelps Creek

Box Canyon Creek

31 32 33 34 35 6 5 4 3 2 7 8 9 10 11 18 17 16 15 14 19 20 21 22 23 30 29 28 27 26

Map 14

Map 15

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
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- Highways
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0 0.25 0.5

Miles

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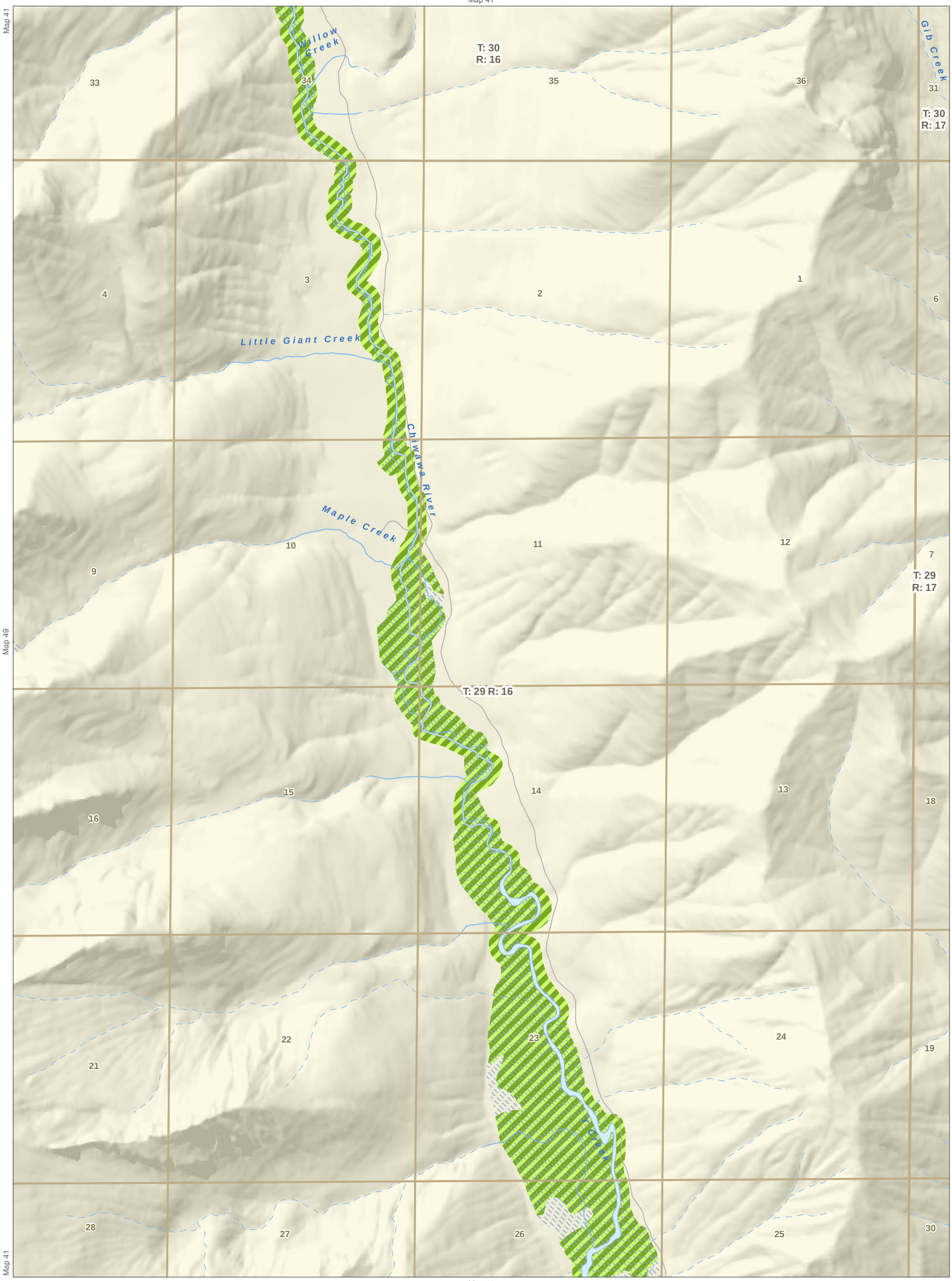
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 42 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
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0 0.25 0.5
Miles

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October 12, 2017

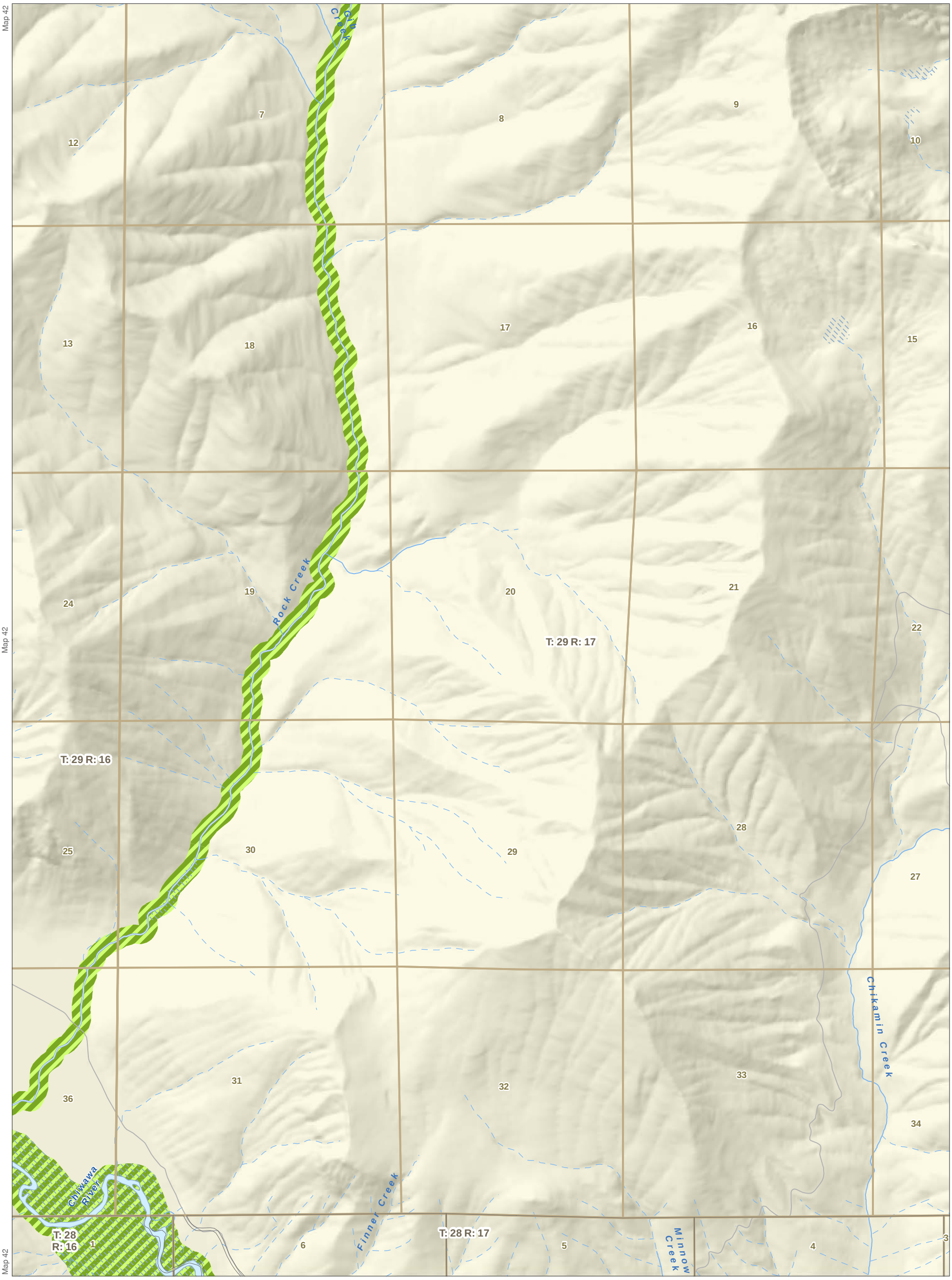
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 43 of 102

Map 42



Map 42

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Railroads

0 0.25 0.5
Miles

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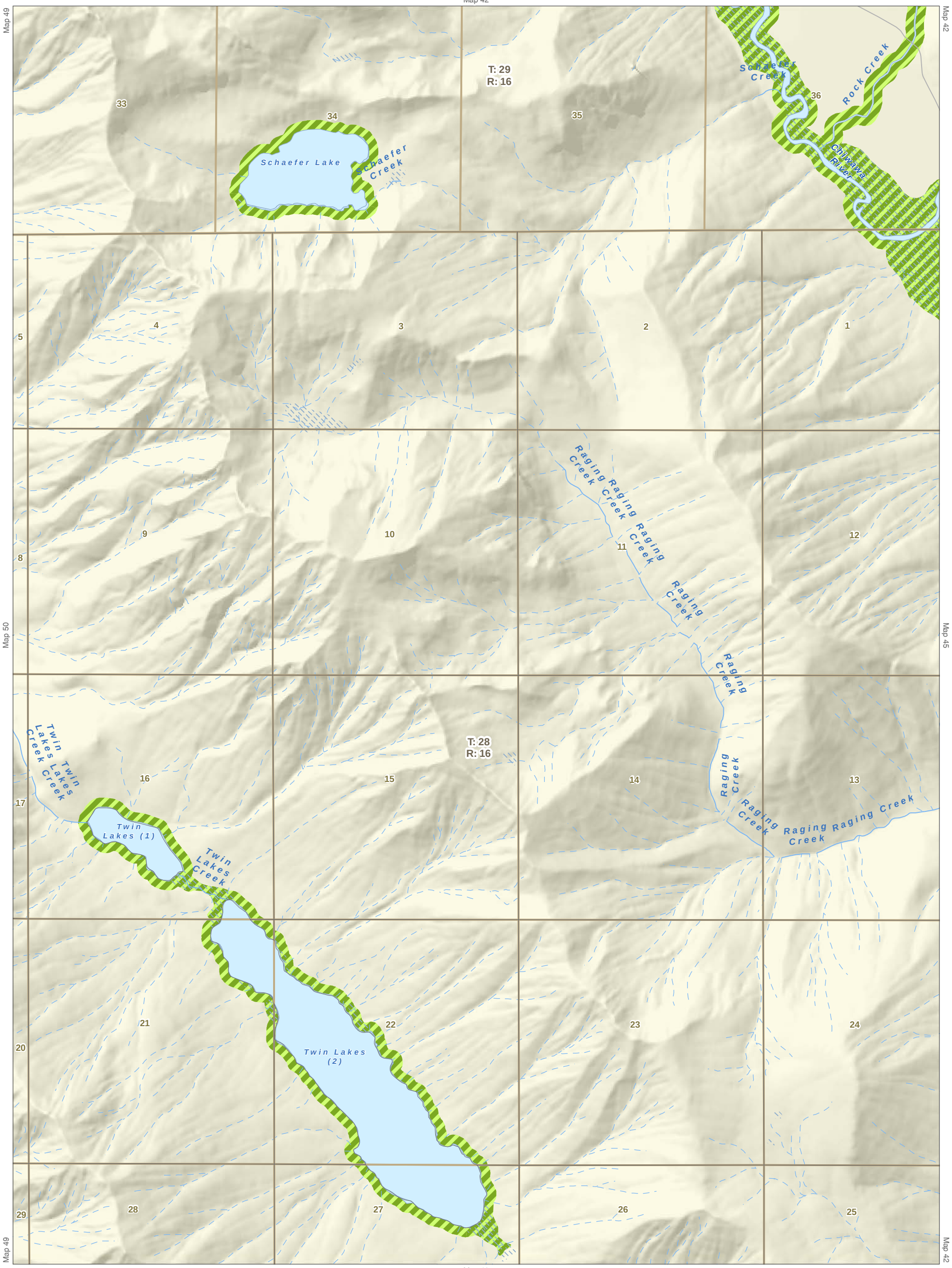
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 44 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 43

Map 44

Map 44

Map 43

T: 28 R: 16

T: 28 R: 17

Raging Creek

Chiwawa River

Minnow Creek

Chikamin Creek

Marble Creek

Brush Creek

Big Meadow Creek

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT

Area of Interest in Red

Chelan County SMP Designations

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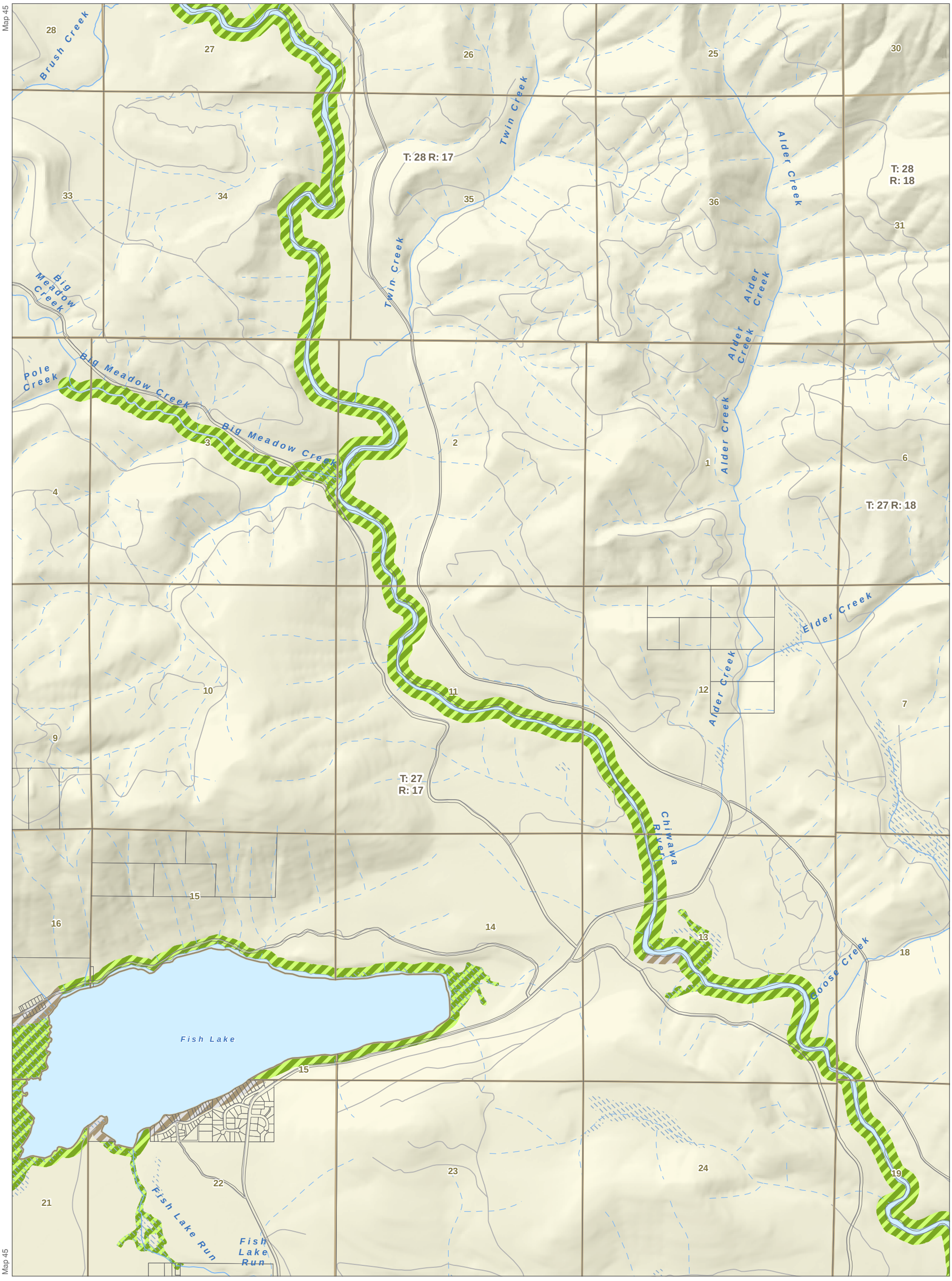
Map 45



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
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- Parcels
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- Fish-Bearing Streams
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0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 46

Map 46

Map 61

Map 46

Chiwawa River
Alder Creek
Goose Creek
Deep Creek
Deep Creek
Deep Creek
Deep Creek
Fish Lake
Fish Lake Run
Wenatchee River
Clear Creek
Clear Creek
Clear Creek
Hegler Creek
Beaver Creek
Beaver Creek

T: 27 R: 17
T: 27 R: 18
T: 26 R: 17
T: 26 R: 18

10 11 12 7 8
15 14 13 18 17
15
22 23 24 19 20
27 26 25 30 29
34 35 36 31 32
3 2 1 6 5

Map 46

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 48 of 102

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 48

Map 42

T: 30 R: 16

T: 29 R: 15

T: 29 R: 16

Boulder Creek

Napeequa River

Little Giant Creek

Maple Creek

Map 42

Map 48

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 50 of 102

Map 49

Map 53

Map 44

T: 29 R: 15

T: 29 R: 16

T: 28 R: 15

T: 28 R: 16

35 36 31 32 33 1 2 6 5 4 12 11 7 8 9 13 14 18 17 16 24 23 19 20 21 25 26 30 29 28

Napeequa River

White River

Panther Creek

Twin Lakes Creek

Twin Lakes (1)

Canyon Creek

Map 53

Map 44

Map 49

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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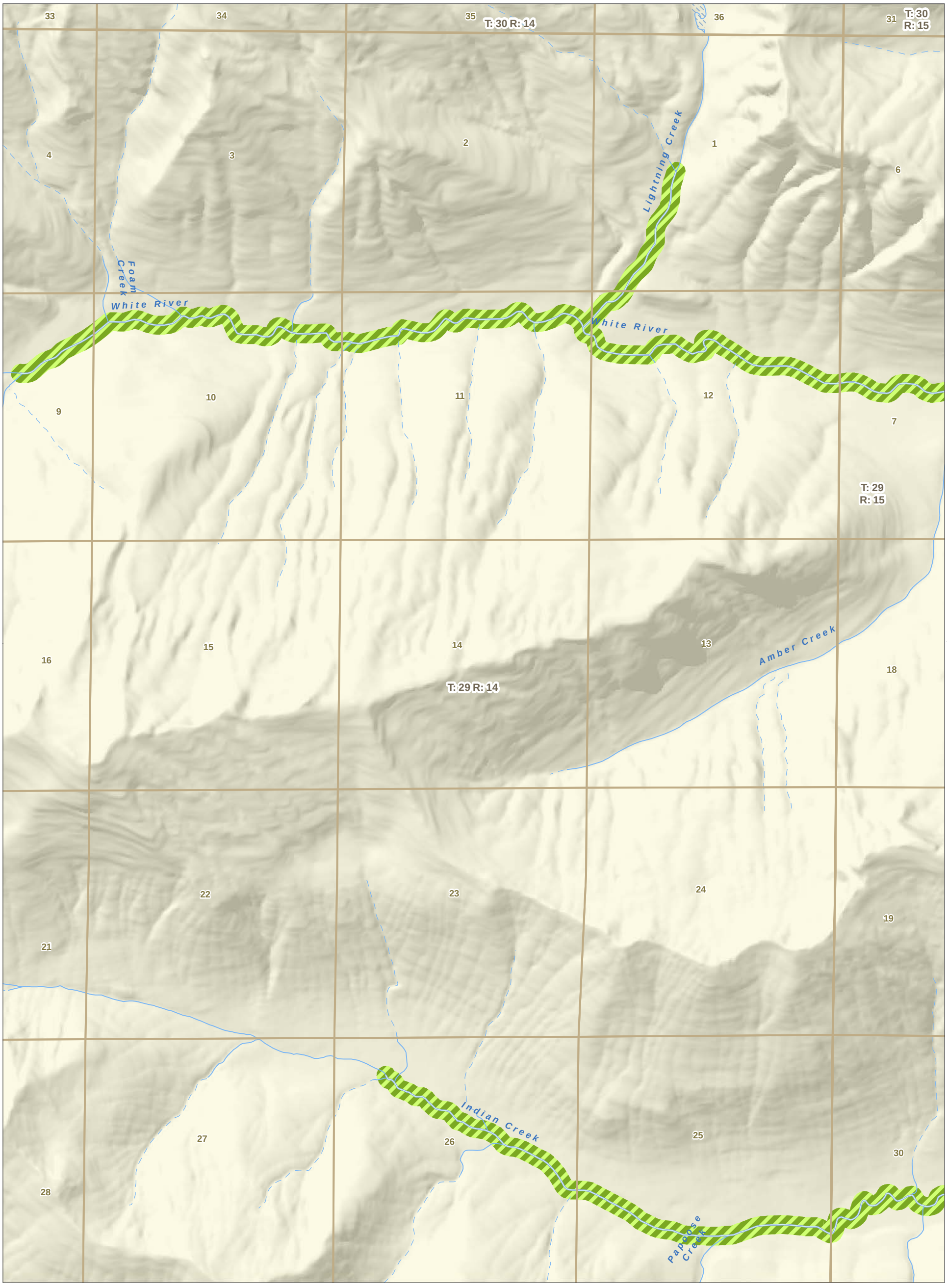
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 51 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 48

Map 51

Map 48

T: 30 R: 15

T: 29 R: 15

Thunder Creek

White River

Boulder Creek

Indian Creek

31 32 33 34 35

6 5 4 3 2

7 8 9 10 11

18 17 16 15 14

19 20 21 22 23

30 29 28 27 26

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 53 of 102

Map 52 | Map 49 | Map 50

32 | 33 | T: 29 R: 15 | 34 | 35

4 | 3 | 2

5

White River

Ibex Creek

8 | 9 | 10 | 11

Panther Creek

Cougar Creek

16 | 15 | 14

17

T: 28 R: 15

21 | 22 | 23

20

29 | 28 | 27 | 26

Canyon Creek

Map 52 | Map 49

Map 52

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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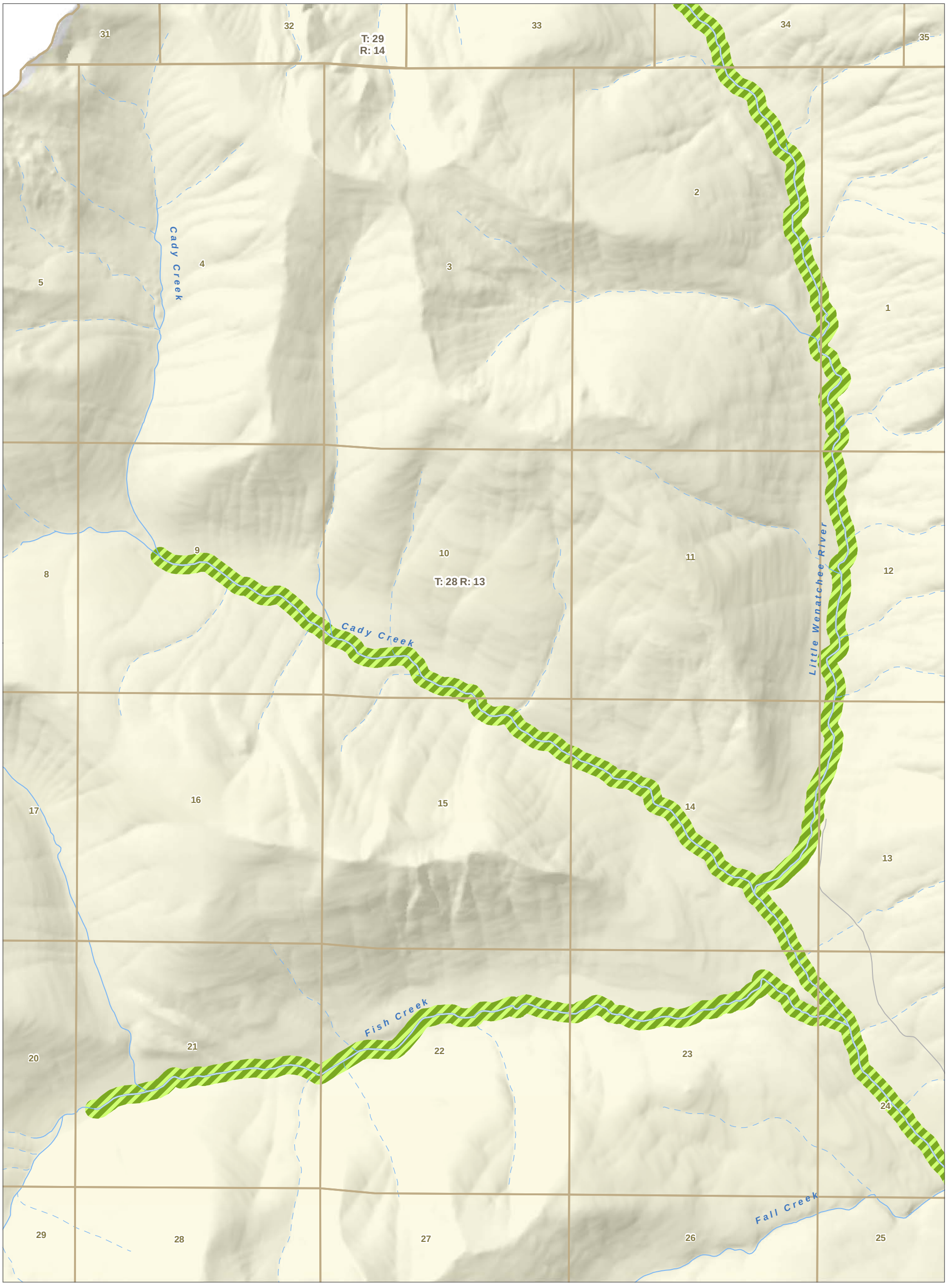
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 54 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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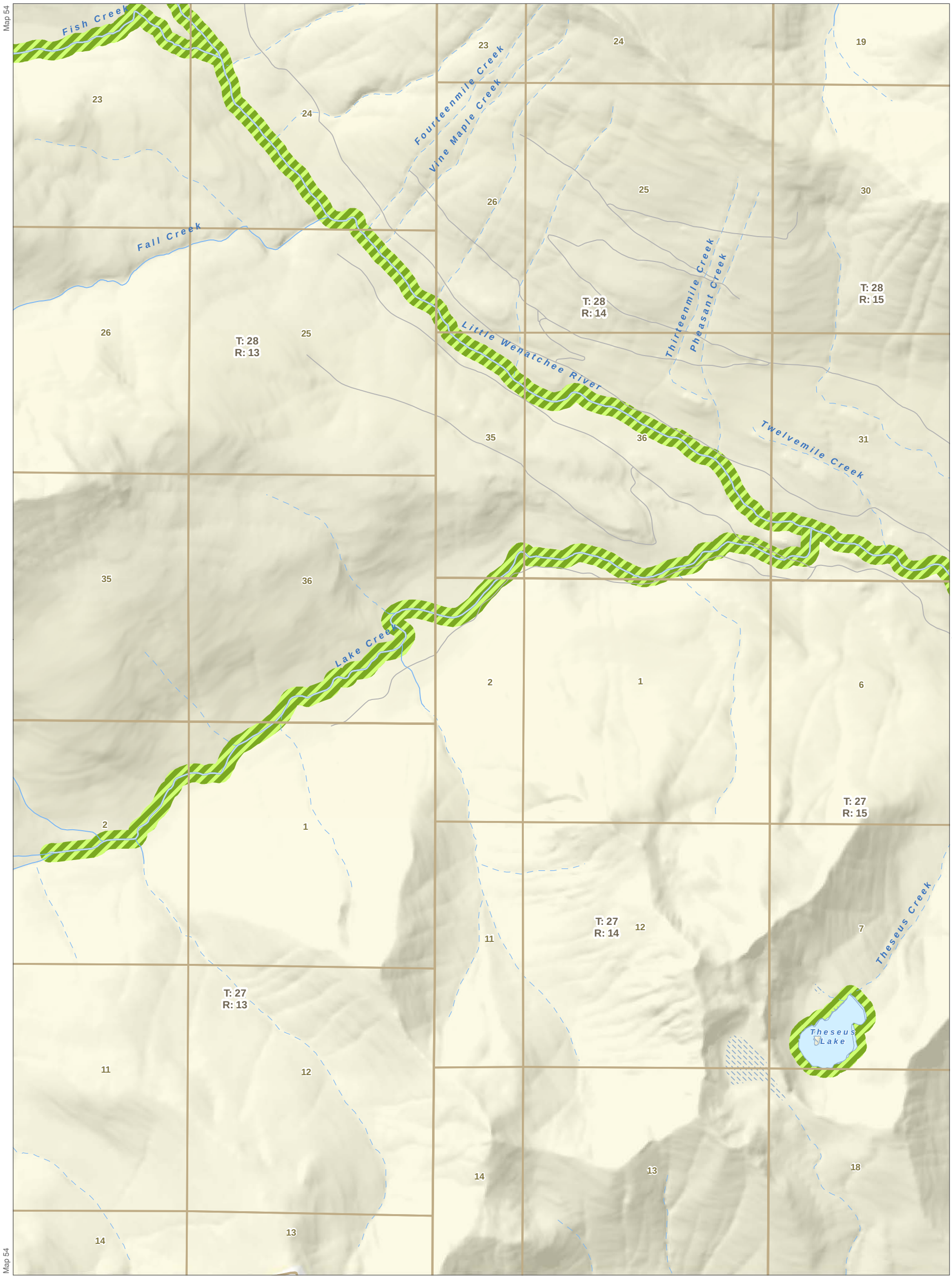
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 55 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 55

Lake Creek
Heather lake
Glasses Lake
Rapid River
Smith Brook
Lichtenwasser Lake
Lake Valhalla
T: 27 R: 13
1
2
3
4
5
8
9
10
11
12
13
14
15
24
25
26
34
35
36

Map 55

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

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Map 55
Map 58

Twelvemile Creek
Elevenmile Creek
Lodgepole Creek
T: 28 R: 15
Devils Club Creek
Theseus Creek
Little Wenatchee River
Ninemile Creek
Soda Creek
Theseus Lake
T: 27 R: 15
Rainy Creek
Snowy Creek

31 32 33 34
6 5 4 3
7 8 9 10
18 17 16 15
19 20 21 22
30 29 28 27

Map 55
Map 58

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 58 of 102

Map 53 | Map 50 | Map 50

Ninemile Creek
34
35
T: 28 R: 15
36
31
T: 28 R: 16
32
White River
3
2
1
6
5
10
11
12
7
8
Peavine Creek
Little Wenatchee River
Cedar Creek
Fir Creek
Hidden Creek
T: 27 R: 15
T: 27 R: 16
14
13
18
17
15
Lost Creek
23
24
19
20
22
27
26
25
Lost Lake
30
29
Royal Creek

Map 57 | Map 59 | Map 53 | Map 50 | Map 50

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 59 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

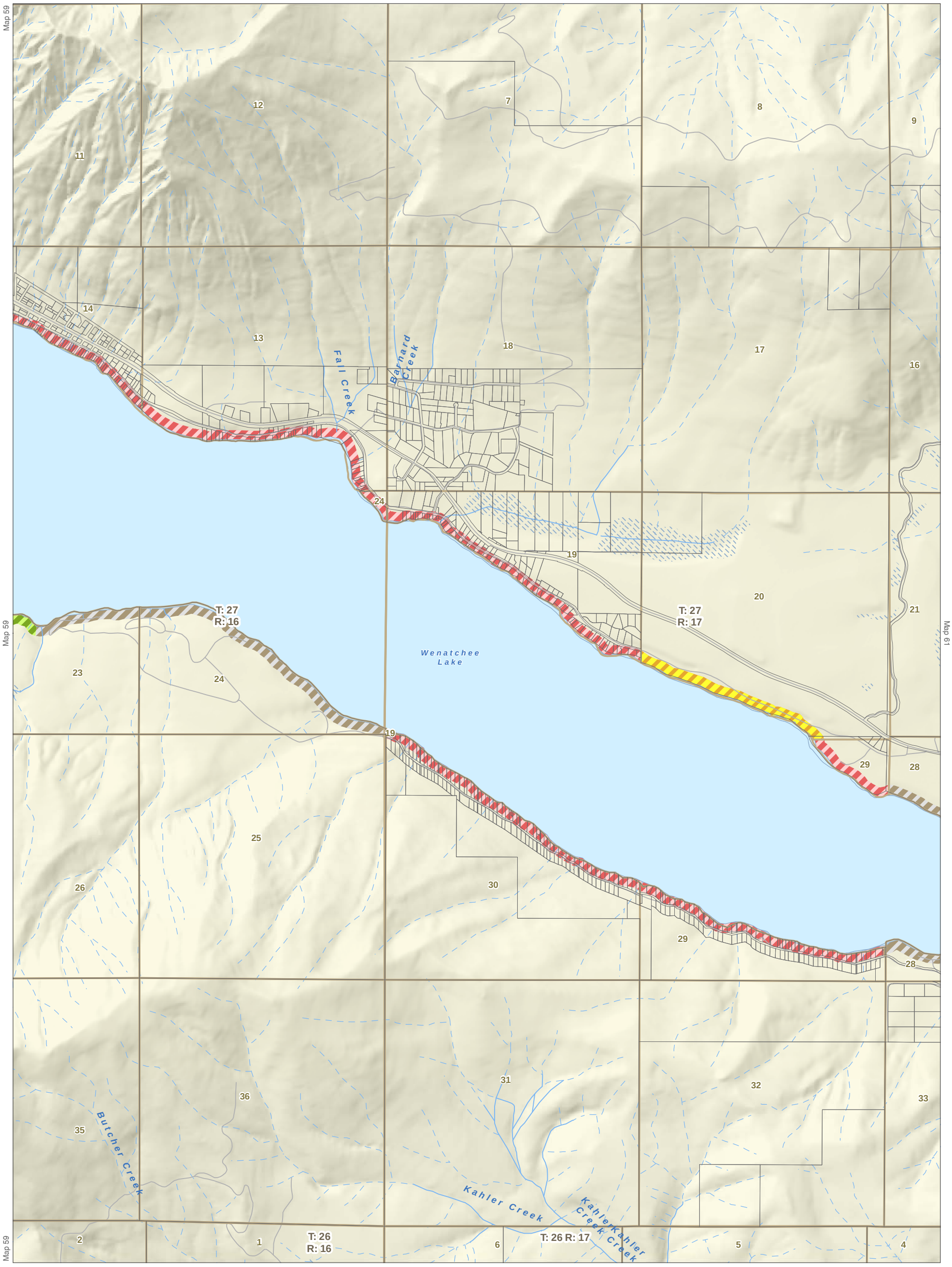
Map 60 of 102

Map 59

Map 61

Map 59

Map 59



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 61 of 102

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

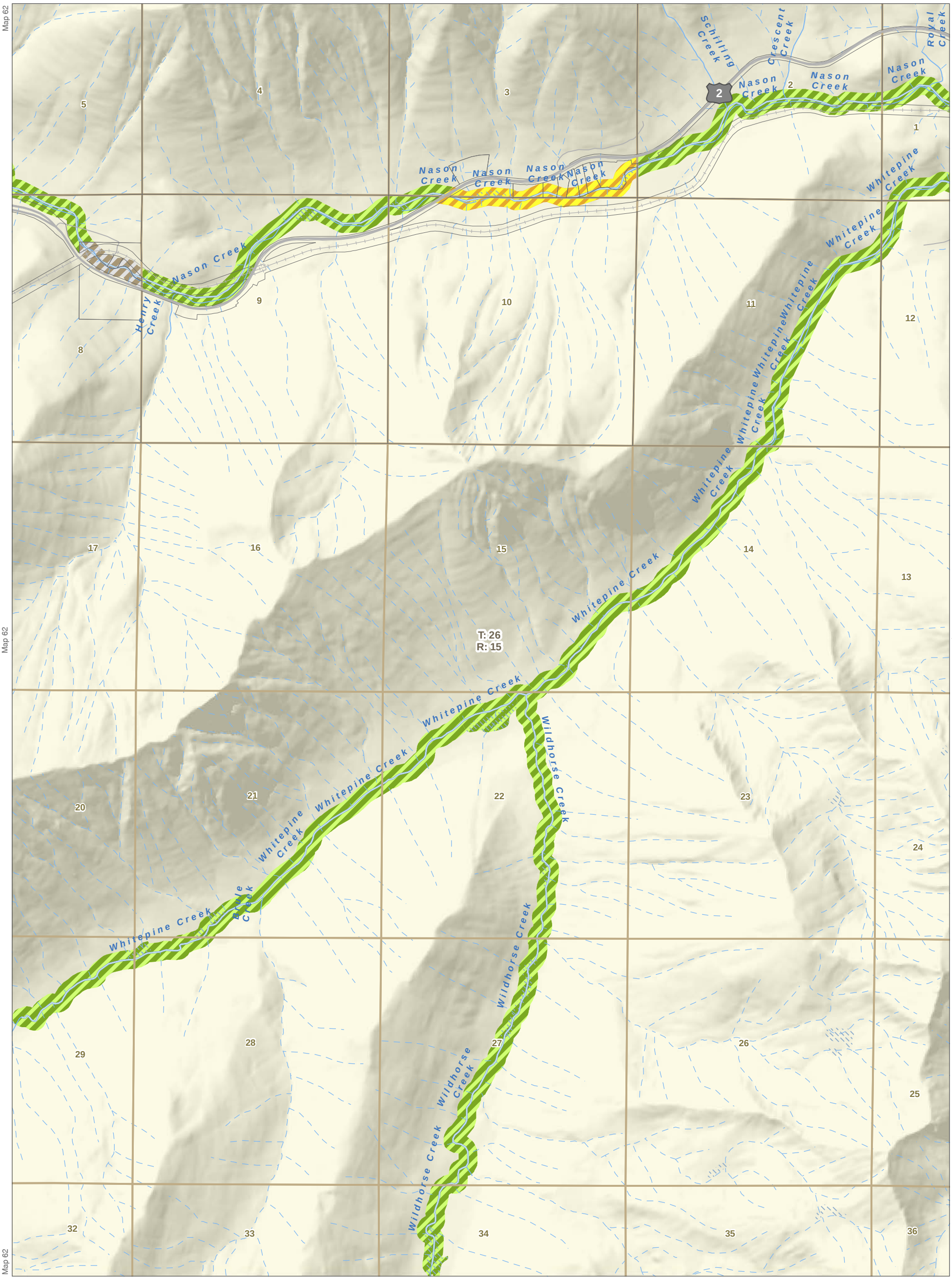
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 63 of 102

Map 62


Schilling Creek
Crescent Creek
Royal Creek
Nason Creek
Whitepine Creek
Henry Creek
Whitepine Whitepine Creek
Creek
Whitepine Creek
Whitepine Creek
Whitepine

Chelan County SMP Designations

Map 64 of 102

Map 65

Royal Creek
Royal Creek
Nason Creek
Whitepine Creek
Nason Creek
Nason Creek
Gill Creek
Loch Eileen Lake
Roaring Creek
Roaring Creek
Roaring Creek
Roaring Creek
Roaring Creek
Chiwaukum Creek
Chiwaukum Lake
Chiwaukum Creek
Chiwaukum Creek
Chiwaukum Creek
Chiwaukum Creek
Glacier Creek
Glacier Creek
Larch Lake

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

T: 26 R: 15
T: 26 R: 16

Map 63
Map 65

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 65 of 102

Map 60

Map 64

Map 66

Map 60

Gill Creek
Roaring Creek
Roaring Creek Rd
Coulter Creek
Butcher Creek
Roaring Creek
Coulter Creek
Roaring Creek
Roaring Creek
Roaring Creek
Roaring Creek
Coulter Creek
Thomson Creek
Chiwaukum Creek
Chiwaukum Creek
Chiwaukum Creek

T: 26 R: 16
T: 26 R: 17

1 2 3 4 6 7 9 10 11 12 13 14 15 16 18 19 21 22 23 24 25 26 27 28 30 31 33 34 35 36

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 66 of 102

Map 60 (top) | Map 61 (right) | Map 65 (left) | Map 67 (right) | Map 60 (bottom) | Map 60 (bottom) | Map 60 (bottom-left) | Map 61 (bottom-right)

Kahler Creek
Nason Creek
Skinney Creek
Thomson Creek
Chiwaukum Creek
T: 26 R: 16
T: 26 R: 17
207
2

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 66 | Map 47 | Map 47

Hegler Creek

Beaver Creek

Beaver Creek

Beaver Creek

Beaver Creek

T: 26 R: 17

T: 26 R: 18

Little Chumstick Creek

Wenatchee River

Chumstick Creek

Map 66 | Map 47

Map 66

Map 47

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 68 of 102

Map 64 | Map 65 | Map 65

T: 26 R: 16

T: 25 R: 16

Chiwaukum Creek
Chiwaukum Creek
Chiwaukum Creek
Chiwaukum Creek
Chiwaukum Creek
Chiwaukum Creek
Glacier Creek
Glacier Creek
Glacier Creek
Glacier Creek
Glacier Creek
South Fork Chiwaukum Creek
South Fork Chiwaukum Creek
South Fork Chiwaukum Creek
South Fork Chiwaukum Creek
South Fork Chiwaukum Creek
South Fork Chiwaukum Creek, S F
Painter Creek
Painter Creek
Painter Creek
Painter Creek
Painter Creek
Painter Creek
Painter Creek
Painter Creek
Painter Creek
Painter Creek
Index Creek
Index Creek
Index Creek
Index Creek
Index Creek
Index Creek
Index Creek
Battle Canyon Creek
Lake Augusta
Fall Creek
Cabin Creek

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels

- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams

- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 69 of 102

Map 66 | Map 67

Chiwaukum Creek

Wenatchee River

T: 25 R: 17

Map 66 | Map 67

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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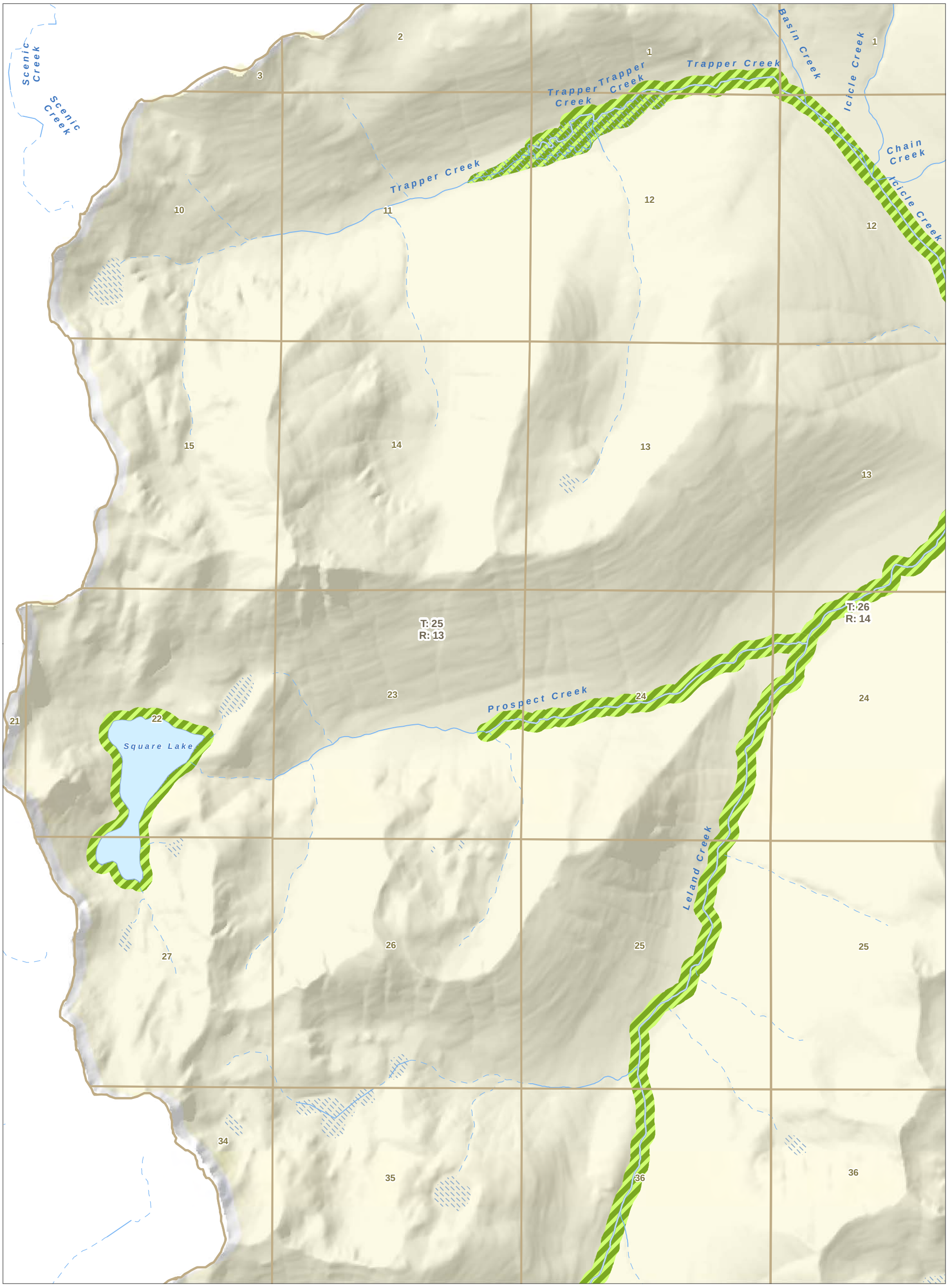
October 12, 2017
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 70 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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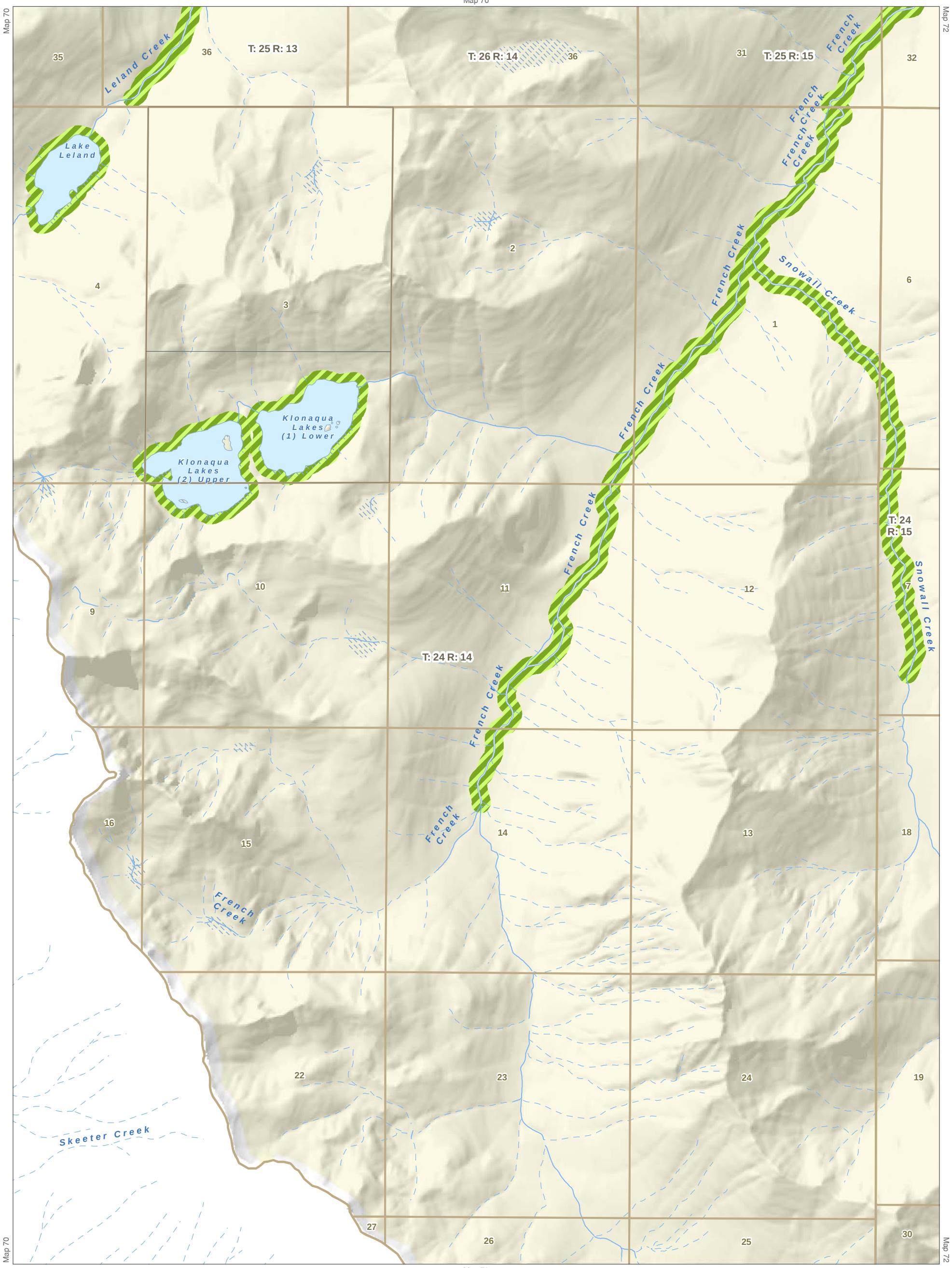
Map 70

Map 70

Map 72



Map 70

Map 70

Map 72

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 70

Map 74

Leland Creek

Icicle Creek

Quitlin Creek

Doughgod Creek

Frosty Creek

French Creek

French Creek

French Creek

French Creek

Snowall Creek

T: 26 R: 14

T: 25 R: 15

T: 24 R: 14

T: 24 R: 15

12 7 8 9 10

18 17 16 15

13

19 20 21 22

24

30 29 28 27

25

31 32 33 34

36

2 1 6 5 4

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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October 12, 2017

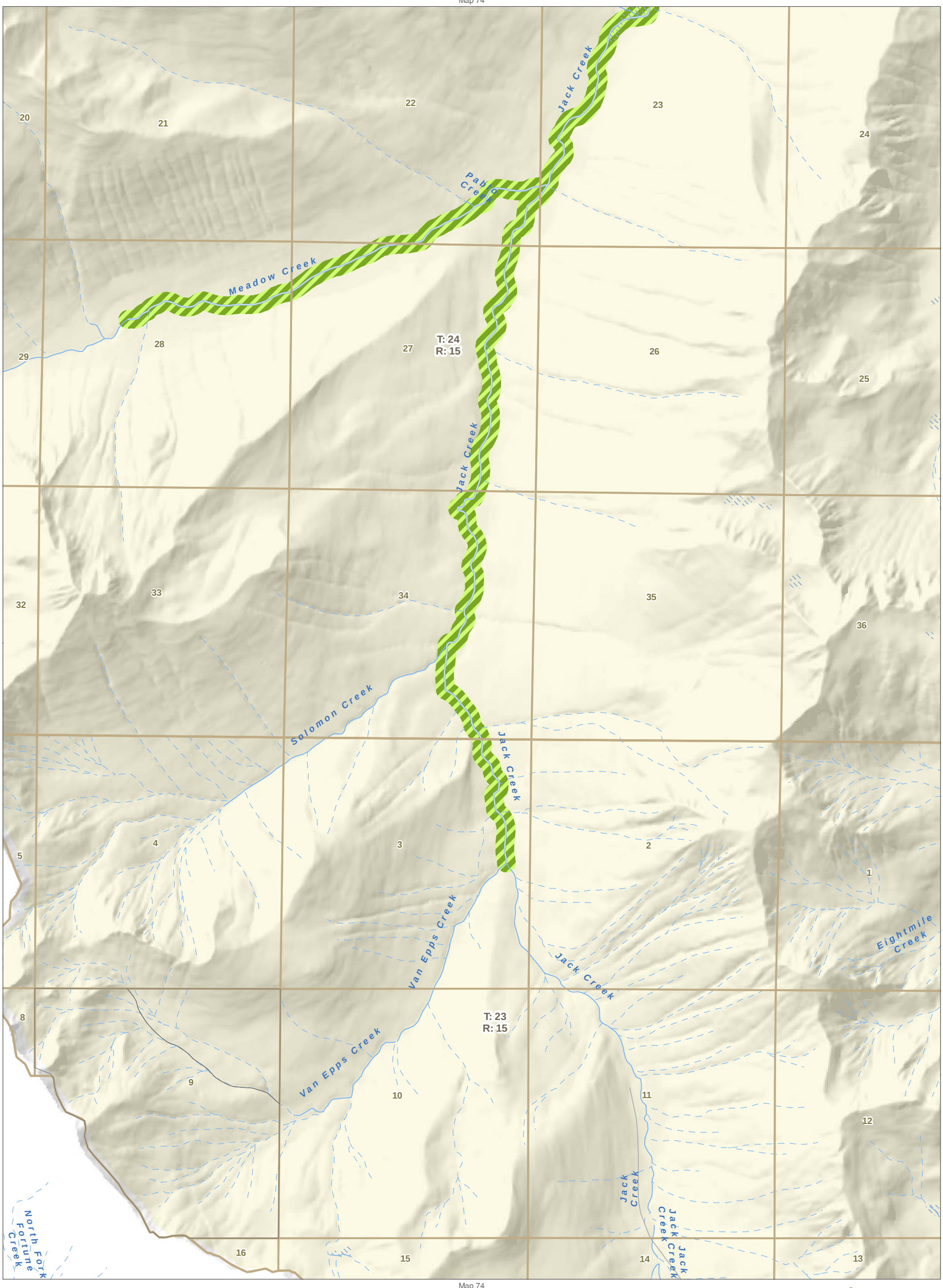
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 73 of 102

Map 74



Map 74

Map 74

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 74 of 102

Map 72

Map 75

Map 72

Icicle Creek
Spanish Camp Creek
French Creek
Grindstone Creek
Icicle Creek
Boggy Creek
Trout Creek
Chatter Creek
Black Pine Creek
Jack Creek
Trout Creek
Trout Creek
Trout Creek
Dunn Creek
Trout Creek

22 23 24 19
26 25 30
27
T: 25 R: 15
T: 25 R: 16
35 36 31
34
4 3 2 1 6
T: 24 R: 15
T: 24 R: 16
10 11 12
9
7
16 15 14 13 18

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Townships
- Sections
- Highways
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- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 75 of 102

Map 74 | Map 68 | Map 68

30 29 28 27 26

31 32 33 34 35

T: 25
R: 16

Hoxsey Creek

Big Slide Creek

Chatter Creek

Icicle Creek

Doctor Creek

Ida Creek

Jay Creek

Johnny Creek

Victoria Creek

Map 74 | Map 77

6 5 4 3 2

7 8 9 10 11

T: 24
R: 16

Bob Creek

Lake Victoria

18 17 16 15 14

19 20 21 22 23

Map 74 | Map 68

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT

Area of Interest in Red

Chelan County SMP Designations

Map 76 of 102

Map 75

Map 77

Trout Creek
Pioneer Creek
Eightmile Creek
Eightmile Lake
Mountaineer Creek
Stuart Lake
Colchuck Lake
T: 24 R: 16
T: 23 R: 16
19 20 21 22 23
30 29 28 27 26
31 32 33 34 35
6 5 4 3 2
7 8 9 10 11
18 17 16 15 14

Map 75

Map 77

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 77 of 102

Map 75

Johnny Creek
Mac Creek
Icicle Creek
Icicle Creek
Icicle Creek
Icicle Creek South Fork
Icicle Creek
Icicle Creek
Slide Creek
Power Creek
Eightmile Creek
Eightmile Creek
Eightmile Creek
Eightmile Creek
Rat Creek
Rat Creek
Icicle Creek
Icicle Creek
Icicle Creek

1 2 5 6 7 8 11 12 13 14 17 18 19 20 23 24 25 26 29 30 31 32 35 36

T: 24 R: 16
T: 24 R: 17

Map 75
Map 78
Map 75

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
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- Railroads

0 0.25 0.5
Miles

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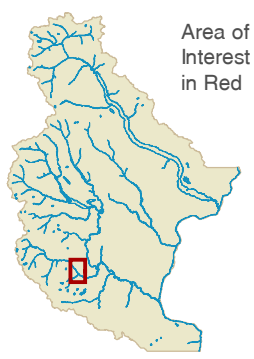
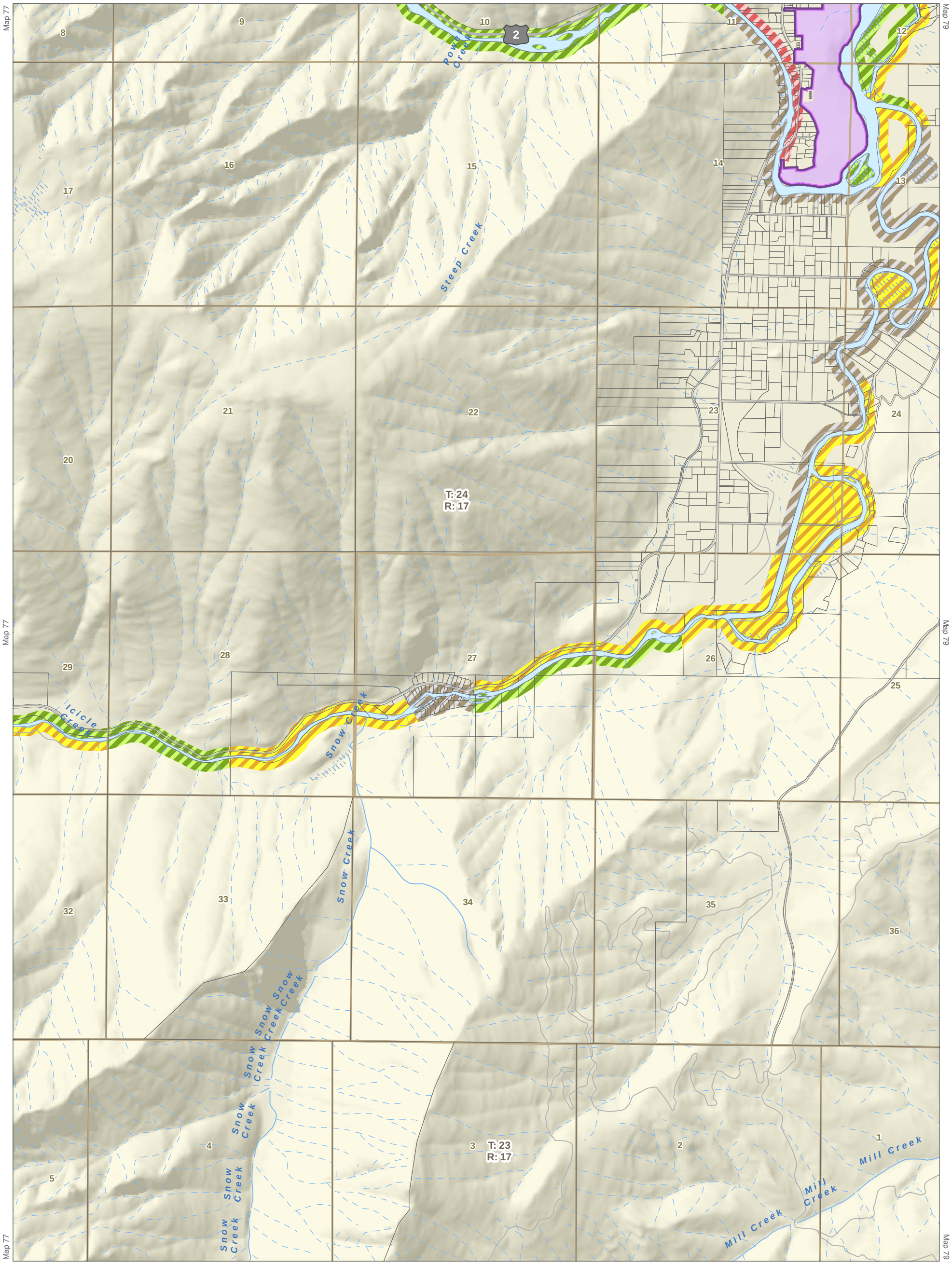
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 78 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
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- Sections
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0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 79 of 102

Map 80

Map 80

T: 25 R: 17

36

31

T: 25 R: 18

32

33

Chumstick Creek

Chumstick Creek

Chumstick Creek

1

2

6

5

4

12

7

8

11

9

Map 78

T: 24 R: 17

13

18

T: 24 R: 18

17

16

2

14

24

19

20

23

21

Icicle Creek

97

Peshastin Creek

Peshastin Creek

26

25

30

29

28

Map 85

Map 80

Map 80

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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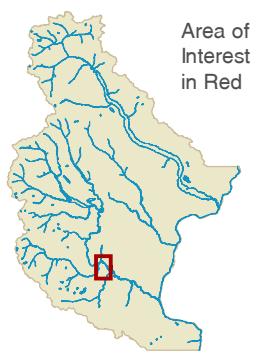
October 12, 2017

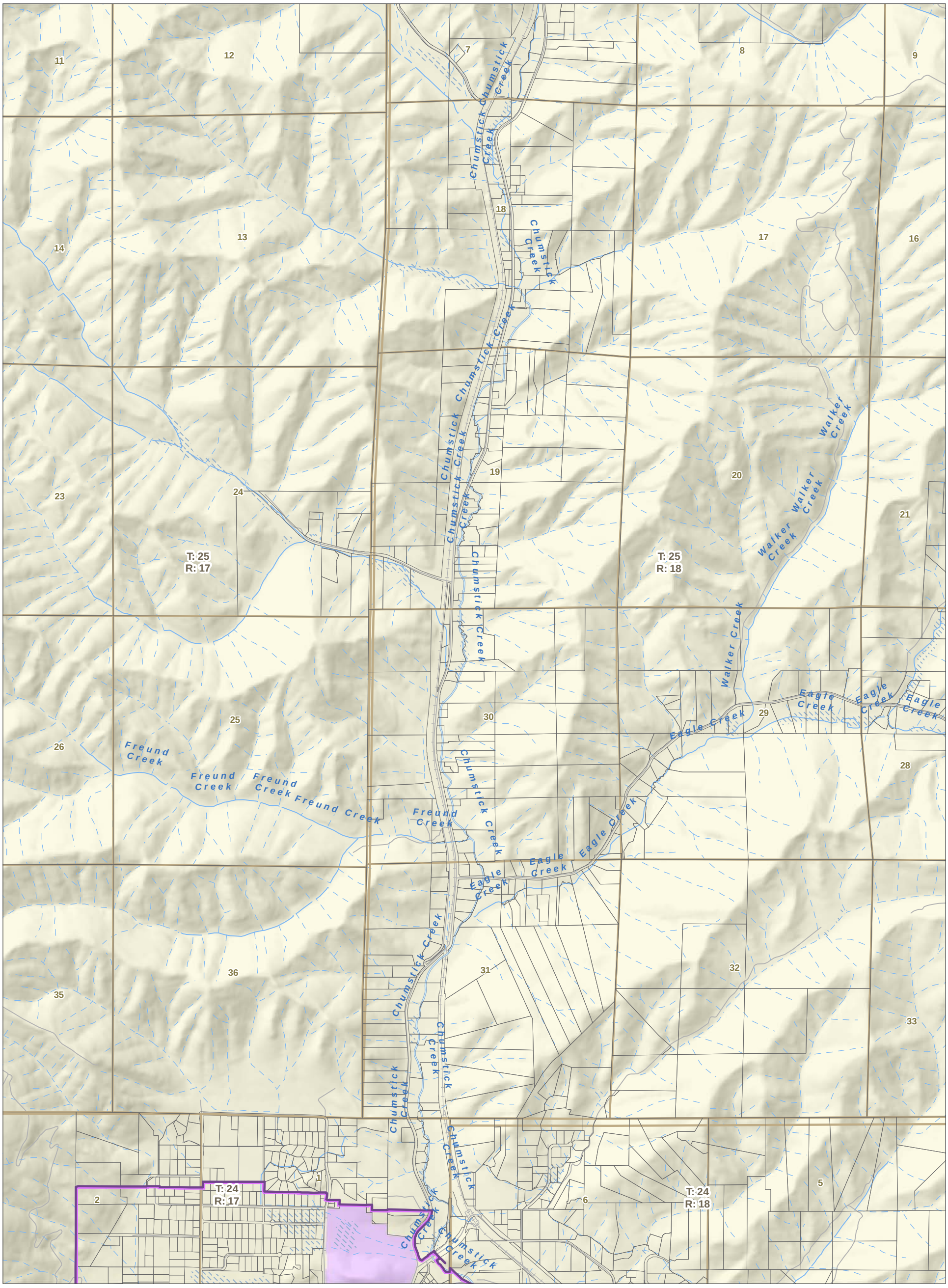
Data: Chelan County, USFWS, WSDOT



Area of Interest in Red

Chelan County SMP Designations

Map 80 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 81 of 102

Map 76 | Map 82

Mountaineer Creek
20 | 21 | 22 | 23
29 | 28 | 27 | 26
T: 23 R: 16
Crystal Creek
Porcupine Creek
Ingalls Creek
Ingalls Creek
Ingalls Creek
Fourth Creek
32 | 33 | 34 | 35
Hardscrable Creek
Hardscrable Creek
6 | 5 | 4 | 3 | 2
T: 22 R: 16
7 | 8 | 8 | 9
Beverly Creek
Bean Creek
Standup Creek

Map 76 | Map 82

Map 76

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 82 of 102

Map 77 | Map 78 | Map 83

T: 24 R: 16 | T: 23 R: 16 | T: 23 R: 17

Unnamed Lake 1 | Shield Lake | Perfection Lake | Nada Lake | Snow lakes-lower | Snow lake-higher

Rat Creek | Toketie Creek | Snow Creek | Crystal Creek | Ingalls Creek | Falls Creek

1 2 4 5 6 7 8 9 11 12 13 14 16 17 18 19 20 21 23 24 25 26 28 29 30 31 32 33 35 36

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 83 of 102

Map 78 | Map 82 | Map 84

Snow Creek | Allen Creek | Peshastin Creek | Hansel Creek | Ingalls Creek | Negro Creek | Ruby Creek

T: 23 R: 17 | T: 23 R: 18 | T: 22 R: 17

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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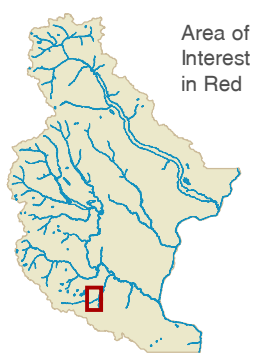
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 84 of 102

Map 79

Map 78

Map 85

Map 83

T: 24 R: 17

T: 24 R: 18

T: 23 R: 17

T: 23 R: 18

35 36 31 32 33

1 2 6 5 4

11 12 7 8 9

14 13 18 17 16

23 24 19 20 21

26 25 30 29 28

Mill Creek

Peshastin Creek

Larsen Creek

Allen Creek

Camas Creek

Hansel Creek

Ingalls Creek

97

Map 79

Map 78

Map 85

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

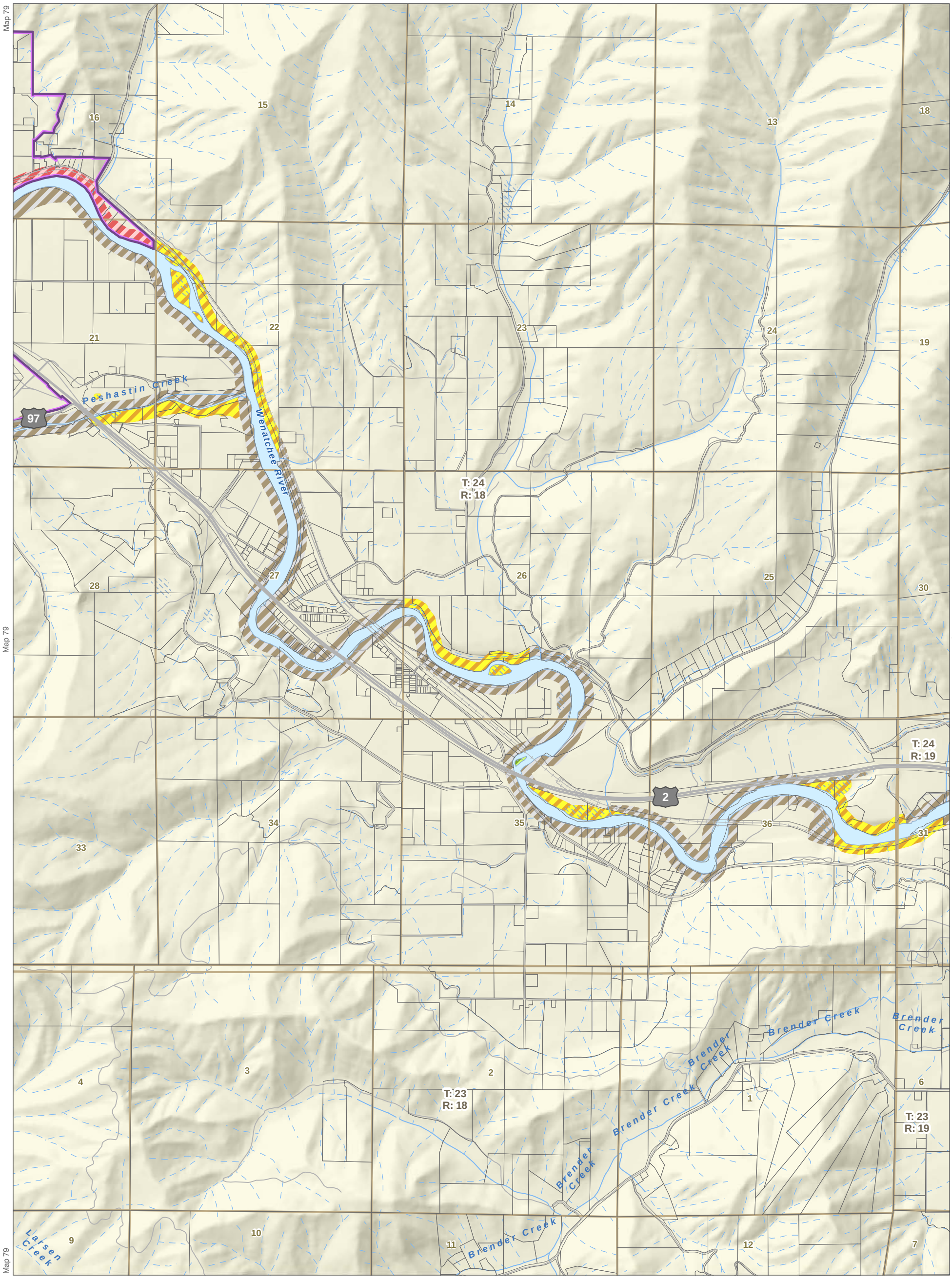
Map 85 of 102

Map 79

Map 79

Map 86

Map 79



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT

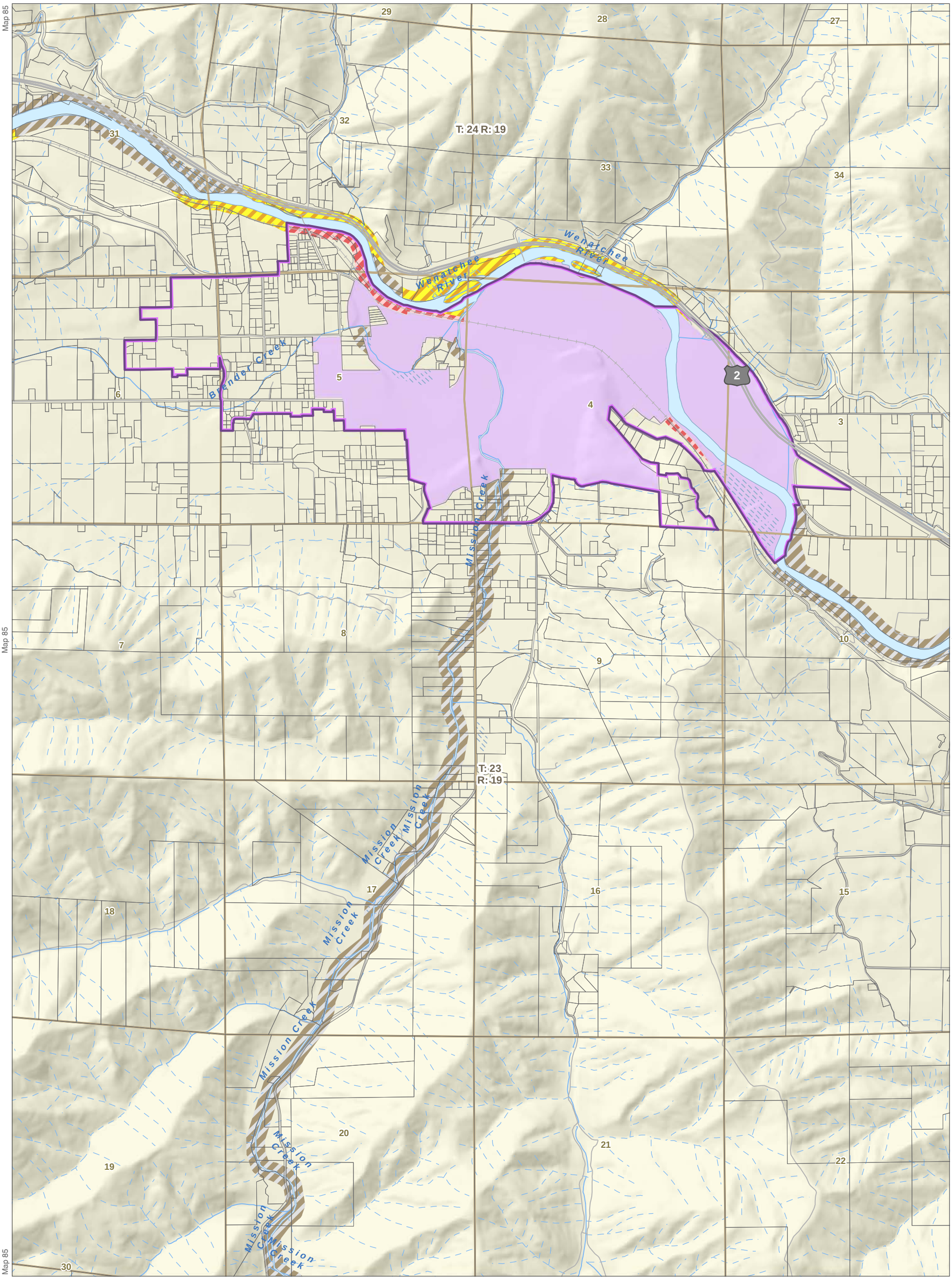


Area of Interest in Red

Chelan County SMP Designations

Map 86 of 102

Map 85



Map 85

Map 88

Map 85

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels

- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams

- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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October 12, 2017

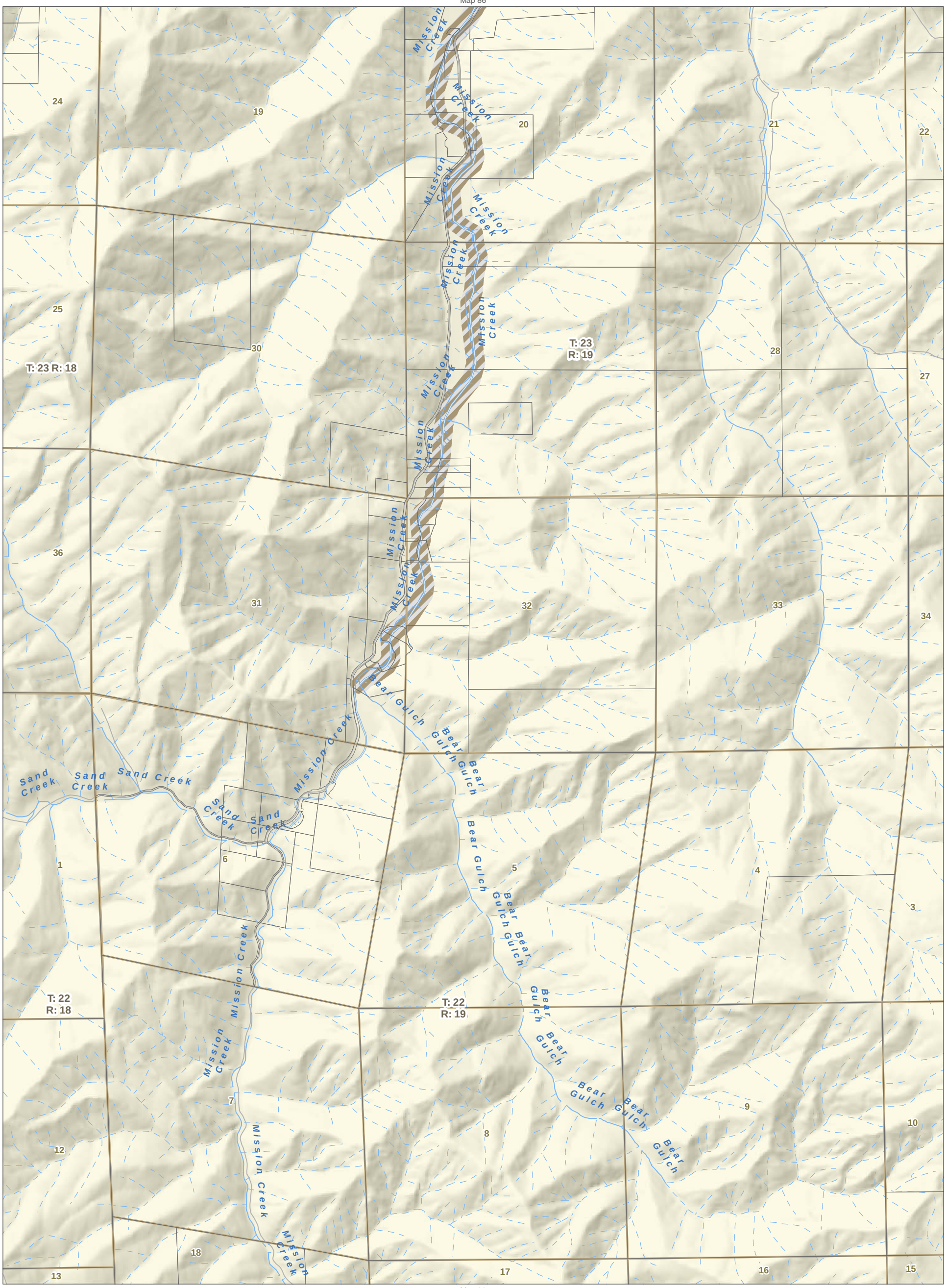
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 87 of 102

Map 86



Map 86

Map 86

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

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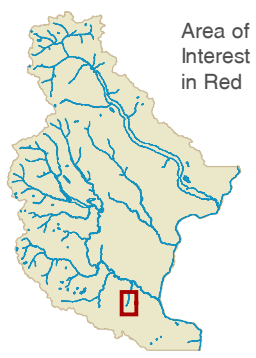
October 12, 2017

Data: Chelan County, USFWS, WSDOT

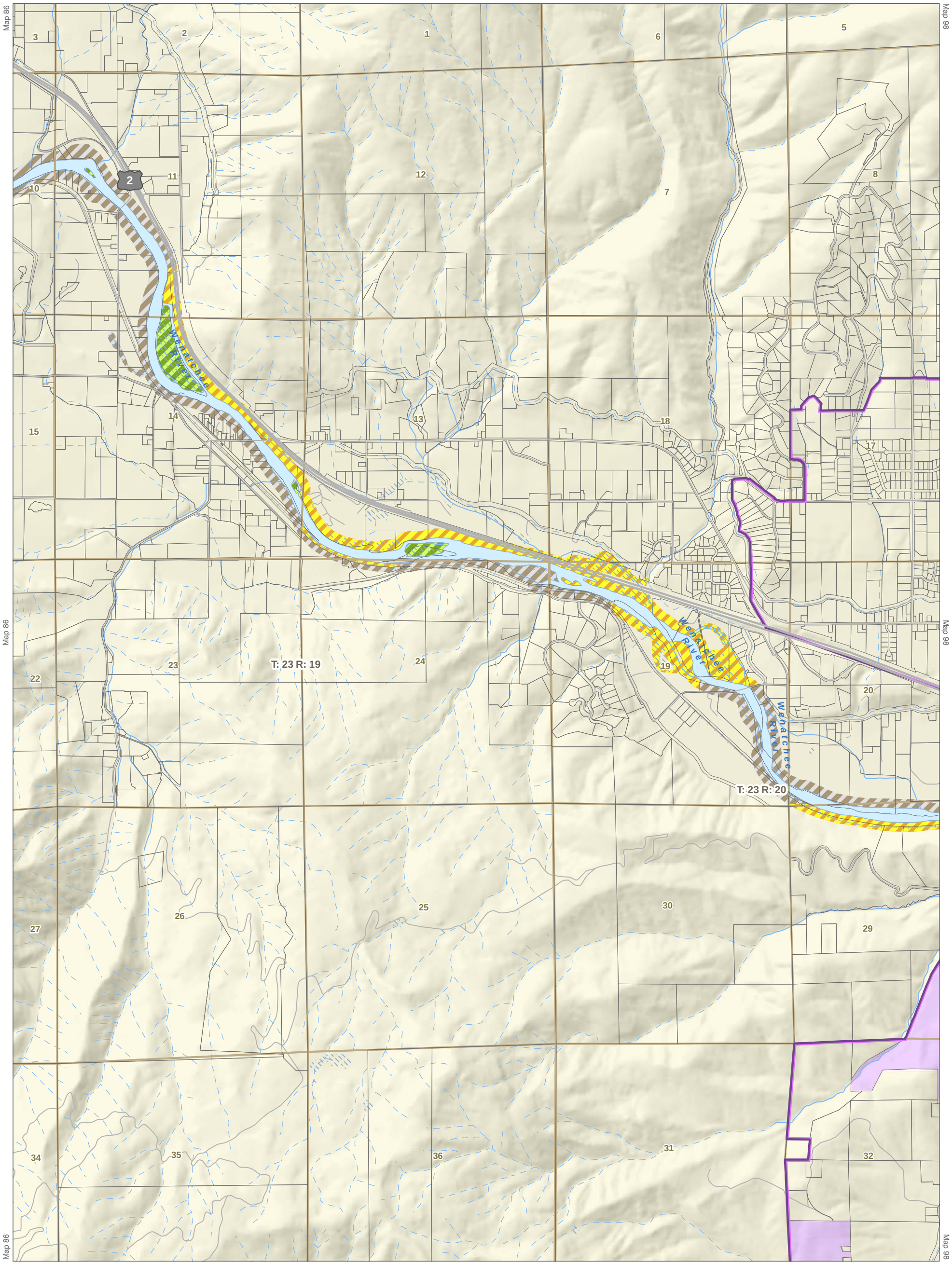


Chelan County SMP Designations

Map 88 of 102

Map 86

Map 98



Map 86

Map 98

Map 86

Map 98

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5

Miles

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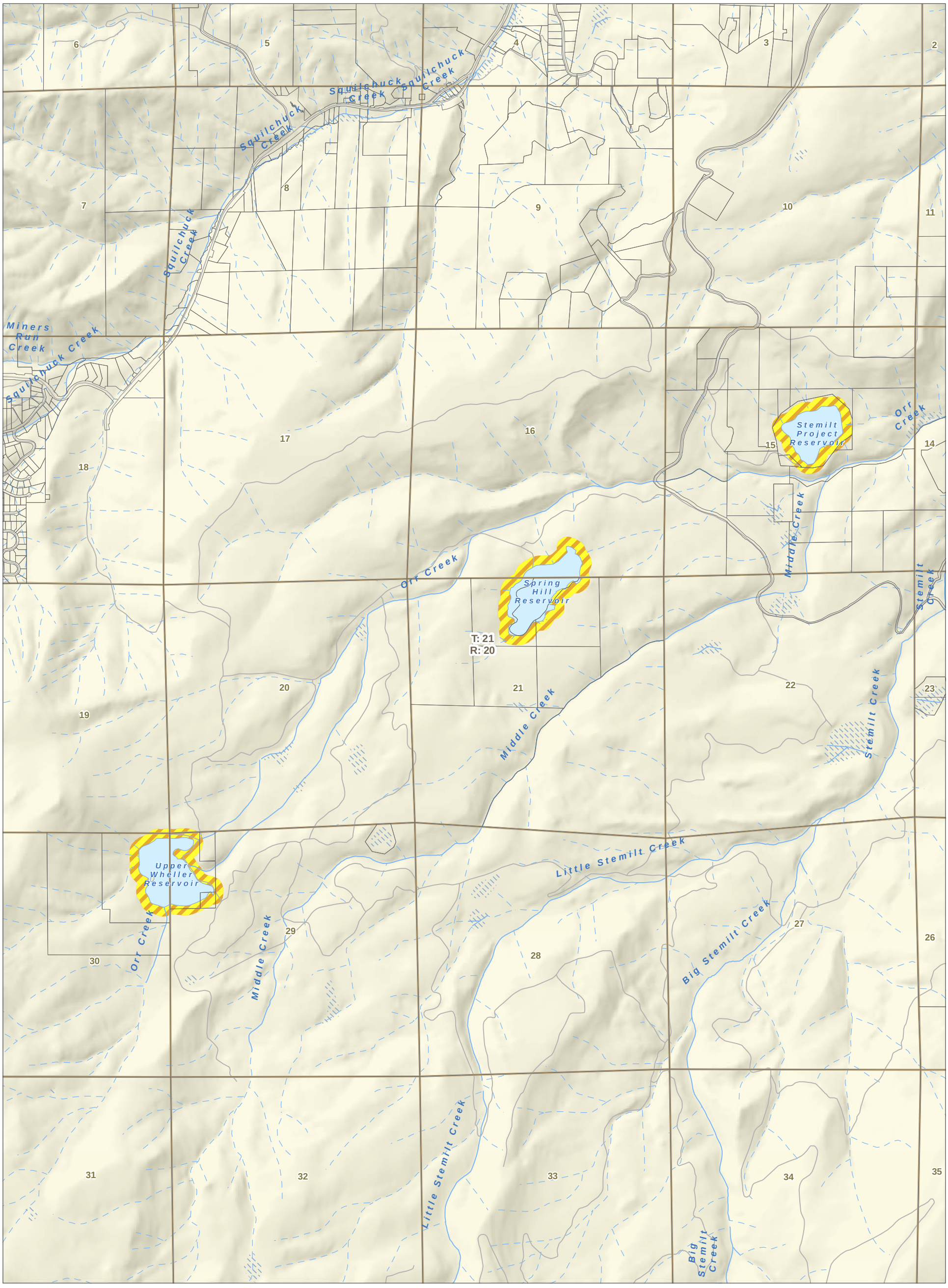
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 89 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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October 12, 2017

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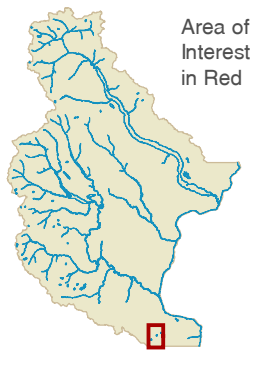
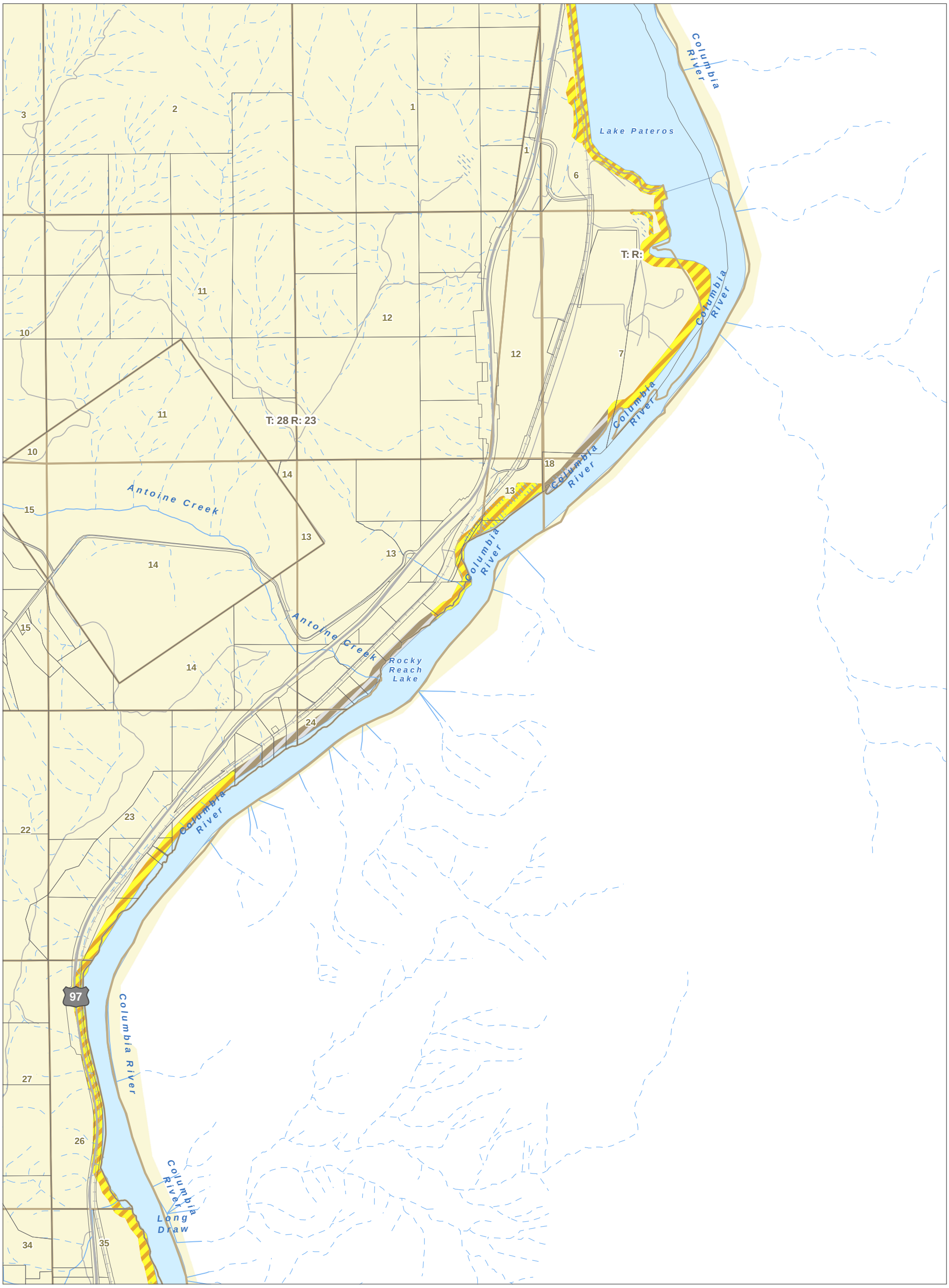


Chelan County SMP Designations

Map 90 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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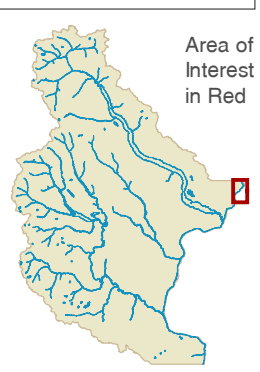

Chelan County SMP Designations

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Map 90

Map 30

Map 90

T: 28 R: 23

T: 27 R: 23

Columbia River

Sheep Trough Draw

Corral Creek

Rocky Reach Lake

Chelan River

SLT 97

97

150

31 32 33 34 35 6 5 4 3 2 10 9 7 8 16 18 17 19 20 29 30

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
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- Sections
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- Railroads

0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 92 of 102

Map 30 (top) | Map 91 (right) | Map 93 (left) | Map 30 (bottom) | Map 30 (bottom) | Map 91 (bottom)

26 | 25 | 30 | 29 | 30 | 29 | 32 | 32 | 27 | T: 27 R: 22 | T: 27 R: 23 | 35 | 36 | 31 | 34 | 1 | 6 | 2 | T: 26 R: 22 | T: 26 R: 23 | 3 | 97

Rocky Reach Lake

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5 Miles

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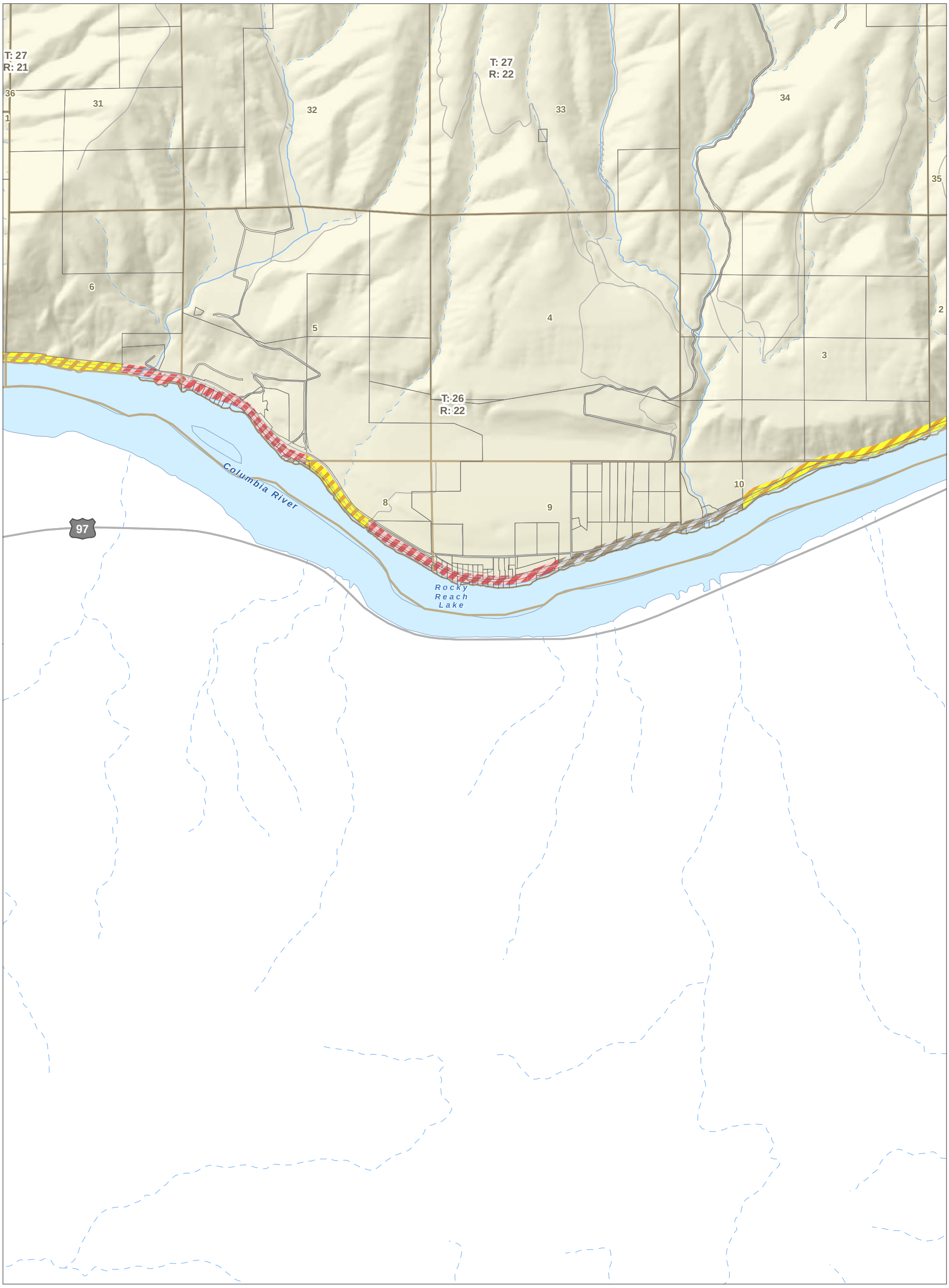
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 93 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
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- Railroads

0 0.25 0.5
Miles

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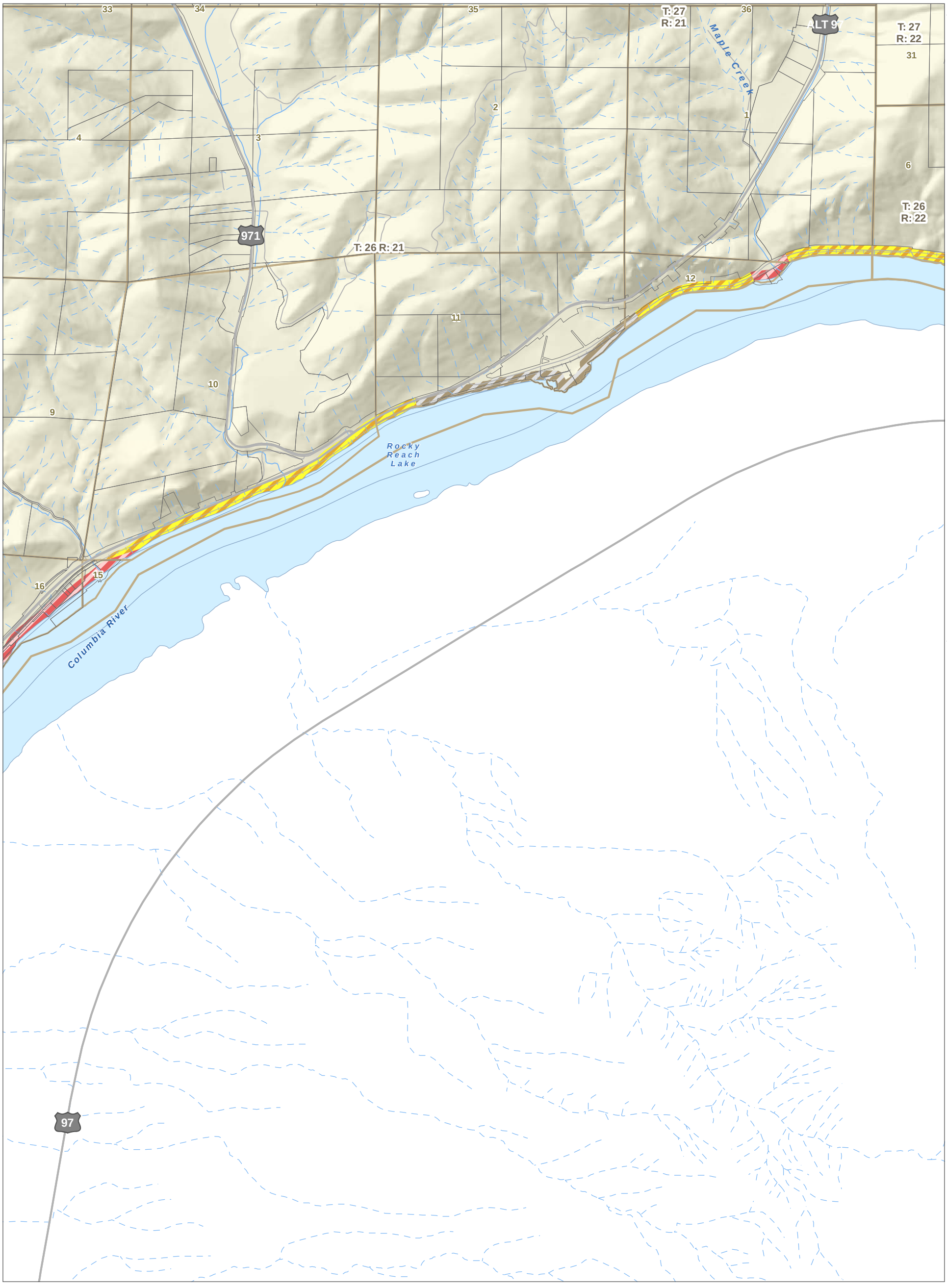
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 94 of 102



Chelan County Shoreline Environment Designations

- Natural
- Conservancy
- Rural
- Urban
- NWI Wetlands
- Lakes & River Channels
- Parcels
- SMA Streams
- Fish-Bearing Streams
- Non Fish-Bearing Streams
- Townships
- Sections
- Highways
- Roads
- Railroads

0 0.25 0.5
Miles

NOTE: Shoreline environment designations depicted on this map are approximate. They have not been surveyed and are intended for planning purposes only. Additional site specific evaluations may be required to confirm shoreline jurisdiction boundaries pursuant to the Chelan County Shoreline Master Program.

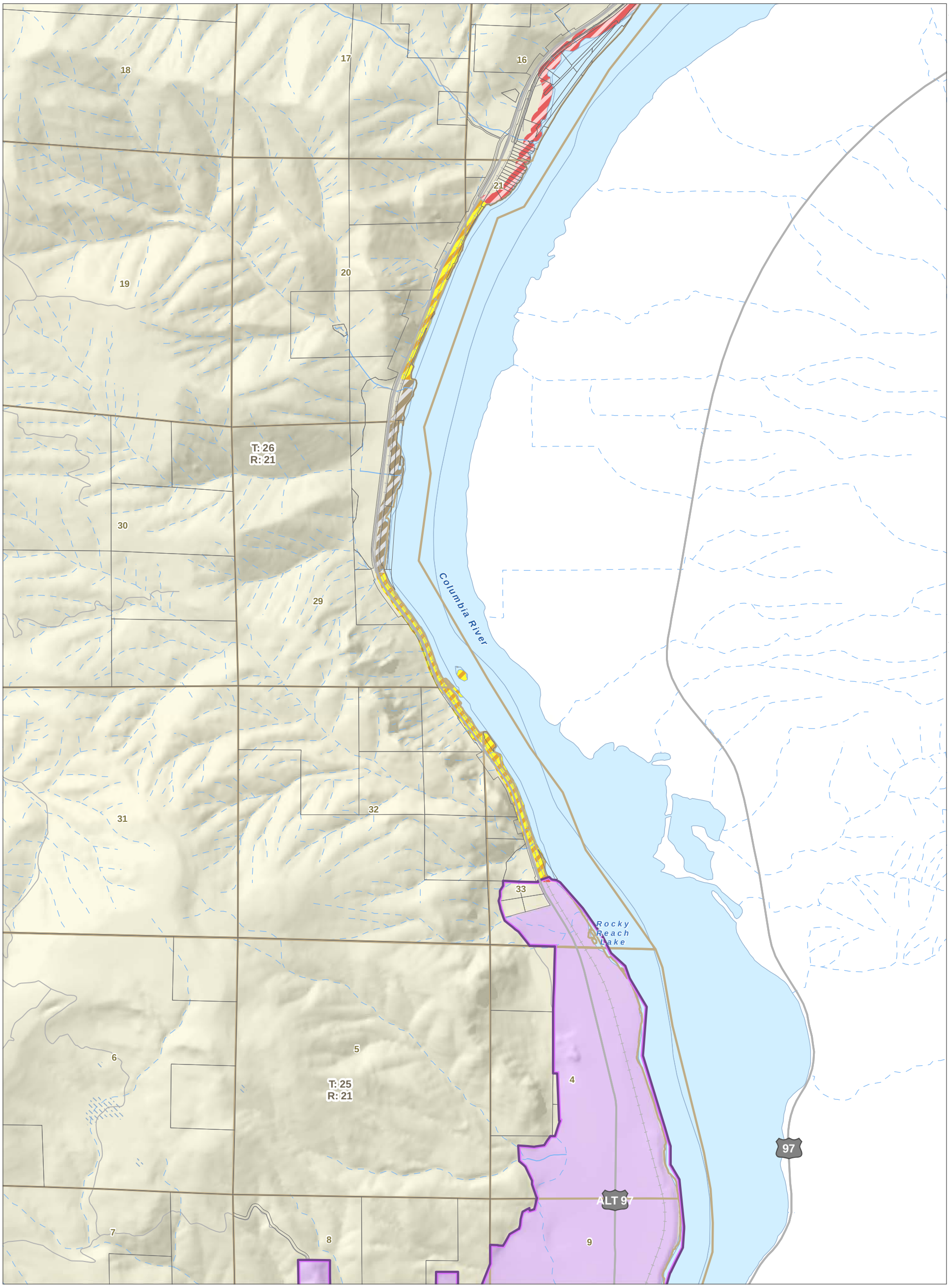
October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 95 of 102



Chelan County Shoreline Environment Designations

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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Map 40 | Map 95 | Map 95

Entiat River
Rocky Reach Lake
Columbia River
97
2
ALT 97
T: 25 R: 21
T: 25 R: 20
T: 24 R: 20
T: 24 R: 21

Map 40 | Map 95 | Map 95

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
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0 0.25 0.5 Miles

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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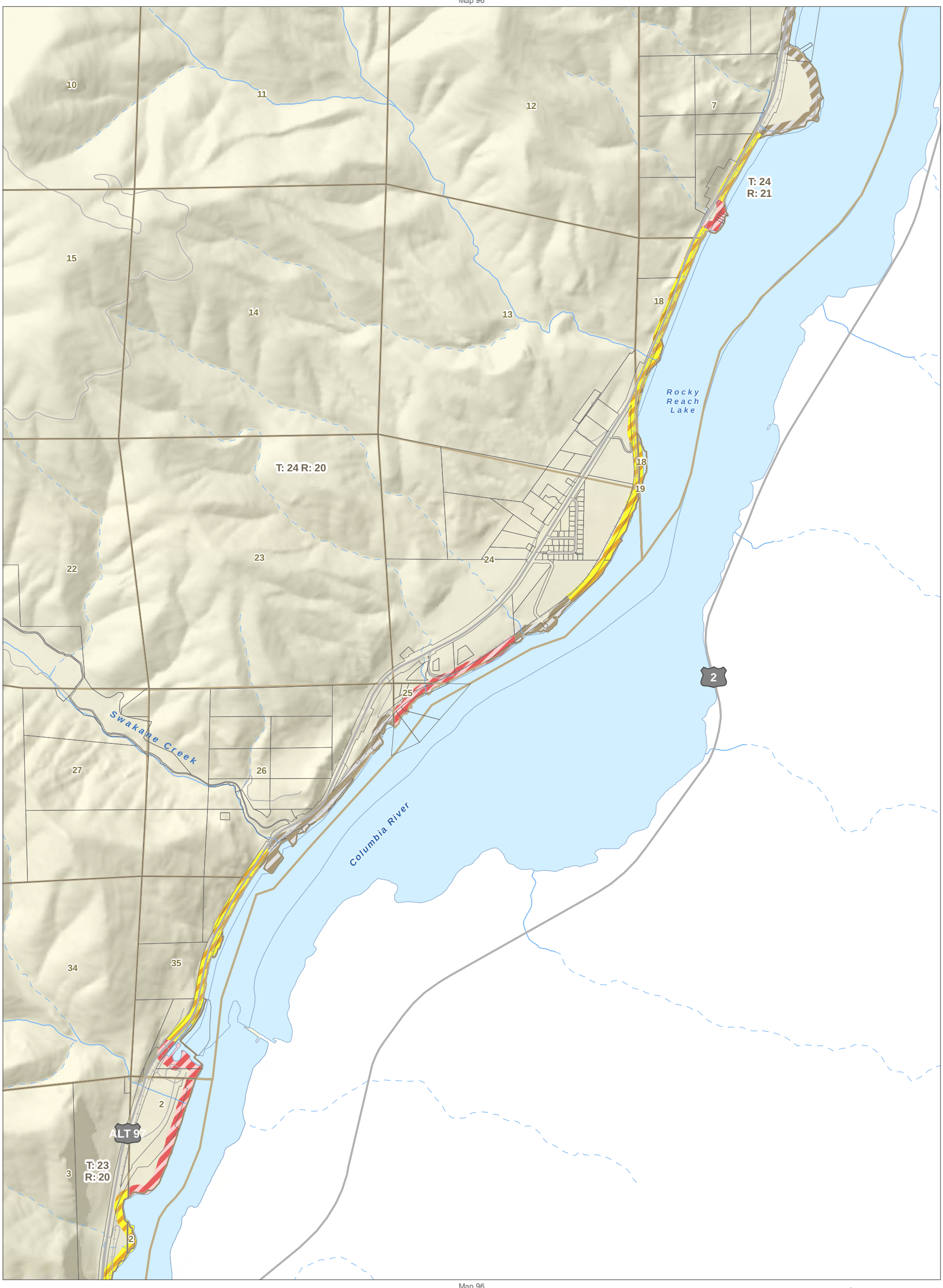
Map 96



Map 96

Map 96

Chelan County Shoreline Environment Designations

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October 12, 2017

Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

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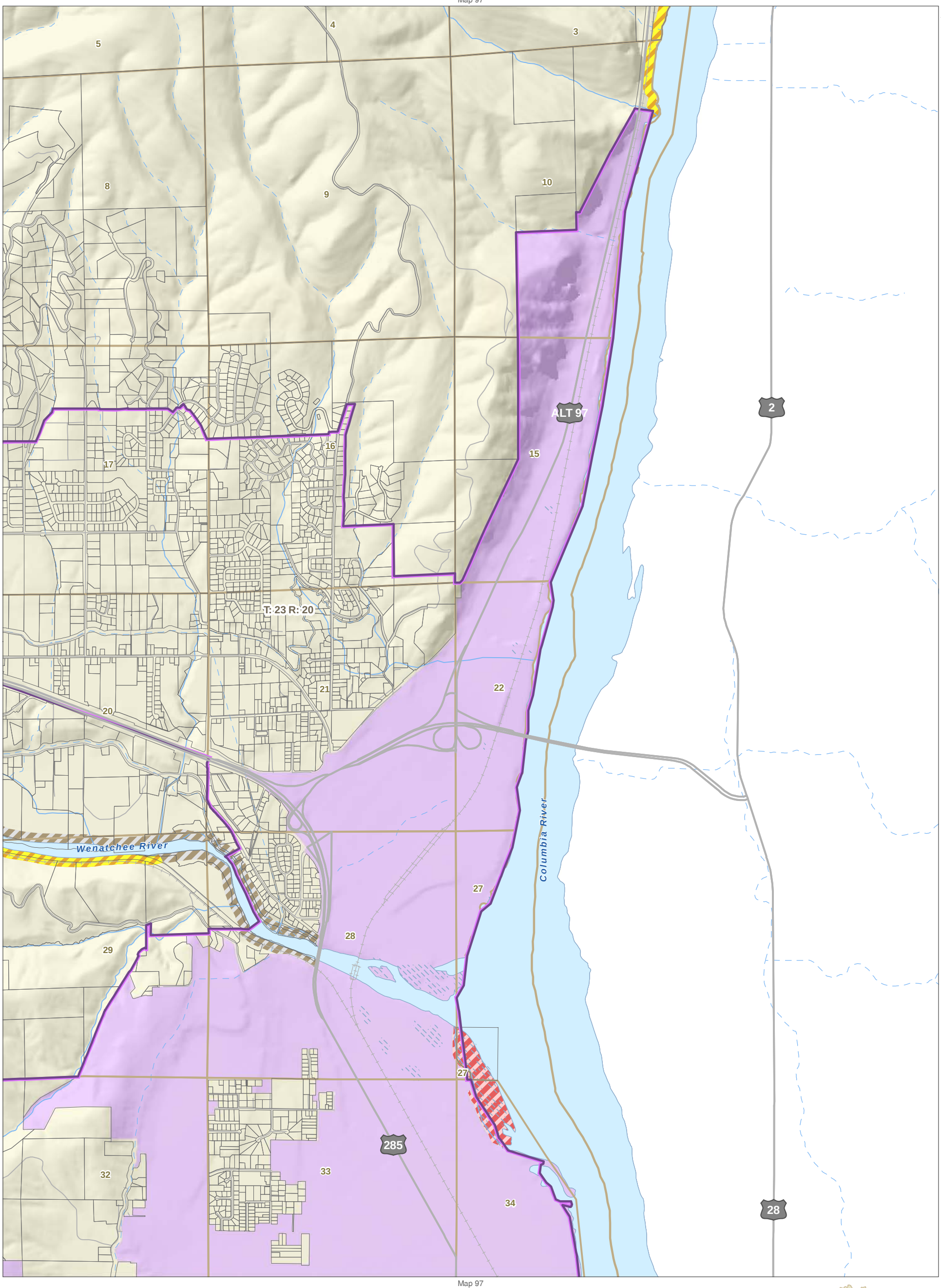
Map 97



Map 97

Chelan County Shoreline Environment Designations

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October 12, 2017

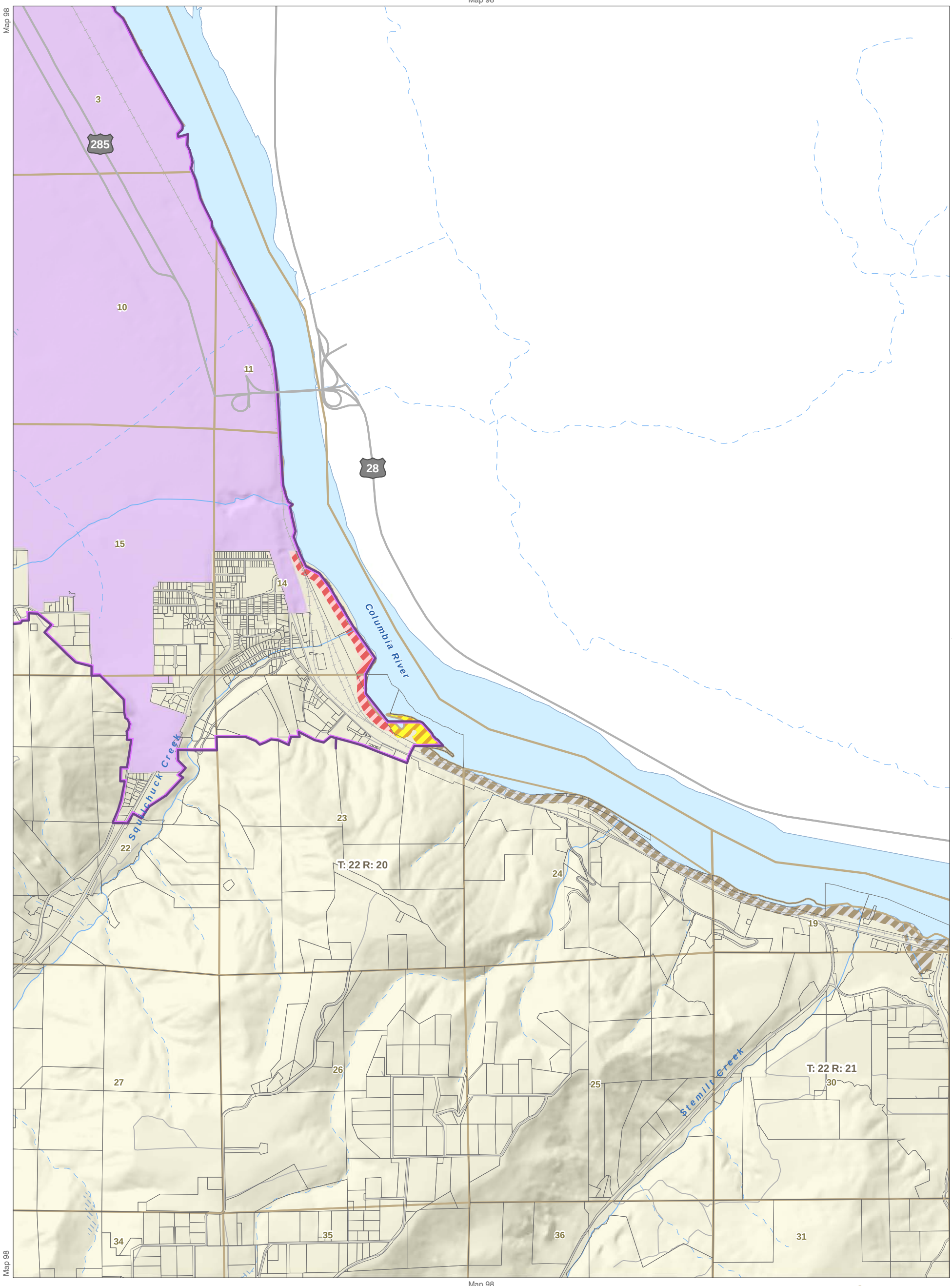
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 99 of 102

Map 98



Map 98

Chelan County Shoreline Environment Designations

- Natural
- Conservancy
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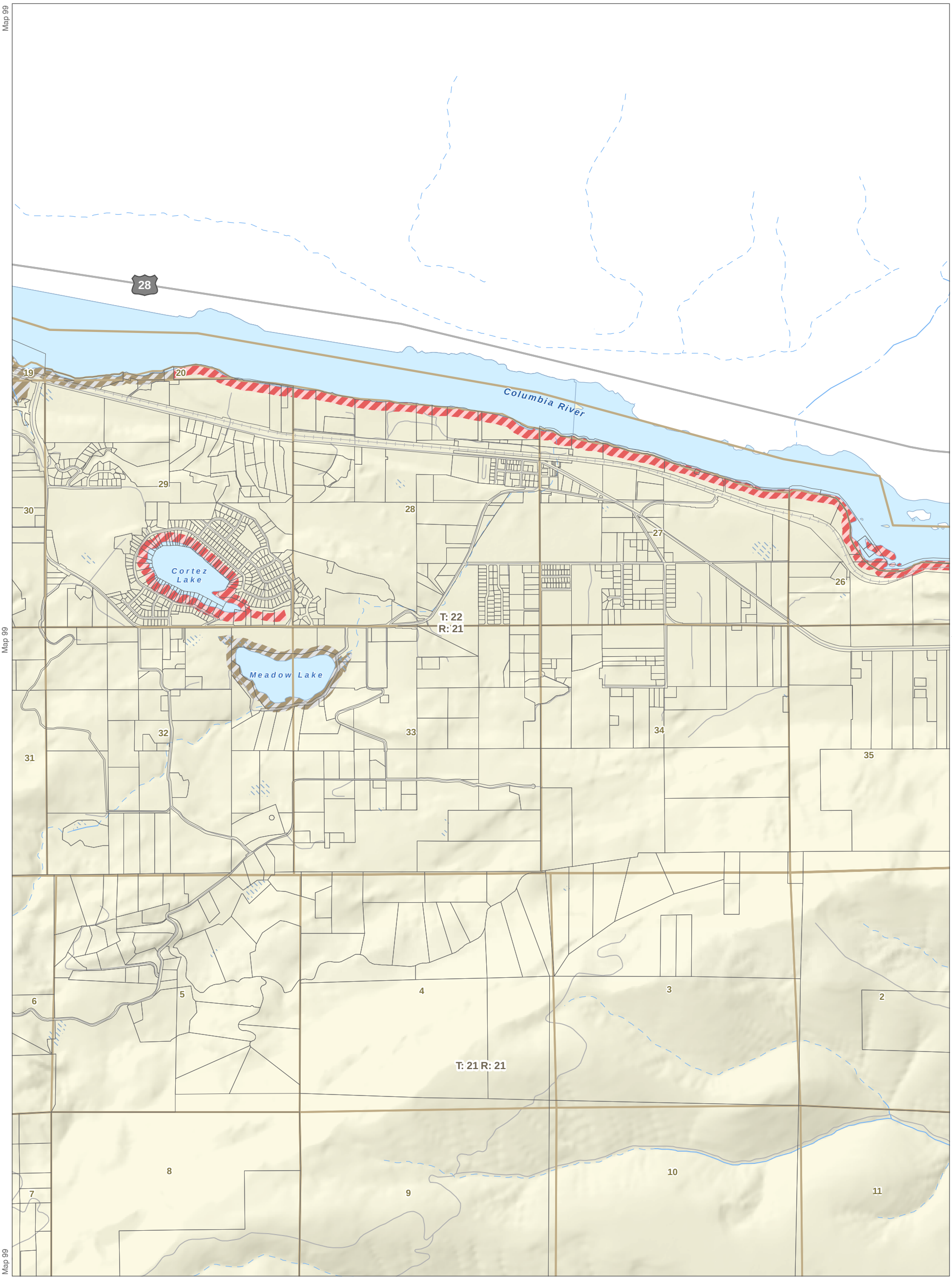
Data: Chelan County, USFWS, WSDOT



Chelan County SMP Designations

Map 100 of 102

Map 99



Map 99

Map 101

Map 99

Chelan County Shoreline Environment Designations

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October 12, 2017

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Chelan County SMP Designations

Map 101 of 102



Map 100

Chelan County Shoreline Environment Designations

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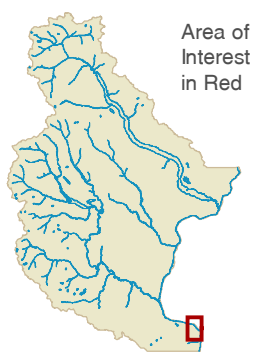

Chelan County SMP Designations

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Map 100 | Map 101

Wanapum Lake

Colockum Creek

Colockum Creek

T: 21 R: 21

T: 21
R: 22

1 2 4 5 6 7 8 9 11 12 13 14 16 17 18 19 20 21 23 24 25 26 28 28 29 30 31 32 35 36

Map 100 | Map 101

Chelan County Shoreline Environment Designations

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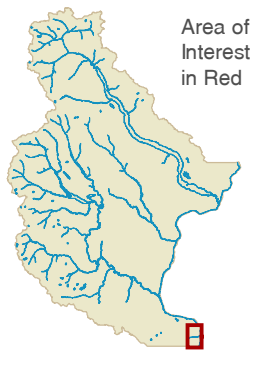

APPENDIX B: CRITICAL AREAS



Lake Chelan from Stehekin, unknown date

SECTION 1 PURPOSE AND OBJECTIVES 1
SECTION 2 ESTABLISHMENT OF CRITICAL AREAS 2
SECTION 3 INTERPRETATION OF DATA MAPS 2
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SECTION 6 CRITICAL AREAS & DEVELOPMENT STANDARDS 4
SECTION 7 WARNING AND DISCLAIMER OF LIABILITY 11

SECTION 1 PURPOSE AND OBJECTIVES

The regulations of this chapter are intended to protect critical areas, and satisfy the requirements of the Shoreline Management Act for critical areas protection as provided in WAC 173-26-221 and through the application of the best available science, as determined according to WAC 365-195-900 through 365-195-925 and in consultation with qualified professionals.

This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards.

SECTION 2 ESTABLISHMENT OF CRITICAL AREAS

2.1 List of Critical Areas

Critical areas include (A) Wetlands, (B) Critical aquifer recharge areas, (C) Fish and wildlife conservation areas, (D) Frequently flooded areas, and (E) Geologically hazardous areas, defined in Chapter 8 of the Shoreline Master Program (SMP).

All areas within shoreline jurisdiction meeting the definition of one or more critical areas are hereby designated critical areas and are subject to the provisions of this SMP.

2.2 Data Maps

Critical areas are hereby designated on a series of GIS data maps maintained by Chelan County Community Development. These maps contain the best available graphic depiction of critical areas and will be updated as reliable data becomes available. These maps are for information and illustrative purposes only and are not regulatory in nature.

The critical areas data maps are intended to alert the public of natural features/systems. The presence of a critical area on the data maps is sufficient foundation for the Administrator to require an analysis/report related to a proposed use or development.

SECTION 3 INTERPRETATION OF DATA MAPS

3.1 Interpretation of Data Maps

The Administrator of the Shoreline Master Program is hereby declared the Administrator of these regulations. An affected property owner or other party with standing has a right to appeal an Administrative Determination to the Hearing Examiner using the procedure for appeals found in Chapter 7 of this SMP.

The data maps are to be used as a general guide to the location and extent of critical areas. Critical areas indicated on the data maps are presumed to exist in the locations shown and these critical areas and any associated buffers are protected under the provisions of this chapter and all other applicable provisions of the SMP. The exact location of critical areas shall be determined by the applicant as a result of field investigations performed by qualified professionals using the standards and definitions found in this SMP. All development applications are required to show the boundary(s) of all critical areas and any applicable buffers on a scaled drawing prior to the development application being considered “complete” for processing purposes.

SECTION 4 EFFECT OF DATA MAPS: APPLICABILITY

4.1 Reference maps and inventories

The conclusion by the Administrator that a parcel of land, or a part of parcel of land, proposed for development is within the boundary(s) of one or more designated critical areas, as shown on the data maps, shall serve as cause for additional investigation and analysis to be conducted by the applicant.

Development adjacent to an identified critical areas may require further investigation, analysis and/or review when there is information to determine a potential impact to or from the critical area.

4.2 Applicability

A. When a chapter reference is used, it shall be inclusive of all of Appendix B.
B. This chapter applies to all development and uses within Chelan County SMP jurisdiction. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the requirements of these regulations.
C. This chapter classifies and designates critical areas and establishes a process to apply appropriate protection measures for these critical areas in concert with all applicable provisions of the SMP.
D. Any development authorized to alter the condition of any land, water or vegetation; or to alter or construct any building, structure or improvement shall be in compliance with the requirements of this chapter and the SMP.
E. Any individual critical area adjoined by another type of critical area shall apply the buffer standards and meet the requirements that provide the most protection of shoreline resources, when consistent with SMA policy.

SECTION 5 GENERAL PROVISIONS

5.1 Permit Approval

A. The Administrator of the SMP shall not approve any permit or issue any authorization to alter the condition of any land, water or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this chapter and the SMP.
B. Critical area site analysis/reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish, such as salmon and bull trout, and their habitat.
C. Any action taken pursuant to this chapter shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the best available science. Applicants must first demonstrate an inability to avoid or reduce impacts, before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the ecological functions or values of critical areas.

5.2 Qualified Professional

No site analysis/report required by Section 6 of this chapter will be considered complete unless completed by a qualified professional, as defined in Chapter 8 of the SMP.

5.3 Surety

If a development proposal is subject to mitigation, maintenance or monitoring plans, an assurance device or surety may be required by the Administrator in accordance with Title 14 of the Chelan County Code.

5.4 Site Analysis/Reports

The preparation of site analysis/reports or information and materials required by this Chapter are the responsibility of the applicant.

5.5 Applications

The Administrator shall make available to applicants resources and information on the type(s) of critical areas and/or buffers that may be present. Information shall be provided to the applicant on the type of evaluation and site-specific analysis that will be required as a supplement to the application materials necessary to bring the application up to a standard that can be characterized as "complete" and eligible for processing.

If it is determined after the issuance of a permit that the site contains a critical area, the Administrator may revoke the permit pending appropriate review and possible modification of the application.

5.6 Fees

The County shall establish fees for filing a critical area review and other services provided by the County as required by this chapter. These fees shall be based on the anticipated sum of direct costs incurred for any individual development or action and may be established as a sliding scale that will recover all of the costs including the enforcement of these code provisions. Basis for these fees shall include, but not be limited to, the cost of engineering and planning review time, cost of inspection time, costs for administration, and any other special costs attributable to the critical area review process.

5.7 Administrative Procedures

The administrative procedures followed during the critical area review process shall conform to the standards and requirements of the associated application type provided in Chapter 7 of the SMP.

SECTION 6 CRITICAL AREAS & DEVELOPMENT STANDARDS

Critical areas are subject to the following minimum requirements for classification, buffers and development requirements.

6.1 Wetlands

Wetlands are defined within Chapter 8 of the SMP. They are mapped by Chelan County using best available science and data. The GIS maps do not provide a conclusive or definitive indication of wetland presence or extent. Other wetlands may exist that do not appear on the maps and some wetlands that appear on the maps may not meet all of the wetland designation criteria.

6.1.1 Wetland Delineations

Wetlands shall be identified and delineated by a qualified wetlands professional in accordance with the most current approved federal wetland delineation manual and applicable regional supplements. All areas within the County meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this Chapter. Wetland delineations are valid for five years; after such date the County shall determine whether a revision or additional assessment is necessary.

The Administrator may require the onsite wetland boundary to be surveyed by a qualified

professional. This professional shall field stake, flag or mark the onsite wetland boundary to aid in reviewing and finalization of the development proposal. The Administrator may also require an applicant to identify the approximate location or presence of any wetlands within three hundred (300) feet of a proposed development site.

Wetlands that occur or extend beyond the boundaries of the development site, onto adjoining properties, do not need to be flagged or formally delineated but their general location must be disclosed in order to assess wetland buffer impacts.

6.1.2 Categorization and rating

Wetlands shall be rated based on categories that reflect the functions and values of each wetland. Wetlands shall be identified, rated, categorized, and delineated by a qualified wetland professional in accordance with the current version of the Washington State Wetland Rating System for Eastern Washington, the procedure outlined in WAC 173-22-035, and the appropriate rating forms approved by the Washington State Department of Ecology.

These categories are generally defined as follows:

A. Category I wetlands: Category I wetlands are those that represent a unique or rare wetland type, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible or too difficult to replace within a human lifetime, and provide a high level of functions. The following types of wetlands are Category I: (i) Alkali wetlands; (ii) Wetlands that are identified by scientists of the Washington Department of Natural Resources Natural Heritage Program as high quality, relatively undisturbed wetlands, or wetlands that support state Threatened or Endangered plant species; (iii) Bogs; (iv) Mature and old-growth forested wetlands; (v) Forest wetlands with stands of Aspen; and, (vi) Wetland scoring between twenty-two and twenty-seven (22-27) points in the Eastern Washington Wetland Rating System.
B. Category II wetlands: Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection. Category II wetlands include: (i) Forested wetlands in the floodplains of rivers; (ii) Mature and old-growth forested wetlands with native fast growing trees; (iii) Vernal pools; and, iv. Wetlands scoring between nineteen and twenty-one (19-21) points in the Eastern Washington Wetland Rating System.
C. Category III wetlands are often smaller, less diverse and/or more isolated from other natural resources in the landscape than Category II wetlands. Category III wetlands include: i. Vernal pools that are isolated; and ii. Wetlands scoring between sixteen and eighteen (16-18) points in the Eastern Washington Wetland Rating System.
D. Category IV wetlands have the lowest levels of functions, scoring between nine and fifteen (9-15) points in the Eastern Washington Wetland Rating System, and are often heavily disturbed. These are wetlands that should be able to be replaced, and in some cases improved. These wetlands may provide some important functions, and also need to be protected.

6.1.3 Wetland Buffers and Regulations

6.1.3.1 Buffer widths

Buffers shall be established and maintained to protect all regulated wetlands. The minimum buffers for wetlands are listed below. The buffer shall not be altered except as authorized by this Program; provided that such alterations meet all other standards for the protection of regulated wetlands. Buffers are measured horizontally in all directions from the regulated wetland edge as marked in the field.

The following buffer widths have been established in accordance with the best available science. They are based on the category of wetland and the intensity of the impacts from proposed land use. Different land uses that can cause these levels of impact are listed in Table XX.

Table 1

Category of Wetland	Land Use with Low Impact	Land Use with Moderate Impact	Land Use with High Impact
I	125 ft	190 ft	250 ft
II	100 ft	150 ft	200 ft
III	75 ft	110 ft	150 ft
IV	25 ft	40 ft	50 ft

Table 2

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations
High	• Commercial • Urban • Industrial • Institutional • Retail sales • Residential (more than 1 unit/acre) • Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc.) • High-intensity recreation (golf courses, ball fields, etc.) • Hobby farms
Moderate	• Residential (1 unit/acre or less) • Moderate-intensity open space (parks with biking, jogging, etc.) • Conversion to moderate-intensity agriculture (orchards, hay fields, etc.) • Paved trails • Building of logging roads • Utility corridor or right-of-way shared by several utilities and including access/maintenance road
Low	• Forestry (cutting of trees only) • Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.) • Unpaved trails • Utility corridor without a maintenance road and little or no vegetation management.

6.1.3.2. Wetland buffer condition

Wetland buffer areas shall be retained in a natural condition or may be improved to enhance buffer functions and values. Where buffer disturbance is allowed pursuant to this Chapter, revegetation with native vegetation shall be required. Alterations of the buffer that are not associated with an allowed shoreline use or development shall be prohibited.

6.1.3.3. Multiple buffers

In the event that buffers for any shorelines and/or critical areas are contiguous or overlapping, the landward-most edge of all such buffers shall apply.

6.1.3.4. Interrupted buffer

When a wetland buffer contains an existing legally established public road or private access road, the Administrator may allow development on the landward side of the road provided that the development will not have a detrimental impact to the wetland. The applicant may be required to provide a wetland critical areas report to describe the potential impacts. In determining whether a critical areas report is necessary, the Administrator may consider the hydrologic, geologic, and/or biological habitat connection potential and the extent and permanence of the buffer interruption.

6.1.3.5. Buffers of restored wetlands

The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

6.1.3.6. Buffer averaging

The Administrator may allow averaging of the standard wetland buffer widths when necessary to accommodate a single family residence or residential development subdivision. With buffer averaging, the buffer width is reduced in one location and increased in another location to maintain the same overall buffer area and level of function.

Proposals for buffer averaging or reduction shall meet the following conditions:

A. The buffer has not been averaged or reduced by any prior actions administered; and,
B. No feasible site design could be accomplished without buffer averaging; and,
C. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and that wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places; and,
D. An approved critical area report demonstrates that the averaging or reduction will not adversely impact wetland function and values; and,
E. The minimum width of the buffer at any given point is at least fifty percent (25%) of the required buffer or twenty-five (25) feet, whichever is greater; and
F. Any area that is added to the buffer is well-vegetated and, when appropriate, separated and screened from incompatible land uses such as parking lots, commercial or industrial uses or high intensity uses. The Administrator may require vegetation enhancement if needed to ensure this criterion is met.

6.1.3.7 Permitted buffer uses

The following uses may be permitted within a wetland buffer without a variance; provided they are not prohibited by any other applicable law, are consistent with the provisions of this SMP, and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland, including wetland functions and values:

A. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

B. Trails associated with a residential use.
C. Passive recreation facilities designed in accordance with an approved critical area report, including:
    1. Walkways and trails constructed with a surface that is not impervious to water. Raised boardwalks utilizing non-treated pilings may be acceptable; and
    2. Wildlife viewing structures.
D. Stormwater management facilities, limited to stormwater dispersion facilities, outfalls and bioswales, may be provided that:
    1. No other location is feasible; and
    2. The location of such facilities will not degrade the functions or values of the wetland.

6.1.3.8 Wetland compensatory mitigation

Proposed activities or uses that would impact a wetland must follow the mitigation sequencing requirements of Section 4.2 of the SMP. Wetland impacts may be allowed when there is no reasonable alternative site design that would result in less adverse impact to a wetland or its buffer. When a project involves wetland and/or buffer impacts, a compensatory mitigation report, prepared by a qualified professional, shall be required. Compensatory mitigation plans shall be consistent with *Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans--Version 1,* (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as revised), and *Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington)* (Publication #10-06-07, November 2010). All wetland impacts shall comply with these compensatory mitigation requirements:

A. Department of Ecology's Debit/Credit tool; or
B. Compensatory mitigation is required for all alterations to wetlands or their buffers, except for buffer averaging when done in accordance with this Section.
C. Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:
    1. Restoring and/or rehabilitating filled or altered wetlands to their original or near original condition.
    2. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conductive for the wetland community that is being designed.
    3. Enhancing significantly degraded wetlands in combination with restoration or creation.
D. Activities and uses within Category I wetland shall be limited to the following:
    1. An existing public facility that must be expanded or extended into the wetland;
    2. Utility construction or maintenance, where there is no other site that can serve the utility's function; or
    3. Development associated with an approved variance that allows the impact.
E. Mitigation for lost or affected functions shall replace functions affected by the alteration and shall provide equal or greater functions compared to the impacted wetland.
F. Mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
G. The Administrator may authorize a one-time temporary delay, up to one hundred twenty calendar days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. The request for the temporary delay must include a written justification that documents the environmental constraints which preclude implementation of the mitigation plan. The justification must be verified and approved by the Administrator and include a financial

guarantee.

H. Mitigation ratios shall be used when impacts to wetlands cannot be avoided and under the following criteria:
   1. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.
   2. Compensatory mitigation shall restore, create, rehabilitate or enhance equivalent or greater wetland functions.
   3. The ratios shall apply to mitigation that is in-kind, is on-site, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success.
   4. Remedial actions resulting from unauthorized alterations are restoration.
   5. These ratios do not apply to the use of credits from a certified wetland mitigation bank or in-lieu fee program. When credits from a certified bank or in-lieu fee program are used, replacement ratios should be consistent with the requirements of the bank's/program's certification.

Compensatory mitigation ratios

Category and Type of Wetland	Restoration or Creation[1,2]	Rehabilitation Only[1,2]	Enhancement Only [1,3]
Category I Forested	6:1	12:1	24:1
Category I Non-Forested	4:1	8:1	16:1
Category II Forested	4:1	8:1	16:1
Category II Vernal pool	2:1	4:1	Case-by-case
All other Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

[1] Natural heritage sites, alkali wetlands, and bogs are considered irreplaceable wetlands because they perform special functions that cannot be replaced through compensatory mitigation. Impact to such wetlands would therefore result in a net loss of some functions no matter what kind of mitigation is provided.

[2] Provides gains in a whole suite of functions both at the site and landscape scale. Rehabilitation actions often focus on restoring environmental processes that have been disturbed or altered by previous ongoing human activity.

[3] Actions which provide gains in only a few functions. Enhancement actions often focus on structural or superficial improvements to a site and generally do not address larger scale environmental processes.

3 Compensatory mitigation for vernal pool impacts must be seasonally ponded wetland area(s).

6.2 Critical Aquifer Recharge Areas

6.2.1 Critical Aquifer Recharge Areas within Chelan County shall be classified, designated and regulated through the County's critical areas provisions in Chelan County Code, Chapter 11.82

6.3 Frequently Flooded Areas

6.3.1 Classification.

Those areas located within the one-hundred-year floodplain as defined by the Federal Emergency Management Agency are classified as frequently flooded areas. Only those frequently flooded areas located in shoreline jurisdiction are subject to these regulations and this SMP.

6.3.2 Designation.

Best available science will be used in the designation of the county's frequently flooded areas. The flood insurance rate maps (FIRM) and floodway maps along with the Flood Insurance Study—Chelan

County prepared by the National Flood Insurance Program (NFIP) are adopted as the formal designation for frequently flooded areas. Upon review and approval by the county, subsequent studies delineating the boundaries of the floodways and floodway fringe areas of the one-hundred-year floodplains for the county, or portion thereof, shall constitute the best available science and be utilized as the official designation information for frequently flooded areas. A review committee comprised of the directors of the department of building, fire safety and planning, and the public works department shall review each set of new information to make a recommendation to the Chelan County board of commissioners whether it should be adopted as new designation criteria. Before final adoption, this will be distributed for public and agency review.

When base flood elevation data is not available from the above information to designate frequently flooded areas, the above-defined review committee shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from federal and state governmental agencies or other sources including but not limited to historical data, high water marks or photographs of past flooding to make the appropriate designations.

6.3.3 Protection measures.

(1) New lots may be created within frequently flooded areas, provided:

(A) A designated buildable area in each lot is provided for outside the floodway and is identified on the face of the final plat, short plat or binding site plan mylar;

(B) All improvements, including parking areas, are located outside the floodway;

(C) Roads necessary to access permitted improvements may cross the floodway if no reasonable route exists outside the floodway;

(D) Open space lots may be located within the one-hundred-year floodplain; and

(2) No residential structures may be built or placed within a designated floodway;

6.3.4 Anchoring.

All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure. All manufactured homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors; provided however, that double-wide units having a width of seventeen feet or more from end to end, and any units manufactured since 1976 that have been certified in compliance with the construction standards of the Department of Housing and Urban Development, require only frame ties.

Anchoring requirements for manufactured homes are as follows:

(1) Over-the-top ties shall be provided at the end of each manufactured home. Two additional over-the-top ties shall be provided at intermediate locations for manufactured homes greater than fifty feet in length while those units less than fifty feet in length shall require one additional over-the-top tie.

(2) Frame ties shall be provided at each corner of a manufactured home. Five additional frame ties shall be provided at intermediate locations for manufactured homes greater than fifty feet in length while those units less than fifty feet in length shall require four additional frame ties.

(3) All components of the anchoring system shall be capable of carrying a force of four thousand eight hundred pounds as certified by a registered professional engineer or manufacturer's specifications.

(4) Any additions to a manufactured home shall be similarly anchored.

6.3.5 **Construction materials and methods.**

All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage and shall be constructed with materials and utility equipment resistant to flood damage. Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

6.3.6 **Utilities.**

The following standards shall apply to all utilities within the flood hazard area:

(1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system. The proposed water well should be located on high ground that is not in the floodway;

(2) Manhole covers shall be designated so as to seal themselves, thereby preventing infiltration of floodwaters;

(3) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration by floodwaters into the system and prevent the discharge from the sewage systems into floodwaters and contamination during flooding. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. The compliance with these requirements shall be as directed by the Chelan Douglas Health District.

(4) All utility systems shall be underground except where the presence of bedrock or other obstructions makes undergrounding prohibitive; provided, that electric transmission lines in excess of fifteen KV are exempt from undergrounding.

6.3.7 **Use of other base flood data.**

When base flood elevation data has not been provided in accordance with Section 4.020, Designation, the administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer Chapter 4 of Appendix B of this SMP.

6.3.8 **Construction activities.**

(1) Residential Construction. New construction or substantial improvement of any residential structure shall require the lowest floor including basement to be elevated to three feet or higher above the base flood elevation (BFE). Where new construction or substantial improvement is to occur in a flood hazard area designated as an AO zone, the lowest floor including basement shall be elevated above the highest adjacent grade of the building site, to one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified). Where hazardous velocities are noted on the FIRM consideration shall be given to mitigating the effects of these velocities in proper construction techniques and methods. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

(A) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(B) The bottom of all openings shall be no higher than one foot above grade.

(C) Openings may be equipped with screens, louvers or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.

(D) In an AO zone adequate drainage paths shall be provided on slopes to guide floodwaters around and away from proposed structures.

(2) Nonresidential Construction. New construction or the substantial improvement of any commercial, industrial or other nonresidential structure shall require the lowest floor, including basement, to be elevated to or above one foot higher than the base flood elevation (BFE). Where new construction or substantial improvement is to occur in a flood hazard area designated as an AO zone, the lowest floor including basement shall be elevated above the highest adjacent grade of the building site, to one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified). Where hazardous velocities are noted on the FIRM consideration shall be given to mitigating the effects of these velocities in proper construction techniques and methods. As an alternative to the elevation of nonresidential structures, such structures, with attendant utility and sanitary facilities, shall:

(A) Be floodproofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

(B) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

(C) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this section based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to and maintained by the administrator;

(D) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as provided in subsection (1)(A) through (C) of this section.

6.3.9 **Grading and filling.**

No fill, including fill for roads, and levees; grading; or excavating that unduly affects the efficiency or the capacity of the channel or floodway, or unduly decreases flood storage or increases flood heights, shall be permitted. Any fill proposed to be deposited in a flood hazard area shall not be contrary to the need for storage of floodwater nor shall the amount of fill proposed be greater than is necessary to achieve the purpose for which the fill is intended. Fill materials shall be clean with a minimum potential for degrading water quality. All fill materials shall be protected against erosion with retaining walls or other mechanisms to deter erosions. If vegetative cover is chosen, the side slopes of the fill should not exceed two units of horizontal distance to one unit of vertical distance.

6.3.10 **Manufactured homes and recreational vehicles.**

The following standards shall be applicable for all new or replacement manufactured home installations and for any existing manufactured home which has incurred substantial damage as the result of flood.

(1) Manufactured homes in designated zones A1 through A30, AH, AE and AO shall be elevated on a permanent foundation consisting of a minimum of reinforced concrete footings and piers such that the lowest flood of the manufactured home is elevated to at least three feet above the base flood elevation and adequately anchored to resist flotation, collapse and lateral movement. In flood hazard areas designated as an AO zone the lowest floor of the manufactured home shall be elevated above the highest adjacent grade of the building site, to one foot or more above the depth number specified on the FIRM. Where hazardous velocities are noted on the FIRM, consideration shall be given to mitigating the effects of these velocities through engineering design.

(2) All recreational vehicles located in designated zones A1 through A30, AH, AE and AO shall not be located in the flood hazard area for more than one hundred eighty consecutive days unless parked at an occupied single-family residence and must be licensed and ready for highway use.

6.3.11 **Regulatory floodways.**

Development within a regulatory floodway is prohibited as follows:

(1) Encroachments are prohibited, including fill, new construction, substantial improvements, or other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge.

(2) Construction or reconstruction of residential structures is prohibited within designated floodways, except for (A) repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and (B) repairs, reconstruction or improvements to a structure, the cost of which does not exceed fifty percent of the market value of the structure either (i) before the repair or reconstruction is started, or (ii) if the structure has been damaged, and is being restored, before the damage occurred. Work done on structures to comply with existing health, sanitary, or safety codes or to structures identified as historic places may be excluded in the fifty percent.

(3) If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Chapter 6.3 of Appendix B of this SMP.

6.3.12 **Critical facilities.**

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the base floodplain. Construction of new critical facilities shall be permissible within the base floodplain if no feasible alternative site is available. Critical facilities constructed within the base floodplain shall have the lowest floor elevated to three feet or more above the level of the same flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base floodplain shall be provided to all critical facilities to the extent possible. Compliance with these requirements must be certified by a registered professional engineer or architect.

6.3.13 Subdivision.

(1) In the event the applicant is dividing property through the short subdivision, major subdivision, binding site plan, or plat alteration process, a notation shall appear on the face of the final plat referencing the requirements of this chapter, as amended, and the delineated floodway and floodway fringe of the one-hundred-year floodplain shall be shown.

(2) All subdivision proposals shall be consistent with the need to minimize flood damage;

(3) All subdivision proposals shall locate and construct public/private utilities to minimize flood damage;

(4) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and

(5) Where base flood elevation data has not been provided or is not available from another authorized source, it shall be generated for subdivision proposals and other proposed developments.

(6) No subdivision or part thereof shall be approved if related improvements such as levees, fills, or other features will individually or collectively significantly increase flood flows, heights, velocities or potential for damage. All subdivisions shall be consistent with and in conformance with the requirements of this chapter.

(7) If a subdivision or portion thereof lies within the one-hundred-year floodplain, conformance with all applicable local, state and federal requirements shall be required including, but not limited to, this chapter, the Chelan County zoning resolution, the Chelan County subdivision resolution, and the Chelan County shoreline master program.

6.3.14 Reasonable use.

Nothing in this chapter is intended to preclude reasonable use of property, or to effect a taking in violation of the U.S. Constitution, the State of Washington Constitution and substantive due process. Where project proponents would seek a “Reasonable Use” exception to their proposal, they shall seek relief through the SMP Shoreline Conditional Use or Shoreline Variance Permit process. Shoreline Variances may be granted by the hearing examiner as set forth in Section 7.8, Shoreline Variance Permits of this SMP.

6.4 Geologically Hazardous Areas

6.4.1 Purpose.

The purpose of the geologically hazardous overlay district is to reduce the risk to the health and safety of citizens by designating and regulating geologically hazardous critical areas in shoreline jurisdiction consistent with the Growth Management Act and Chapter 395-190 WAC, Minimum Guidelines to Classify Agricultural, Forest, Mineral Lands and Critical Areas.

6.4.2 Applicability.

The provisions of this chapter shall apply to any land use or development under county shoreline jurisdiction that is proposed to be located within designated geologically hazardous areas with the exception of (1) residential footprint expansions less than fifty percent of the square footage of the primary structure to be expanded, including any attached nonhabitable space, and (2) accessory structures that do not contain habitable space. Designated geologically hazardous areas include all areas classified as geologically hazardous areas under Section 5.030.

6.4.3 Classification.

Classification of each geologically hazardous area (which include areas susceptible to erosion, sliding, earthquake, or other geological events that may pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard) will be based upon the risk to development. The following categories shall be used:

(1) Known or Suspected Risk. Areas that are susceptible to one or more of the following types of hazards shall be classified as a geologically hazardous area with a known or suspected risk and shall require a geologic site assessment as described in Section 5.090.

(A) Erosion hazard areas identified by the U.S. Department of Agriculture Natural Resources Conservation Service and Chelan County Soil Survey Manual which may experience significant erosion. Erosion hazard areas also include channel migration zones.

(B) Landslide hazard areas shall include areas potentially subject to landslides based on a combination of geologic, topographic and hydrologic factors. They include any areas susceptible to mass movement because of any combination of bedrock soil, slope (gradient), slope aspect, structure, hydrology, damage or removal of vegetative cover, or other factors. Examples of these may include, but are not limited to, the following:

(i) Sites that are located on or within two hundred fifty feet of areas of documented or historic failures, such as:

(a) Those areas delineated by the United States Department of Natural Resource Conservation Service as having a “severe” limitation for building site development.

(b) Areas designated as quaternary slumps, earthflows, mudflows, or landslides on maps published by the United States Geological Survey or the Department of Natural Resources Division of Geology and Earth Resources.

(c) Areas located on a landslide feature which has shown movement during the past ten thousand years or which is underlain or covered by mass wastage debris of that period.

(d) Slopes that are adjacent to existing fault planes or similar geologic formations.

(ii) Sites that are located on or within two hundred fifty feet from areas with all three of the following characteristics:

(a) Slopes steeper than fifteen percent; and

(b) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

(c) Springs or groundwater seepage.

(iii) Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones.

(iv) Areas located on or within two hundred fifty feet from an alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding.

(v) Steep Slopes. Any slope of forty percent or steeper with ten feet of relief or areas adjacent to these slopes, of which shall cover a distance equal to the vertical height of the slope or two hundred fifty feet, whichever is less.

(vi) Areas that show evidence of, or are at risk from, sliding that may pose a threat to the public health and safety.

(C) Sites that are located on or within five hundred feet from snow avalanche areas. Snow avalanche areas include areas that show evidence of, or are at risk from, snow avalanches.

(D) Sites that are located on or within seismic hazard areas. Seismic hazard areas include areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting, or tsunamis. Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow groundwater table. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington, and ground settlement may occur with shaking. The strength of ground shaking is primarily affected by:

(i) The magnitude of an earthquake;

(ii) The distance from the source of an earthquake;

(iii) The type or thickness of geologic materials at the surface; and

(iv) The type of subsurface geologic structure.

(E) Other geologically hazardous areas:

(i) Volcanic hazard areas must include areas subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.

(ii) Mine hazard areas are those areas underlain by, adjacent to, or affected by mine workings such as adits, gangways, tunnels, drifts, or air shafts. Factors which should be considered include: Proximity to development, depth from ground surface to the mine working, and geologic material.

(F) Upon examination of the subject property by a qualified professional pursuant to Section 5.080, if a determination is made that none of the foregoing conditions are present on or adjacent to the property, the qualified professional may state in letter form the circumstances under which the site assessment or report may be waived.

(2) No Risk. Areas classified initially as geologically hazardous areas with a known or suspected risk or unknown risk may, upon further study, actually pose no risk to development or to the public health and safety. Where the administrator can determine that no risk from the geologically hazardous area is present, based upon geotechnical reports or best available science, these areas shall be classified as geologically hazardous areas determined to be of no risk.

(3) Unknown Risk. Geologically hazardous areas may be present in the county that cannot readily be identified based upon the criteria of subsection (1) of this section. Geologically hazardous areas of unknown risk include areas where data is not available to determine the presence or absence of a geological hazard. The administrator may require a geologic site assessment and/or geotechnical report to determine the actual presence or absence of a geologically hazardous area.

6.4.4 Classification challenge.

An applicant may challenge the geologically hazardous area classification determination made by the administrator. Said challenge shall be in the form of a geotechnical report under the provisions of Section 5.090. If the geotechnical report indicates that the geologically hazardous area does not exist or should be classified as no risk, the administrator may find that the performance standards outlined in this chapter do not apply to the site or project.

6.4.5 Administrative review.

The administrator may modify the requirements of this chapter when existing or intervening natural or manmade features would preclude the development proposal from geologic risk. An applicant may request such review from the department of community development as part of the permit application process.

6.4.6 Designation.

Areas classified as geologically hazardous areas pursuant to Section 5.030 are designated as geologically hazardous areas.

6.4.7 Performance standards.

(1) Upon completion of a geotechnical report, the following performance standards shall be applied during county review of proposed development projects that are the subject of the geotechnical report. Additional mitigation measures may be required pursuant to the findings of a geotechnical report. The administrator may agree to alternative mitigation measures set forth by the geotechnical report, if such alternative measures provide greater or equal protection than the application of the performance standards below. Development proposals may be approved pursuant to the performance standards of this section and/or mitigation measures of a geotechnical report, if they are determined to satisfy the purposes of this chapter. A development permit may be denied based upon the administrator's evaluation of the inability of said measures to reduce risks associated with the geologically hazardous area. Performance standards to be utilized include:

(A) Construction methods should be used which minimize risks to structures and do not increase the risk to the site, or to adjacent properties and their structures, from the geologic hazard. Development shall not increase instability or create a hazard to the site or adjacent properties, or result in a significant increase in sedimentation or erosion.

(B) Site planning should minimize disruption of existing topography and vegetation, and should incorporate opportunities for phased clearing.

(C) Disturbed areas shall be replanted within one year of project completion, in accordance with an approved revegetation plan, and be appropriately bonded for.

(D) Impervious surface coverage shall be minimized.

(E) Excavation and grading shall be minimized. A clearing and grading schedule shall consider limitations based upon seasonal weather conditions.

(F) Detailed drainage plans may be required for projects affecting areas of geologic hazard. These plans shall indicate the effect the project may have on the hazard areas and adjacent properties and mitigating measures, with stormwater detention standards based upon the technical studies required under this document.

(G) Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of development approval should be marked in the field and approved by the county prior to undertaking the project.

(H) A monitoring program should be prepared for construction activities occurring in geologic hazard areas and be marked on the face of the building permit.

(I) All authorized clearing for roads, utilities, etc., should be limited to the minimum necessary to accomplish engineering design. Alternatives should meet the following requirements:

(i) Clearing, grading or filling of sloped sites containing erosion hazard areas shall be limited by weather conditions and an approved erosion control plan.

(ii) The face of cut and fill on slopes shall be prepared and maintained to control against erosion.

(J) An erosion control plan shall be submitted by the applicant for a development, prior to approval of the proposal. Temporary erosion and sedimentation controls shall be utilized during construction and until a permanent control measure is achieved. Further, to minimize blowing soil during development, appropriate water and/or mulch material should be applied to any areas without a vegetative cover.

(K) To maintain the natural integrity of landslide hazard areas and to protect the environment, and the public health and safety, adequate vegetation shall be maintained around all sides of the landslide hazard area.

(L) Development proposals that involve altering land upon areas identified as landslide or avalanche hazard areas must demonstrate the following for approval:

(i) There is no evidence of recent landslides or avalanches in the vicinity of the proposed development and quantitative analysis of slope stability and/or other pertinent factors indicate no significant risk to the proposed development or other properties.

(ii) The landslide or avalanche hazard areas can be modified or the project can be designed so that the landslide or avalanche hazard to the project is eliminated.

(iii) The development proposal would cause no increase in surface water discharge, sedimentation, or avalanche hazard to other properties, and will not decrease slope stability on other properties.

(iv) Disturbance of trees and vegetation shall be the minimum necessary in order to prevent erosion and/or an increase in avalanche hazard, to stabilize slopes, and preserve the natural character of the area.

(v) Structures and improvements shall be located to preserve the most sensitive portion of the site and its natural landforms and vegetation.

(M) Projects in snow avalanche hazard areas shall provide technical studies, which identify the location and extent of the potential avalanche area and include mitigation measures, which ensure that the proposed activity will not increase the potential for an avalanche on the subject property and adjacent properties.

(2) Performance standards or mitigation measures outlined in a geologic site assessment or geotechnical report shall be implemented and incorporated into conditions of approval, if applicable.

(3) If performance standards or mitigation measures are outlined in a geologic site assessment or geotechnical report, an engineer or geologist shall verify that said measures/standards have been adequately completed and provide written notification of completion to the department.

6.4.8 Report preparer qualifications and criteria.

(1) A geologic site assessment, when required, shall be prepared by either a professional civil engineer with geologic expertise licensed by the state of Washington; a geologist licensed by the state of Washington; an engineering geologist licensed by the state of Washington; or a person with applicable qualifications as determined by the administrator.

(2) A geotechnical report, when required, shall be prepared by either an engineering geologist licensed by the state of Washington or a professional civil engineer licensed by the state of Washington. A civil engineer must also have the following experience and background.

(A) Five years of geotechnical experience evaluating geologically hazardous conditions and site development activities, such as landform recognition; unstable geologic units; roads; structural footings, foundations and retaining walls; swimming pools and sport courts; and other activities such as timber removal, site disturbance and mining.

6.4.9 Site assessment and report requirements.

Geologic site assessments and geotechnical reports shall be prepared in compliance with the following provisions. A geotechnical report contains all of the provisions of a geologic site assessment and shall be considered to meet the requirements of a geologic site assessment.

(1) The geologic site assessment shall include the following:

(A) Evaluate the actual presence of geologically hazardous areas within or in the vicinity of the site and the need for a geotechnical report. Specifically mention the circumstances or conditions which require the report to be prepared (steep slopes, erodible soils, suspected landslide or avalanche hazard, adverse hydrologic or flood risk, etc.).

(B) Evaluate safety issues related to proposed activities. Address issues that could involve personal injury, worksite safety, or property damage.

(C) Address existing geologic, topographic, and hydrologic conditions on the site, including an evaluation of the ability of the site to accommodate the proposed activity. Describe the proposed development, including property size and location, nature and extent of the planned development (i.e., house, garage, shop, swimming pool, etc.), and its specific location on the property. Include evidence of prior grading, excavation, cut banks, fill areas, or mining activity, and their potential impact on the project. Note and evaluate any features that could adversely affect development such as drainage gullies, erosion channeling, alluvial fans, evidence for debris flow or avalanche, surface creep and slope failure, observed or suspected spring activity and flood risk potential.

(D) A discussion of the surface and subsurface geological and engineering properties of the soils, sediments, and/or rocks on the subject property and adjacent properties and their effect on the stability of the slope. Where known from field inspection or reference maps and literature, include bedrock identification and age, structural attitude with respect to slope inclination, fracturing, faults and shear zones, hydrothermal alteration, weathering characteristics, presence of landslide diamictite and its age and consolidation, etc. Use cross-sections if necessary for better representation of subsurface character.

(E) A description of the soils in accordance with the Unified Soil Classification System. Give general soil characteristics that could affect site development (i.e., frost action and shrink/swell potential, permeability, plasticity and wet/dry behavior, erodibility, etc.). Especially note the presence or suspected presence of clay-rich horizons and their position/location in the soil profile, and any indication that a building site could be subjected to differential soil compression or setting.

(F) Evidence and history of avalanches, faults, significant geologic contacts, landslides, or downslope soil movement on the subject property and adjacent properties not detailed in subsection (1)(C) of this section.

(G) A summary of the site assessment and its conclusions, mentioning the presence or absence of geohazards and site suitability. Include any recommendations for mitigation of potential hazards that can be dealt with without requiring a complete geotechnical report (control measures such as footing or intercept drainage systems, retaining walls, erosion control, vegetative management and restoration, and the probable need for engineering consultation and design).

(H) A topographic map showing the proposed development site location and approximate parcel shape location and boundaries.

(I) Cite all references and information used in the assessment preparation, such as United States Geologic Survey (USGS) and Department of Natural Resources Geologic Maps and Bulletins, soil studies, surveys and previous reports.

(2) The geotechnical report determined to be required by the geologic site assessment shall include the following:

All of the information required for a geologic site assessment as well as the following:

(A) Determine the appropriate hazard category according to the classification of the geologically hazardous area consistent with Section 5.030.

(B) Determine the appropriate application of the performance standards of Section 5.070 and/or alternative mitigation measures that provide an equal or greater level of protection.

(C) Include a contour map of the proposed site, at a scale of one inch equals twenty feet or as deemed appropriate by the administrator. Slopes shall be clearly delineated for the ranges between fifteen and twenty-nine percent, and thirty percent or greater, including figures for a real coverage of each slope category on the site. When site-specific conditions indicate the necessity, the administrator may require the topographic data to be field surveyed.

(D) A site development plan drawn to scale which shows the boundary lines and dimensions of the subject property, the location, size and type of any existing or proposed structures, impervious surfaces, wells, drainfields, drainfield reserve areas, roads, easements, and utilities proposed or located on site.

(E) The location of springs, seeps, or other surface expressions of groundwater. The location of surface water or evidence of seasonal surface water runoff or groundwater.

(F) The extent and type of vegetative cover prior to development activity or site disturbance.

(G) The proposed method of drainage and locations of all existing and proposed surface and subsurface drainage facilities and patterns, and the locations and methods for erosion control.

(H) An identification of all existing fill areas.

(I) Information demonstrating compliance with all applicable codes and ordinances for the proposed development permit.

(J) A vegetation management and restoration plan or other means for maintaining long-term stability of slopes.

(3) Geologic site assessments and geotechnical reports, when completed in accordance with this chapter, shall be valid for a period of five years. A qualified professional, as outlined in Section 5.080(2), may extend the applicability of a valid geologic site assessment or geotechnical report by five years by submittal of a letter stating the validity of the existing document and its application for the five-year extension; provided, that such letter must address any changes in surrounding land use activity or site conditions.

6.4.10 Subdivision notation.

In the event the applicant is dividing property through the short subdivision, major subdivision, binding site plan, or plat alteration process, and all or a portion of the property division is located within a geologically hazardous area, a notation shall appear on the face of the final plat mylar that states the following:

All or part of this area may be located within a suspected or known geologically hazardous area, and development proposals proposed within this area will be subject to the requirements of Chapter 5: Geologically Hazardous Areas Overlay District (GHOD) of the County's Shoreline Master Program. Geologic site assessments and technical reports completed for subdivision approval may not be adequate for site development and additional assessment may be necessary.

6.5 Fish and Wildlife Habitat Conservation Areas

6.5.1 Purpose

It is the purpose of this chapter to designate and classify fish and wildlife conservation areas and to protect, restore where practical, and enhance fish and wildlife populations and their associated habitats.

6.5.2 Applicability

The provisions of this chapter shall apply to development that is proposed to be located within fish and wildlife habitat conservation areas by definition or within a review area of one thousand feet from a mapped point location (den or nest site) of a priority species.

"Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company.

Fish and wildlife protection is not intended to preclude reasonable use of property, nor is it intended to authorize public use of private property or prevent trespassing laws from being enforced.

6.5.3 Fish and wildlife habitat conservation areas classification and designation.

(1) Classification. The following classifications shall be used in designating fish and wildlife conservation areas:

(A) Class I Fish and Wildlife Habitat Conservation Areas.

(i) State natural area preserves and natural resource conservation areas; and

(ii) Habitat which have a primary association with species listed by federal

agencies as endangered or threatened under the Federal Register for the Endangered Species Act of 1973, or species listed by state agencies as endangered (WAC 232-12-014), threatened (WAC 232-12-011) or sensitive (WAC 232-12-011).

(2) Class II Fish and Wildlife Habitat Conservation Areas.

(A) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;

(B) Waters of the state;

(C) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

(D) Priority habitats and species as identified by the Washington State Department of Fish and Wildlife Priority Habitats and Species Program;

(E) Mule deer and/or elk winter range and migration corridors.

(3) Designation. All lands and shorelands classified as fish and wildlife habitat conservation areas are designated as fish and wildlife habitat conservation areas. The Chelan County department of building, fire safety and planning will maintain maps to provide information to the public and aid in the administration of this section. Sites that include fish and wildlife habitat conservation areas not mapped shall be subject to the provisions of this section. In the event of a conflict between the information shown on the maps and information shown as a result of field investigations, the latter shall prevail. Maps utilized by Chelan County to identify fish and wildlife habitat conservation areas include the following maps and map databases:

(A) The Washington State Department of Fish and Wildlife Priority Habitats and Species and Wildlife Heritage Maps and Database, as amended;

(B) Washington Rivers Information System Maps and Database, as amended;

(C) National Wetlands Inventory Maps and Database, as amended;

(D) Chelan County shoreline master program, as amended;

(E) DNR Stream Type Maps for Type S, F, Np, and Ns waters per criteria as set forth in WAC 222-16-031, Interim water typing system, as amended;

(F) Mule deer and/or elk winter range and migration corridors in Chelan County identified on the Chelan County mule deer and elk winter range maps in the community development department.

6.5.4 Class I wildlife habitat conservation area standards.

(1) Major Development Within Class I Wildlife Habitat Conservation Areas. A review area of one thousand feet of a mapped point location of a den or nest site or a polygon of a species listed as endangered, threatened, or sensitive by the state of Washington, or registered as endangered or threatened by the federal government, shall be subject to the following standards:

(A) Pertinent agencies including but not limited to the Washington State Department of Fish and Wildlife shall be given written notice of the development proposal. In order for agency comments to be considered, the agencies shall have thirty days from the date of mailing of the notice to submit written comments to the county. The referral is necessary to determine the accuracy of mapping, presence of habitat, and potential impacts of the development.

(B) If the site does contain wildlife habitat regulated by this chapter, the applicant must meet the requirements outlined in this section. A habitat management and mitigation plan, pursuant to Section 6.5.6, shall be required for major developments in Class I wildlife habitat conservation areas. In the case of bald eagles, an approved bald eagle management plan by the Washington State Department of Fish and Wildlife meeting the requirement and guidelines of the bald eagle protection rules (WAC 232-12-292, as amended) will satisfy the requirements for a habitat management and mitigation plan.

(2) Minor Development Within Class I Wildlife Conservation Areas. A review area of one thousand feet of a mapped point location of a den or nest site, or a polygon of a species

listed as endangered, threatened, or sensitive by the state of Washington, or registered as endangered or threatened by the federal government, shall be subject to the following standards:

(A) Pertinent agencies, including but not limited to the Washington State Department of Fish and Wildlife, shall be given written notice of the development proposal. In order for agency comments to be considered, the agencies shall have thirty days from the date of mailing of the notice to submit written comments to the county. The referral is necessary to determine the accuracy of mapping, presence of habitat, and potential impacts of the development.

(B) If the site does contain wildlife habitat regulated by this section, the applicant shall meet the requirements outlined in subsections (2)(C) and (D) of this section.

(C) The administrator shall review comments from pertinent agencies and the following criteria to determine if the standards outlined in subsection (2)(D) of this section are adequate to protect wildlife habitat:

(i) Published guidelines regarding the protection and management of the affected species, including but not necessarily limited to those published by the Washington State Department of Fish and Wildlife;

(ii) Physical characteristics of the subject parcel and vicinity, including topography and vegetation;

(iii) Historic, current and proposed uses, proposed density of the development site, and development characteristics in the vicinity of the site;

(iv) Is the site within an urban growth area, rural area or resource land?

(v) What are the potential land uses for the site as identified by the comprehensive plan and zoning code?

(vi) Is the site's habitat fragmented or is it connected to significant habitat blocks or open spaces?

(vii) Consider the habitat located on the site and in the surrounding area. Would impacts of the development be site-specific or have the potential to be cumulative with existing and potential future developments in the area?

If it is determined by the administrator that the standards outlined in subsection (2)(D) of this section are not adequate to protect the wildlife habitat, a habitat management and mitigation plan, pursuant to Section 6.5.6, shall be required. In the case of bald eagles, an approved bald eagle management plan by the Washington State Department of Fish and Wildlife meeting the requirements and guidelines of the bald eagle protection rules (WAC 232-12-292, as amended) will satisfy the requirements for a habitat management and mitigation plan, pursuant to Section 6.5.6. The administrator shall base his or her decision on written findings of fact and conclusions.

(D) Minor development within Class I wildlife habitat conservation areas shall be subject to the following standards:

(i) Disturbed areas shall be revegetated with native vegetation within one growing season of project completion in accordance with an approved revegetation plan, where appropriate.

(ii) Site planning shall minimize disruption of existing topography and vegetation, and shall incorporate opportunities for phased clearing.

(iii) Any limitations to site disturbance, such as clearing restrictions, imposed as a condition of development approval shall be marked in the field and approved by the county prior to undertaking the project.

(iv) Fencing requirements as outlined in Section 6.5.6.

(v) An erosion and drainage control plan will be required for any clearing, grading and/or excavation of one acre or greater in area.

(vi) Building sites are encouraged to be located away from critical wildlife habitat corridors as feasibly as possible.

6.5.5 Class II wildlife habitat conservation area standards

(1) Major development within Class II wildlife habitat conservation areas within a review area of one thousand feet from a mapped point location of a nest or den site or polygon of a priority species shall be subject to the following standards:

(A) Pertinent agencies, including but not limited to the Washington State Department of Fish and Wildlife, shall be given written notice of the development proposal. In order for agency comments to be considered, the agencies shall have fourteen days from the date of mailing of the notice to submit written comments to the county. The referral is necessary to determine the accuracy of mapping, presence of habitat, and potential impacts of the development.

(B) If the site does contain wildlife habitat regulated by this section, the applicant shall meet the requirements outlined in subsections (1)(C) and (D) of this section.

(C) The administrator shall review written comments from the agencies and the following criteria to determine if the standards outlined in Section 11.78.070(2)(D) are adequate to protect wildlife habitat:

(i) Published guidelines regarding the protection and management of the affected species, including but not necessarily limited to those published by the Washington State Department of Fish and Wildlife;

(ii) Physical characteristics of the subject parcel and vicinity, including topography and vegetation;

(iii) Historic, current and proposed uses, proposed density of the development site, and development characteristics in the vicinity of the site;

(iv) Is the site within an urban growth area, rural area or resource land?

(v) What are the potential land uses for the site as identified by the comprehensive plan and zoning code?

(vi) Is the site's habitat fragmented or is it connected to significant habitat blocks or open spaces?

(vii) Consider the habitat located on the site and in the surrounding area. Would impacts of the development be site-specific or have the potential to be cumulative with existing and potential future developments in the area?

The administrator will have up to thirty days after the end of the comment period to determine if the standards outlined in Section 11.78.070(2)(D) provide adequate protection to wildlife habitat. If it is determined that the standards of Section 11.78.070(2)(D) are not adequate to protect wildlife habitat, a habitat management and mitigation plan shall be required pursuant to Section 11.78.100. The administrator shall base his or her decision on written findings of fact and conclusions.

(D) Major development within Class II wildlife habitat conservation areas shall be subject to the standards outlined in Section 11.78.070(2)(D).

(2) Minor development within Class II wildlife habitat conservation areas within a review area of one thousand feet from a mapped point location of a nest or den site or polygon of a priority species shall be subject to the following standards:

(A) If the site does contain fish and wildlife habitat regulated by this chapter, the applicant must meet the requirements outlined in subsection (2)(B) of this section.

(B) The administrator shall review written comments from the agencies and the following criteria to determine if the standards outlined in Section 11.78.070(2)(D) are adequate to protect wildlife habitat:

(i) Published guidelines regarding the protection and management of the affected species, including but not necessarily limited to those published by the Washington State Department of Fish and Wildlife;

(ii) Physical characteristics of the subject parcel and vicinity, including topography and vegetation;

(iii) Historic, current and proposed uses, proposed density of the development site, and development characteristics in the vicinity of the site;

(iv) Is the site within an urban growth area, rural area or resource land?

(v) What are the potential land uses for the site as identified by the comprehensive plan and zoning code?

(vi) Is the site's habitat fragmented or is it connected to significant habitat blocks or open spaces?

(vi) Consider the habitat located on the site and in the surrounding area. Would impacts of the development be site-specific or have the potential to be cumulative with existing and potential future developments in the area?

The administrator will have up to thirty days after the end of the comment period to determine if the standards outlined in Section 6.5.4 (2)(d) provide adequate protection to wildlife habitat. If it is determined that the standards of Section 11.78.070(2)(D) are not adequate to protect wildlife habitat, a habitat management and mitigation plan shall be required pursuant to Section 11.78.100. The administrator shall base his or her decision on written findings of fact and conclusions.

(3) Minor development within Class II wildlife habitat conservation areas shall have the following standards:

(A) Minor development within Class II wildlife habitat conservation areas may be subject to the minimum standards, all or in part, of Section 6.5.4 (2)(d), as determined by the administrator utilizing the following criteria:

(i) Is the site's habitat fragmented or is it connected to significant habitat blocks or open spaces?

(ii) What is the level of human activity in the area and what are the surrounding land uses?

(iii) Is the site within an urban growth area, rural area or resource land?

(iv) What are the potential land uses for the site as identified by the comprehensive plan and zoning code?

(v) What are the potential impacts of the development to wildlife habitat and species?

(vi) Can a reasonable balance be achieved between wildlife habitat protection and the reasonable use of private property?

6.5.6 Habitat management and mitigation plan.

(1) If required, this plan shall identify how the impacts from the proposed use or activity will be avoided or mitigated consistent with the purposes of this section. The Washington Priority Habitat and Species data as now or hereafter amended, other priority habitat and species publications, and consultation with a habitat biologist from the Washington State Department of Fish and Wildlife may be used as the basis for the plan.

(2) The habitat management and mitigation plan shall be approved or denied in writing by the administrator and shall contain but not be limited to the following information:

(A) A map(s) prepared at an easily readable scale (at least one inch equals two hundred feet) showing:

(i) The location of the proposed site;

(ii) The relationship of the site to surrounding topographic and built features;

(iii) The nature and density of the proposed use or activity;

(iv) Proposed building locations and arrangements;

(v) A legend which includes:

(a) A complete and accurate legal description. The description shall include the total acreage of the parcel,

(b) Title, scale and north arrow,

(c) Date;

(vi) Existing structures, improvements and landscape features including the name and location of all water bodies;

(vii) Location of priority habitat types and priority species point locations, including nesting, roosting and den sites, winter range areas, riparian zones and migration corridors.

(B) A report which contains:

(i) A description of the nature, density and intensity of the proposed use or activity in sufficient detail to allow analysis of such a land use change upon identified wildlife habitat including the proposed amounts of excavation, grading, and vegetation disturbance.

(ii) An analysis of the effect of the proposed use or activity upon fish and wildlife species and their habitats, identified within the priority habitat and species program.

(iii) A plan which explains how the applicant will avoid, minimize or mitigate adverse impacts to fish and/or wildlife habitats created by the proposed use or activity. Mitigation measures within the plan may include, but are not limited to:

(a) Establishment of buffer areas;

(b) Preservation of critically important plants and trees, preferably in consolidated areas;

(c) Limitation of access to habitat area;

(d) Seasonal restriction of construction activities;

(e) Clustering of development and preservation of open space, if permitted by the underlying zoning district;

(f) Signs marking habitats or habitat buffer areas;

(g) Title notice or plat dedication warning statements;

(h) Conservation easements;

(i) Preserve and introduce native plant species which serve as food and shelter from climatic extremes and predators and structure and cover for reproduction and rearing of young for critical wildlife;

(j) The use of native species or species recommended by the Washington State Department of Fish and Wildlife in the revegetation or

landscaping of disturbed or developed areas and in any enhancement of habitat or buffers.

(iv) Review comments by a habitat biologist from the Washington State Department of Fish and Wildlife will be required.

The administrator shall have the authority to approve or deny habitat management and mitigation plans or require additional information based upon criteria within this section and review comments from relevant agencies. The administrator shall base his or her decision on written findings of fact and conclusions. The administrator's written decision shall be forwarded to the Washington State Department of Fish and Wildlife, other agencies or tribal entities which provided comments to the department and to any other agency/individual(s) who request a copy of the written decision.

(C) Mitigation shall be completed prior to granting of final occupancy, or the completion of final approval of any development activity for which mitigation measures have been required. Bonding at one hundred fifty percent of the cost of uncompleted activities is an acceptable alternative to completion where a contract to complete the work is in force. Bonding shall be in effect for a maximum of two years.

6.5.7 Fish and wildlife habitat conservation areas regulations

A. All Development within known fish and wildlife habitat conservation containing federal-listed and state-listed endangered, threatened, and priority species and which, if altered, may reduce the likelihood that a species will maintain its population and reproduce over the long term shall require a site analysis/report which:
   1. Identifies the endangered species and related habitats; and,
   2. Identifies other known threatened or sensitive species and their related habitats; and,
   3. Includes the relative density and species richness, breeding, habitat, seasonal range dynamics and movement corridors; and,
   4. Addresses the relative tolerance by species of human activities; and,
   5. Evaluates the development/use in terms of its influence on the above wildlife factors and recommend mitigation measures for any area that would potentially degrade base-line populations and reproduction rates over the long term.

B. Development and uses shall comply with the following:
   1. No development approval shall be granted unless mitigation of adverse effects can be provided that will ensure continuation of base-line populations for all endangered, threatened and sensitive species.
   2. Development reviews shall include regional species occurrence and movements and will avoid creating isolated sub-populations.

C. Stream buffers:
   The area adjacent to the shoreline is the riparian buffer. The point of measurement for the riparian buffer begins at the ordinary high water mark on each bank and is measured horizontally from this point or from the top of the bank where the ordinary high water mark cannot be identified. No development, except as outlined in the provisions of SMP, is allowed in this area. Shoreline buffers for streams and their associated shoreline rivers can be found in Table 3.8a of the SMP.

SECTION 7 WARNING AND DISCLAIMER OF LIABILITY

7.1 Warning and Disclaimer of Liability

The degree of hazard protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Catastrophic natural disasters can, and will, occur on rare occasions. This chapter does not imply that land outside the critical areas or activities permitted within such areas will be free from exposure or damage. This chapter shall not create liability on the part of the County, and officers or employees thereof, for any damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

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Section 1 Introduction

A jurisdiction's Shoreline Master Program applies to activities in the jurisdiction's shoreline[1] area. Activities that have adverse effects on the ecological functions and values of the shoreline must provide mitigation for those impacts. By law, the proponent of that activity is not required to return the subject shoreline to a condition that is better than the baseline level at the time the activity takes place. How then can the shoreline be improved over time in areas where the baseline condition is severely, or even marginally, degraded?

Section 173-26-201(2) (f) WAC of the Shoreline Master Program Guidelines[2] says:

> *"master programs shall include goals and policies that provide for restoration of such impaired ecological functions. These master program provisions shall identify existing policies and programs that contribute to planned restoration goals and identify any additional policies and programs that local government will implement to achieve its goals. These master program elements regarding restoration should make real and meaningful use of established or funded nonregulatory policies and programs that contribute to restoration of ecological functions, and should appropriately consider the direct or indirect effects of other regulatory or nonregulatory programs under other local, state, and federal laws, as well as any restoration effects that may flow indirectly from shoreline development regulations and mitigation standards."*

However, degraded shorelines are not just a result of pre-Shoreline Master Program activities, but also of unregulated activities and exempt development. The new Guidelines also require that "[l]ocal master programs shall include regulations ensuring that exempt development in the aggregate will not cause a net loss of ecological functions of the shoreline." While some actions within shoreline jurisdiction are exempt from a permit, the Shoreline Master Program should clearly state that those actions are not exempt from compliance with the Shoreline Management Act or the local Shoreline Master Program. Because the shoreline environment is also affected by activities taking place outside of a specific local master program's jurisdiction (e.g., outside of county/city limits, outside of the shoreline area within the county/city), assembly of out-of-jurisdiction actions, programs and policies can be essential for understanding how the County and Cities fit into the larger watershed context. The latter is critical when establishing realistic goals and objectives for dynamic and highly inter-connected environments.

As directed by the Guidelines, the following discussions provide a summary of baseline shoreline conditions, list restoration goals and objectives, and discuss existing or potential programs and projects that positively impact the shoreline environment. Finally, anticipated scheduling, funding, and monitoring of these various comprehensive restoration elements are provided. In total, implementation of the Shoreline Master Program (with mitigation of project-related impacts) in combination with this Restoration Plan (for restoration of lost ecological functions)

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[1] "Shorelines" means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them…" (RCW 90.58.030(2)(d))

[2] The Shoreline Master Program Guidelines were prepared by the Washington Department of Ecology and codified as WAC 173-26. The Guidelines translate the broad policies of the Shoreline Management Act (RCW 90.58.020) into standards for regulation of shoreline uses. See http://www.ecy.wa.gov/programs/sea/sma/guidelines/index.html for more background.

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should result in a net improvement within Chelan County, and the Cities of Cashmere, Chelan, Entiat, Leavenworth and Wenatchee's shoreline environment in the long term.

In addition to meeting the requirements of the Guidelines, this Restoration Plan is also intended to support the County's, Cities' or other non-governmental organizations' applications for grant funding, and to provide the interested public with contact information for the various entities working within the County and Cities to enhance the environment.

Section 2 Shoreline Inventory Summary

2.1 Introduction

An inventory was conducted for all County and City shorelines as defined by the state's Shoreline Management Act (SMA) (RCW 90.58). The inventory was conducted according to direction provided in the Guidelines (WAC 173-26-201) and in the Grant Agreement promulgated by Ecology. It referenced "relevant and reasonably available" information (WAC 173-26-201(3)(c)) from County, City, State and Federal agencies; utilities; private non-governmental organizations; and Advisory Committee members, among others. The *Shoreline Inventory and Analysis Report* (*Analysis Report*) (The Watershed Company and ICF Jones & Stokes 2009 [TWC and J&S]) utilizes the existing watershed and sub-basin plans to the maximum extent practicable given the Guidelines and the topical coverage of those management plans. Many parties were active participants to the Advisory Committee for the SMP Update; the remaining parties have been and will continue to be notified at key project stages and provided with opportunities to submit relevant information. Collected information was supplemented with other resources such as scientific literature, personal communications, aerial photographs, and internet documents.

The *Analysis Report* (TWC and J&S 2009) will serve as the baseline from which the possible effects of potential development actions in the shoreline will be measured. Ideally, the SMP, in combination with other County, City and regional efforts, will ultimately produce a net improvement in shoreline ecological functions. The *Analysis Report* (TWC and J&S 2009) describes existing physical and biological conditions in the shoreline area within County and City limits, including recommendations for restoration of ecological functions where they are degraded. The full *Analysis Report* (TWC and J&S 2009) is summarized below.

2.2 Shoreline Boundaries

As defined by the Shoreline Management Act of 1971, shorelines include certain waters of the state plus their associated "shorelands." At a minimum, the waterbodies designated as shorelines of the state are streams whose mean annual flow is 20 cubic feet per second (cfs) or greater or lakes whose area is greater than 20 acres. In addition, shorelines of statewide significance are those streams and rivers that meet one or more of the following criteria

> *"that have either: a mean annual flow of 200 cubic feet per second or more, or; the portion downstream from the first 300 square miles of drainage areas.*

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Shorelands are defined as:

> *"those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter…Any county or city may determine that portion of a one-hundred-year-floodplain to be included in its master program as long as such portion includes, as a minimum, the floodway and the adjacent land extending landward two hundred feet therefrom… Any city or county may also include in its master program land necessary for buffers for critical areas… (RCW 90.58.030)"*

The County and City shoreline boundaries have been updated, subject to Board of County Commissioners (BOCC) and Ecology approval, concurrent with the *Analysis Report* (TWC and J&S 2009) through use of improved stream flow modeling by the United States Geological Survey and improved lake area mapping that resulted in increased accuracy of jurisdiction identification and mapping. Past mapping errors by USGS and Ecology have been corrected so that federal lands are no longer excluded from shoreline jurisdiction.

2.2.1 Chelan County

Chelan County encompasses 2,294 square miles and is located in the north-central part of Washington. The county is bordered to the south by Kittitas County, to the southwest by King County, to the west by Snohomish County, to the northwest by Skagit County, to the northeast by Okanogan County, and to the east by Douglas County. Chelan County is predominantly rural in nature, with unincorporated areas making up most of the land area. Chelan County includes four Watershed Resource Inventory Areas (WRIAs) (WRIA 40a - Stemilt-Squilchuck and part of WRIA 40b located in Chelan County [Colockum Creek basin], WRIA 45 - Wenatchee, WRIA 46 - Entiat, and WRIA 47 – Chelan) and five incorporated cities (Cashmere, Chelan, Entiat, Leavenworth, and Wenatchee).

The *Analysis Report* (TWC and J&S 2009) provided detail about 80 streams/rivers and 53 lakes that may meet shoreline jurisdiction criteria. The total acreage of upland shorelands (excluding area of the shoreline waterbodies) is approximately 42,693.

Federal lands make up 68 percent of that acreage, or 29,211 acres total. Of the 133 total shoreline waterbodies, 94 are entirely on federal lands and another 17 have more than 50 percent of their shoreland areas on federal land. The three federal entities that own the majority of the federal land are the United States Forest Service (USFS), the National Park Service (NPS), and the United States Bureau of Land Management (BLM). Four USFS wilderness areas are found along Chelan County shorelines: Lake Chelan Sawtooth Wilderness, Glacier Peak Wilderness, Henry M. Jackson Wilderness, and Alpine Lakes Wilderness. These areas have the greatest level of protection and stringent prohibitions on alteration. A large area at the north end of Lake Chelan is also part of NPS's Lake Chelan National Recreation Area.

Tables 1 and 2 of the *Analysis Report* (TWC and J&S 2009) present the list of shoreline jurisdictional waterbodies, and some basic jurisdictional history. These tables have been included in this document as Tables 1 and 2 below.

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Table 1 Shoreline Jurisdiction Streams and Rivers

River/Creek Name	Mapped as Shoreline Under Existing SMP	Total Length of Proposed Shoreline (ft)	River/Creek Name	Mapped as Shoreline Under Existing SMP	Total Length of Proposed Shoreline (ft)
Agnes Creek	No	29,474	Mill Creek	No	6,781
Basin Creek	No	1,770	Mission Creek	Yes	39,870
Big Meadow Creek	No	5,541	Mountaineer Creek	No	15,747
Boulder Creek 1	No	20,203	Napeequa River	Yes	88,773
Boulder Creek 2	No	4,702	Nason Creek*	Yes	122,246
Bridge Creek	No	62,307	North Fork Bridge Creek	No	33,667
Buck Creek	No	19,291	North Fork Entiat River	No	34,972
Cady Creek	No	15,527	North Fork Thirtyfive Mile Creek	No	3,104
Chelan River*	Yes	21,818	Panther Creek	No	22,409
Chikamin Creek	Yes	14,641	Park Creek	No	28,140
Chiwaukum Creek	No	41,892	Peshastin Creek	Yes	64,582
Chiwawa River*	Yes	200,777	Phelps Creek	Yes	31,266
Chumstick Creek	No	24,601	Pole Creek	No	249
Colockum Creek	No	19,380	Prince Creek	No	27,914
Columbia River*	Yes	395,252	Prospect Creek	No	7,479
Company Creek	No	47,709	Railroad Creek	Yes	78,823
Cottonwood Creek	No	2,617	Rainbow Creek	No	21,952
Cougar Creek	No	41	Rainy Creek	No	25,678
Doubtful Creek	No	59	Rimrock Creek	No	2,849
Eightmile Creek	Yes	21,678	Roaring Creek	No	75
Entiat River*	Yes	269,902	Rock Creek	No	29,154
Fish Creek	No	20,158	Snowall Creek	No	11,418
Fish Creek	No	17,825	South Fork Agnes Creek	No	48,380
Flat Creek	No	41,871	South Fork Bridge Creek	No	12,953
French Creek	No	38,892	South Fork Chiwaukum Creek	Yes	16,709
Ibex Creek	No	3,443	South Fork Flat Creek	No	4,702
Ice Creek	No	6,088	Spruce Creek	No	16,427
Icicle Creek*	Yes	151,122	Stehekin River*	Yes	125,759
Indian Creek	No	35,568	Swamp Creek	No	5,190
Ingalls Creek	Yes	56,766	Thunder Creek	No	12,715
Jack Creek	No	45,045	Tommy Creek	No	7,255
Lake Creek	No	8,846	Trapper Creek	No	7,437
Lake Creek	No	21,104	Trout Creek	No	9,324

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River/Creek Name	Mapped as Shoreline Under Existing SMP	Total Length of Proposed Shoreline (ft)	River/Creek Name	Mapped as Shoreline Under Existing SMP	Total Length of Proposed Shoreline (ft)
Leland Creek	No	24,814	Twentyfive Mile Creek	Yes	15,544
Lightning Creek	No	4,059	Wenatchee River*	Yes	278,629
Little Wenatchee River*	Yes	117,784	West Fork Agnes Creek	No	34,890
Mad River	Yes	104,360	West Fork Flat Creek	No	10,583
Maple Creek	No	10,153	White River*	Yes	153,763
McAlester Creek	No	12,397	Whitepine Creek	Yes	31,390
Meadow Creek	No	9,909	Wildhorse Creek	No	13,921
					TOTAL: 3,452,102 ft (653.8 miles)

* Streams/rivers that are partial or complete Shorelines of Statewide Significance.

Table 2 Shoreline Jurisdiction Lakes

Lake Name	Mapped as Shoreline Under Existing SMP	Total Area of Proposed Shoreline Lake (acres)	Lake Name	Mapped as Shoreline Under Existing SMP	Total Area of Proposed Shoreline Lake (acres)
Antilon Lake	Yes	35	Lichtenwasser Lake	No	26
Black Lake (aka Wheeler Hill or Spring Hill Reservoir)	Yes	33	Loch Eileen Lake	Yes	26
Chiwaukum Lake	Yes	70	Lost Lake	No	27
Colchuck Lake	Yes	88	Lyman Lake	No	74
Cortez Lake	Yes	34	Meadow Lake	Yes	36
Cub Lake	No	23	Mirror Lake	No	25
Domke Lake	No	273	Nada Lake	No	23
Doubtful Lake	No	30	Perfection Lake	No	21
Dry Lake	Yes	81	Rainy Lake	No	53
Eightmile Lake	Yes	65	Roses Lake	Yes	178
Fish Lake	Yes	503	Schaefer Lake	No	83
Glasses Lake	No	23	Shield Lake	No	39
Green View Lake	No	41	Snow Lake-Lower	Yes	65
Hart Lake	No	33	Snow Lake-Upper	Yes	126
Heather Lake	No	86	Square Lake	No	73
Ice Lakes (1)	No	44	Stemilt Project Reservoir	No	22
Ice Lakes (2)	No	20	Stuart Lake	No	41
Josephine Lake	No	24	Surprise Lake	No	40

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Lake Name	Mapped as Shoreline Under Existing SMP	Total Area of Proposed Shoreline Lake (acres)	Lake Name	Mapped as Shoreline Under Existing SMP	Total Area of Proposed Shoreline Lake (acres)
Klonaqua Lakes (1) Lower	Yes	66	Theseus Lake	No	29
Klonaqua Lakes (2) Upper	Yes	65	Trapper Lake	No	148
Lake Augusta	No	24	Twin Lakes (1)	No	33
Lake Chelan*	Yes	32,623	Twin Lakes (2)	No	259
Lake Leland	No	36	Unnamed Lake 1	No	34
Lake Valhalla	No	25	Upper Wheeler Reservoir	Yes	34
Lake Victoria	Yes	26	Wapato Lake	Yes	195
Lake Wenatchee*	Yes	2,449	White Rock Lakes (1)	No	20
Larch Lake	No	30			
					TOTAL: 38,577 acres

* Lakes that are partial or complete Shorelines of Statewide Significance.

2.2.2 Stemilt/Squilchuck-Colockum (WRIA 40a/b)

The Stemilt/Squilchuck - Colockum watershed (WRIA 40a/b) is approximately 49,000 acres, and includes two shoreline streams/rivers and five lakes. The area of upland shoreline jurisdiction totals 739 acres along 137,001 linear feet (26 miles) of shoreline. Table 3 provides the name of each shoreline waterbody in WRIA 40a/b.

Table 3 Shoreline waterbodies in WRIA 40a/b, outside of cities and their urban growth areas.

Jurisdictional Streams/Lakes			
Colockum Creek	Black Lake	Meadow Lake	Upper Wheeler Reservoir
Columbia River	Cortez Lake	Stemilt Project Reservoir	

2.2.3 Wenatchee (WRIA 45)

The Wenatchee watershed (WRIA 45) is approximately 1,370 square miles, and contains 45 shoreline streams/rivers and 29 shoreline lakes. The area of upland shoreline jurisdiction totals 24,652 acres along 2,159,741 linear feet (409 miles) of shoreline. The headwaters of WRIA 45 originate in the Cascade Mountain range as the Little Wenatchee and White Rivers. These rivers flow into Lake Wenatchee, the source of the Wenatchee River. Table 4 provides the name of each shoreline waterbody in WRIA 45.

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Table 4 Shoreline waterbodies in WRIA 45, outside of cities and their urban growth areas.

Jurisdictional Streams/Lakes				
Big Meadow Creek	Icicle Creek	Peshastin Creek	Wildhorse Creek	Loch Eileen Lake
Boulder Creek	Indian Creek	Phelps Creek	Chiwaukum Lake	Lost Lake
Buck Creek	Ingalls Creek	Pole Creek	Colchuck Lake	Nada Lake
Cady Creek	Jack Creek	Prospect Creek	Eightmile Lake	Perfection Lake
Chikamin Creek	Lake Creek	Rainy Creek	Fish Lake	Schaefer Lake
Chiwaukum Creek	Leland Creek	Roaring Creek	Glasses Lake	Shield Lake
Chiwaukum Creek SF	Lightning Creek	Rock Creek	Heather Lake	Snow Lake Lower
Chiwawa River	Little Wenatchee River	SF Chiwaukum Creek	Josephine Lake	Snow Lake Upper
Chumstick Creek	Meadow Creek	Snowall Creek	Klonaqua Lakes Lower	Square Lake
Columbia River	Mill Creek	Thunder Creek	Klonaqua Lakes Upper	Stuart Lake
Cougar Creek	Mission Creek	Trapper Creek	Lake Augusta	Theseus Lake
Eightmile Creek	Mountaineer Creek	Trout Creek	Lake Leland	Twin Lakes 1
Fish Creek	Napeequa River	Wenatchee River	Lake Valhalla	Twin Lakes 2
French Creek	Nason Creek	White River	Lake Victoria	
Ibex Creek	Panther Creek	Whitepine Creek	Lake Wenatchee	

2.2.4 Entiat (WRIA 46)

WRIA 46 contains 305,641 acres, including 5,065 acres of shorelands and 526,093 linear feet (100 miles) of shoreline along seven streams/rivers and two lakes. Table 5 provides the name of each shoreline waterbody in WRIA 46.

Table 5 Shoreline waterbodies in WRIA 46, outside of cities and their urban growth areas.

Jurisdictional Streams/Lakes		
Columbia River	Lake Creek	Tommy Creek
Entiat River	Mad River	Ice Lake 1
Ice Creek	NF Entiat River	Ice Lake 2

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2.2.5 Chelan (WRIA 47)

Chelan watershed (WRIA 47) as a whole contains 670,080 acres, including 11,160 acres of shorelands along 1,596,517 linear feet (302 miles) of shoreline, distributed among 30 shoreline streams/rivers and 17 shoreline lakes. Table 6 provides the name of each shoreline waterbody in WRIA 47.

Table 6 Shoreline waterbodies in WRIA 47, outside of cities and their urban growth areas.

Jurisdictional Streams/Lakes				
Agnes Creek	Flat Creek	SF Agnes Creek	Antilon Lake	Rainy Lake
Basin Creek	Maple Creek	SF Bridge Creek	Cub Lake	Roses Lake
Boulder Creek 1	McAlester Creek	SF Flat Creek	Domke Lake	Surprise Lake
Bridge Creek	NF Bridge Creek	Spruce Creek	Doubtful Lake	Trapper Lake
Chelan River	NF Thirtyfive Mile Creek	Stehekin River	Dry Lake	Unnamed Lake 1
Columbia River	Park Creek	Swamp Creek	Green View Lake	Wapato Lake
Company Creek	Prince Creek	Twentyfive Mile Creek	Hart Lake	White Rock Lake 1
Cottonwood Creek	Railroad Creek	WF Agnes Creek	Lake Chelan	
Doubtful Creek	Rainbow Creek	WF Flat Creek	Lyman Lake	
Fish Creek 1	Rimrock Creek	WF Agnes Creek	Mirror Lake	

2.2.6 City of Cashmere

Shorelands in the City of Cashmere include areas within 200 feet of the ordinary high water mark, floodways, portions of their adjacent floodplains, and any associated wetlands within those floodplains. Waters identified within jurisdiction include Mission Creek and the Wenatchee River. The shoreline acres in the City and UGA equal 238, and the shoreline length equals 12,159 feet.

2.2.7 City of Chelan

Shorelands in the City of Chelan include only areas within 200 feet of the ordinary high water mark, floodways, portions of their adjacent floodplains, and any associated wetlands within those floodplains. Waters identified within jurisdiction include Lake Chelan, the Chelan River and a very small portion of the Columbia River. Together the City and its UGA have 517 acres and 109,558 linear feet in shoreline jurisdiction.

2.2.8 City of Entiat

Shorelands in the City of Entiat include only areas within 200 feet of the ordinary high water mark, floodways, portions of their adjacent floodplains and any associated wetlands within those floodplains. Waters identified within jurisdiction include the Entiat and Columbia Rivers. The City of Entiat contains 117 acres and 22,500 linear feet in shoreline jurisdiction.

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2.2.9 City of Leavenworth

Shorelands in the City of Entiat include only areas within 200 feet of the ordinary high water mark, floodways, portions of their adjacent floodplains and any associated wetlands within those floodplains. Waters identified within jurisdiction include Chumstick Creek and the Wenatchee River. The City of Leavenworth and its UGA contain a total shoreland area of approximately 148 acres and runs 5,071 linear feet.

2.2.10 City of Wenatchee

Shorelands in the City of Wenatchee include only areas within 200 feet of the ordinary high water mark, floodways, portions of their adjacent floodplains and any associated wetlands within those floodplains. Waters identified within jurisdiction include the Wenatchee and Columbia Rivers. In the City and its UGA, shoreline jurisdiction contains 282 acres and 51,484 linear feet.

2.3 Inventory and Analysis Summary

The *Shoreline Inventory and Analysis Report* (TWC and J&S 2009) is divided into seven main sections: Introduction, Current Regulatory Framework Summary, Elements of the Shoreline Inventory, Shoreline-Specific Conditions, Analysis of Ecological Functions and Ecosystem-wide Processes, Land Use Analysis, and Public Access Analysis. Most of these chapters were subdivided into sections for the County and watershed. Discussions were broken into the four WRIAs (WRIA 40a - Stemilt-Squilchuck and part of WRIA 40b located in Chelan County [Colockum Creek basin], WRIA 45 - Wenatchee, WRIA 46 - Entiat, and WRIA 47 – Chelan) and five Cities (Cashmere, Chelan, Entiat, Leavenworth, and Wenatchee). The WRIA discussions do not include information for the incorporated Cities and their UGAs. The City discussions include each City's UGA. The following inventory is summarized from detailed information presented in the *Analysis Report* (TWC and J&S 2009).

2.3.1 Chelan County

Land Use and Physical Conditions

Most human settlements (both pre-historic and historic) in Chelan County have developed along waterbodies. The communities that developed are likewise connected along waterbodies by transportation and utility corridors. County-wide water-oriented uses include: agriculture, fish hatcheries, certain hotels/motels, marine craft transportation, open space, parks, recreational activities, resorts and group camps, and retail trade-eating/drinking.

In the unincorporated WRIAs, the current land use patterns are predominantly rural residential, government/utility, and forestry and agriculture resource lands, with exceptions – such as small towns along rivers and streams, lake communities, and some focused areas of rural industrial and rural waterfront commercial. Relatively more urban and intensive development is found in the cities, particularly Chelan (commercial, tourist, recreation), Cashmere (mixed use), and Wenatchee (utility and industrial). Some cities have extensive open space along their shorelines, such as Entiat, Leavenworth and Wenatchee, due to municipal, Public Utility District (PUD), County, or state park lands.

Future land use designations tend to reinforce current land use patterns, but there are areas of the County that are identified for new or greater uses. Unincorporated shorelines that are in public ownership tend to be identified for resource uses, while those in private ownership tend

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to be planned for rural residential, rural commercial/waterfront, or rural industrial uses. City shorelines are planned for a wider variety of activities to support their role as centers of the local community. Many areas in the cities that are already developed are likely to see re-development. Entiat and Wenatchee have the most ambitious of these re-development/waterfront plans. All of the WRIAs are likely to see additional rural residential growth.

Biological Resources and Critical Areas

Numerous wetlands are associated with Chelan County shorelines, including emergent and palustrine wetlands. In Chelan County, emergent wetlands are most likely to be sedge meadows and montane meadows, and palustrine wetlands would be dominated by woody vegetation occurring along watercourses. Old-growth forest corridors are found throughout the county, having been mapped by the USFS as part of its *Northwest Forest Plan*.

Chelan County has many critical areas discussed in more detail in the sections below.

2.3.2 Stemilt/Squilchuck–Colockum (WRIA 40a/b)

Land Use and Physical Conditions

WRIA 40a/b is dominated by resource lands, including commercial agriculture and commercial forestry. Residential and industrial uses tend to congregate closer to the Columbia River and other waterbodies in the eastern portion of the WRIA (RH2 Engineering, Inc. 2007). Geologically hazardous areas are common, particularly around the three reservoirs (which are considered to have 100% geohazard coverage). Shorelands within WRIA 40a/b are currently used for: agriculture; cultural/recreation/assembly; forestry; government/utility; manufacturing/industry; natural resources; residential; and transportation.

Twenty-seven percent (27%) of the WRIA remains undeveloped, although plans for additional single-family rural residential dwellings (23% of the current land use, planned to increase to 65% of the shoreland area) would reduce the amount of undeveloped land in time. Likewise, increases in rural industrial shoreline use, accounting for 3% of the existing shoreline use, would increase to 22 percent. Current open space in shoreline jurisdiction totals about 166 acres, mostly along the Columbia River.

Biological Resources and Critical Areas

Shorelines contain a combined total of 569 acres of priority habitats and habitat features, including wetlands, riparian zones, cliffs/bluffs, elk and mule deer habitat, and wood duck breeding areas. WRIA 40a/b waters contain priority fish species as well. According to the National Wetlands Inventory (NWI) and hydric soils information, as much as 17% of the total shoreline area may be wetlands.

2.3.3 Wenatchee (WRIA 45)

Land Use and Physical Conditions

Government/utility uses and resource lands (forestry, agriculture, and other natural resources) dominate the majority of the 75 shorelines. Shorelands within WRIA 45 are currently used for: agriculture, commercial, cultural/recreation/assembly, forestry, government/utility,

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manufacturing/industry, natural resources, residential, transportation, and open space. WRIA 45 contains unincorporated and incorporated lands.

Water-oriented uses along shorelines in WRIA 45 include agriculture, parks/recreation/recreational activities, resorts and group camps, certain hotel/motels, eating and drinking places, and others. Much of the shorelines tend to be parcels without buildings, largely due to the commercial forest lands in the watershed. Most of the shoreline land is being used for government/utility is expected to remain, even where there are vacant parcels. With future development, the shorelines are likely to see added rural residential, which makes up 17 percent of the current land use, but is planned for over 24 percent of the shoreline lands.

Parks and open space are found along numerous shorelines in WRIA 45. Open space is estimated at approximately 24,699 acres, and park lands total about 17 acres (found along the Columbia and Wenatchee Rivers). Developed public access points include: trails, campgrounds, picnic areas, fishing easements, and boat launches. The trails are extensive, linking various waterbodies as well as running alongside waterbodies. Fishing easements and boat launches are located along the Wenatchee River.

Biological Resources and Critical Areas

Shorelines in WRIA 45 contain a combined total of 19,433 acres of priority habitats and habitat features. The most common habitats, in order of frequency of occurrence, are those for elk calving, migration, concentrations, or foraging and mountain goat breeding or concentrations. Twenty-seven separate osprey nest sites are mapped in shoreline jurisdiction, distributed on five waterbodies. Many of the rivers, streams and lakes also contain priority fish species. According to the NWI and hydric soils information, as much as 39 percent of the total shoreline area may be wetlands. Floodplains and a few geohazard areas are also documented in the WRIA.

2.3.4 Entiat (WRIA 46)

Land Use and Physical Conditions

Current land uses in WRIA 46 shorelines are dominated by orchards, livestock production and grazing, timber harvest, residential housing, and recreation. The USFS and timber lands dominate in terms of acres (Chelan County Conservation District [CCCD] 2004). Non-federal shoreline uses include: agriculture, commercial, cultural/recreation/assembly, forestry, government/utility, natural resources, residential, and undeveloped land.

Water-oriented land use is primarily agriculture (at approximately 170 acres), with most of the acreage on the Entiat River, followed by the Columbia River. Other water-oriented uses include open space (non-commercial forest) and recreational activities. The majority of shorelines contain parcels without buildings. Most of the undeveloped land in the watershed is planned for commercial forestry, rural residential, and rural waterfront uses. Forestry uses likely would not result in permanent shoreline development, and residential lands are likely to continue in similar patterns as today, with some infill on vacant parcels. Rural waterfront uses include residential, and water related/water dependant recreational and tourist development.

Public access consists of view corridors, open space and parks. View corridors are prominent along the Columbia and Entiat Rivers (from higher elevations). Open space is estimated at approximately 3,084 acres with park land totaling about 1 acre (along the Entiat River). Developed public access points include trails and campgrounds in shoreline jurisdiction. Three

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of 10 shorelines have campground facilities and one shoreline has several trailheads. The trails are extensive, linking various waterbodies as well as running alongside waterbodies.

Biological Resources and Critical Areas

Shorelines in WRIA 46 contain a combined total of 5,504 acres of priority habitats and habitat features. The most common priority habitats, in order of frequency of occurrence, are those for lynx, followed by old-growth/mature forests and priority riparian zones. Many of the rivers, streams and lakes also contain priority fish species. According to the NWI and hydric soils information, as much as 24 percent of the total shoreline area may be wetlands. Floodplains and a few geohazard areas are also documented in the WRIA.

2.3.5 Chelan (WRIA 47)

Land Use and Physical Conditions

Approximately 87 percent of WRIA 47 is in federal, state, and local government ownership. The remaining 13 percent is in private ownership. Current land uses in the WRIA as a whole include conservation, recreation, primary and secondary (vacation and second homes) residential, resorts, and agriculture. The upper two-thirds of the watershed can be accessed only by water, foot, horseback or air (floatplane) (Berg 2004). The shoreline land uses include: agriculture, commercial, cultural/recreation/assembly, forestry, government/utility, natural resources, residential, and undeveloped land. The existing land uses vary by individual waterbody, with some shorelines dominated by residential uses (Lake Chelan, Roses Lake, Wapato Lake), commercial uses (Chelan River, Twentyfive Mile Creek), and undeveloped lands (Fish Creek, Dry Lake).

WRIA 47 shorelines contain unincorporated and incorporated lands. Unincorporated lands are primarily used as commercial forest (71%) or residential (20%) lands. Shorelines planned for focused rural development (including rural waterfront development) include Twentyfive Mile Creek, Roses Lake, and Wapato Lake.

Parks and open space are found along numerous shorelines in the unincorporated area. Open space is estimated at approximately 9,417 acres, and park lands total less than 1 acre along Lake Chelan. Developed public access points include: trails, campgrounds, and boat launches. The trails are more extensive in the northern and western portion of the WRIA and alongside and between waterbodies. Most trails near Lake Chelan do not parallel the water, and radiate to other destinations away from the lake. Boat launches are numerous along Lake Chelan. View corridors are prominent along Lake Chelan in the vicinity of the City of Chelan. Lake Chelan is the most developed shoreline in WRIA 47, with boating and camping facilities. There are fewer facilities on a handful of other waterbodies.

Biological Resources and Critical Areas

Shorelines in WRIA 47 contain a combined total of 7,858 acres of priority habitats and habitat features. The most common priority habitats, in order of frequency of occurrence, are those for lynx (found in 28 shorelines), followed by mule deer breeding areas, concentrations, and migratory corridors. Many of the rivers, streams and lakes also contain priority fish species. According to the NWI and hydric soils information, as much as 16 percent of the total shoreline area may be wetlands. Floodplains and a few geohazard areas are also documented in the WRIA.

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2.3.6 City of Cashmere

Cashmere is a historic community in the lower Wenatchee River valley known for its agricultural-oriented industries, traditional downtown, and residential character.

Land Use and Physical Conditions

Mission Creek is largely flanked by single-family residential, but also commercial and government uses. The Wenatchee River is fronted mostly by government/utility uses, such as the City's wastewater treatment plant, Riverside Park, City sanitation and recycling facility, and a City mulching facility. Planned land uses are likewise a mix, maintaining the existing pattern of the majority of land for single family on Mission Creek and public for the Wenatchee River. Potential water-oriented uses include agricultural uses, and uses at public parks and open space along both Mission Creek and the Wenatchee River.

There are parcels which do not contain buildings on both Mission Creek (4% of land in the shoreline jurisdiction) and the Wenatchee River (29% of land in the shoreline jurisdiction). The City's two shorelines are mostly committed to urban development today, primarily single-family residential. However, some of the land along the Wenatchee River in the City limits contains older industrial structures or improvements that may redevelop. There may be additional growth on shorelines in the UGA, since this area has not yet fully developed. The City may see additional commercial or industrial uses along Mission Creek, which currently has 9 percent of the land being used for commercial purposes (but 15% of the land is planned for mixed commercial/light industrial and 10% in warehouse industrial).

Public access features include parks and open space along Mission Creek (having approximately 3 acres of parks and 1 acre of open space, equaling 7% of shoreline jurisdiction) and the Wenatchee River (with approximately 36 acres of open space at 33% of shoreline jurisdiction and over 32 acres in parks, equaling 29% of shoreline jurisdiction). Other public access features include a river access ramp easement along the Wenatchee River within Riverside Park, as well as visual access corridors from lands east and west of the Wenatchee River in the vicinity of US 2, Riverside Park, and higher elevations. Shoreline trails are present along both Mission Creek (602 feet in length) and the Wenatchee River (14,522 feet in length).

Biological Resources and Critical Areas

Shorelines in the City of Cashmere and its UGA contain a combined total of 46 acres of priority habitats and habitat features. Both the Wenatchee River and Mission Creek contain priority fish species. According to the NWI and hydric soils information, as much as 24 percent of the total shoreline area may be wetlands.

The critical area most prevalent on the City's Wenatchee River shoreline is "frequently flooded areas." Most of the City is protected by a City-owned, Corps-certified/built levee on the Wenatchee River. However, there is a gap in the Wenatchee River levee along Riverfront Drive, south of the Cotlets Way bridge. The area near Riverfront Drive is susceptible to flooding during heavy rains or high elevation snow melt.

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2.3.7 City of Chelan

The City of Chelan is found along the eastern shore of Lake Chelan. The Chelan community attracts tourists and seasonal residents due to its historic charm, provision of commercial services, and recreational opportunities along Lake Chelan.

Land Use and Physical Conditions

Current land uses along the entire City and UGA shorelines are dominated by residential, commercial, recreation, government, but also include: agriculture, commercial, cultural/recreation/assembly, natural resources, residential, and undeveloped land. Most of the shoreline is developed apart from parklands. Plans for development or redevelopment along Lake Chelan and other public open space will be oriented to tourist, commercial, recreational services, activities, and residential uses (Land Use Element Commercial Policy 18). The City encourages efficient public use of shoreline properties (Land Use Element Urban Growth Area Policy 4), and will allow public and private development for adequate camping, boat launching, docking and moorage facilities, marinas, and other water-related recreational opportunities on Lake Chelan and the Columbia River (Economic Development Element Open Space and Recreation Policy 3).

Land uses have been proposed for all the City's shorelines, and may include: high density commercial, highway service commercial, waterfront commercial, public lands and facilities, single-family residential, multi-family residential, special use district, tourist accommodations, and warehousing and industrial land uses. Potential growth could occur on properties that are vacant or that do not have structures, as well as on lands the City has identified for further development in its plans.

Lake Chelan shorelines contain some water-oriented uses including parks (about 18 acres), agriculture (about than 2 acres), recreational activities (about 2 acres), resorts and group camps (about 8 acres), marine craft transportation (more than 1 acre), and eating/drinking places (more than 1 acre). The Chelan River has about 7 acres in shoreline jurisdiction for park use. Waterfront commercial and tourist accommodation are also water-oriented land uses found throughout City shorelines.

Public access consists of view corridors, open space and parks. View corridors are prevalent along roadways paralleling the water, and from higher elevations above the lake. Open space acres in the shoreline jurisdiction total about 47 acres, along the Chelan River (~ 17 acres) and along Lake Chelan (~ 30 acres). Based on the shoreline inventory, there are 17 recreation facilities on Lake Chelan within the City and UGA consisting of boat launches (2), boating facilities (2), community dock/marina (5), and other marinas (3).

Biological Resources and Critical Areas

Shorelines in the City of Chelan and its UGA contain less than 0.1 acre of priority habitat, limited to mule deer habitat in the small area of Columbia River shoreline. All of the City's shorelines contain priority fish species. According to the NWI and hydric soils information, as much as 11 percent of the total shoreline area may be wetlands. Most of these potential wetlands are located in the Chelan River shorelands. The portions of the Chelan River and Columbia River in the City and UGA contain substantial areas identified as geologic hazards.

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2.3.8 City of Entiat

The City of Entiat serves as a central gathering point for a broader community surrounding the City limits.

Land Use and Physical Conditions

Primarily land is used for government/utility and residential purposes, but also as open space. Along both the Columbia and Entiat Rivers, future land use plans call for a wider mix of uses, including commercial and business. Existing water-oriented uses in the City limits include a large park with shoreline recreation facilities.

There are a number of lots without structures (not necessarily without uses) along the Columbia (15 parcels, encompassing 71% of shoreline acres) and Entiat Rivers (7 parcels, encompassing 68% of shoreline acres). The Entiat Waterfront Master Plan (ESA Adolfson 2009) intends to facilitate tourism, commercial uses and economic development for the community along approximately 18 acres of Columbia River shoreland. Conceptual plans (dated December 2009) identify potential uses for the shorelands including: a marina, mixed-use condominiums and retail, a hotel, a restaurant row, an amphitheatre, waterfront parks, picnic areas, riparian restoration, a fishing dock, multi-use trail, sidewalks, a new waterfront road and short side roads, and parking.

The Columbia River is lined with a park (Entiat City Park) and PUD-owned open space estimated at about 46 acres (54% of the shoreline). The remaining space is residential, City wastewater treatment facility, and a gravel mine. Open space land along the Entiat River is estimated at about 15 acres (47% of the shoreline). Shoreline viewing access is available for the Columbia and Entiat Rivers along roadways, and from hilltops or immediately along the shoreline. Physical access is primarily found at the Entiat City Park, providing over 4,000 feet of shoreline. The facilities at this park include 3 restrooms, 2 showers, 25 tent camping sites, 31 RV camping sites, and a boat launch. At this location, park users can boat, water ski, jet ski, swim and picnic. Additionally, a local museum is also located adjacent to the site. The Chelan County PUD is planning improvements to the park that may include additional boat launching facilities.

Biological Resources and Critical Areas

Shorelines in the City of Entiat and in the Columbia River fronting the City contain 130 acres of priority habitats, including bald eagle, riparian zones, mule deer, and waterfowl concentration areas. All of the City's shorelines contain priority fish species. According to the NWI and hydric soils information, as much as 16 percent of the total shoreline area may be wetlands. All of the potential wetlands identified by NWI are located along the Entiat River.

2.3.9 City of Leavenworth

Leavenworth is located in the upper reaches of the Wenatchee River Valley. Leavenworth is known for its Bavarian-themed downtown, as well as for its environmental quality along the Wenatchee River, where the City has obtained much of the shoreline for recreation or open space purposes.

Land Use and Physical Conditions

Along Leavenworth's combined shoreline area (including the UGA), the current land uses are dominated by government/utility, residential, and commercial uses, but also include:

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cultural/recreation/assembly and undeveloped land. Along the Wenatchee River and Chumstick Creek, future land plans generally follow current patterns, though some additional development would occur consistent with the following categories: central and general commercial zones, light industrial zone, recreation public zone, recreation zone, residential multi-family zone, rl-12 zone, rl-6 zone, and a tourist commercial zone.

Extensive park and recreation uses along the Wenatchee River (in the City) total approximately 54 acres in shoreline jurisdiction. There are also hotels/motels (4 acres approx.), a wastewater treatment plant (about 2 acres), and eating and drinking venues (less than 1 acre). Water-oriented uses include a small agricultural property (0.10 acre) on Chumstick Creek.

There are several public and private parcels with no structures on them, which may be locations for future waterfront development. Four of 13 parcels on Chumstick Creek do not have buildings (representing 40% of the shoreland), and 73 of the 172 parcels on the Wenatchee River (representing 32% of the shoreland) do not contain buildings presently. Generally, extensive changes along the shoreline are not anticipated due to the public recreation ownership of the public golf course and parks along much of the shoreline and the remaining already developed condition.

Shoreline visual access along the Wenatchee River is possible from public parks and access points on both sides of the river. Improvements to shoreline visual access points have been outlined in the *Downtown Master Plan* (City of Leavenworth 2007). Approximately 65 acres of park land and open space lie within the City's shoreline jurisdiction, with most located on the Wenatchee River. Four City-owned parks and recreation facilities (along the Wenatchee River) provide physical and visual shoreline access.

Biological Resources and Critical Areas

Shorelines in the City of Leavenworth and its UGA contain 115 acres of priority habitats, consisting only of priority riparian zones concentrations. All of the City's shorelines contain priority fish species. According to the NWI and hydric soils information, as much as 26 percent of the total shoreline area may be wetlands. No information was available regarding presence of geologically hazardous areas in the City of Leavenworth shorelines.

2.3.10 City of Wenatchee

The City of Wenatchee and its UGA are located along the banks of the Columbia River at the confluence of the Wenatchee River. Wenatchee is the largest city in Chelan County and is the primary center for jobs.

Land Use and Physical Conditions

Along the two shorelines in the City of Wenatchee, current land uses are dominated by government/utility and open space, but also include: agriculture, commercial, manufacturing/industrial, residential, transportation, and undeveloped land. Water-oriented uses include parks/open space (approximately 80 acres) and agriculture (6 acres), with 50 combined acres on the Columbia River and 30 combined acres on the Wenatchee.

Planned development along the City's shorelines may include: industry, the north Wenatchee business district, residential high/moderate/single-family, and waterfront mixed use. These planned land uses along the Columbia River shoreline may include industrial, high density

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residential, and parks. Planned land uses along the Wenatchee River may include single-family residential, industrial, and parks.

The Columbia River waterfront is flanked by public properties such as PUD recreation facilities and the railroad. The Sunnyslope area along the Wenatchee and Columbia Rivers is generally developed with homes and industrial uses, and is unlikely to see a significant change in the land use pattern (B. Frampton, personal communication, April 2008). There are several public and private parcels with no structures on them. Future development could occur on vacant parcels and on parcels subject to the *Wenatchee Waterfront Sub-Area Plan* (2003) which promotes redevelopment. Seventy-seven of 125 parcels on the Columbia River do not have buildings (representing 66% of the shoreland), and 20 of the 31 parcels on the Wenatchee River (representing 94% of the shoreland) do not contain buildings.

Open space and park land within the City's shoreline jurisdiction (totaling ~120 acres), may offer water access via boat launches, piers, or trails at some locations. Four waterfront parks and trails are present in the City and UGA. Planned parks and recreation improvement in or near the shoreline include waterfront moorage and parking, waterfront trail upland access and boathouse, and open space acquisition in the City of Wenatchee and its UGA at +/- 200 acres (City of Wenatchee 2008).

Biological Resources and Critical Areas

Shorelines in the City of Wenatchee and its UGA contain 253 acres of priority habitats, consisting of bald eagle, bighorn sheep, mule deer, and priority riparian zones concentrations. All of the City's shorelines contain priority fish species. According to the NWI and hydric soils information, as much as 38 percent of the total shoreline area may be wetlands. However, this figure is high because of the inclusion of some of the mainstem Columbia River as wetland. No information was available regarding presence of geologically hazardous areas in the City of Wenatchee.

Section 3 Restoration Goals and Objectives

3.1 Chelan County

The following subsections discuss restoration goals and objectives previously identified in local WRIA, City and County planning efforts. Discussions are broken into the four WRIAs and five Cities when applicable. The WRIA discussions do not include information for the incorporated Cities and their UGAs. The City discussions include each City's UGA.

3.1.1 County-Wide

Many of the watershed planning and salmon recovery efforts are administered by the Chelan County Natural Resources Department (CCNRD). Current activities include Wenatchee River Watershed (WRIA 45) planning and implementation, Squilchuck/Stemilt Watershed (WRIA 40a) planning and implementation, a County-wide salmon recovery grant program through Washington Salmon Recovery Funding Board, and habitat conservation plan development under the Federal Endangered Species Act (Chelan County website). CCNRD is also a partner with the Cascadia Conservation District (CCD) (formerly the Chelan County Conservation District) in the planning and implementation of the Entiat (WRIA 46) watershed plan, and the early planning

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stages of the Lake Chelan (WRIA 47) watershed plan. The goals and objectives of the above plans will be discussed in the appropriate WRIA subsections below.

The CCNRD also supports a regional salmon recovery effort, the Upper Columbia Salmon Recovery Board (UCSRB), and staffs the Chelan County Water Conservancy Board (Chelan County website).The mission statement of the UCSRB, whose planning area includes all of Chelan County except for the Chelan watershed, is:

> *"To restore viable and sustainable populations of salmon, steelhead, and other at risk species through collaborative, economically sensitive efforts, combined resources, and wise resource management of the Upper Columbia region."*

Restoration efforts throughout the County could focus on addressing the 12 factors for decline that were identified in the *Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan* (UCSRB 2007) for covered species. Areas for improvement may address the following factors:

- Social, Cultural, and Economic Factors
- Public Policy
- Management Actions
- Harvest
- Hatcheries
- Hydropower
- Habitat (includes alteration from land use practices, logging, mining, diversions, and other uses)
- Ecological Factors
- Factors Outside the ESU [Evolutionarily Significant Unit] and DPS [Distinct Population Segment]
- Interaction of Factors
- Current Threats
- Uncertainties

3.1.2 WRIA 40a/b

WRIA 40a Watershed Plan Restoration Objectives

The *WRIA 40a Watershed Plan* (RH2 Engineering, Inc. 2007) developed objectives for desired future conditions within the Squilchuck and Stemilt basins. Phase 1 (discussions) and Phase 2 (assessment work) of the Plan led to the development of three general principal recommendations, which are listed in the general order of the Planning Unit's priority:

1. Increase the availability of water, the reliability of the water supply, and/or increase water use efficiency.
2. Improve the management of water and related land resources in WRIA 40a.
3. Improve the understanding of the hydrology of WRIA 40a.

Objectives were organized by sub-basin, and ranked and revised based on the information obtained during the development of the *Water Quantity Assessment* (2007), the *Multi-Purpose Water Storage Assessment* (2007) and the preliminary draft of the Watershed Plan during WRIA 40a Planning Unit (Planning Unit) meetings (RH2 Engineering, Inc. 2007). Planning Unit objectives identified in the *WRIA 40a Watershed Plan* focus primarily water storage and address

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the three objectives listed in the plan and above. These are in the general order of ranking, as follows:

1. Perform emergency infrastructure repairs to ensure continued system operation.
2. Upgrade existing water reservoir storage and irrigation water distribution systems for water conservation and continued safety protection (fire suppression water). The availability of fire suppression water protects the watershed and natural resources within the WRIA. If this area were to experience a catastrophic wildfire, it would drastically impact the water balance in the area because of changes to runoff and evapotranspiration that would occur.
3. Implement cost-effective new water storage projects in both the Stemilt and Squilchuck Creek watersheds to sustain flow during the agricultural water use period and the fall low flow period.
4. Obtain needed data to enhance the water balance developed by RH2 as part of the watershed planning effort and consider the water balance in all decisions related to water supply in the WRIA 40a study area.
5. Evaluate artificial snow-making and reservoir construction at the Mission Ridge Winter Sports Area to determine opportunities for enhancing water delivery in terms of timing and flow in the Squilchuck Creek watershed.
6. Where feasible, transfer existing interruptible Columbia River water rights to non-interruptible sources. Coordinate with Ecology's Columbia River Water Management Program (CRWMP) to ensure this issue is adequately addressed in that effort.
7. Where feasible, provide domestic water from the regional water supply to support future residential and industrial development in WRIA 40a.

In addition to the objectives above, the *WRIA 40a Watershed Plan* (RH2 Engineering, Inc .2007) identifies the following goal toward implementing restoration:

8. Work with CCNRD and other State and local agencies to protect identified wetland, riparian and ground water recharge areas.

Planned and implemented restoration projects addressing goal number 8 are listed in Table 3-8 of the *Final WRIA 40a Detailed Implementation Plan* (WRIA 40a Planning Unit 2008). Habitat issues are addressed with projects that include channel connectivity, off-channel habitat, culvert removal and improvement, bank stabilization, and habitat enhancement.

WRIA 40a Watershed Plan Restoration Implementation Strategies, Benchmarks, and Funding

The *Final WRIA 40a Detailed Implementation Plan* (WRIA 40a Planning Unit 2008) calls for concurrent implementation of the three general principal recommendations and the eight objectives above. The Planning Unit applied the same prioritization process to each goal and objective. The Implementation Plan employs flexibility in its strategy so that variable water needs, available funds, and commitment to projects may be accommodated. The strategy calls for determining targets for instream flow and acceptable instream habitat loss by conducting studies on the Wenatchee River and tributaries. Periodic review is part of the strategy, as is the pursuit of funding through partnerships and innovative means. Implementation schedules

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depend on size and complexity of projects, funding, permitting, and the capacity of involved parties to complete projects. Near-term funded actions were scheduled for implementation in 2008 to 2011 at the time of Implementation Plan completion. Implementation of 50 percent of near-term unfunded actions (top-tier priority only) was scheduled for 2009 to 2013 implementation; the remaining 50 percent and 50 percent of second-tier projects are scheduled for 2014 to 2018. The remaining projects of second-tier priority are scheduled for implementation. All remaining second- and third-tier projects are to be implemented in 2019 to 2023. Evaluation of the status of water reservation is scheduled for every five years until 2025.

Three funding mechanisms are addressed in the Implementation Plan. Funds appropriated by the State legislature for watershed planning implementation will be used primarily for first- and second-tier projects and implementation of the *WRIA 45 Watershed Management Plan*. Secondly, implementing entities (Ecology, CCNRD, BOR, SRFB, and BPA, for example) have made unspecified finding commitments. Finally, grant funding will be coordinated with other processes, such as the Chelan County Lead Entity process and the CCD. Additional funds for projects not funded through these avenues may be sought from a variety of sources, included other State agency grants, other SRFB funding, BPA grants, and many private sources, which can be located through the Boise State University Finance Center website at http://efc.boisestate.edu/watershed/searchmenu.asp.

Washington Department of Fish and Wildlife Diversion Screening and Fish Passage Inventory Report for Colockum Creek, Stemilt Creek and Squilchuck Creek Objectives

The Washington Department of Fish and Wildlife (WDFW) completed a *Diversion Screening and Fish Passage Inventory Report for Colockum Creek, Stemilt Creek and Squilchuck Creek* in 2006. The goal of the inventory was to 1) assess unscreened or inadequately screened surface water diversions and 2) identify fish passage barriers and to assess the potential available habitat gain for each feature. Data obtained from the diversion screening and fish passage inventory and concurrent habitat survey will allow for prioritization for correction of noncompliant surface water diversions and fish passage barriers to ensure compliance with Washington State laws. The report identifies an additional goal toward shoreline restoration in WRIA 40a/b: In the area of Colockum Creek within the shoreline jurisdiction, at least five barriers to fish passage were identified. These are all recommended for removal or repair, as they block anadromous salmonids access to suitable habitat.

Washington Department of Fish and Wildlife Diversion Screening and Fish Passage Inventory Report for Colockum Creek, Stemilt Creek and Squilchuck Creek Implementation Strategies, Benchmarks, and Funding

The goals of the *Diversion Screening and Fish Passage Inventory Report for Colockum Creek, Stemilt Creek and Squilchuck Creek* (WDFW 2006) to assess surface water diversion and fish passage issues were largely completed during the inventory process. The results yielded the third goal in the preceding section, the removal and/or repair of fish passage barriers. The potential fish barrier projects were also ranked and prioritized as part of the inventory. No timeline or implementation strategy was included in the analyses. This, a recommended first step would be to completed a detailed implementation plan for fish passage barrier projects in the three creeks. Potential funding sources include many of those listed in the preceding paragraph.

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3.1.3 WRIA 45

Planning Unit Objectives

The Wenatchee Watershed Planning Unit, which includes Chelan County and the Cities of Wenatchee, Cashmere and Leavenworth, has a defined mission "to collaboratively develop a management plan for sustaining and improving watershed and community health." To implement this plan, the WRIA 45 Planning Unit's goal is to: "protect water resources, habitat and water use in a way that balances the educational, economic and recreational values associated with a healthy community." The WRIA 45 Planning Unit will work to achieve this goal by meeting the following three objectives:

1. Assess water supply and use, and develop strategies for meeting current and future needs for both in-stream and out-of-stream use (Water Quantity and Instream Flow Subcommittee).
2. Protect and enhance habitat of threatened and endangered and culturally important species throughout the Wenatchee Watershed, improving overall habitat function and connectivity (Habitat Subcommittee).
3. Address polluted water bodies that do not meet state and federal water quality standards (Water Quality Technical Subcommittee).

The WRIA 45 Planning Unit identified 25 opportunities for actions in the Wenatchee watershed, including six short-term actions and four hatchery-oriented actions. Details are covered in Volume 1 of the *Wenatchee Watershed Management Plan* (WWMP) (Wenatchee Watershed Planning Unit 2006). These recommended actions and planned implementation strategies meet the WRIA 45 Planning Unit's three objectives by indentifying watershed-wide actions (pertaining to instream flow, quantity, growth and land use, quality, habitat, implementation, and outreach) and sub-watershed specific actions. Tables 2-1 through 2-16 of the WWMP (2006) present summaries of the recommended actions and the agency(s) or entity(s) responsible for implementation; Table 2-6 lists specific implementation actions.

Planning Unit Implementation Strategies, Benchmarks, and Funding

The WWMP suggests that voluntary, cooperative measures are preferable to regulatory enforcement approaches. Implementation actions in the WWMP may need additional assessment and planning before implementation can proceed and responsibilities can be assumed, and that funding considerations may limit the implementation process, although federal entities are expected to support the strategies in the plan within the limits of available financial resources.

Funding sources for recommended actions would be determined by the implementation entity. Examples of potential private and public funding sources include Aquatic Lands Enhancement Account (ALEA), Bonneville Environmental Foundation Watershed Program, The Bullitt Foundation, Coastal Protection Fund (CPF), The Compton Foundation Environmental Grants, Family Forest Fish Passage Program (WDNR), Fish America Foundation Conservation Grant, Riparian Habitat Protection in the Washington Wildlife and Recreation Program (WWRP), and the UCSRB.

The UCSRB *Draft Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan* (2005) calls for administrative reviews to assess project implementation success, as well and for monitoring of recovery actions for their effectiveness in fulfilling goals. The WWMP also

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recommends an adaptive management strategy for actions that may require further development, additional data collection, or subsequent modification.

The *Wenatchee River Integrated Status and Effectiveness Monitoring Program* (ISEMP) is also in place to evaluate and document the progress and success of habitat actions. The ISEMP is a collaborative effort funded through various federal, state and local efforts. It builds on existing monitoring programs and consists of pilot status and trend monitoring efforts for anadromous salmonids and their habitat, as well as effectiveness monitoring for suites of habitat restoration projects in the Wenatchee Watershed.

Wenatchee River Channel Migration Zone Study Objectives

CCNRD conducted a *Wenatchee River Channel Migration Zone Study-Phase I* in 2003. The purpose of the CMZ Study Phase I was to provide the technical foundation to allow the selection and prioritization of salmonid habitat restoration, enhancement, and preservation projects (Jones and Stokes Inc. 2004). The study objectives were to 1) evaluate historic changes in channel behavior and vegetation for the lower Wenatchee River (from Leavenworth to the mouth) and some of its tributaries (mouths of the Icicle, Peshastin and Mission Creeks, and the lower four miles of Nason Creek), 2) project areas where these rivers and streams may migrate or erode their banks in the future, and 3) identify potential restoration sites to improve salmon habitat (CCNRD website).

Phase II of the CMZ Study was subsequently completed to quantify physical and biological mechanisms linked to the salmonid habitat limiting factors, and prioritize potential habitat restoration, enhancement, and preservation actions. Twenty-four restoration sites were selected for preservation, enhancement, or restoration. The sites included areas that could be preserved because of their existing high-quality habitat adjacent to the Wenatchee River, and their need for additional off-channel habitat and riparian vegetation. The CCNRD has made it a goal to restore and protect these 24 sites.

Wenatchee River Channel Migration Zone Study Implementation Strategies, Benchmarks, and Funding

Potential restoration and protection opportunities are reviewed by CCNRD in an ongoing manner. No timetable or implementation strategy specific to the 24 sites listed in the CMZ study exists. Rather, the sites will be considered as viable options for restoration and preservation activities discussions. Funding for restoration and preservation projects may differ, as some public funds and private entities may be available solely for one of these project types. For example, one of the projects (identified as CMZ 2, and referenced in the WWMP) was initiated by a private property owner and then was finalized and will be constructed by the Yakama Nation using Bonneville Power Administration mitigation funds. The Boise State University Finance Center website (http://efc.boisestate.edu/watershed/searchmenu.asp) provides a potential listing of available grants and other funds for the projects and sites suggested in the CMZ study.

Upper Valley Plan Objectives

A Steering Committee and the Chelan County Public Utilities District (CCPUD) partnered to develop a vision plan with opportunities for the upper Wenatchee River valley, including the communities of Leavenworth, Peshastin, Dryden, Cashmere, and Monitor. They identified goals,

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objectives and a list of potential river access sites and fisheries enhancement opportunities along the Wenatchee River.

A summary of the *Upper Valley Plan*'s purpose was to: 1) identify interpretive sites, river access points, and fisheries and wildlife enhancement opportunities along the Wenatchee River corridor, that have the potential to increase the public's knowledge and understanding of CCPUD's salmon and wildlife habitat enhancement programs; and to 2) build on existing tourism by creating attractions, new tourism opportunities (with an emphasis on the environment, education, recreation, culture, and art), visibility of the valley's resources, leveraging efforts of other groups that share common goals, and protect and enhance natural habitats (J.T. Atkins & Company PC. 2003). The plan identifies opportunity sites in:

1. Leavenworth (at the Leavenworth National Fish Hatchery, Blackbird Island, Icicle Creek/Wenatchee River confluence, irrigation projects, Wenatchee River habitat work, Icicle Loop Trail, potential interpretive trail at an old railbed site east of Leavenworth, gateway for "back roads" scenic drive, and Trout Unlimited projects).
2. Peshastin (at an old mill site, mill intake station, old railroad corridor, Kiwanis Park, Main Street, a historic log structure, Peshastin Creek/Wenatchee River confluence, and at railroad bridge and sandy beach).
3. Dryden (at a beaver pond site, dam site, powerhouse site, old school site, downtown Dryden, old dump site and public access above railroad and between railroad and SR 2).
4. Cashmere (at the Chelan Co. museum, a fishing hole on the north shore of the Wenatchee R., Old Mill, Raft Park and PUD kiosk, a flood area below Bethlehem construction, Goodwin Bridge, and Devil's Gulch mountain bike area).
5. Monitor (at Sleepy Hollow viewpoint, Green Bridge, gateway for "back roads" scenic drive, irrigation site, Monitor Bridge, riparian area, Chelan Co. Park, Wenatchee Foothills trail).

Upper Valley Plan Implementation Strategies, Benchmarks, and Funding

Implementation plans for the Upper Valley Plan goals begin obtaining 501c3 for the Steering committee, hiring a project director, and acquiring office space and equipment. Community meetings and meetings with reviewing agencies to determine permitting requirements are the following step. The remainder of the plan is aimed at identifying and procuring funding. Potential funding sources are not specified but may include both acquiring project specific funds from private and public entities as well as teaming to complete projects with existing programs and groups such as the Chelan-Douglas Land Trust, Washington State Department of Transportation, The Audubon Society, and CCNRD.

Washington Department of Ecology Total Maximum Daily Load (TMDL) Objectives

The U.S. Environmental Protection Agency (EPA) has approved a TMDL (the Wenatchee River Watershed Dissolved Oxygen and pH Total Maximum Daily Load Water Quality Improvement Plan (TMDL) (Ecology 2009). The TMDL identified three water bodies in the project area exceeding dissolved oxygen standards and six exceeding pH standards. The overarching goal of the TMDL plan is to meet water quality standards; thus, the goal is to reduce total phosphorus from point and nonpoint sources to the Wenatchee River. The timeline for compliance with water quality standards is 10 years from TMDL approval, or 2019. Fifty specific activities and goals are identified in Table 5 of the TMDL. They include supporting and regional phosphorus

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reduction activities, point and nonpoint source activities, facility planning and design, monitoring activities, and habitat improvements.

Washington Department of Ecology Total Maximum Daily Load (TMDL) Implementation Strategies, Benchmarks, and Funding

Three phases and a number of targets are defined to track progress toward goals. Timelines are in Table 3 of the TMDL and summarized below:

Phase/Target	Definition	Timeline
Phase 1	Point and nonpoint source reductions, data collection and model calibration	2009-2013
Target 1	50% nonpoint source loading reduction	2014
Phase 2	Modification of load and wasteload allocations (if needed); identification of additional nonpoint source reductions	2014-2015
Phase 3	Additional load reductions implemented	2015-2019
Target 2a	NPDES compliance	2019
Target 2b	Reduction in remaining nonpoint source poading	2019
Final Target	Water quality standards achieved	2019

Dissolved oxygen and pH data will be collected every five years to monitor progress toward the goals. Adaptive management will be employed to ensure that goals are achieved. Compliance monitoring will continue after compliance with water quality standards is achieved.

A number of funding resources presently support the TMDL or will potentially provide technical assistance or monetary support as projects are implemented. These sources include the CCD, which is a current recipient of a Centennial Clean Water Fund grant for TMDL activities; CCNRD, which provides incentive payments for implementation of riparian restoration activities; NRCS, which provides technical assistance to farmers and ranchers and may also be a funding source; and a number of jurisdictions and entities, including Chelan County, the Chelan County PUD, and the Cities of Wenatchee, Leavenworth, and Cashmere, have all shown interest in investigating sources of nonpoint source phosphorus loading.

3.1.4 WRIA 46

Planning Unit Objectives

The Entiat sub-basin community is recognized as being a leader in restoration planning, implementation and monitoring. The Entiat Watershed Planning Unit (EWPU) has won three awards for its restoration and planning efforts. Restoration projects have been designed and implemented by a variety of agencies, including BLM, WDFW, USFS, and the Natural Resources Conservation Service (NRCS).

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The EWPU consists of Entiat valley landowners, government and non-government employees, and other stakeholders. The revised vision of the EWPU (adopted 19 April 2000) is to "voluntarily bring people together in a collaborative setting to improve communication, reduce conflicts, address problems, reach consensus and implement actions to improve coordinated natural resource management on private and public lands in the Entiat Water Resource Inventory Area (WRIA 46)" (CCCD 2004).

The EWPU's *specific goals* are as follows:

1. Optimize quantity and quality of water to achieve a balance between natural resources and human use, both current and projected.
2. Provide for coexistence of people, fish and wildlife while sustaining lifestyles through planned community growth, and maintaining and/or improving habitats.
3. No avoidable human-caused mortality of state and federal threatened, endangered and candidate species.
4. Develop and implement an adaptive action plan to address priority issues, emphasizing local customs, culture and economic stability in balance with natural resources. All actions will comply with existing laws and regulations. However, changes to existing laws and regulations will be recommended as needed to attain our common vision and avoid one-size-fits-all solutions.
5. Recognizing the significance of the roles of limiting factors outside of the watershed and natural events within the watershed, the long-term goal is to have the Entiat River's existing and future habitats contribute to the recovery of listed species and to eventually provide harvestable and sustainable populations of fishes and other aquatic resources.

Planning Unit Implementation Strategies, Benchmarks, and Funding

The *Detailed Implementation Plan Entiat Water Resource Inventory Area (WRIA) 46* (CCCD 2006) provides a framework for implementing habitat restoration actions. The strategy first prioritizes geographic location; next, biological data and primary limiting factors are considered in the prioritization process. While implementation strategies pertain primarily to water quantity and instream flow issues (See Chapter 9 of the *Detailed Implementation Plan*), the *Entiat Water Resource Inventory Area (WRIA) 46 Management Plan* (CCCD 2004) resulted in a number of potential habitat projects that are also recommended for consideration. The Plan places importance on channel restoration, LWD placement, side channel and floodplain reconnection, streamside revegetation, fish passage, and community outreach.

Monitoring strategies outlined in the plan focus on maintaining favorable natural resources trends, implementing habitat improvements that address limiting factors, and ensuring that Management Plan (CCCD 2004) goals are being met. Monitoring items (e.g., water quality, noxious weeds, wetlands, etc.) are identified; monitoring techniques appropriate to the type of project are suggested; the responsible entities are identified; and a monitoring schedule (frequency and duration) specific to the project type is determined. Evaluation of monitoring results is required to meet legal responsibilities, and adaptive management is recommended. Funding sources include Ecology Phase 4 grant funds, general Washington Conservation

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Commission/ County operating funds, federal operating funds and legislative appropriations, partner grants, and agreements.

The EWPU hopes that their "living" watershed management plan will grow, advance, and improve over time. In keeping with that spirit, the EWPU views this document as a "working" *Entiat Water Resource Inventory Area (WRIA) 46 Management Plan* (CCCD 2004). The EWPU fully anticipates that the Plan will be revisited and updated in the years to come. Within Appendix A of the *Entiat Water Resource Inventory Area (WRIA) 46 Management Plan* (CCCD 2004), the EWPU proposed 21 potential restoration projects within the Entiat sub-basin and 3 projects within minor Columbia River tributaries. This living and working document can be found online at the Cascadia Conservation District website at: http://www.cascadiacd.org/index.php?page_id=255.

Entiat Tributary Assessment

The Bureau of Reclamation (BOR) (U.S. Department of the Interior) recently completed an *Entiat Tributary Assessment* (2009) that summarized impacts and restoration opportunities related to channel and floodplain complexity in the lower 26 river miles of the Entiat River. This information is intended to provide technical information to decision makers to assist with restoration planning efforts. To summarize, human impacts to the Entiat River channel and floodplain primarily occur within the lower 26 river miles, and have not significantly altered the large-scale morphological characteristics of the river. Impacts are generally limited to localized areas where specific disturbances have occurred (i.e. levees or channelization) and do not extend far upstream or downstream of the impacted area (BOR 2009).

The analysis provided the extent of human impacts to river processes that may offer opportunities for restoration. In turn, this analysis also showed where river processes have not been significantly impacted and offers opportunities for protection from future anthropogenic impacts.

In the *Entiat Tributary Assessment* (BOR 2009), Table 17 summarized findings for geomorphic reaches within three valley segments. The BOR successfully identified opportunities for improving habitat complexity through channel and floodplain restoration or enhancement efforts. Six reaches had the highest potential to improve steelhead or spring Chinook salmon habitat complexity by addressing present impacts, and four reaches were recommended for further analysis prior to development of recommended restoration concepts. Recommendations for additional analysis included addressing habitat, vegetation, hydraulic, and morphology data gaps.

Upper Columbia Salmon Recovery Plan Objectives

The *Upper Columbia Salmon Recovery Plan* (UCSRB 2007) identified general habitat actions for the Lower Entiat and Middle Entiat to address limiting factors that include:

1. Riparian restoration: Improving riparian conditions along the Entiat River and adjacent floodplain to improve bank stability, shading, and potential for LWD recruitment.
2. Floodplain restoration and enhancement: Improving channel and floodplain function including increased connectivity where blocked off, increased lateral migration and reworking of the active floodplain where artificially constrained, and addressing altered

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channel geometry where it has been disrupted due to channel straightening or bank protection.

3. LWD restoration and enhancement: Increasing amounts of LWD in the main channel or off-channel habitat areas, taking into account the role of LWD for a given geomorphic setting.
4. In-channel restoration: Generally implies construction of in-channel features to create man-made scour pools and slower velocity areas where channel and floodplain restoration cannot occur due to existing land use constraints, or where new habitat is desired to increase habitat availability to mitigate for other impacts possibly even those outside of the subbasin.
5. Road maintenance: Addressing bridges and roads that are no longer in use or that impede channel and floodplain processes, particularly those with embankments that alter floodplain inundation. Floodplain inundation may be more frequent in areas upstream of constricted floodplain sections (backwater), or may be less frequent in areas no longer accessible due to features that cut off access to the floodplain
6. Obstruction restoration: Removing barriers to fish migration; no fish passage issues were identified along the mainstem Entiat River
7. Water quality and quantity: Improvement of water characteristics including temperature, nutrients, contaminants, and flow quantity during low-flow periods.

Upper Columbia Salmon Recovery Plan Implementation Strategies, Benchmarks, and Funding

Implementation of the above actions is intended to be voluntary under the coordination of a UCSRB Implementation Leader, to be hired, and Implementation Team. The Team will facilitate implementation, monitoring, and adaptive management of projects. Responsibilities of the Team will include identifying benchmarks for each project, tracking progress, preparing progress reports for the public and interested agencies and entities, incorporating the Upper Columbia Regional Technical Team's (RTT) (created by the UCSRB to recommend region-wide approaches to protect and restore salmonid) work to ensure that effective monitoring and analysis are implemented.

The adaptive management strategy will employ a Water Action Team (WAT) to work with UCSRB to update implementation schedules if needed, and to facilitate monitoring to promote consistency across the region. A representative nominated by the WAT will coordinate funding sources, implementation schedules on a regional scale, monitoring, and adaptive management. The RTT will also be responsible for project technical review. Detailed monitoring and review processes for the Recovery Plan as a whole are described in the Plan (UCSRB 2007).

Funding sources for the restoration projects taken from the UCSRB Recovery Plan (2007) are the following:

1. The Washington Salmon Recovery Board
2. PUD funds
3. The BPA Fish and Wildlife Program
4. The Federal Columbia River Power System Biological Opinion

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5. State agencies budgets (WDFW, Ecology, Conservation Districts
6. NMFS Pacific Coast Recovery Fund
7. Federal agencies monies appropriated by the U.S. Congress (Corps, USFWS, USGS, USFS, NRCS, BOR, and BLM)
8. Local government finding through state legislative appropriations
9. NGOs, including the National Fish and Wildlife Foundation, regional fishery enhancement groups, and the Bullitt Foundation
10. NOAA's Community-Based Restoration Program
11. Public and private partnership funding for voluntary projects

3.1.5 WRIA 47

WRIA 47 Final Draft Planning Unit Charter Objectives

The Lake Chelan Watershed (WRIA 47) Planning Unit's vision is to "recognize, inform, educate, monitor, understand and protect the unique water resource that is Lake Chelan; the ecological processes and pathways essential to maintaining this high quality water body, and the ways in which we can live on this lakeshore, enjoy this unique treasure and protect it for generations to come."

The WRIA 47 Planning Unit has the goal "to implement a management plan for water use and protection that sustains the environmental, educational, economic and recreational values associated with a healthy lakeside community and watershed." The following objectives were outlined in the *WRIA 47 Final Draft Planning Unit Charter* (2008):

1. Assess water supply, use and projected needs.
2. Develop and implement a comprehensive, long-term monitoring program of key parameters that will ensure water quality sustainability throughout the Lake Chelan Watershed.
3. Address waterbodies with constituents on the State 303(d) list and other parameters of potential concern that threaten lake water quality.
4. Inform and educate local communities and visiting populations about water quality protection.
5. Develop a Water Quality Improvement Plan and Water Quality Management Plan to understand, restore and protect water resources.

WRIA 47 Final Draft Planning Unit Charter Implementation Strategies, Benchmarks, and Funding

Strategies for achieving the plan objectives are summarized as follows in the *WRIA 47 Final Draft Planning Unit Charter* (2008):

1. Fully engage all stakeholders through an open, accessible and collaborative process.
2. Develop clear objectives, decision-making and evaluation processes, and planning products to ensure accountability for implementation.
3. Identify gaps in the understanding of water resource issues within the watershed. Develop a scope of work to address important issues using credible scientific

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information to understand, protect and restore the most critical aspects of a healthy watershed.

4. Use new and existing information to forge a plan to meet stated objectives.
5. Integrate the watershed planning process and ensuing plan with other programs, initiatives and activities affecting the Lake Chelan Watershed.

As a separate goal, a Watershed Plan is presently being completed and will include restoration goals and recommendations. CCNRD is the lead entity on this project, proposed for draft submittal to the CCNRD in June 2010.

Funding of the efforts will be pursued on a project-by-project basis by various lead entities, including the initiating governments of WRIA 47 under the Watershed Planning Act (RCW Chapter 90.82). These governments are Chelan County, the City of Chelan, and the Lake Chelan Reclamation District. Each of these initiated the watershed planning process by applying for grants from Ecology. Implementation funds for recommended actions will be drawn from a number of grants and other sources, including State grants of up to $500,000 per WRIA. No timeline is defined for the general goals. A number of them overlap with other plans and activities described in this document.

Lake Chelan Subbasin Plan Objectives

The *Lake Chelan Subbasin Plan* (Berg 2004) established the goal to "restore conditions to a more natural state" by employing "ecosystem-based perspectives that consider multiple species, their life histories, and their inter-relationships." The Subbasin Plan includes a detailed inventory, and concludes with a number of habitat or biological objectives for key species and key habitats in the basin.

Many of the objectives are to conduct additional species/habitat assessments, "identify and provide biological and social conservation measures to sustain focal species populations and habitats," and in a number of instances to "[m]aintain and/or enhance habitat function (i.e., focal habitat attributes) by improving silvicultural practices, fire management, weed control, livestock grazing practices, and road management…" Below are terrestrial and aquatic general restoration and conservation strategies suggested in the *Lake Chelan Subbasin Plan* (2004):

Terrestrial

- Improve habitat quantity and quality by emphasizing conservation, protection, and connectivity of large blocks of high quality focal habitat.
- Protect and restore beaver habitat and, where possible, prepare for reintroduction into suitable habitat where natural recolonization may not occur.

Aquatic

- Increase populations of westslope cutthroat trout by reducing direct harvest impacts and eliminating introductions of, and/or removing, non-native species.
- Reintroduce bull trout to form self-sustaining nonmigratory populations. Measures that support this goal include reducing abundance of non-native fish, maintaining suitable habitat and ecosystem-wide processes, and increasing harvest on competitor or predator fish.

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- Increase the abundance and productivity of kokanee to ensure self-sustaining populations by increasing harvest of Chinook salmon and lake trout, reducing the abundance of mysids, and planting appropriate numbers of hatchery fish.

Lake Chelan Subbasin Plan Implementation Strategies, Benchmarks, and Funding

The Lake Chelan Subbasin Plan outlines suggested strategies toward achieving the goals listed above. These are summarized for terrestrial and aquatic goals.

Terrestrial

A general strategy to move toward the goal of terrestrial habitat protection and conservation is described in the Subbasin Plan: "Strategies to achieve this goal include promoting local planning and zoning, utilizing governmental plans and programs, implementing habitat stewardship projects with private landowners, and protecting lands through acquisition, conservation easements, and cooperative agreements."

Another proposed general strategy addresses beaver habitat directly: "Both the fish and wildlife portions of this management plan provide strategies to protect and restore beaver habitat and, where possible, to prepare for reintroduction into suitable habitat where natural recolonization may not occur. The restored habitat would benefit beaver, whose activities would in turn benefit the salmon and steelhead that use the watershed for a portion of their life history…The plan also provides for the maintenance of mule deer populations and ensures their habitat needs are met."

Strategies and recommendations call for the involvement of government, NGO and/or land managers, or some coordinated effort between these groups.

Specific strategies and suggested timelines include the following actions:

- Identify existing quantity and quality of habitat (2008).
- Survey populations of focal species (2008).
- Utilize existing government and private programs to conserve habitat, with priority for large blocks and high connectivity (2010).
- Develop and implement fire management protocols (protection and prescribed burning), and weed control and road management plans (unspecified/subsequent to 2010 strategies).
- Monitor wildlife focal species (unspecified/subsequent to 2010 strategies).
- Implement federal, state and tribal management and recovery plans (unspecified/subsequent to 2010 strategies).
- Institute beaver protections, including harvest restrictions and reintroduction (unspecified/subsequent to 2010 strategies).

Aquatic

The Subbasin Plan generally calls for promoting self-sustaining kokanee and westslope cutthroat trout through harvest reduction and eliminating non-native species, and for reintroducing bull trout. The following strategies are aimed at achieving the aquatic goals of the Subbasin Plan.

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- Eliminate introductions of nonnative species that may impact westslope cutthroat trout by completing a comprehensive stocking plan (complete by 2010).
- Remove cutthroat trout spawning barriers (remove in first year, monitor spawning activity and success in two subsequent years).
- Increase Chinook salmon and lake trout harvest limits (plan for decreased abundance by 2015).
- Remove brook trout and rainbow trout harvest limits (plan for decreased abundance by 2015).
- Identify early life history requirements of cutthroat trout and determine whether kokanee spawning interferes with fry emergence (studies should span 6 to 10 years, with yearly reports).
- Examine life history requirements of other species that may interact with cutthroat trout (studies should be two years in length with draft and final reports).
- Delay fishing season until after cutthroat trout spawning.
- Determine if bull trout are present in the basin through exploration of potential habitat areas (study should be two years in length with draft and final reports).
- Preserve or restore bull trout spawning habitat.
- Reduce abundance of competing introduced fish (2010).
- Determine predator-prey relationships for Chinook salmon and lake trout (Five-year study effort with yearly reports).
- Institute bull trout reintroduction program (2010).

Funding sources for recommended actions are not specified. However, funding for each project could be pursued from a variety of sources, including those specified elsewhere in this document.

3.2 City of Cashmere

The *City of Cashmere Comprehensive Land Use Plan* (2008) is intended to be a guide for the growth and development within and surrounding the community that is both sensitive to the environment and to guide the needs of the community residents. Environment-related goals of the plan are as follows:

1. Encourage the most appropriate use of land throughout the community.
2. Conserve and protect and restore natural beauty and other natural resources.

The City of Cashmere is a member of the Wenatchee Watershed Planning Unit, and as such is committed to supporting the relevant objectives and actions of the *Wenatchee Watershed Management Plan.* As reported in the *Shoreline Inventory and Analysis Report* (TWC and J&S 2009), the *Wenatchee Watershed Management Plan* (Wenatchee Watershed Planning Unit 2006) includes four specific habitat actions for the Lower Wenatchee Watershed, which includes the City of Cashmere:

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- LowWenH-1: Use practical and feasible means to increase stream flows (within the natural hydrologic regime and existing water rights) in the Wenatchee River (UCSRB 2005).
- LowWenH-2: Reduce water temperatures by restoring riparian vegetation along the river (UCSRB 2005).
- LowWenH-3: Increase habitat diversity and quantity by restoring riparian habitat along the Wenatchee River, reconnecting side channels and the floodplain with the river, and increasing large woody debris in the side channels (UCSRB 2005).
- LowWenH-4: Protect existing riparian habitat and channel migration floodplain function (UCRTT 2002).

Five separate habitat actions, as follows, are included for the Mission sub-watershed:

- MissionH-1: Re-establish connectivity throughout the assessment unit by removing, replacing, or fixing artificial barriers (culverts and diversions) (UCSRB 2005).
- MissionH-2: Use practical and feasible means to increase stream flows (within the natural hydrologic regime and existing water rights) in Mission Creek (UCSRB 2005).
- MissionH-3: Decrease water temperatures and improve water quality by restoring riparian vegetation along the stream (UCSRB 2005).
- MissionH-4: Reduce unnatural sediment recruitment to the stream by restoring riparian habitat and improving road maintenance (UCSRB 2005).
- MissionH-5: Increase habitat diversity and quantity by restoring riparian habitat, reconnecting side channels and the floodplain with the channel, increasing large woody debris within the channel, and by adding instream structures (UCSRB 2005).

Several of the water-quality actions for the lower Wenatchee watershed address inputs of nutrients, particularly phosphorus to the Wenatchee River. Many parks and other intensively maintained lawns or landscape areas are potential sources of nutrient run-off. The Plan specifically mentions a need to reduce phosphorus inputs from wastewater treatment plants, including the City of Cashmere's facility, and notes that the City is one of several members of a partnership formed to address dissolved oxygen and pH problems that are related to phosphorus. The Plan also includes 19 water-quality actions in the Lower Wenatchee Watershed and 33 water-quality actions for the Mission sub-watershed.

The *Wenatchee Watershed Management Plan* provides guidelines regarding implementation strategies, timelines, and potential funding sources. These are described in Section 3.1.3 of this document.

3.3 City of Chelan

The *City of Chelan Comprehensive Land Use Plan* (2007) is intended to implement comprehensive land use planning at the local level, maintain local decision making power, and

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promote desired changes. An element to the Plan is the *Parks and Recreation Comprehensive Plan 2008-14* (2007). The mission of the Chelan Parks and Recreation Department is to "build a great community through people, parks, and programs." It also includes a commitment to managing and expanding the community's resources, including conservation of natural resources and support for the City's economic vitality (City of Chelan Parks and Recreation Department 2007).

The Department established goals and objectives, including priority actions. The environment protection goal is listed below.

PRG 6.0: Protect and preserve as open space areas that: are ecologically significant sensitive areas; provide significant opportunities for restoration buffers between uses and link open space; provide trails and/or wildlife corridors; or enhance fish habitat.

The City of Chelan's *Strategic Plan 2008-2009* (2008) vision statement includes relevant information "to preserve and improve the quality of life for the citizens of the community and for visitors to the area by achieving/creating….the preservation of natural resources and water quality….and a commitment to maintaining existing city resources/facilities" (City of Chelan 2008). The City of Chelan's mission statement again mentions the provision of "maintenance and preservation of existing resources/facilities/neighborhoods with a focus on community sustainability…." (City of Chelan 2008). The relevant strategic goal and objectives were defined as follows:

- Goal: To improve the quality of life and environment in the Lake Chelan area;
- Objective: Complete Don Morse Park Master Plan and initiate phased development with a focus on shoreline stabilization, beach enhancement, and reassessment of size of marina;
- Objective: Create a City sustainability plan.

As previously mentioned, the City of Chelan is an initiating government in development of a watershed management plan for the Chelan watershed. Because this plan is still in preparation, there are currently no identified projects or timelines. However, the City is committed to developing and implementing its future actions and/or programs consistent with the already agreed upon goals and objectives. See discussion under 3.1.5 above for more detail.

3.4 City of Entiat

In the *City of Entiat Comprehensive Land Use Plan* (2009), the Entiat Planning Area Statement of Intent is:

> *"to provide a guide for development for the citizens of the Entiat Planning Area. The plan will strive to maintain the existing quality of life that includes: culture, customs, economy, agricultural opportunities, sense of community, water quality, and recreational opportunities. This plan should provide for expansion of these opportunities and promotion of commercial waterfront development, while maintaining an adequate*

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> *infrastructure to accommodate this growth. Continuous public participation is warranted, with decision-making and implementation at the local level."*

The City of Entiat believes that goals provide the motivating force behind all planning efforts. Therefore, the following goals related to environmental protection or restoration were established utilizing provisions of the Shoreline Management Act and Guidelines as a basic theme, in combination with the ideas and evaluation of the Citizens Advisory Committee (from City of Entiat 2009a, Section 6.1):

1. Promote reasonable and appropriate use of the shorelines which will not jeopardize public and private interests.
2. Protect against adverse effects to the public health, the land, its vegetation and wildlife, and the waters and their aquatic life within Chelan County.
3. Protect rights of navigation.
4. Recognize and protect private property rights.
5. Maintain or recreate a high quality of environment along the shorelines of the County.
6. Preserve and protect fragile natural resources and culturally significant features.
7. Increase public access to publicly owned areas of the shorelines where increased levels are desirable.
8. Protect public and private properties from the adverse effects of improper development in hazardous shorelines areas.
9. Recognize the importance of an informed and responsible public, observing basic rules of good behavior in the use and enjoyment of all shorelines.

In the case of those shorelines that have been designated as having statewide significance, the City of Entiat recognizes the following protection goals (City of Entiat 2009a, Section 6.2):

1. Recognize and protect statewide interest.
2. Preserve or enhance the natural character of the shoreline.
3. Address uses which result in long-term over short-term benefit.
4. Protect the resources and ecology of the shorelines.
5. Increase public access to publicly owned areas of the shorelines where increased use levels are desirable.
6. Increase recreational opportunities on the shorelines open to the public.

More specific goals that include an environmental protection element are as follows (City of Entiat 2009a, Section 6.3):

> Economic Development Goal: Permit those commercial and industrial developments requiring shorelines locations which may contribute to the economic well-being of the City of Entiat with minimum disruptions of the environment.
>
> Public Access Goal: Assure safe, convenient and diversified access to the public shorelines of the City of Entiat; assure that the intrusions created by public access will not endanger

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life or have adverse effects on property or fragile natural features; assure that the provisions for public access will minimize conflicts between public and private property.

Circulation Goal: Since the major transportation systems pre-exist near many shorelines, additions or modifications to these systems should minimize the conflicts between those systems and shorelines uses.

Recreational Element Goal: Assure diverse, convenient, and adequate recreational opportunities along the public shorelines of the City of Entiat for the local residents and a reasonable number of transient users.

Shoreline Use Goal: Assure an appropriate pattern of sound development in suitable locations without diminishing the quality of environment along the shoreline of the City of Entiat.

Historical/Cultural Element Goal: Protect and restore areas having significant historic, cultural, educational, or scenic values.

Conservation Goal: Assure preservation of unique, fragile and scenic elements; assure conservation of non-renewable natural resources; assure continued utilization of the renewable resources such as timber, water and wildlife.

Rehabilitation Goal: Encourage the restoration of shoreline areas which have been modified, blighted, or otherwise disrupted by natural or human activities.

The City of Entiat was an initiating government and is a member of the Entiat Watershed Planning Unit (EWPU), and as such has committed to "coordinat[ing] their policy and planning activities in a manner that compliments and helps support overall EWPU goals" (Chelan County Conservation District 2006).

3.5 City of Leavenworth

As reported in the *Analysis Report* (TWC and J&S 2009), the City of Leavenworth is engaged in a number of cooperative restoration efforts with Trout Unlimited and U.S. Fish and Wildlife Service (USFWS). The City is working with Trout Unlimited to enhance ponds in public recreation areas, including Enchantment Park and Blackbird Island. The north channel of the Wenatchee River around Blackbird Island is the subject of a study by USFWS for inclusion of large woody debris to provide instream habitat.

The City of Cashmere is a member of the Wenatchee Watershed Planning Unit, and as such is committed to supporting the relevant objectives and actions of the *Wenatchee Watershed Management Plan.* Four habitat actions for the lower Wenatchee watershed previously mentioned for the City of Cashmere (identified in the WWMP) are relevant to City of Leavenworth's Wenatchee River and Chumstick Creek shorelines. Five separate habitat actions, as follows, are included for the Chumstick sub-watershed, which is located for a small area at its downstream end in the City of Leavenworth:

ChumH-1: Re-establish connectivity throughout the assessment unit by removing, replacing, or fixing artificial barriers (culverts and diversions) (UCSRB, 2005).

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ChumH-2: Use practical and feasible means to increase stream flows (within the natural hydrologic regime and existing water rights) in Chumstick Creek (UCSRB, 2005).

ChumH-3: Decrease water temperatures and improve water quality by restoring riparian vegetation along the stream (UCSRB, 2005).

ChumH-4: Increase habitat diversity and quantity by restoring riparian habitat, reconnecting side channels and the floodplain with the channel, increasing large woody debris within the channel, and by adding instream structures (UCSRB, 2005).

ChumH-5: Protect remaining floodplain and riparian habitat (UCRTT, 2002).

Several of the water-quality actions for the lower Wenatchee watershed address inputs of nutrients, particularly phosphorus to the Wenatchee River. The *WWMP* (WWPU 2006) specifically mentions a need to reduce phosphorus inputs from wastewater treatment plants, including the City of Leavenworth's plant, and notes that the City is one of several members of a partnership formed to address dissolved oxygen and pH problems that are related to phosphorus. To date, the cities and town sites within the Upper Valley area are working to determine all sources of phosphorus contamination, as there appears to be very little loading capacity for phosphorus in the area. The *WWMP* (WWPU 2006) also includes 20 water-quality actions in the Chumstick sub-watershed.

3.6 City of Wenatchee

The *Planning to Blossom 2025 Wenatchee Urban Area Comprehensive Plan* (2008) states that "scenic resources and open space have become topics of community preservation and value. These natural resources are intrinsic to Wenatchee's identity and attraction and need to be protected." The Wenatchee vision statement identified by locals in 2002 reads, "the City will protect and enhance its natural setting and environmental quality, including the surrounding hillsides, shorelines, and scenic vistas."

The City of Wenatchee and the CCPUD developed a long range *Wenatchee Waterfront Sub-Area Plan* (2003). Plan goals and objectives look at the Waterfront as a whole and identified what needs to happen on a global perspective. Environment protection goals are as follows:

Parks, Recreation, and Shoreline Goal: Preserve and enhance Wenatchee's system of waterfront park and trails.

Shoreline and Environment Goal: Upgrade the environmental quality of the shoreline and larger waterfront area.

More information about this Sub-Area Plan is available online at the City's website: http://www.wenatcheewa.gov/Index.aspx?page=79.

The City of Wenatchee was an initiating government and is a member of the Wenatchee Watershed Planning Unit, and as such is committed to supporting the relevant objectives and actions of the *Wenatchee Watershed Management Plan.* The four habitat actions for the lower Wenatchee watershed previously mentioned for the City of Cashmere (identified in the *WWMP* 2006) are relevant to City of Wenatchee's Wenatchee River shoreline.

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Section 4 List of Existing and Ongoing Programs

4.1 WRIA 40a/b Watershed Plans

As reported in the *Shoreline Inventory and Analysis Report* (TWC and J&S 2009), the *WRIA 40a Watershed Plan* (RH2 Engineering, Inc. 2007) was the deliverable for Phase 3 of the watershed planning process. Phase 4, the implementation plan, is currently underway. Opportunities and strategies for carrying out each of the three principal recommendations presented in Section 3.1.2 above are presented in Table 3 of the *WRIA 40a Watershed Plan* and described in detail in the Plan's Section 3.3. These opportunities will be further evaluated in Phase 4 (implementation) and prioritized based on their feasibility to achieve the desired future conditions in WRIA 40a.

Implementation goals were identified in Appendix D (*Water Quantity Assessment*) and Appendix E (*Multi-Purpose Storage Assessment*) of the *WRIA 40a Watershed Plan* (RH2 Engineering, Inc. 2007). Goals were ranked according to their level of importance and will be implemented by the WRIA 40a Planning Unit as funds become available.

4.2 WRIA 45 Watershed Plans

The WRIA 45 Planning Unit explains in their *Phase IV – Detailed Implementation Plan* [(DIP) April 2008] that:

> *"The Wenatchee Watershed (WRIA 45) has been listed by the State Department of Ecology as one of the 16 basins in the state with critical and inadequate streamflows for fish."*

The WRIA 45 Planning Unit therefore developed an approach and ranking strategy to prioritize actions for implementation of the *WWMP* (WWPU 2006). The DIP (WWPU 2008) provides priorities and a practical schedule for implementing actions previously identified in Volume 1 of the *WWMP* (WWPU 2006), along with additional salmon recovery and water quality related actions that have evolved since the DIP was adopted. This management tool targets the status and completion of existing and ongoing projects, and can be found in Table 3-2 of the WRIA 45 Planning Unit's *Phase IV – Detailed Implementation Plan* (WWPU 2008).

4.3 WRIA 46 Watershed Plans

The *Entiat WRIA - Detailed Implementation Plan's* (DIP) (CCCD 2006) purpose is "to outline a framework for maintaining or improving the health of the Entiat and Mad River watersheds through implementation of Entiat WRIA 46 Management Plan recommendations." Actions and strategies identified in the *Entiat WRIA 46 Management Plan* (CCCD 2004) will help correct altered conditions and improve or maintain overall watershed health, attain compliance with the Clean Water and Endangered Species Acts, and contribute to the recovery of listed species and opportunities for recreational and tribal fisheries, in accordance with the vision and goals of the EWPU.

The DIP is meant to be a reasonable approach to achieving watershed protection and enhancement in a realistic timeframe under the known physical, political, social and economic

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limitations. The EWPU has already implemented a number of watershed restoration actions, and has a list of ongoing and long-term projects identified in Table 8 of the *Entiat WRIA - Detailed Implementation Plan* (CCCD 2006). Table 17 of the DIP summarizes ongoing monitoring activities. These tables also outline lead/support agencies that are involved, and includes information about activities that have some degree of funding support associated with them (CCCD 2006).

4.4 WRIA 47 Watershed Plans

The Lake Chelan WRIA 47 Planning Unit assessed 1) water quantity and 2) water quality, by assessing the supply and use in the management area to develop future strategies (RH2 Engineering, Inc. and Geomatrix Consultants 2008 [RH2 and Geomatrix]). The WRIA 47 Planning Unit charter is addressing the recommended strategies detailed in the *Final Draft Planning Unit Charter* (RH2 and Geomatrix 2008).

Management and research, monitoring, and evaluation plans were developed as part of the *Lake Chelan Subbasin Plan* (Berg 2004) to be used by subbasin planners and state salmon recovery personnel to aid in the conservation and restoration of important habitat that will aid in the recovery of focal species. Restoration objectives and strategies that were identified in the plan are underway, in addition to research, monitoring and evaluation. The research, monitoring and evaluation plan consists of a variety of quantitative elements, ranging from scientific wildlife and vegetation surveys, spatial analyses of project location and acreage, to simple enumeration of land use projects/regulations commented upon by cooperating agencies. Details about focal species restoration efforts, research, monitoring and evaluation can be found in the *Lake Chelan Subbasin Plan* (Berg 2004).

4.5 Chelan County Natural Resource Department Efforts

The Chelan County Natural Resource Department (CCNRD) administers watershed planning and salmon recovery efforts in Chelan County. Current activities include Wenatchee River Watershed (WRIA 45) planning and implementation, Squilchuck/Stemilt Watershed (WRIA 40a) planning and implementation, a countywide salmon recovery grant program through Washington Salmon Recovery Funding Board, and habitat conservation plan development under the Federal Endangered Species Act (Chelan County website). The CCNRD also supports the Upper Columbia Salmon Recovery Board (UCSRB) and staffs the Chelan County Water Conservancy Board. The CCNRD manages a variety of state, federal, and local project and planning grants that assist watershed planning and salmon recovery efforts in Chelan County. Details about CCNRD programs and funding can be found online at http://www.co.chelan.wa.us/nr/nr_main.htm.

The CCNRD's current restoration strategies and efforts primarily stem from those identified in: watershed plans and DIPs previously mentioned; the *Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan*'s (2007) implementation schedule; and various studies, such as the Wenatchee River CMZ study. The CCNRD also implements "need-based" projects as they arise (E. Fonville, personal communication, March 9, 2009), which may consist of native riparian plantings and stream buffer restoration for private land owners in collaboration with the Chelan-Douglas Land Trust (CDLT).

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UCSRB Implementation Schedule

The *Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan* (UCSRB 2007) provides a regionally and federally accepted framework for implementing coordinated recovery actions, while providing a "roadmap" towards implementation of priority habitat actions. The UCSRB has successfully completed single-project-focused actions that 1) reopen tributary habitat, 2) preserve key habitat areas, and 3) protect countless fry and smolt from entrainment in irrigation diversions. One recent project success story, sponsored by the CCNRD, includes the Nason Creek Oxbow Reconnection project in the upper Wenatchee valley (located between mile post 0.83 and 1.33 on Hwy. 207). This project reconnected a half-mile-long oxbow (secondary channel) by installing two 12-foot-wide fish-friendly culverts. The reconnection restored access to 21.7 acres of off-channel refuge, rearing and over-wintering habitat for juvenile salmonids.

While these single-project-focused actions significantly contribute to recovery efforts, "there is a growing consensus among biologists, project managers and the entities providing salmon recovery funding, that the greatest current opportunities for habitat restoration projects that will yield the greatest biological benefits are found in the yet to be addressed large-scale, multi-years, multi-million dollar recovery activities" (UCSRB 2009). In a recent memo regarding funding and project coordination of salmon recovery projects in the Upper Columbia, UCSRB members state that "the priority of the UCSRB is to restore salmonid populations … through the development of a mid-range implementation/3-year work plan and coordinated funding." The UCSRB is currently updating their comprehensive, coordinated and strategic approach to restoration to address the "large-scale, multi-year, multi-million dollar recovery activities." The implementation plan that the CCNRD works from can be found online at http://www.ucsrb.com/theplan.asp. Implementation actions pertain to: water quantity and quality, water temperature extremes, habitat diversity and quantity, obstructions, riparian/floodplain, sediment, diversions, species interactions, depleted nutrients, nutrient limitations, and ecosystem function.

Outreach and Education

The CCNRD sends out mailers (postcards) updating the community about educational workshops and workgroups, such as the Shoreline Master Program update meetings.

4.6 Comprehensive Plan Policies

At the beginning of the planning process, the County and the Cities of Cashmere, Chelan, Entiat, Leavenworth, and Wenatchee opted to divide the County into eight study areas and prepare a plan for each area. The County took the lead role, in coordination with the cities in the development of seven sub-area plans. The City of Wenatchee took the lead role in the development of a comprehensive plan for the Wenatchee Urban Area.

4.6.1 Chelan County

The *Chelan County Comprehensive Plan* (2005) was developed in accordance with Section 36.70A.070 of the Growth Management Act to address land uses. The Plan covers the unincorporated areas outside of the city urban growth areas. Seven study areas were indentified within the county-wide plan, encompassing the following study areas: Chelan-Manson, Entiat Valley, Malaga-Stemilt-Squilchuck, Lower Wenatchee River Valley, Upper Wenatchee River

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Valley, Plain-Lake Wenatchee, and Stehekin (Chelan County 2005). Unincorporated areas of the County within UGA boundaries are covered by the city comprehensive plans.

A Rural Coordinating Committee, made of 12 members appointed by the Board of Commissioners to coordinate the Rural Element of the Plan, together with the Planning Commission, went through a process where they identified goals and policies applicable to specific study areas, and goals and policies applicable county-wide. The Comprehensive Plan represents the County's policy plan for growth to the year 2017 and can be found online: http://www.co.chelan.wa.us/bl/data/compplan.pdf. In particular, the Plan expresses a goal of identifying and protecting critical areas and mitigation adverse impacts that may result from reasonable use. Policies include encouraging the enhancement and restoration of fish and wildlife habitat. Projects pertaining to habitat are to be defined implemented by landholders and other involved party on a case-by-case basis.

4.6.2 City of Cashmere

The *City of Cashmere Comprehensive Land Use Plan "The Heart of Cashmere"* (January 14, 2008, Ordinance 1117) is intended to guide the needs of residents and environment throughout growth and development within and surrounding the community. Because the "community" of Cashmere extends beyond the actual city limits, it is important that this plan and the *Chelan County Comprehensive Plan* (2005) are complementary. Countywide planning policies as well as the overall policies of the GMA are intended to assure that all levels of government are communicating and working towards respective plans that are compatible and consistent. The Comprehensive Plan describes general goals and objectives that will be used to make decisions that balance the needs and desires of the residents of the Cashmere area. The Plan should clearly state the community's vision for future growth and development, as the city zoning codes, building codes and land use regulations will be established or updated.

Goals of the plan are as follows:

1. Encourage the most appropriate use of land throughout the community.
2. Lessen traffic congestion and accidents.
3. Secure safety from fire.
4. Encourage the formation of neighborhood or community units.
5. Secure an appropriate allotment of land area in new developments for all the requirements of community life.
6. Conserve and protect and restore natural beauty and other natural resources.
7. Facilitate the adequate provision of transportation.

4.6.3 City of Chelan

This *City of Chelan Comprehensive Land Use Plan* (2007) was prepared by the citizens of the Chelan Planning Area of Chelan County and the City of Chelan to address growth issues in the Chelan Planning Area. It represents their land use policy and plan for growth to the year 2017. Separate documents are also an element of this plan, and include a Comprehensive Sewer Plan, Comprehensive Water Plan, and Parks Plan. In developing the *City of Chelan Comprehensive*

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Land Use Plan (2007), the Citizen's Advisory Committee found that the Economic Development Element is a leading driver of the entire plan, addressing more of the thirteen goals of the Growth Management Act (GMA).

4.6.4 City of Entiat

The *City of Entiat Comprehensive Land Use Plan* (2009) provides for urban land use designations in the City and UGA, and addresses other important elements such as capital facilities (e.g. parks and recreation). The Comprehensive Plan was prepared by the citizens of Entiat to address growth issues in the Entiat Planning Area. It represents their land use policy plan for growth into the future.

The Entiat Citizens Advisory Committee developed a statement of intent that took care to list characteristics of the community and what they would like to see happen in the future. Their following statement of intent for the Planning Area states, "The intent of this Comprehensive Plan is to provide a guide for development for the citizens of the Entiat Planning Area. The plan will strive to maintain the existing quality of life that includes: culture, customs, economy, agricultural opportunities, sense of community, water quality, and recreational opportunities. This plan should provide for expansion of these opportunities and promotion of commercial waterfront development, while maintaining an adequate infrastructure to accommodate this growth. Continuous public participation is warranted, with decision-making and implementation at the local level" (City of Entiat 2009, Section 1.5).

4.6.5 City of Leavenworth

The *City of Leavenworth Comprehensive Plan* (2003) was prepared by the citizens of the Leavenworth/Upper Wenatchee River Valley Planning Area, the City of Leavenworth Planning Commission, and the Leavenworth City Council to address growth issues in the City of Leavenworth and its UGA. It represents the City's growth policies for the next 20 years. The vision of area residents is expressed in the following statement:

> *"The citizens of the planning area envision maintaining the uniqueness of the area which combines a quality "rural/small community" lifestyle with a diversified economic base that allows orderly growth and development while preserving the beauty of the area with open spaces and enhancing the proper management of the natural environment."*

The goals and policies found in the Comprehensive Plan are deemed to be essential in maintaining a satisfactory quality of life for the planning area. A City of Leavenworth open space/recreation goal mirrors the City's vision by stating that Leavenworth will "conserve open space and encourage open space considerations in future development."

4.6.6 City of Wenatchee

The City of Wenatchee developed their *Planning to Blossom 2025 Wenatchee Urban Area Comprehensive Plan* (2007) with a vision based upon the views expressed by local residents. Three subjects were considered to be the most important determinants in Wenatchee's future: 1) economic development, 2) quality of life, 3) and learning and human services. Detailed

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policies can be found in the *Planning to Blossom 2025 Wenatchee Urban Area Comprehensive Plan* (2007).

4.7 Critical Areas Regulations

Chelan County and the Cities of Cashmere, Chelan, Entiat, Leavenworth and Wenatchee each have their own set of critical area regulations that dictate protection of environmentally sensitive areas, including wetlands, streams (fish and wildlife habitat conservation areas), geologically hazardous areas, frequently flooded areas, and aquifer recharge areas. All regulations use a version of Ecology's Eastern Washington Wetland Rating System. For specific protection of critical areas in shoreline jurisdiction, the Shoreline Master Program contains for the County and each City a revised set of regulations that meets the Shoreline Management Act and Shoreline Master Program Guidelines' more specific requirements and standards.

4.7.1 Chelan County

Chelan County's critical areas regulations were recently updated (2007), and are considered to be consistent with Growth Management Act "best available science" standards. No further revisions to the regulations in the near future are anticipated. Many of the issues and concerns that guided the development of the critical area regulations were discussed and addressed in the comprehensive planning process. The GMA also requires the provision for the protection of the quality and quantity of ground water used for public water supplies. The land use element is also required to review; where applicable, drainage, flooding, and storm water run-off and to provide guidance for corrective actions to mitigate or cleanse those discharges that pollute waters of the state. Chelan County set the following goals, with associated policies that can be found in the Comprehensive Plan.

Goal 1: Protect water quality.

Goal 2: Protect and maintain air quality.

Goal 3: Ensure that development minimizes impacts upon significant natural, historic, and cultural features and to preserve their integrity.

Goal 4: Identify and protect critical areas and provide for reasonable use of private property while mitigating adverse environmental impacts.

Goal 5: Within the upper Wenatchee River valley study area, encourage retention of the scenic character and environmental quality of the Icicle valley.

4.7.2 City of Cashmere

The *City of Cashmere Comprehensive Land Use Plan "The Heart of Cashmere"*(2008) states, "the quality of life of different communities is directly related to the quality of environmental factors, such as air and water quality…subtle and prolonged degradation of these things can undermine the community's appeal and viability." Therefore, following requirements of the Growth Management Act (GMA) and using the "best available science", the Comprehensive Plan provides reference maps, a description of the City's classification and designation of critical areas, as well as goals and policies to protect them.

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The City's general goal is to "preserve and protect the quality of the area's natural features and maintain a harmonious relationship between the man-made community and the natural environment" (City of Cashmere 2008). More specific goals are as follows:

Goal: The City's wetlands will be protected to the greatest extent possible because they provide important functions that help define the quality of life in the community.

Goal: Protect fish and wildlife habitat areas as an important natural resource for the City, particularly in regard to their economic, aesthetic and quality of life values.

Goal: The City seeks to protect the public health, safety and welfare of its residents by providing protection of potable water sources, primarily through careful monitoring and control of areas demonstrated to be critical aquifers and/or which play a crucial role in recharging our groundwater supplies.

Goal: Protect the frequently flooded areas that are known to be critical parts of the natural drainage system by limiting and controlling potential alterations and/or obstructions to those areas.

Goal: The City will provide appropriate measures to either avoid or mitigate significant risks that are posed by geologic hazard areas to public and private property and to public health and safety.

The City's critical areas regulations are currently being updated.

4.7.3 City of Chelan

The *City of Chelan Comprehensive Land Use Plan* (2007) follows the recommendation of the Growth Management Act (GMA) by adopting goals and policies to "protect critical areas," that include wetlands, geologically hazardous areas, aquifer recharge areas, fish and wildlife habitat conservation areas and frequently flooded areas. The City of Chelan established critical area goals and policies that were adopted in 1998 (City of Chelan 2007) as follows:

- Goal 1: Protect water quality

Policy 1: Support the —keep it blue and other water quality education programs which inform local citizens and visitors about water quality issues and ramifications.

Policy 2: Ensure that storm water is not directly discharged into water sources without appropriate treatment that meets federal, state, and city standards.

Policy 3: Encourage the appropriate regulatory agencies to actively pursue violators that illegally discharge waste into rivers, lakes and streams.

Policy 4: Development along the shoreline shall comply with federal, state, and City guidelines to ensure minimum impact on water quality.

Policy 5: Support ongoing measures by the Lake Chelan Reclamation District, Chelan County Conservation District, area orchardists, and other related agencies and groups, as they raise awareness levels, and monitor and mitigate water quality issues related to agriculture.

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Policy 6: Boat launches should incorporate wash-off stations to remove milfoil off of boats prior to entrance to the Lake. Boaters should be educated about the negative impacts of milfoil to the clarity and quality of Lake Chelan.

Policy 7: Where erosion is occurring, and can be found to not be of natural origin, measures should be allowed to amend the situation. Rationale: This helps protect lake water quality, as well as private property.

- Goal 2: Permit development to occur in known natural hazard areas only when sufficient safeguards protecting life and property can be met.

Policy 1: Discourage development in areas of natural hazard such as those susceptible to landslide, flood, avalanche, unstable soils and excessive slopes, unless appropriate safeguards are taken.

Policy 2: Provide slope protection, erosion control, soil stabilization, and fire protection when appropriate.

- Goal 3: Encourage development that takes into consideration significant natural features and protects their integrity.

Policy 1: Encourage preservation and proper maintenance of significant natural drainage ways.

Policy 2: Encourage the conservation or preservation of critical areas, such as wetlands, migratory animal routes, etc., by supporting plans that provide for public and private organizations to purchase these lands.

Policy 3: Allow for recreational development to make use of natural amenities on critical areas when the recreational use has minimal impacts.

- Goal 4: Protect and maintain air quality

Policy 1: Support the wood stove standards recently adopted by the Department of Ecology

Policy 2: Recognize the potential benefits of public water, rail, electric, alternative fuels, non-motorized and air transportation in helping maintain local air quality.

Policy 3: Ensure that new industrial development meets air quality standards and does not significantly affect adjacent property.

Policy 4: Poor air quality should not degrade the agricultural industry.

The City of Chelan's environmental regulations are found in the *Chelan Municipal Code*, Chapter 14.10, and are currently being updated. These regulations "establish special standards for the use and development of lands based on the existence of natural conditions and features including geologically hazardous areas, critical aquifer recharge areas, frequently flooded areas, fish and wildlife conservation areas and wetlands."

The standards and procedures established in Chapter 14 are intended to protect environmentally sensitive areas while accommodating the rights of property owners to the use of their property in a reasonable manner. The following is a direct excerpt from the municipal code, Chapter 14.10:

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"These environmentally sensitive areas are of special concern to the city…. By regulating development and alterations to sensitive areas this chapter seeks to:

1. *Protect members of the public and public and private resources and facilities from injury, loss of life, property damage or financial losses due to erosion, landslide, seismic events or steep slope failure;*
2. *Protect unique fragile and valuable elements of the environment, including canyon areas and wetlands;*
3. *Mitigate unavoidable impacts to environmentally sensitive areas by regulating alterations in and adjacent to those areas; 4) Provide city officials with the information and authority to protect sensitive areas and implement the policies of the State Environmental Policies Act, RCW 43.21C, the city of Chelan Comprehensive Plan and the Growth Management Act of 1990. (Ord. 944 § 1 (part), 1992)."*

4.7.4 City of Entiat

The City of Entiat has adopted critical area regulations in 2006, consistent with best available science and all other requirements of the GMA. The goals and policies were outlined in the *City of Entiat Comprehensive Land Use Plan* (2009) and "are intended to provide some measure of protection to the environmental elements that contribute to the quality of life in the community."

The *g*eneral goal is the same as the City of Cashmere, to "preserve and protect the quality of the area's natural features and maintain a harmonious relationship between the man-made community and the natural environment" (City of Entiat 2009). The City of Entiat identified more specific goals, which again are the same as the City of Cashmere, and can be found in that section above.

4.7.5 City of Leavenworth

The City of Leavenworth initially adopted goals and policies in response to the requirements of the GMA as part of its Comprehensive Plan adopted in 1996. In 2002 and 2003 this information was updated incorporating the use of "best available science". The City completed the planning process for developing critical area regulations following an extensive citizen participation process, and will be further updating those critical areas regulations in 2009. Critical area policies found in the *City of Leavenworth Comprehensive Plan* (2003) follow the goals below:

Goal 1: Encourage land use practices that protect the integrity of the natural environment to ensure that the community has an adequate source of clean water and air and to otherwise maintain a healthy human environment.

Goal 2: Use best available science in classifying, designating, and regulating, critical areas within the City of Leavenworth.

Goal 3: Provide flexibility in regulation of land uses in critical areas, recognizing that the GMA encourages development within cities in order to limit the geographic extent of human impacts.

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Goal 4: Identify and protect critical areas and provide for reasonable use of private property while mitigating adverse environmental impacts.

Goal 5: Protect water quality.

Goal 6: Protect and maintain air quality.

Goal 7: Ensure that development minimizes impacts upon significant natural, historic, and cultural features and preserves their integrity.

4.7.6 City of Wenatchee

The City Wenatchee has adopted the Resource Lands and Critical Area Development Ordinance (City of Wenatchee 2009). The Ordinance does not designate agricultural lands of long-term commercial significance but assures the continued use of farm lands for agricultural purposes. The City of Wenatchee will "protect public safety and the ecological functions of critical areas by mitigating development depending on area characteristics" (City of Wenatchee 2007). The *Planning to Blossom 2025 Wenatchee Urban Area Comprehensive Plan* (2007) lists regulatory policies as follows:

Policy 1: Ensure any development in critical areas adequately mitigates potential negative impacts associated with the specific conditions.

Policy 2: Review and expand critical area designations and associated development regulations for accuracy, effectiveness, and utilization of best available science.

Policy 3: Designate fish and wildlife habitat corridors along the waterfront and in the foothills where appropriate.

Policy 4: Designate within the UGA, frequently-flooded areas in accordance with Federal Emergency Management Act (FEMA) criteria.

Policy 5: Encourage the use of clustered development and other innovative designs that aim to preserve the functions of critical areas and further public safety.

The City completed an update of its critical areas regulations in early 2009.

4.8 Stormwater Management and Planning

4.8.1 Chelan County

The storm drain system for Chelan County's roads consists primarily of roadside ditches and culvert pipes for drainage under roads and driveways. Stormwater is generally directed to roadside ditches that discharge directly into local waters. In more urbanized areas, a limited number of piped drain systems are in place. These areas include Olds Station, Sunnyslope, Peshastin, Leavenworth, and Manson. The piped systems are located where it was necessary to construct a roadway with curb, gutter and associated catch basins.

The Chelan County Public Works Department has developed a Stormwater Management Plan for the Olds Station area that is adopted by reference as part of the *Chelan County Comprehensive Plan* (2005). The Port of Chelan County is in the process of developing more storm systems in the Olds Station area. Within the County portions of the Entiat and Leavenworth UGA's, stormwater systems consist of a system of roadside drainage ditches (City

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of Entiat 2007 and City of Leavenworth 2001). The storm ditches within the Leavenworth UGA will need to be tight-lined into the City storm system when land is developed (City of Leavenworth 2001).

4.8.2 City of Cashmere

As described in the *City of Cashmere Comprehensive Land Use Plan "The Heart of Cashmere"* (2008), stormwater drainage facilities are available throughout most of the City. Major components of the system consist of piping, manholes, catch basins and outfalls. Extensions to the stormwater system are primarily done by land development and the cost of the extension is borne by the developer. The City of Cashmere will be evaluating the stormwater system for Ecology's Phase II, Stormwater Management Regulations compliance in the near future.

4.8.3 City of Chelan

Adopted as part of the *City of Chelan Comprehensive Land Use Plan* (2007), a limited storm drainage system in Chelan uses a combination of surface and subsurface means to collect and drain stormwater. In most cases, the subsurface drainage system is located under major streets in the present downtown area and is discharged into Lake Chelan. The City of Chelan will develop a stormwater plan to further address existing and future stormwater facilities.

4.8.4 City of Entiat

According to the City's Comprehensive Plan, the City of Entiat did not have any stormwater drainage systems until very recently (City of Entiat 2009). New subdivisions have stormwater facilities, generally consisting of grassy swales, catch basins and large detention areas, whereas earlier subdivisions used an open ditch system. The *City of Entiat Comprehensive Land Use Plan* (2009) explains that the City now requires new development to install curbs and gutters to convey stormwater. There are no current plans to implement a city-wide stormwater drainage system, aside from when new development occurs.

4.8.5 City of Leavenworth

The *City of Leavenworth Comprehensive Plan* (2003) describes the City's existing storm sewer system as a network of catch basins, inlets, pipelines, and manholes which function to collect and transport surface run-off for eventual discharge to the Wenatchee River. There are portions of paved road that do not allow drainage into the catch basins, due to improper paving of the roads. The City may undertake a joint stormwater runoff study with Chelan County and the USFS for the Ski Hill area of Leavenworth. They may also adopt an ordinance that requires oil/water separators for parking lots, commercial and multifamily structures, per Ecology's recommendations (City of Leavenworth 2003).

4.8.6 City of Wenatchee

The City of Wenatchee has developed many control measures required for stormwater management programs, since the federal National Pollutant Discharge Elimination System (NPDES) requirements went into effect in 2003. All development within the City is required to control stormwater such that it doesn't damage adjoining properties, route to City system if capacity is available, extend City infrastructure in accordance with the *Planning to Blossom 2025 Wenatchee Urban Area Comprehensive Plan* (2007), and will provide water quality treatment for

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all construction activities. All commercial development must address water quality on site and some must be capable of detaining stormwater in flood events. The City also routinely sweeps streets to help keep debris out of the storm drain system. Most of the City of Wenatchee is connected to the stormwater collection system that discharges directly into local waters. The City of Wenatchee presented a policy in the Comprehensive Plan to establish review requirements so that all development projects do not adversely impact the rate and amount of runoff into adjacent waters or lands.

The *Planning to Blossom 2025 Wenatchee Urban Area Comprehensive Plan* (2007) provides options being considered for future City of Wenatchee stormwater:

1. Low Impact Development - Explore the use of low impact development techniques in city streets, new and redevelopment so as to decrease the volume of stormwater entering the City system and surrounding waters.
2. Extend Stormwater Requirements - Require all new development and appropriate redevelopment to infiltrate stormwater on site.
3. Education - Continue efforts to inform the public about stormwater's effects on water quality, the way the City's stormwater system works, and how individual actions affect stormwater.

4.9 Public Environmental Education

4.9.1 Chelan County

The *Chelan County Comprehensive Plan* (2005) describes eight visions of the citizens of the Lower Wenatchee River Valley Study Area, including one that pertains to an "educational climate." As part of providing "an economic and educational climate that enables our citizens to find suitable employment within the valley," environmental education and respect for natural resources is highly evident throughout county and partner activities. County environmental education and stewardship is highly influenced and supported by the surrounding forest and park lands, vast natural resources and beauty, and associated managing and guiding agencies. Several of the agencies and community groups involved in local education have been described in the sections below.

The Board of County Commissioners approved an initial set of county-wide planning policies on May 26, 1992. One of the policies included pertains to public education and citizen participation (Chelan County 2005). Chelan County does provide public education and accepts citizen involvement pertaining to Comprehensive Plan information, rationale and goals, as well as changes that will take place in the County with the Plan's implementation (Chelan County 2005).

4.9.2 City of Cashmere

The City of Cashmere's Riverside Center is a gathering place for music, culture and educational activities within the City. People living in and around Cashmere also utilize City parks for swimming programs, sports leagues, school and youth programs, and community events. The City has an existing Park Plan, part of the *City of Cashmere Comprehensive Land Use Plan "The Heart of Cashmere"* (2008), that identifies that the parks should be developed to perform two different and distinctive functions: 1) provide facilities for the City's residents, therefore making

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Cashmere a more desirable place to live; and 2) provide facilities for the visitors who come into the area, thereby enhancing the City's economy.

The City's Parks and Recreation goal is to, "encourage the retention of open-space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks." A policy associated with this goal links schools and natural resource education to parks.

> Policy: Cooperate with and support Cashmere School District in making school property available for public recreational use.

4.9.3 City of Chelan

The City of Chelan shows support for educational activities, such as art, aquatics, athletics, outdoor, cultural, special event, recreation, enrichment, parks, golf, adaptive, health, fitness, wellness, safety and other program areas as stated in the Parks and Recreation Comprehensive Plan 2008-14 (2007) definition of recreation. The City of Chelan's Riverwalk Park, owned and operated by the Chelan County Public Utilities District, provides a one-mile scenic river loop trail and performing arts pavilion that seasonally hosts regional musicians and performers, benefiting the recreation, education and culture of the community. City of Chelan policies that support education and natural resources can be indentified in the Parks and Recreation Comprehensive Plan (2007) policies below:

> PRP 1.2: Maximize the use of parks, schools, recreation and open space resources within the City by connecting them with a coordinated system of trails.
>
> PRP 4.2: Park, recreation and open spaces which exhibit one or more of the following characteristics shall be designated by the City to be of local or regional significance:
>
> a) Contains significant recreation or cultural opportunities or facilities, such as marinas, waterfront access, athletic fields, golf courses, Primary trails, urban wildlife habitat, community entrances, etc.;
>
> b) Contains unusual or special botanical resources;
>
> c) Contains environmentally sensitive areas that serve a significant role or provide a significant function in the natural systems within the City;
>
> d) Is associated in a significant way with an historic event, structure, or person with a significant effect upon the City, state or nation; and
>
> e) Contains public art.
>
> PRG 5.2: Continue to develop and foster partnerships with the Lake Chelan School District to utilize school sites to provide active recreation and cultural facilities. Explore opportunities to co-develop facilities on school property or property adjacent to schools.

4.9.4 City of Entiat

The City of Entiat will continue its public education program following its Comprehensive Land Use Plan adoption in order to inform the entire community about the goals of the plan, as well as the changes that will take place in the planning area because of the plan's implementation (City of Entiat 2009). The City believes that broad support for the plan is crucial for effective implementation. The following objectives from the Comprehensive Land Use Plan (2009) address public education related to important resource areas.

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Objective LU 3.3: Identify and encourage the preservation of sites and structures with historical or archaeological significance, particularly those that might generate tourist appeal.

Objective LU 18.4: Encourage the development of an education program that promotes the value of critical areas and that promotes public and private stewardship of these lands.

Objective LU 18.13: Allow for open space and recreational use of critical areas where such use does not negatively impact the critical areas.

Objective ED 2.9: Develop informational kiosks in the waterfront district and appropriate viewing areas or historical sites.

The City of Entiat and numerous local, state and federal agencies (USFS, Ecology, Washington Conservation Corps, Entiat School District, NCW AmeriCorps, Washington State Department of Natural Resources, Entiat Community Historical Society, Greater Wenatchee Community Foundation and Chelan County PUD) are developing a plan for an outdoor learning center to be located along the Entiat River. The Learning Center will consist of a day-use facility and interpretive center located on Chelan County PUD land at the Entiat River confluence with the Columbia River to a point upstream approximately one-third of a mile (City of Entiat 2007). More detail about the Learning Center is found in Section 4.10.2 below.

4.9.5 City of Leavenworth

The *City of Leavenworth Parks and Recreation Comprehensive Plan* (1997) considers "outdoor recreation" to be the principal reason for living in Leavenworth. Therefore the City recognizes the importance of parks and recreation services for the health, social and economic benefits of the resident population, and the enjoyment derived by visitors to the City. These services encompass programs and facilities that educate and foster stewardship within the community.

The use of parks, school facilities and natural resources for recreation purposes by residents and visitors alike has long been an established part of Leavenworth's lifestyle and business interests. Thus, two workshops were hosted during the development of the *City of Leavenworth Parks and Recreation Comprehensive Plan* (1997). Community members were asked to focus on recreation programs and service needs within the City. The need for recreation classes was rated to be the third highest priority for recreation programs within the community. In 1997, when the Parks and Recreation Comprehensive Plan was finalized, only two recreation classes (martial arts and summer arts and crafts) were offered. A considerable list of future classes of interest is provided in the plan. Historical and cultural activities for residents and visitors were also identified to be important to the community participants. The plan concluded that, "it would appear that the City of Leavenworth is the appropriate leader in developing historical and cultural assets for the benefit of the community and its residents and visitor populations as a function of recreation."

4.9.6 City of Wenatchee

The City of Wenatchee's Natural Environment element in the *Planning to Blossom 2025 Wenatchee Urban Area Comprehensive Plan* (2007) includes several policies and potential options for maximizing the implementation and effectiveness of public environmental education:

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1. Encourage environmental education, learning opportunities and partnerships for shoreline and habitat opportunities
2. Continue efforts to inform the public about storm water's effects on water quality, the way the City's storm water system works, and how individual actions affect storm water.
3. Promote water conservation in buildings, appliances, landscaping, and daily life through public outreach and informational materials.
4. Work with Chelan County Noxious Weed Control Board to increase public awareness and promote volunteer clean-up action [of noxious weeds].
5. Be an active player in education and involvement programs that raise public awareness about environmental issues, advocate respect for the environment, and demonstrate how individual and cumulative actions directly affect our surroundings.
6. Work in cooperation with public agencies, local organizations, associations, departments, and groups in creating and carrying out environmentally related programs and outreach efforts.
7. Create informational documents with green building methods and local resources to aid new development in utilizing "green" techniques.

One of the goals established in the *Wenatchee Waterfront Sub-Area Plan* (2003) is to develop an environmental education center/urban agricultural center.

4.10 Additional City Efforts

4.10.1 City of Chelan

The City of Chelan is undergoing Shoreline Restoration and Beach Enhancement planning at Don Morse Park. This project's key goals are to stabilize the shoreline, expand sandy beach areas, enhance water-based recreational opportunities, improve views and access to the Lake, increase opportunities for tourism and economic development, address existing safety and accessibility issues, and restore shoreline areas. Plan details can be found online: http://www.cityofchelan.us/parks/pdfdocs/donmorseparkmasterplanexecsummary.pdf.

The City also recently received a grant from the Washington Department of Ecology to re-vegetate with native plants a 4,300-square-foot area on the steep bank area up-lake of the Don Morse Park marina. This native planting area will improve habitat for birds, fish and other aquatic species.

4.10.2 City of Entiat

The City of Entiat has identified future shoreline parks and public access opportunities including a shoreline trail associated with the *Lake Entiat Waterfront Business District Subarea Plan* (2009b). According to the Subarea Plan, the trail in the redevelopment area is intended to connect with a trail along the shoreline at Entiat City Park, to the south of, and progress under the Entiat River Bridge to connect with the proposed Entiaqua trail. A conceptual plan for a loop trail could connect the east end of the Entiaqua trail to the north end of the waterfront trail at

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the Columbia Breaks Fire Interpretive Center via irrigation district right-of-way. The trail would be flanked by restored riparian areas along much of its length.

The City is working to develop the Entiat River Outdoor Learning Center located on the Entiat River near its confluence with the Columbia River. This proposal involves the development of day-use and interpretive facilities on the River (City of Entiat 2008). Facilities are anticipated to include parking, education facilities, a swim platform, trails and paddle boat haul-out.

The above efforts of the City are consistent with the *Entiat Water Resource Inventory Area (WRIA) 46 Management Plan* (CCCD 2004), which includes a project titled "Entiaqua River Park and Outdoor Learning Center" as #9 on its list of restoration projects for the Entiat Subbasin.

The Chelan County PUD also conducted its own assessment of recreation needs as part of the Rocky Reach Dam relicensing effort. The PUD's assessment included conceptual plans for Entiat City Park, as well as the Entiaqua trail (Chelan County PUD 2004).

The Entiat Watershed, and specifically an orchard enterprise on the Entiat River, is the geographic area of a pilot study for the Habitat Farming Enterprise Program (HFEP) (GeoEngineers 2007). HFEP is a program being developed by the Initiative for Rural Innovation and Stewardship (IRIS), in cooperation with North Central Washington Resource Conservation and Development, the Entiat Watershed Planning Unit, Cascadia Conservation District, Chelan-Douglas Land Trust, Chelan County, and several other environmental interests. The HFEP pilot is evaluating the benefits and costs of compensating area farmers to grow riparian habitat and accommodate other restoration measures on their property, in lieu of growing marketable crops. The potential of the HFEP to realize significant improvement in shoreline functions is high.

4.10.3 City of Wenatchee

The City of Wenatchee continues to accomplish the goals established in the *Wenatchee Waterfront Sub-Area Plan* (2003). Restoration-related elements of the park/open space/recreation implementation opportunities include: waterfront park and shoreline enhancement and the development of an environmental education center/urban agricultural center.

4.11 Audubon Society Efforts

The North Central Washington (NCW) chapter of the Audubon Society is dedicated to furthering the knowledge and conservation of the environment of North Central Washington, our Nation, and the World (NCW Audubon website). Chapter president, Mark Oswood, expresses the goals, hopes, aspirations, and plans of the NCW Audubon Society to: promote resource decisions based on the best available data; be honest brokers in environmental conflicts; believe that sustainable economies are the only road into the future; believe in citizen science and life-long learning; act as "outside consultants" – leading field trips, holding outdoor classes, and doing "dirt work"; and watch, count and protect birds, "one of the grandest expressions of life" (NCW Audubon website).

NCW Audubon is a frequent contributor and partner in several area events and programs that educate and foster stewardship within the community, including the annual *Leavenworth Spring Bird Fest* and the *Wenatchee River Salmon Festival*. Both of these are venues for a NCW Audubon Society birding simulation activity for kids and families, called "What's That Bird?" (M.

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Oswood, e-mail communication, March 7, 2009). NCW Audubon volunteers assist with outdoor education programs at these events and at events for local students, primarily held at the Barn Beach Reserve (in Leavenworth). The NCW chapter of the Audubon Society also participates in the Wenatchee River Watershed (WRIA 45) Planning effort and the Stemilt-Squilchuck Partnership. The *Wild Phlox*, a NCW Audubon Society newsletter (edited by Teri Pieper), reaches approximately 450 members across the four-county (Chelan, Douglas, Okanogan, Ferry) chapter territory, providing monthly environmental updates and opportunities for Audubon birders and environmental enthusiasts alike. More information about the NCW Audubon Society can be found online at http://www.ncwaudubon.org.

4.12 Cascadia Conservation District Efforts

Watershed Planning

The Cascadia Conservation District (CCD) (formerly the Chelan County Conservation District) is the lead entity for the Entiat (WRIA 46) watershed planning effort, and is also involved with the Wenatchee (WRIA 45) watershed planning effort, led by Chelan County. Since 1993, Entiat area landowners have been working with the CCD to develop local solutions to natural resource issues specific to the basin. The CCD coordinates quarterly Entiat Watershed Planning Unit meetings, monthly Entiat Habitat Sub-Committee meetings, and numerous water quality and quantity meetings. The CCD and its partners generate and update Entiat watershed reports, the Entiat Watershed Plan, and the Entiat Watershed Detailed Implementation Plan.

Land Owner Assistance Program

Numerous projects occur each year, with recent projects along Chumstick Creek, Colockum Creek, Mission Creek, Stemilt Creek, Yaksum Creek, and the Entiat and Wenatchee Rivers (R. Malinowski, personal communication, February 17, 2009). The CCD has assisted in diverse ways by providing: side channel reconnection, off-channel juvenile salmonid rearing habitat, installation of LWD structures and boulder structures for instream habitat complexity, native riparian plantings to stabilize streambanks and provide canopy cover, installation of livestock fencing, elimination of fish entrainment in irrigation diversions through designing and updating new fish screens, and construction of groundwater wells to replace surface water diversions. Primarily the CCD works with private landowners to enhance riparian areas while providing fish-friendly conveyance to irrigation ditches, thereby reducing annual instream disturbance from diversion maintenance. By installing instream log cross vanes, LWD (with intact rootwads) and boulder clusters, irrigation pools are allowed to form (with fish screens), minimizing diversion impacts to fish and stream habitat. The CCD continues to assist local landowners and watersheds.

Water Metering

In an effort to encourage voluntary compliance with state metering requirements, the CCD has partnered with the Washington State Department of Ecology to provide cost-share funding to assist Chelan County diversion owners with the installation of adequate metering equipment.

Education and Outreach

- *Kids in the Creek*

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Cascadia Conservation District participates in the *Kids in the Creek* program that was developed by local volunteers. This program won First Place for 2006 Environmental Education Curriculum from the National Association of Interpretation Media. The objectives of the program show how streams and watersheds work. Students walk away with an understanding of how their actions can affect stream health, in both negative and positive ways. They learn about watersheds, stream habitat, water quality, riparian areas, and macroinvertebrates. More information about the *Kids in the Creek* program can be found online: http://www.bpa.gov/corporate/KR/ed/kidsinthecreek/homepage.htm

- *Streamside Property Owner's Guide*

The CCD developed the *Streamside Property Owner's Guide* for the Entiat Watershed to provide county residents with an understanding of the critical riparian habitat along the stream. The guide includes "7 Steps to Stewardship" - a list of contacts and sources of information to assist with riparian planning and activities (R. Malinowski, personal communication, February 17, 2009).

- *Wenatchee River Salmon Festival*

The CCD participates in the *Wenatchee River Salmon Festival*, hosted annually by the Leavenworth National Fish Hatchery and the Okanogan and Wenatchee National Forests. The festival's mission is to "provide high quality natural resource education, promote outdoor recreation, and share the cultural significance of salmon to the people of the Northwest." Information about the Wenatchee River Salmon Festival can be found online at http://www.salmonfest.org.

For more details, contact the Cascadia Conservation District by phone (509) 664-9370 or look them up on the internet at http://www.cascadiacd.org.

4.13 Chelan-Douglas Land Trust Efforts

Land Protection

The Chelan-Douglas Land Trust (Land Trust) protects lands throughout the County, either through conservation easements or acquisition (B. Bugert, e-mail correspondence, February 13, 2009). Land is eligible for Land Trust protection based on the following qualifying criteria:

- Is it habitat for endangered, threatened or rare species?
- Does it contain exemplary natural ecosystems such as old-growth forests or migratory waterfowl staging/wintering areas?
- Does it include shoreline and riparian areas?
- Does it include wetlands, floodplains, or other lands important for the protection of water quality?
- Is it undeveloped land in close proximity to urban development?
- Does it have important recreational opportunities?
- Does it include parcels that could be connected to greenbelt corridors between privately protected or publicly held properties?

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- Does it include unique local scenic viewpoints or outstanding physiographic features that help define the character of our locale and enhance our community's sense of place?
- Is it valuable for timber or agricultural production?
- Is it a heritage site of historic and or prehistoric value?
- Does it include ecosystems of educational or scientific value?
- Is the landowner amenable to the conservation goals of the land trust?

Additional Land Trust protection efforts are described below:

- *Riparian Plantings*

The Land Trust has done work to revegetate riparian habitat along the Entiat River (WRIA 46) at their Cottonwood and Stormy Creek reserves (B. Bugert, e-mail correspondence, February 13, 2009). They are currently collaborating with Chelan County Natural Resources to do riparian plantings along Icicle Creek and potentially future projects throughout the County (B. Bugert, e-mail correspondence, February 13, 2009).

- *Lake Wenatchee and White River*

The Land Trust is working with private landowners, the U.S. Forest Service, the Washington Department of Fish and Wildlife (WDFW), and Chelan County to permanently protect the natural functions and scenic beauty of the White River watershed.

- *Entiat River Valley*

The Land Trust is actively involved in efforts to protect fish habitat, wildlife habitat, and floodplain function along the "*Stillwater*" reach of the Entiat River. The *Stillwater* is a calm stretch of river that contains the majority of the Entiat's spawning and rearing habitat for endangered steelhead, endangered spring Chinook salmon, threatened bull trout, and fall Chinook salmon. At the urging of local residents, the Land Trust applied for and received a grant for $1.4 million from the state Salmon Recovery Funding Board to purchase nearly 300 acres (including nearly three miles of riverfront) of prime fish and wildlife habitat along the Entiat. The Land Trust is working with Entiat Valley residents to develop management plans that will protect the conservation values of these properties in perpetuity (Chelan-Douglas Land Trust website).

Education and Outreach

- *Chelan County Good Neighbor Handbook*

To promote community stewardship, the Land Trust publishes the *Chelan County Good Neighbor Handbook* as a tool to ensure people do their part in keeping the County a special place to live. The handbook is available online at:
http://www.cdlandtrust.org/Good%20Neighbor%20HB%20for%20web.pdf

- *Workshops*

The Land Trust is working to make the case that land conservation is a good investment for local communities. They believe that, “we do not need to choose between a healthy economy and healthy landscapes” (Chelan-Douglas Land Trust website). As part of this effort, the Land Trust

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partners with several local organizations to present workshops on various topics ranging from the economy to the environment. Recent workshops cover noxious weeds, sustainable landscaping and insects.

- *Conservation Roundtable, Ag and Environment Dialog, Environmental Film Series*

The Land Trust works closely with a wide variety of landowners, conservation groups, farmers, and resource agencies to develop innovative approaches to natural resource management. The Conservation Roundtable seeks to facilitate communication and collaboration among conservation groups. This dialog fosters understanding and collaboration among farmers, agriculture groups, and environmental groups to promote sustainable, productive, and profitable farms in the region. The Land Trust sponsors a monthly environmental film series (Chelan-Douglas Land Trust website).

The Land Trust is able to work quickly and creatively with local citizens, helping to preserve the unique character of the region and enhance the quality of life for residents, visitors, and future generations. For more details, contact the Chelan-Douglas Land Trust by e-mail: info@cdlandtrust.org or phone: (509) 667-9708.

4.14 Chelan County Public Utility District Efforts

Habitat Conservation Plan

The Chelan County Public Utility District (PUD) is collaborating with local, state, and federal governments; tribes; and private landowners to restore and protect salmon and steelhead habitat in the mid-Columbia and its tributaries. As part of the Habitat Conservation Plan (HCP) Tributary Program, the PUD funds projects to help protect and enhance salmon and steelhead spawning, rearing and migration. These projects will help the PUD meet its HCP commitment of "no-net-impact" to migrating fish. One such project includes the acclimation and rearing of summer steelhead on Blackbird Island in Leavenworth. The PUD, as part of its mitigation responsibility for the Wenatchee River basin, will rear summer steelhead in the Blackbird Island fish pond each spring, beginning in 2009 (D. Davies, e-mail correspondence, March 9, 2009). Additional information about steelhead acclimation on Blackbird Island is found in the Trout Unlimited section below (Section 4.15).

Potential PUD projects may include bank and shoreline restoration, removal of migration barriers, enhancing stream flows, native riparian plantings, wetland restoration, constructing in-stream habitat structures, acquiring conservation easements or other means to preserve critical floodplain properties, and reconnecting relic side channels to provide rearing habitat (CCPUD website). Any individual or group can propose an HCP project through either of following two funding options. The General Salmon Habitat Program will fund projects costing $25,000 or more. The Small Projects Program is for projects costing less than $25,000 and is designed to encourage community groups working in cooperation with landowners (CCPUD website). Table 7 shows the PUD's current projects underway as part of the HCP Tributary Program.

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Table 7 Chelan County PUD's HCP current project list (provided by T. Larson, CCPUD, March 11, 2009)

ROCKY REACH PLAN SPECIES ACCOUNT	Project Small/GSF	Sponsor	Total Projected Cost	Trib Contribution	Project Status
Entiat Instream Structure Engineering	GSF	Cascadia Conservation District	$59,340.00	$59,340.00	in progress
LWD/Rootwad Acquisition & Transport	Small	Cascadia Conservation District	$24,600.00	$24,600.00	in progress
Entiat Canal Log Boom Installation	Small	Cascadia Conservation District	$10,660.00	$7,160.00	in progress
Below the Bridge	GSF	Cascadia Conservation District	$398,998.00	$150,000.00	in progress
Rocky Reach Total			**$94,600.00**	**$91,100.00**	
ROCK ISLAND PLAN SPECIES ACCOUNT	**Project Small/GSF**	**Sponsor**	**Total Projected Cost**	**Trib Contribution**	**Project Status**
WRIA's 45/46 Riparian Restoration	Small	Cascadia Conservation District	$50,000.00	$25,000.00	in progress
Entiat PUD Canal System Conversion	GSF	Cascadia Conservation District	$631,584.00	$99,360.00	in progress
Roaring Creek Flow Enhancement	GSF	Cascadia Conservation District	$147,000.00	$25,000.00	in progress
Keystone Canyon Habitat Restoration	GSF	Cascadia Conservation District	$193,805.00	$29,100.00	in progress
Cashmere Pond Off-Channel Habitat Project	GSF	Chelan County Natural Resources	$914,076.00	$249,110.00	in progress
Rock Island Total			**$1,936,465.00**	**$427,570.00**	

The PUD has a new 43-year license for continued operation of the Rocky Reach Hydroelectric Project (issued on February 19, 2009). The new license is based on a settlement agreement submitted to the Federal Energy Regulatory Commission (FERC) on March 17, 2006, between PUD and stakeholders that includes the local communities, state and federal agencies, tribes, and environmental groups. The new license contains requirements for operating the 1,300-megawatt project that are estimated to cost the PUD approximately $425 million over the 43 years, including continuation of the HCP for salmon and steelhead, maintaining existing parks on the Rocky Reach reservoir, providing renovation of Entiat Park, and enhancements to Lincoln Rock and Daroga State Parks. In addition, the new license has provisions to ensure safe passage of bull trout and lamprey past the dam, research on possible hatchery facilities to supplement the white sturgeon population, an evaluation of resident fish for future recreational fishing, funding for habitat restoration projects on federal and state wildlife lands, and a variety of other actions. (The above information is directly from the CCPUD website).

FERC Licensing

Aside from HCP projects, the PUD is working on three additional efforts as part of the requirements for their FERC relicensing (T. Larson, e-mail communication, March 11, 2009), including the:

1. Dryden off-channel enhancement project (side channel in the Wenatchee River),
2. Chelan River projects: Reach 4 and tailrace habitat enhancement, Low level outlet, and Pump Station, and the
3. Lake Chelan tributary barriers removal and restoration.

For more information about the above projects, contact Jeff Osborn at jeff.osborn@chelanpud.org

Expanding on the above, the PUD has restored a historic Wenatchee River side-channel as off-channel refuge and rearing habitat for salmonids. Located near Dryden, the groundwater-fed channel was enhanced (into pool/riffle habitat with large woody debris) and now provides spawning and rearing habitat. Monitoring reports have identified juvenile Chinook and Coho salmon and steelhead rearing, and adult Coho salmon spawning in the enhanced channel (J. Osborn, personal communication, March 17, 2009). Continued monitoring of the site will

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include electrofishing and snorkel surveys and the collection of temperature data (J. Osborn, personal communication, March 17, 2009).

The PUD has begun an extensive recovery effort that includes year-round discharge at the Chelan Dam and stream restoration along the Chelan River's lowest reach (Reach 4), near the dam's powerhouse (in the town of Chelan Falls). Year-round flow (minimum 80cfs) will be restored to the Chelan River via a new low-level outlet structure, allowing continuous flow, even when the lake level is below the 1087-foot Chelan Dam elevation (J. Osborn, personal communication, March 17, 2009). With this low-level outlet structure, flow will be provided to the river down to the lakes lowest elevation of 1079 feet (J. Osborn, personal communication, March 17, 2009).

The Reach 4 enhancement includes construction of a new side channel, along the river's right bank. LWD and gravels will be added instream to provide fish refugia and spawning areas, and develop pool/riffle habitats ideal for refuge during the spring high flows (4,000-6,000 cfs) and overwintering habitat for juvenile salmonids. A pump station will also be constructed to pump water from the tailrace upstream into this new side channel, in addition to the guaranteed minimum 80 cfs year-round flow, to provide additional spawning and rearing habitat (J. Osborn, personal communication, March 17, 2009). Native vegetative cover along the new side channel will be improved, adding habitat complexity and contributing to LWD and residual fish recruitment. Additionally, approximately 1.75 acres of new spawning habitat for Chinook salmon and steelhead has been created in the tailrace. Appropriate sized gravel was placed instream during the summer of 2008, and were used heavily by salmon during the fall spawning period. Monitoring and evaluation of this restoration project and future opportunities will continue. Restoration attention could be focused on the section of the Chelan River downstream of City limits in the 3.9 miles (6.3 km) of steep, rocky gorge downstream of the Chelan Dam.

The PUD has identified various migration barriers (depth, velocity, gradient) for Westslope cutthroat to Lake Chelan tributary streams in the Lucerne basin. Site reconnaissance and site-specific restoration plans are currently being developed for removing these remote alluvial barriers and restoring upstream passage for adult spring spawning cutthroat trout. The PUD plans to start on-the-ground restoration in 2011, addressing two tributaries per year over a five-year period.

Other Projects

The Chelan Wildlife Area currently consists of approximately 32,540 acres of WDFW-owned and -managed lands (WDFW website). Primarily in eastern Chelan County, subunits of the Wildlife Area include the Chelan Butte, Entiat, Swakane and White River subunits. The PUD provided WDFW with funding to purchase 20,397 acres within the Chelan Butte, Entiat, and Swakane subunits (J. Osborn, personal communication, March 17, 2009). These lands have been impacted by past land uses; therefore, the PUD will be restoring 1,400 acres of the Wildlife Area as shrub steppe habitat for the bighorn sheep, mule deer, upland game birds, and numerous other wildlife species that inhabit the area (J. Osborn, personal communication, March 17, 2009). These restored lands may also be utilized for recreation by the community.

The PUD also develops and maintains a number of parks within the County. Several of these parks include boat launches, short-term boat moorage, parking, extensive day use facilities, overnight camping, picnic shelters, restrooms, showers, shoreline trails, tennis courts,

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playground equipment, and swimming areas. More information about Chelan County PUD habitat and restoration projects can be found online at http://www.chelanpud.org/habitat-restoration-protection.html.

Education and Outreach

The PUD offers public tours of the Rocky Reach Hydroelectric Project that begin at the Rocky Reach Visitor Center. These tours include detail about the PUD's fish recovery efforts throughout the Columbia River basin in addition to the dams fish bypass system, assorted hatchery projects and restoration/mitigation projects.

4.15 Trout Unlimited Efforts

The mission of the Washington Council of Trout Unlimited and the Icicle Chapter is to, ""CONSERVE, PROTECT AND RESTORE" cold water fisheries, their watersheds and ecosystems, as a means of maintaining our quality of life!" Trout Unlimited has been on the forefront of fisheries restoration work at the local, state and national levels. Their website explains that they remain committed to applying "the very best information and thinking available" to conservation work and have developed cutting-edge tools to help direct efforts toward those fish populations most in need of protection or restoration.

Trout Unlimited's Icicle chapter, with backing from the City of Leavenworth, is attempting to restore a fish pond on Blackbird Island to make it suitable for raising 53,000 steelhead per year in cooperation with the Chelan County PUD. Trout Unlimited acquired water rights which will allow constant stream flow into the pond from the Wenatchee River via inlet/outlet structures installed in October of 2008. The goal is to acclimate (imprint) steelhead, beginning in March 2009, on Wenatchee River water in hopes of having returning adults and potentially a Wenatchee River steelhead fishery in years to come. The steelhead are scheduled to be volitionally released beginning in May 2009 (D. Davies, e-mail correspondence, March 9, 2009). The pond will be stocked with cutthroat trout and will open to children for recreational fishing in the summer months after the all steelhead have emigrated. Additional information can be found online at http://icicletrout.org.

4.16 United States Fish and Wildlife Service Efforts

Restoration

The USFWS has been involved in numerous restoration projects and activities in Chelan County. Currently the USFWS is involved in the implementation of habitat restoration projects associated with the Entiat and Wenatchee Watershed Planning Units, Integrated Status and Effectiveness Monitoring Project (ISEMP), CCNRD, CCD, and the Yakama Nation. The USFWS actively participates on several interdisciplinary teams that work towards Entiat and Wenatchee watershed restoration efforts including: the Upper Columbia Regional Technical Team (RTT), Upper Columbia Salmon Recovery Board, the Mid-Columbia HCP Tributary Sub-Committee and the Priest Rapids Coordinating Committee's Habitat Sub-Committee. The USFWS also provides funding for restoration activities through the Western Native Trout Initiative, the National Fish Passage Program (NFPP), Partners for Fish and Wildlife and the Fisheries Restoration and

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Irrigation Mitigation Program. More information about the USFWS involvement in these programs can be found online at http://www.fws.gov/pacific/Fisheries/sp_habcon/index.html.

The USFWS acts as an active partner in several stream and riparian restoration efforts along the lower 26 river miles of the Entiat River. In Chelan County, the USFWS is the lead agency on three extensive projects in the Entiat and Wenatchee basins. These projects are summarized below.

- *Entiat River Restoration*

Currently in design phase, the USFWS's Entiat National Fish Hatchery (NFH) is updating hatchery facilities and undertaking a stream enhancement project on the adjacent Entiat River (located at approximately RM 7). The project hopes to improve juvenile rearing habitat (especially during high flow events), increase instream LWD retention, increase stream habitat complexity and off-channel refugia, and improve floodplain connectivity. The hatchery water intake system will be redesigned and will encompass a fish-friendly screen to prevent fish entrapment. There will also be a new public fishing pond (for Kids Fishing Day events) built to facilitate recreation and learning opportunities within the Entiat basin (R. Parrish, personal communication, February 25, 2009).

- *Icicle Creek Restoration*

In 2006, the BOR and the USFWS convened a Project Alternative and Solution Study (PASS) to sequentially evaluate habitat restoration and water intake for the Leavenworth NFH. Goals for this project are to: improve fish passage and stream habitat; improve management and conservation efforts for water use by the irrigation district, Leavenworth NFH and Sleeping Lady Resort; and increase fish survival and spawning success in Icicle Creek. A group of policy and technical representatives from the USFWS, BOR, other federal and state resource agencies, the Yakama Nation, and the Wild Fish Conservancy were all invited to contribute staff to a technical team. Beginning in October 2006, the technical team collaborated and developed a preferred alternative design for the new Leavenworth NFH water intake system, which was approved for implementation by the USFWS and the BOR in November 2007. Final approval for the project is still pending due to the required completion of NEPA, various permits, and related actions. The BOR has set-aside several million dollars for implementation of this alternative and it is estimated that construction of a new water intake system will begin in 2009-2010.

In February 2008, the PASS effort shifted focus towards habitat restoration within the historic channel of Icicle Creek (adjacent to Leavenworth NFH). Restoration will include the construction of roughened fish passage channel and restoration of a normative flow regime. Additional habitat improvements may include LWD placement and native riparian plantings. The BOR has budgeted funds for PASS meetings, facilitation, engineering design, and related efforts during FY 2009 in support of the technical team's goal of finalizing plans for the restoration project as soon as possible. Once the project plan is finalized and approved, the USFWS will re-initiate and complete consultation on implementation of the plan and Leavenworth NFH operations, in addition to completing NEPA compliance procedures prior to initiating construction of this project. (The above information was provided via e-mail communication with Jim Craig, USFWS Mid-Columbia FRO, March 10, 2009).

- *Chumstick Passage Barrier Removal*

The USFWS and the CCNRD are working with local land owners to remove 17 fish passage barriers along Chumstick Creek. Approximately 20 miles of instream habitat will be restored to

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steelhead, spring Chinook and reintroduced Coho salmon with the removal of barriers on Chumstick Creek (including the North Road). This project is possible with funding from Bonneville Power Administration (BPA) and the National Fish Passage Program (NFPP). (The above information was provided via e-mail communication with Jim Craig, USFWS Mid-Columbia FRO, March 10, 2009).

Education and Outreach

The USFWS's Mid-Columbia FRO is also a lead and partner in several education and outreach programs throughout the County. They inform the public about local restoration efforts, while providing environmental education to the community. The FRO, in cooperation with other agencies, sends out an annual newsletter informing the Entiat community about local watershed projects. The USFWS is involved in several educational events at both the Entiat and Leavenworth NFHs including: National Fishing Week events, Salmon in the Classroom, Wanapum Archeology Days, in addition to field and classroom events and those listed below.

- *Kids in the Creek*

The USFWS partners with the CCD on this program, described in detail in CCD section above.

- *Wenatchee River Salmon Festival*

The USFWS is one of the lead entities that host the *Wenatchee River Salmon Festival* each year at the Leavenworth National Fish Hatchery. The CCD is one of the festival sponsors. Detail about the festival can be found in section 4.8 above.

For more information about the USFWS's programs and/or reports, contact the Mid-Columbia Fisheries Resource Office (FRO) in Leavenworth at (509) 548-7573 or look online at http://www.fws.gov/midcolumbiariverfro.

4.17 United States Forest Service Efforts

Restoration

The USFS is responsible for vegetation/fuel and road management and is an active participant in watershed-level restoration efforts throughout Chelan County. The Leavenworth Ranger District may assist in watershed planning efforts in addition to the research and monitoring programs for fish and wildlife species of the watershed, including participation in the ISEMP. Within the Entiat basin, the USFS provides technical assistance to lead entities involved in in-stream and riparian restoration projects (P. Archibald, personal communication, February 26, 2009).

Education and Outreach

The USFS is implementing its *Respect the River* program that educates recreational users about riparian protection, managing and restoring riparian vegetation, reducing stream bank erosion, and improving floodplain water storage (Chelan County Conservation District 2006).

4.19 Yakama Nation Efforts

Yakama Nation projects throughout the mid- and upper-Columbia's ceded lands follow the tribes mission, "to preserve, protect, enhance, and restore culturally important fish populations

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and their habitats throughout the Zone of Influence of the Yakama Nation and to protect the rights of Yakama Nation members to utilize these resources as reserved for them in the Treaty of 1855." The Entiat and Wenatchee basins are areas in Chelan County that the Yakama Nation hopes to "demonstrate the fishery benefits of integrated land and water management practices" (Yakama Nation website). Currently the Yakama Nation is involved in an instream habitat enhancement project along the lower Entiat River's keystone reach (B. Rogers, e-mail correspondence, February 19, 2009).

The Yakama Nation's Mid-Columbia Field Station (located in Peshastin) has lead restoration efforts that have successful returned extirpated Coho salmon to the Wenatchee basin. Restoration efforts are focused on upper Wenatchee River tributaries, with rearing at the Leavenworth NFH and naturalized acclimation ponds along Nason Creek. The Yakama Nation also participates in numerous salmon recovery and watershed planning efforts, in addition to the research and monitoring programs for fish species of the watershed, including participation in the ISEMP.

Please see the following website for more information about the Yakama Nation Fisheries program: http://host119.yakama.com

Section 5 Additional Projects & Programs to Achieve Local Goals

5.1 City of Cashmere

Additional restoration opportunities, not previously mentioned in WRIA and other watershed planning efforts, were identified in the *Analysis Report* (TWC and J&S 2009) as follows:

Riverside Park: Wenatchee River spring and fall discharges of 20,000 cfs or greater threaten the existing streamside canopy cover, vegetation and dike stability. Left and right bank reduction of shoreline armoring, addition of LWD, river meandering and revegetation could stabilize the stream bank and create off-channel salmonid spawning and juvenile rearing areas. Nature interpretive signs can be posted to entice the birding and naturalist communities to utilize this park. Special restoration attention to the left bank could decrease noise from U.S. Highway 2, improving the overall park and City aesthetic.

Chelan County Historical Museum and Pioneer Village: Similar Wenatchee River armor reduction, stream bank stabilization and revegetation, as mentioned above, can continue downstream of the Riverside Park to the end of Riverfront Drive (right bank) and the Chelan County Historical Museum and Pioneer Village (left bank). The Chelan County Historical Museum and Pioneer Village has wonderful restoration potential providing opportunities for public involvement and education.

Mission Creek: Seasonal floods cause considerable property damage, bank erosion and sediment loss throughout the creek. Reduce armoring and improve native vegetative cover to add habitat complexity and contribute to large woody debris recruitment. Creation of off-channel areas may minimize flooding and provide salmonid spawning and juvenile rearing areas. A combination of native revegetation and bioengineering techniques could be provided to secure the bank from excessive erosion.

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General: At an October 2008 public meeting, a number of attendees commented that several sections of the Wenatchee River and Mission Creek contain debris (old tractors, large metal pieces, household appliances etc…) that could be removed to improve stream and fish habitat, and City aesthetics.

5.2 City of Chelan

Additional restoration opportunities, not previously mentioned in WRIA and other watershed planning efforts, were identified in the *Analysis Report* (TWC and J&S 2009) as follows:

Riverwalk Park: Coordinate with the PUD to reduce shoreline armoring, improve streambank stabilization, remove non-native plantings, and add native vegetation and LWD.

City of Chelan Parks (Don Morse and Lakeside Parks): Reduce shoreline armoring, create a shoreline buffer that includes non-native vegetation, and improve shoreline stabilization. Don Morse Park is currently in the design process for updated facilities, including a substantial restoration component.

General: Many residential shoreline properties throughout the City's Lake Chelan shoreline have the potential for improvement of ecological functions through: 1) reduction or modification of shoreline armoring, 2) reduction of overwater cover and in-water structures (grated pier decking, pier size reduction, pile size and quantity reduction, moorage cover removal), 3) improvements to nearshore native vegetative cover, and/or 4) reductions in impervious surface coverage. A combination of native revegetation and bioengineering techniques could be provided to secure the shoreline from excessive erosion. Where opportunities for on-site mitigation and restoration are not available, projects could explore and consider opportunities for enhancing any of the water-conveyance swales that enter Lake Chelan and drain areas developed for orchard, vineyard, or other uses. Enhancements of these corridors would improve wildlife habitat and increase the ability of these vegetated pathways to filter and treat pollutants originating from upslope uses.

5.3 City of Entiat

Additional restoration opportunities, not previously mentioned in WRIA and other watershed planning efforts, were identified in the *Analysis Report* (TWC and J&S 2009) as follows:

Waterfront Master Plan: Implementation of the City's Waterfront Master Plan (2009c) is expected to result in substantial improvements to shoreline function. The City has worked to balance environmental restoration of the Columbia River waterfront with development of uses that are water-oriented and provide economic return to the community.

Entiat City Park/Silico Saska Park: Create a shoreline buffer, improve shoreline stabilization, remove non-native plantings and add native vegetation. Nature interpretive signs can be posted to entice the birding and naturalist communities to utilize this park.

General: Residential shoreline properties on the Columbia River have the potential for improvement of ecological functions through: 1) reduction or modification of shoreline armoring, 2) reduction of overwater cover and in-water structures (grated pier decking, pier size reduction, pile size and quantity reduction, moorage cover removal), 3) improvements to

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nearshore native vegetative cover, and/or 4) reductions in impervious surface coverage. A combination of native revegetation and bioengineering techniques could be provided to secure the shoreline from excessive erosion.

5.4 City of Leavenworth

An additional restoration opportunity, not previously mentioned in WRIA and other watershed planning efforts were identified in the *Analysis Report* (TWC and J&S 2009) as follows:

Blackbird Island: The City should continue to remain involved in stream bank stabilization and native vegetation establishment efforts. According to the City, the southwest tip of Blackbird Island has eroded 40 feet in 10 years. This site may be a good candidate for shoreline stabilization using bioengineering techniques. A combination of native revegetation and bioengineering techniques could be provided to secure the streambank from excessive erosion, such as was caused by the November 2006 high water event. Design of any stabilization would need to consider the high velocities in the mainstem Wenatchee River and safety issues related to high use of this section of river by non-motorized boaters and recreationists. Interpretive signs could also be updated to provide relevant information about the Wenatchee River, its biological value, and it's potential.

5.5 City of Wenatchee

Additional restoration opportunities, not previously mentioned in WRIA and other watershed planning efforts, were identified in the *Analysis Report* (TWC and J&S 2009) as follows:

Wenatchee Parks (Riverfront and Confluence State Parks): Reduction of shoreline armoring, removal of non-native vegetation, native revegetation, shoreline stabilization, and the addition of interpretive nature and/or historical signs. Enhance and maintain the habitat along the south Confluence State Park wetland area.

General: Reduce shoreline armoring, improve shoreline stabilization, and remove non-native plantings. A combination of native revegetation and bioengineering techniques could be provided to secure the shoreline from excessive erosion.

Section 6 Implementation Targets and Monitoring Methods

As previously noted, the shoreline areas in Chelan County occupy industrial, commercial, agricultural, multi- and single-family residences, and public recreation/open space areas. Therefore, efforts should be made to improve and retain shoreline ecological function through the promotion of restoration and healthy practices at all levels, from large-scale industrial users to single-family property owners. Chelan County and the Cities of Cashmere, Chelan, Entiat, Leavenworth and Wenatchee already have very active environment-focused communities with a strong restoration and education focus. Continued improvement of shoreline ecological functions along the many shorelines requires a comprehensive watershed approach, which combines all planning and implementation efforts.

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The following table outlines possible schedules and funding sources for implementation of a variety of efforts that could improve shoreline ecological function, and are described in previous sections of this report.

Table 8 Implementation Schedule and Funding for Restoration Projects, Programs and Plans.

Restoration Project/Program	Schedule	Funding Source or Commitment
4.1 WRIA 40a/b Participation	WRIA 40a Watershed Plan: 1) Development of Phase 4 - DIP is ongoing 2) Implementation of goals for water quality and quantity improvements are ongoing	1) The WRIA 40a DIP is currently being developed, with opportunities and feasibility to be evaluated. 2) Water quality and quantity implementation goals were ranked according to their level of importance (in Appendix D and E respectively of the WRIA 40a Watershed Plan) and will be implemented as funds become available.
4.2 WRIA 45 Participation	WRIA 45 DIP: 1) Implementation is ongoing	1) Implementation goals identified in the WRIA 45 DIP are being completed in addition to salmon recovery and water quality actions that have evolved since the DIP was adopted. Funding entities have been identified in the DIP and will be addressed as funds become available.
4.3 WRIA 46 Participation	WRIA 46 DIP: 1) Implementation is ongoing	1) Implementation goals and ongoing/long-term projects identified in Table 8 of the WRIA 46 DIP in progress. Funding entities have been identified in the DIP and will be addressed as funds become available.
4.4 WRIA 47 Participation	1) WRIA 47 Final Draft Unit Charter: ongoing 2) Lake Chelan Subbasin Plan: implementation is ongoing	1) Water quantity and quality tasks have been completed, but further recommendations have been made for additional investigation. These recommendations may be implemented as funds are available. 2) Restoration opportunities identified in the plan are underway in addition to ongoing research, monitoring and evaluation. Responsible entities and anticipated funding sources have been identified in the plan. Many of these entities include: USFS, CCPUD, DNR, WDFW or the Lake Chelan Sportsman's Association.

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Restoration Project/Program	Schedule	Funding Source or Commitment
4.5 Chelan County Department of Natural Resources	Ongoing	Continue with implementation of actions as guided by the UCSRB Implementation Plan, the Wenatchee River CMZ study and watershed plans and DIP's (listed above) as funding and grant money is available.
4.6 Comprehensive Plan Policies	1) Chelan County (amended 2005) 2) City of Cashmere (amended 2008) 3) City of Chelan (amended 2007) 4) City of Entiat (amended 2007) 5) City of Leavenworth (amended 2003) 6) City of Wenatchee (amended 2008)	The county and cities make substantial staff time commitments in the course of project and program reviews to determine consistency and compliance with the recently updated comprehensive plans.
4.7 Critical Areas Regulations	1) Chelan County (amended 2005) 2) City of Cashmere (amended 2008) 3) City of Chelan (amended 2007) 4) City of Entiat (amended 2007) 5) City of Leavenworth (amended 2003) 6) City of Wenatchee (amended 2008)	The county and cities make substantial staff time commitments in the course of project and program reviews to determine consistency and compliance with the recently updated critical areas regulations.
4.8 Stormwater Management and Planning	Ongoing	Drainage systems will be updated as new development occurs. The County/Cities make substantial staff time commitments in the course of multi-agency drainage studies, management and planning efforts.
4.9 Public Education	Ongoing	Education is identified as essential to the region in several park/recreation and comprehensive plans. County/City staff time and materials are provided in developing and planning for public education and outreach opportunities.
4.10 City Efforts	Restoration and Education/Outreach projects: Ongoing - as funds and opportunities allow	Staff time, materials and assorted funds support these efforts, in addition to the project specific partners and grant/funding arrangements. Examples follow: City of Entiat The Entiat River Outdoor Learning Center is a multi-jurisdictional effort that is funded through in-kind resources

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Restoration Project/Program	Schedule	Funding Source or Commitment
		from the participants, including the City, and it is also expected that funding will be secured through state grant programs and CCPUD re-licensing funds. City of Wenatchee The Wenatchee Waterfront Sub-Area Plan is primarily funded by the City, CCPUD and private land owners.
4.11 Audubon Society Efforts	Ongoing	NCW Audubon will continue to contribute and partner in planning efforts and education/outreach opportunities as funding and volunteer time allows.
4.12 Cascadia Conservation District Efforts	Ongoing	The CCD will continue to lead, contribute and partner in planning efforts, project implementation, and education/outreach opportunities as state and grant funding allows.
4.13 Chelan-Douglas Land Trust Efforts	Ongoing	The Land Trust will continue to lead land protection efforts and contribute and partner in planning efforts, project implementation, and education/outreach opportunities as state and grant funding allows.
4.14 Chelan County Public Utilities District Efforts	Ongoing	CCPUD is committed to achieving goals and opportunities identified in the HCP tributary program in addition to projects required as part of their FERC relicensing. CCPUD will continue to support community education and park/recreation opportunities.
4.15 Trout Unlimited Efforts	Ongoing	Trout Unlimited will continue to lead and partner in fish protection and conservation efforts throughout the region as funding and volunteerism allows.
4.16 United States Fish and Wildlife Service Efforts	Ongoing	The USFWS will continue to lead and partner in restoration, conservation and education/outreach opportunities throughout the region. Project specific funding sources may vary over time.
4.17 United States Forest Service Efforts	Ongoing – limited projects	Staff time, materials and assorted funds may be available to support restoration, research, monitoring and education/outreach opportunities and partnerships.
4.18 Yakama Nation Efforts	Ongoing	Staff time, materials and assorted funds may be available to support watershed planning, restoration, research, and monitoring opportunities and partnerships. The Yakama Nation may act as a project specific lead or

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Restoration Project/Program	Schedule	Funding Source or Commitment
		partner and may provide varying grant/funding sources over time.

County and City planning staff will track all land use and development activity, including exemptions, within their respective shoreline jurisdictions, and will incorporate actions and programs of other departments as well. Reports will be assembled by each jurisdiction that provides basic project information, including location, permit type issued, project description, impacts, mitigation (if any), and monitoring outcomes as appropriate. Examples of data categories might include square feet of non-native vegetation removed, square feet of native vegetation planted or maintained, reductions in chemical usage to maintain turf, linear feet of eroding stream bank stabilized through plantings, linear feet of shoreline armoring removed or modified levees, changes to square footage of over-water cover, or number of fish passage barriers corrected.

The report would also recommend or describe relevant updates to WRIA, County and City goals and implementation plans, and outline current and ongoing implementation of various programs and restoration actions (by local government or other groups) that relate to watershed health.

The staff reports will be assembled to coincide with Comprehensive Plan updates and will be used, in light of the goals and objectives of the Shoreline Master Program, to determine whether implementation of the SMPs is meeting the basic goal of no net loss of ecological functions relative to the baseline condition established in the *Analysis Report* (TWC and J&S 2009). In the long term, each local government should be able to demonstrate a net improvement in their respective shoreline environments.

Based on the results of these assessments, each local government may make recommendations for changes to its SMP.

Section 7 Restoration Priorities

This restoration plan, a phase of the Shoreline Master Program update process (consistent with WAC 173-26-201(2)(f)), includes “goals, policies and actions for restoration of impaired shoreline ecological functions.” Restoration opportunities have been “designed to achieve overall improvements in shoreline ecological functions over time, when compared to the status upon adoption of the master program.” This Restoration Plan demonstrates how specific potential projects match and meet regional or County/City-wide goals and objectives of the region, watershed planning entities, and environmental organizations that contribute or could potentially contribute to improved ecological functions of the shoreline. Prioritization of specific projects and project types, implementation strategies, and schedules will be based on information found in watershed or basin plans.

The process of prioritizing actions that are geared toward restoration of the County shoreline areas involves balancing ecological goals with a variety of site-specific constraints. Briefly restated, the County environmental protection and restoration goals include 1) protecting

APPENDIX C: RESTORATION PLAN

watershed processes, water quality and quantity; 2) protecting open/recreational space and the habitats for fish and wildlife; and 3) contributing to ESA listed spring Chinook and steelhead conservation and recovery efforts. Constraints that are specific to Chelan County include 1) the community's diverse past and present land uses and desires (that includes livestock grazing, orchards, and logging), 2) rivers and streams that have been confined by roads or that have altered flow regimes from the construction of dams and/or irrigation diversions, and 3) the highly developed and armored shorelines along Lake Chelan and the Columbia/Wenatchee Rivers near the City of Wenatchee. While much of the County lands offer good ecological functions (generally the upper basins and forest/wild lands of each drainage), opportunities have been recognized to further enhance ecological functions, conservation and education of these shorelands. Goals and constraints were used or will be used in the various watershed plans and implementation plans to develop shoreline restoration actions and a ranking prioritization of projects, programs, or sub-basins specific to each WRIA.

Although restoration project/program scheduling has been suggested and summarized in each watershed and entity planning effort identified in Chapters 3 and 4, the actual order of implementation may not always correspond with the priority level assigned to that project/program. This discrepancy is caused by a variety of obstacles that interfere with efforts to implement projects in the exact order of their perceived priority. Some projects, such as those associated with riparian planting, are *relatively* inexpensive and easy to permit and should be implemented over the short and intermediate term despite the perception of lower priority than projects involving extensive shoreline restoration or large-scale capital improvement projects. Projects with available funding will be initiated immediately for the worthwhile benefits they provide and to preserve a sense of momentum while permitting, design, site access authorization, and funding for the larger, more complicated, and more expensive projects are under way.

References

Archibald, Phil. U.S. Forest Service. Personal communication. February 26, 2009.

Bugert, Bob. Executive Director, Chelan- Douglas Land Trust. E-mail correspondence. February 13, 2009.

CCPUD [Chelan County Public Utilities District] website. http://www.chelanpud.org/environmental.html

CCPUD. 2004. Recreation Resources Management Plan, Fifth Draft – Rocky Reach Hydroelectric Project.

Chelan-Douglas Land Trust website. http://www.cdlandtrust.org

Chelan County. 2005. Comprehensive Plan. Adopted in 2000. Amended February 14, 2005. http://www.co.chelan.wa.us/bl/data/compplan.pdf

Chelan County website. Chelan County Natural Resource Department (CCNRD). http://www.co.chelan.wa.us/nr/nr_entiat_watershed.htm

Chelan County Conservation District (CCCD). 2006. Entiat WRIA 46 Detailed Implementation Plan. Prepared for the Entiat WRIA Planning Unit. February 2006.

Chelan County Conservation District (CCCD). 2004. Entiat WRIA 46 Management Plan. Prepared for the Entiat WRIA Planning Unit. October 2004.

Chelan-Douglas Land Trust website. http://www.cdlandtrust.org/

APPENDIX C: RESTORATION PLAN

City of Cashmere. 2008. City of Cashmere Comprehensive Land Use Plan "The Heart of Cashmere". Adopted January 25, 1999. Amended January 14, 2008.

City of Chelan. 2008. Strategic Plan 2008-2009. Approved on September 11, 2008 at City of Chelan Council meeting.

City of Chelan. 2007. City of Chelan Comprehensive Land Use Plan. Adopted June 25, 1998. http://www.cityofchelan.us/planning/pdf/PlanningPDF/Misc/2007%20Comprehensive%20Plan.pdf

City of Chelan. Chelan Municipal Code. http://www.cityofchelan.us/mrsc/chelanmunicipalcode.htm

City of Chelan Parks and Recreation Department. 2007. Parks and Recreation Comprehensive Plan 2008-14. July 26, 2007.

City of Entiat. 2008. City of Entiat Waterfront Visioning Process 2008/2009. October.

City of Entiat. 2009a. City of Entiat Comprehensive Land Use Plan.

City of Entiat. 2009b. Lake Entiat Waterfront Business District Subarea Plan. November 2009.

City of Leavenworth. 2007. Downtown Master Plan. Prepared by the Community Development Department. September 2007.

City of Leavenworth. 2003. City of Leavenworth Comprehensive Plan. Adopted in 2001. Amended August 12, 2003.

City of Wenatchee. 2008. Planning to Blossom 2025 Wenatchee Urban Area Comprehensive Plan. Adopted April 26, 2007. Amended September 11, 2008.

City of Wenatchee and Chelan County Public Utility District (CCPUD). 2003. Wenatchee Waterfront Sub-Area Plan.

Davies, Dan. Trout Unlimited – Icicle Chapter. E-mail correspondence. March 9, 2009.

Droll, R. 2007. Don Morse Park Master Plan Summary. Prepared for City of Chelan. April 2007. http://www.cityofchelan.us/parks/pdfdocs/donmorseparkmasterplanexecsummary.pdf.

Ecology [Washington State Department of Ecology]. 2009. Wenatchee River Watershed Dissolved Oxygen and pH Total Maximum Daily Load Water Quality Improvement Plan (Draft). Washington State Department of Ecology Publication No. 09-10-075. October 2009.

ESA Adolfson. 2009. Waterfront Master Plan. Prepared for City of Entiat, December 2009.

Frampton, Brian. Senior Planner, City of Wenatchee. Personal communication. April 2008.

GeoEngineers, Inc. 2007. Habitat Farming Enterprise Program: Conceptual Riparian and Aquatic Habitat Restoration Plan – Sanray Orchards, Entiat River Valley, Chelan County, WA. Prepared for Initiative for Rural Innovation and Stewardship (IRIS). June 2007.

Jones and Stokes. 2004. Wenatchee River Final Channel Migration Zone Study – Phase 2. Prepared for Chelan County Natural Resource Program. April 2004.

J.T. Atkins & Company PC. 2003. Upper Valley Plan. Prepared for the Steering Committee and the Chelan County PUD (CCPUD).

Laura Berg Consulting. 2004. Lake Chelan Subbasin Plan. Prepared for the Northwest Power and Conservation Council. May 28, 2004. http://www.nwppc.org/fw/subbasinplanning/lakechelan/plan/EntirePlan.pdf

Landerman-Moore Associates and Robert W. Droll. 1997. City of Leavenworth Parks and Recreation Comprehensive Plan. Prepared for the City of Leavenworth.

Malinowski, Rich. Project Coordinator, Cascadia Conservation District. Personal communication. February 17, 2009.

NCW Audubon website. http://www.ncwaudubon.org/

APPENDIX C: RESTORATION PLAN

Osborn, Jeff. License Program Coordinator, Chelan County Public Utility District (CCPUD). Personal communication. March 17, 2009.

Oswood, Mark. President, Audubon Society - North Central Washington (NCW) Chapter. E-mail correspondence. March 7, 2009.

Parrish, Robes. U.S. Fish and Wildlife Service. Personal communication. February 25, 2009.

Patrick, J. 2008. 'Group looks to reopen pond closed to fishing since 2003', The Wenatchee World. April 3, 2008.

RH2 Engineering, Inc. 2007. WRIA 40A Watershed Plan. Prepared for WRIA 40A Squilchuck/Stemilt Planning Unit. May 2007.

RH2 Engineering, Inc. and Geomatrix Consultants. 2008. Lake Chelan WRIA 47 Final Draft Planning Unit Charter. Prepared for Chelan County Natural Resources Department. Approved December 13, 2007.

Rogers, Brandon. Habitat/Fisheries Biologist, Yakama Nation Fisheries. E-mail correspondence. February 19, 2009.

Silverline Projects, Inc. 2000. Lakeside Trail Feasibility Study. Prepared for City of Chelan. September 28, 2000.

The Watershed Company and ICF Jones & Stokes. 2009. Shoreline Inventory and Analysis Report. Prepared for Chelan County and the Cities of Cashmere, Chelan, Entiat, Leavenworth, and Wenatchee.

UCSRB [Upper Columbia Salmon Recovery Board]. 2009. Memo from the board members (L. Carlson, B. Towey, J. Morgan, D. Van Marter and C. Baldwin) regarding Funding and Project Coordination of Salmon Recovery Projects in the Upper Columbia and the Development of the Mid-Range Implementation Plan/3-Year Work Plan. January 16, 2009.

UCSRB [Upper Columbia Salmon Recovery Board]. 2007. Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan. August 2007.

Upper Columbia Salmon Recovery Board (UCSRB). 2005. Draft Upper Columbia Spring Chinook Salmon, Steelhead, and Bull Trout Recovery Plan. December 2005

Upper Columbia Regional Technical Team (UCRTT). 2002. A Biological Strategy to Protect and Restore Salmon Habitat in the Upper Columbia Region, A Report to the Upper Columbia River Salmon Recovery Board. June 2002. Available from the Upper Columbia Salmon Recovery Board, Chelan, Washington.

WDFW [Washington Department of Fish and Wildlife]. 2006. Diversion Screening and Fish Passage Inventory Report for Colockum Creek, Stemilt Creek and Squilchuck Creek. http://wdfw.wa.gov/hab/tapps/reports/wria40paper.pdf

WDFW [Washington Department of Fish and Wildlife] website. Wildlife Areas: Chelan Wildlife Area. http://wdfw.wa.gov/lands/wildlife_areas/chelan/index.php.

Wenatchee Watershed Planning Unit. 2006. Wenatchee Watershed Management Plan. Vol. 1. April 26, 2006. http://www.co.chelan.wa.us/nr/nr_watershed_plan.htm

WRIA 40A Planning Unit. 2008. Final WRIA 40A Detailed Implementation Plan. October, 2008.

WWPU [Wenatchee Watershed Planning Unit]. 2008. Phase IV – Detailed Implementation Plan. April 15, 2008.

Yakama Nation Fisheries website. http://host119.yakama.com

List of Acronyms and Abbreviations

BLM..... U.S. Bureau of Land Management

APPENDIX C: RESTORATION PLAN

BOCC..... Board of County Commissioners
BOR..... Bureau of Reclamation
CCCD..... Chelan County Conservation District
CCD..... Cascadia Conservation District
CCNRD..... Chelan County Natural Resource Department
CCPUD..... Chelan County Public Utilities District
CDLT..... Chelan Douglas Land Trust
cfs..... cubic feet per second
CMZ..... channel migration zone
DIP..... Detailed Implementation Plan
DPS..... Distinct Population Segment
ESA..... Endangered Species Act
ESU..... Evolutionarily Significant Unit
EWPU..... Entiat Watershed Planning Unit
FEMA..... Federal Emergency Management Agency
FERC..... Federal Energy Regulatory Commission
FRO..... Fisheries Resource Office
FWHCA..... Fish and Wildlife Habitat Conservation Area
GIS..... Geographic information systems
HFEP..... Habitat Farming Enterprise Program
IRIS..... Initiative for Rural Innovation and Stewardship
ISEMP..... Integrated Status and Effectiveness Monitoring Project
LWD..... Large Woody Debris
NEPA..... National Environmental Policy Act
NFH..... National Fish Hatchery
NOAA Fisheries..... National Marine Fisheries Service
NPDES..... National Pollutant Discharge Elimination System
NPS..... National Park Service
NRCS..... Natural Resources Conservation Service
OHW/M..... ordinary high water/mark
PUD..... Public Utility District
RCW..... Revised Code of Washington
SMA..... Shoreline Management Act
SMP..... Shoreline Master Program
UCRTT..... Upper Columbia Regional Technical Team
UCSRB..... Upper Columbia Salmon Recovery Board
UGA..... Urban Growth Area
USFS..... United States Forest Service
USFWS..... U.S. Fish and Wildlife Service
WAC..... Washington Administrative Code
WDFW..... Washington Department of Fish and Wildlife
WDNR..... Washington Department of Natural Resources
WRIA..... Watershed Resource Inventory Area
WWMP..... Wenatchee Watershed Management Plan
WWPU..... Wenatchee Watershed Planning Unit

APPENDIX D: CHANNEL MIGRATION ZONE MAPS



SMP Regulatory Channel Migration Zone
02

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

- SMP Regulatory Channel Migration Zone
- Ecology HMZ Lines
- Rivers & Streams
- Highways
- Railroads
- Parcels
- Jurisdiction
- City Boundaries
- UGA Boundaries



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SMP Regulatory Channel Migration Zone
03

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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SMP Regulatory Channel Migration Zone
06

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

- SMP Regulatory Channel Migration Zone
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SMP Regulatory Channel Migration Zone
07

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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SMP Regulatory Channel Migration Zone
12

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

- SMP Regulatory Channel Migration Zone
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SMP Regulatory Channel Migration Zone
13

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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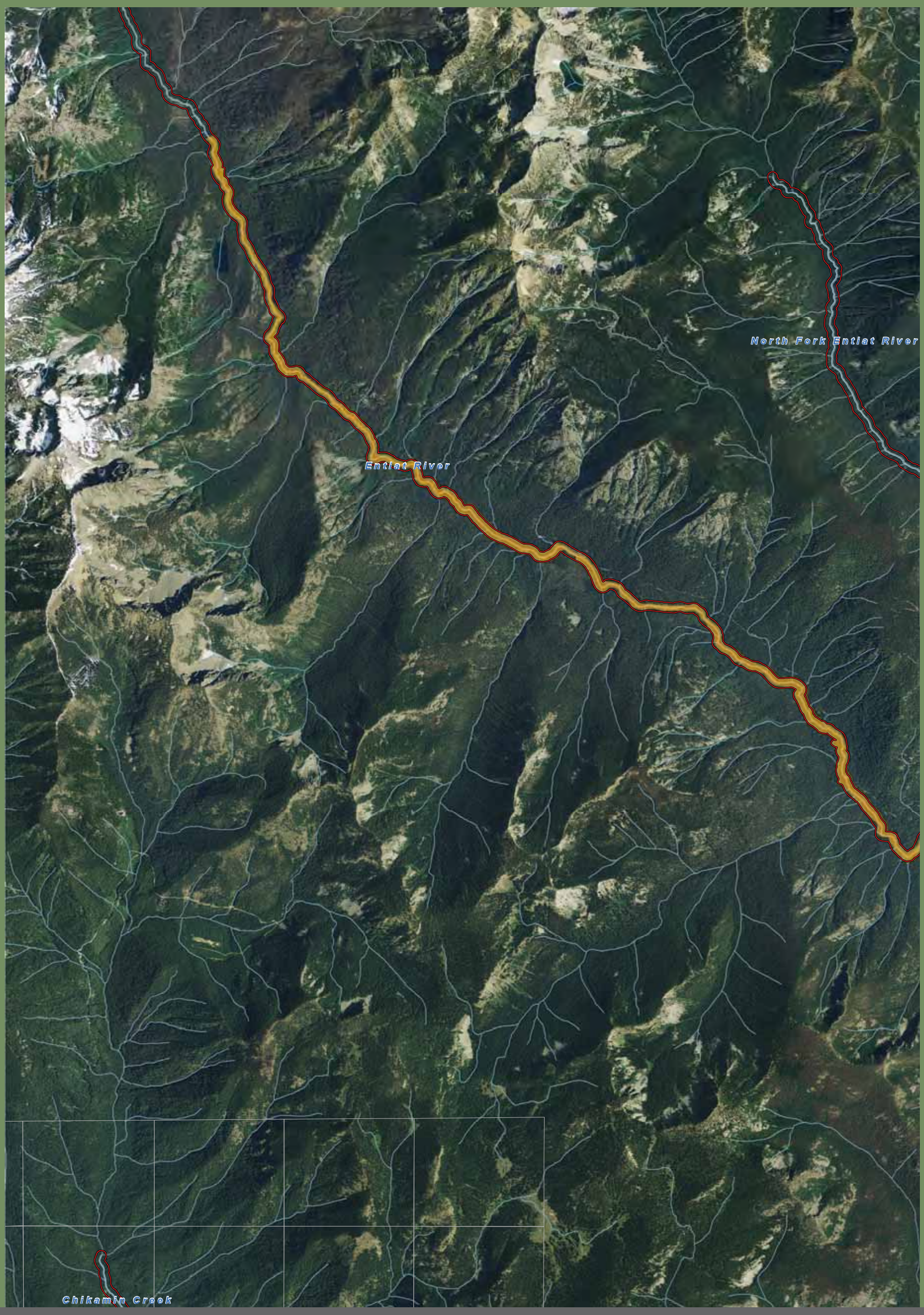

SMP Regulatory Channel Migration Zone
14

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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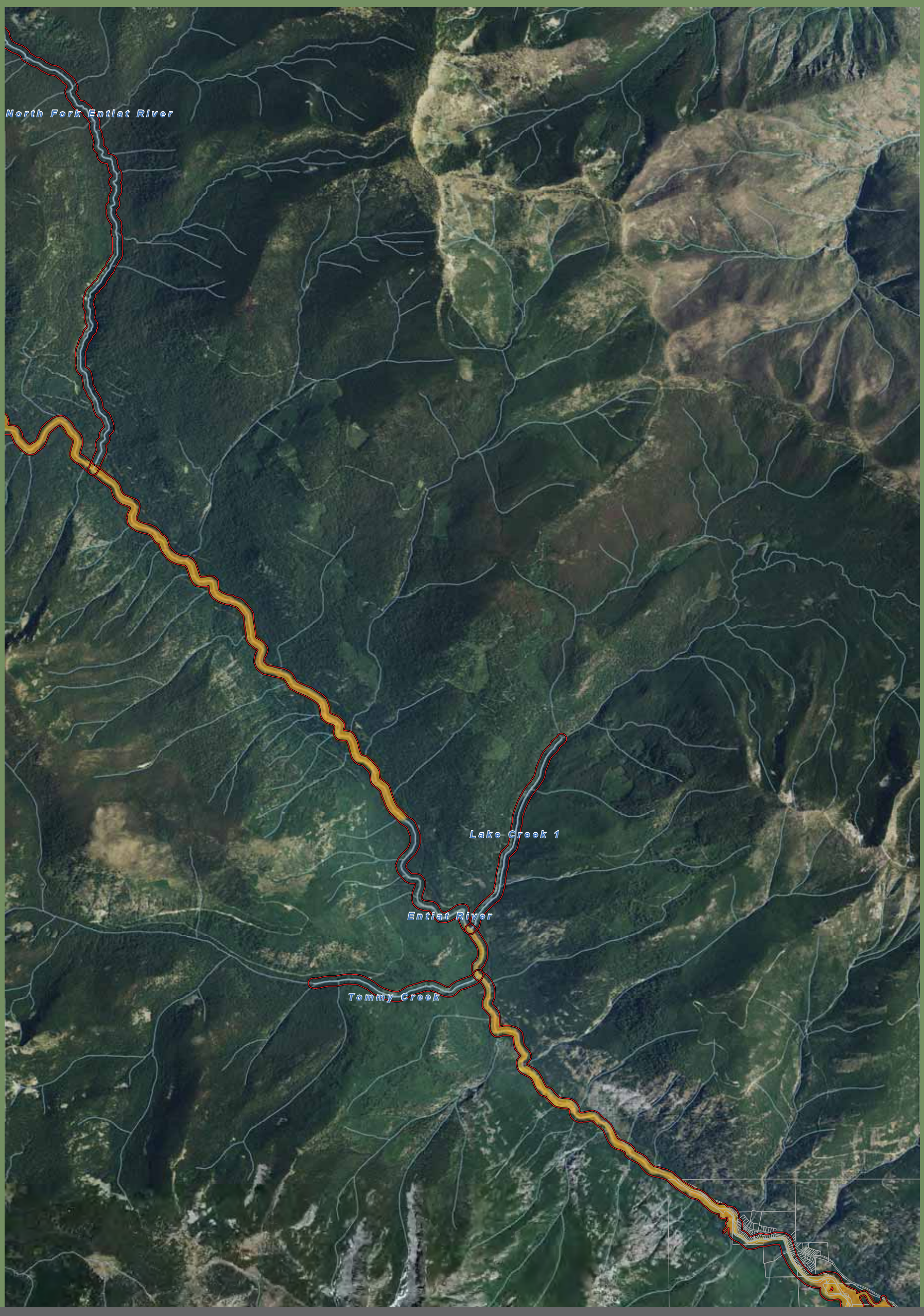

SMP Regulatory Channel Migration Zone
15

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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SMP Regulatory Channel Migration Zone
22

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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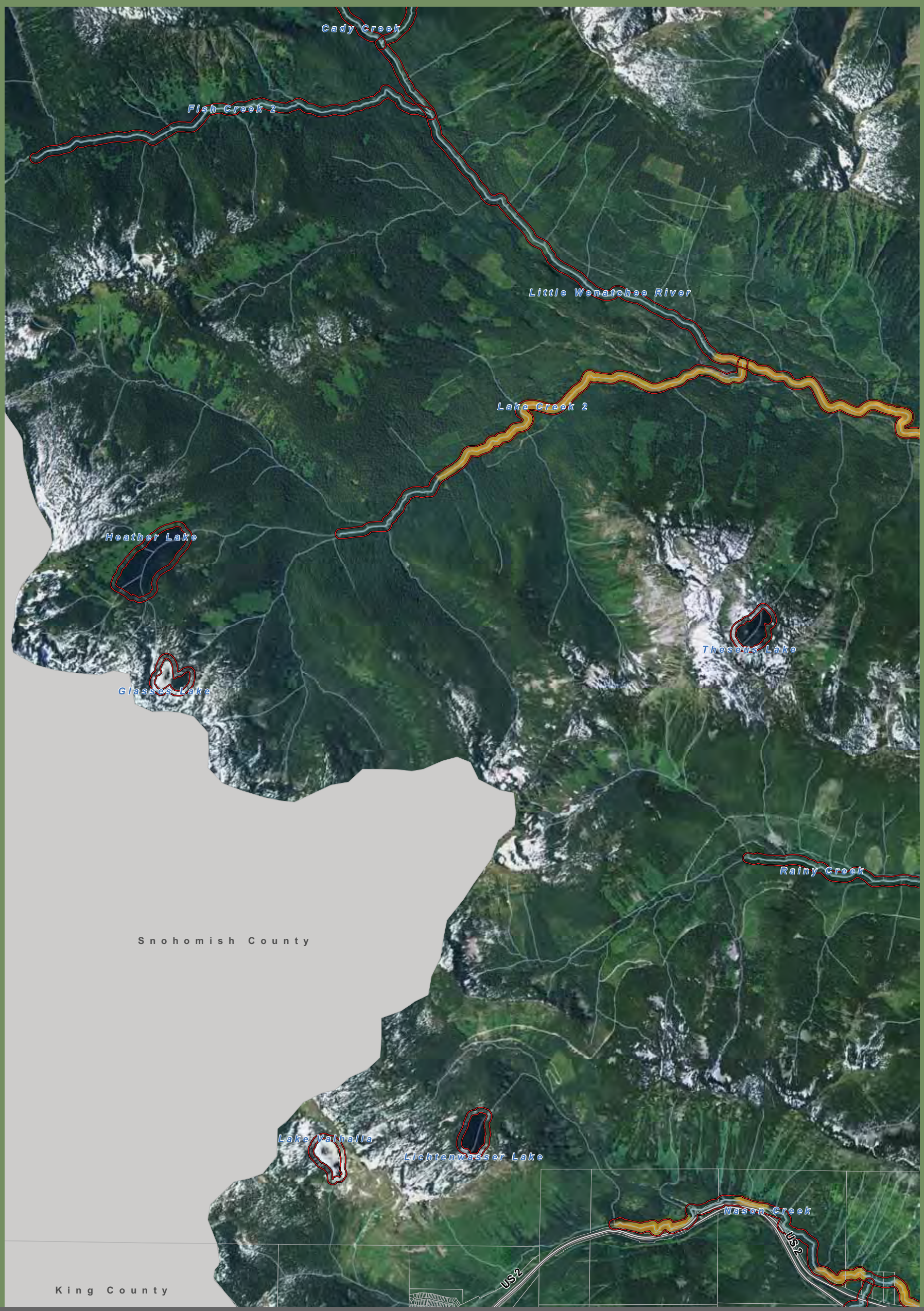

SMP Regulatory Channel Migration Zone
23

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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SMP Regulatory Channel Migration Zone
24

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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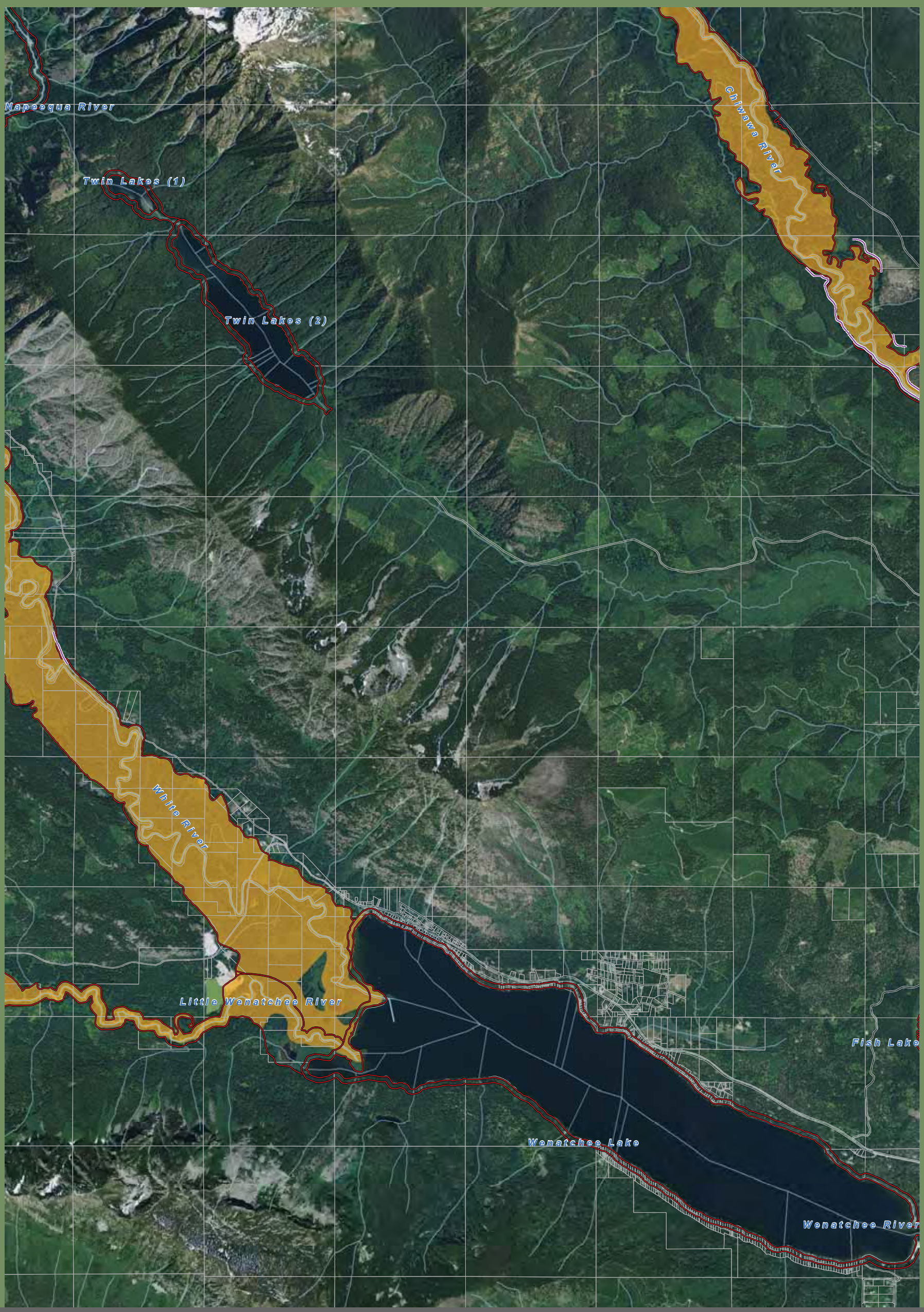

SMP Regulatory Channel Migration Zone
25

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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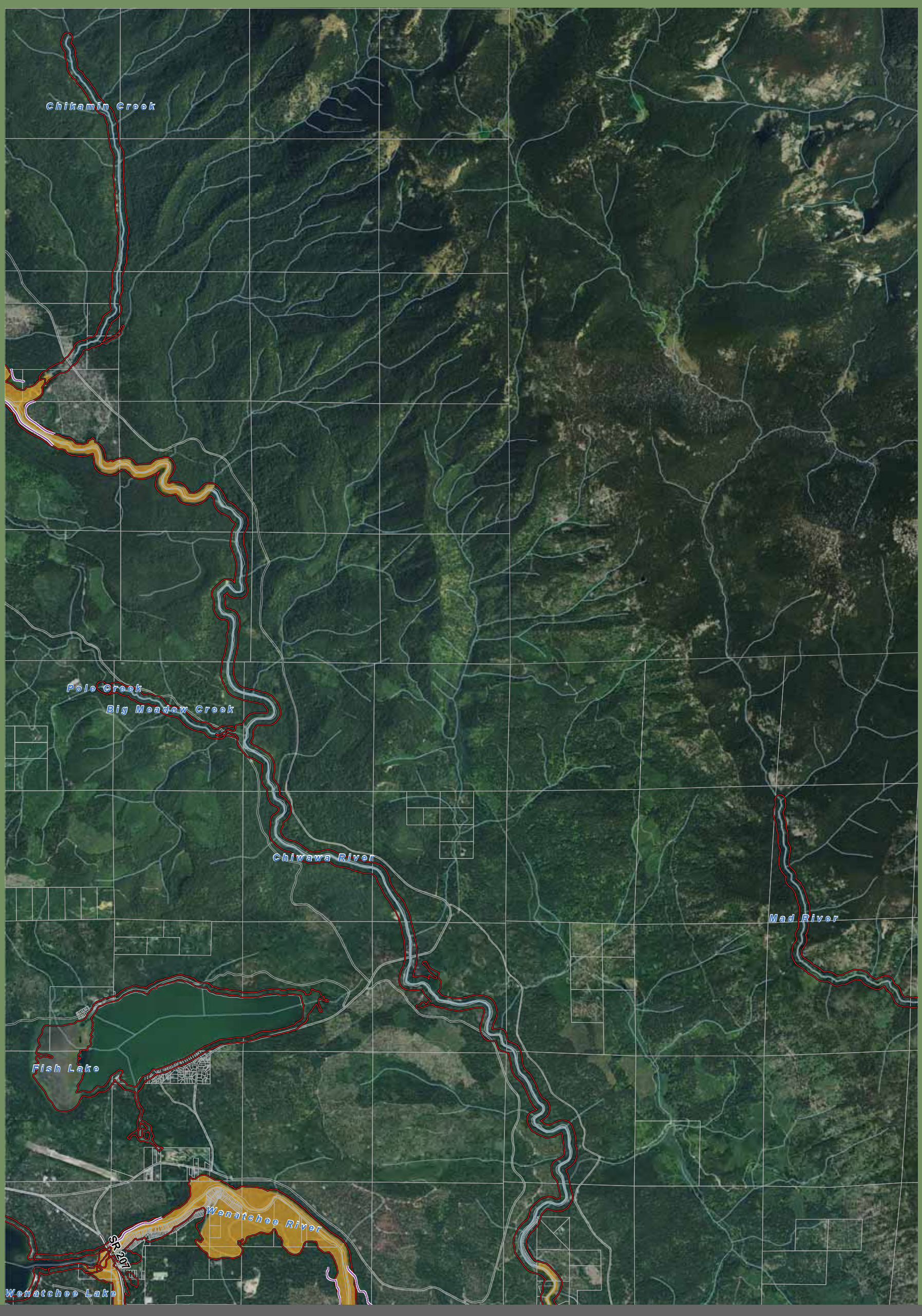

SMP Regulatory Channel Migration Zone
26

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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SMP Regulatory Channel Migration Zone
27

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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Miles
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March 2012
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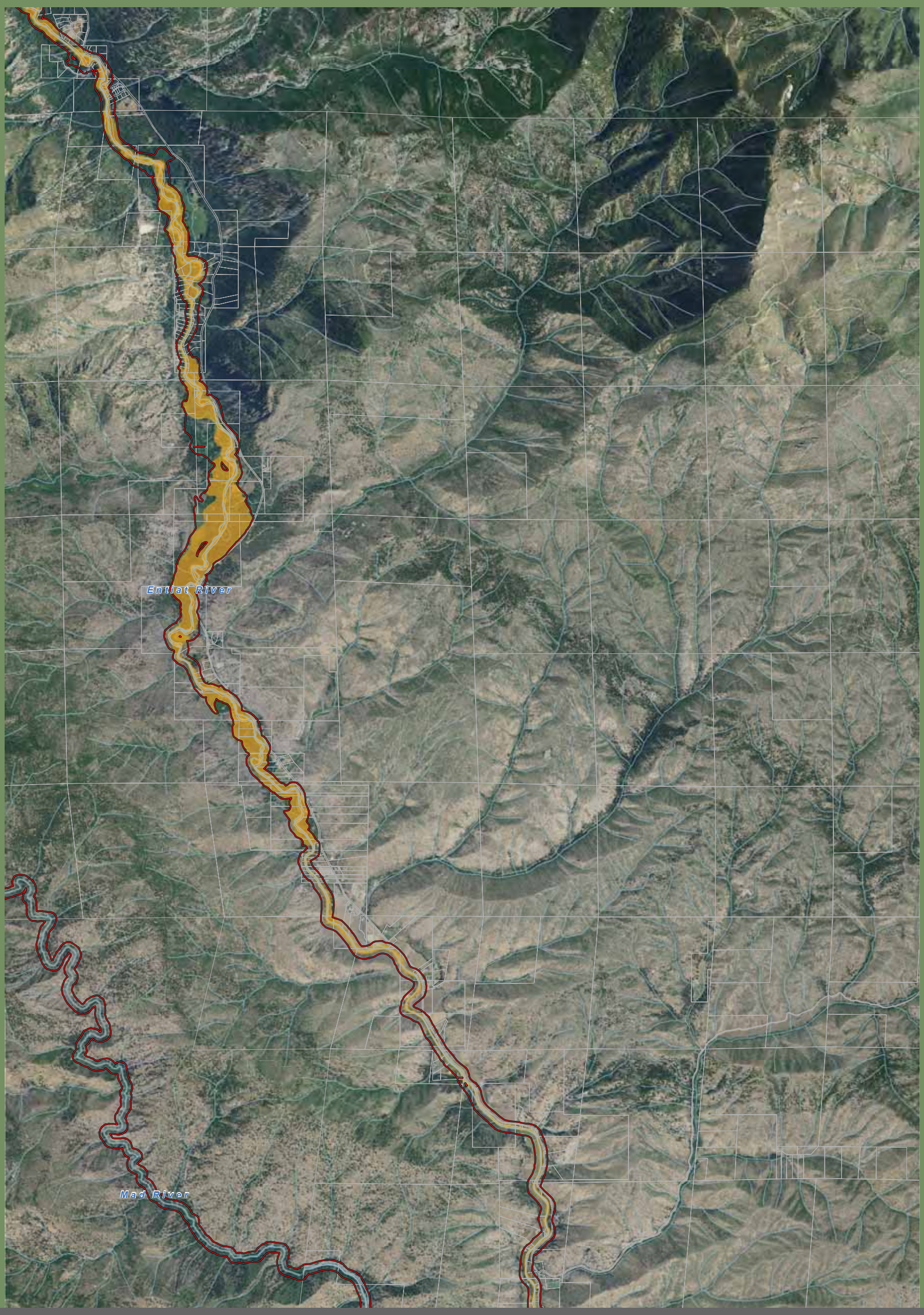

SMP Regulatory Channel Migration Zone
28

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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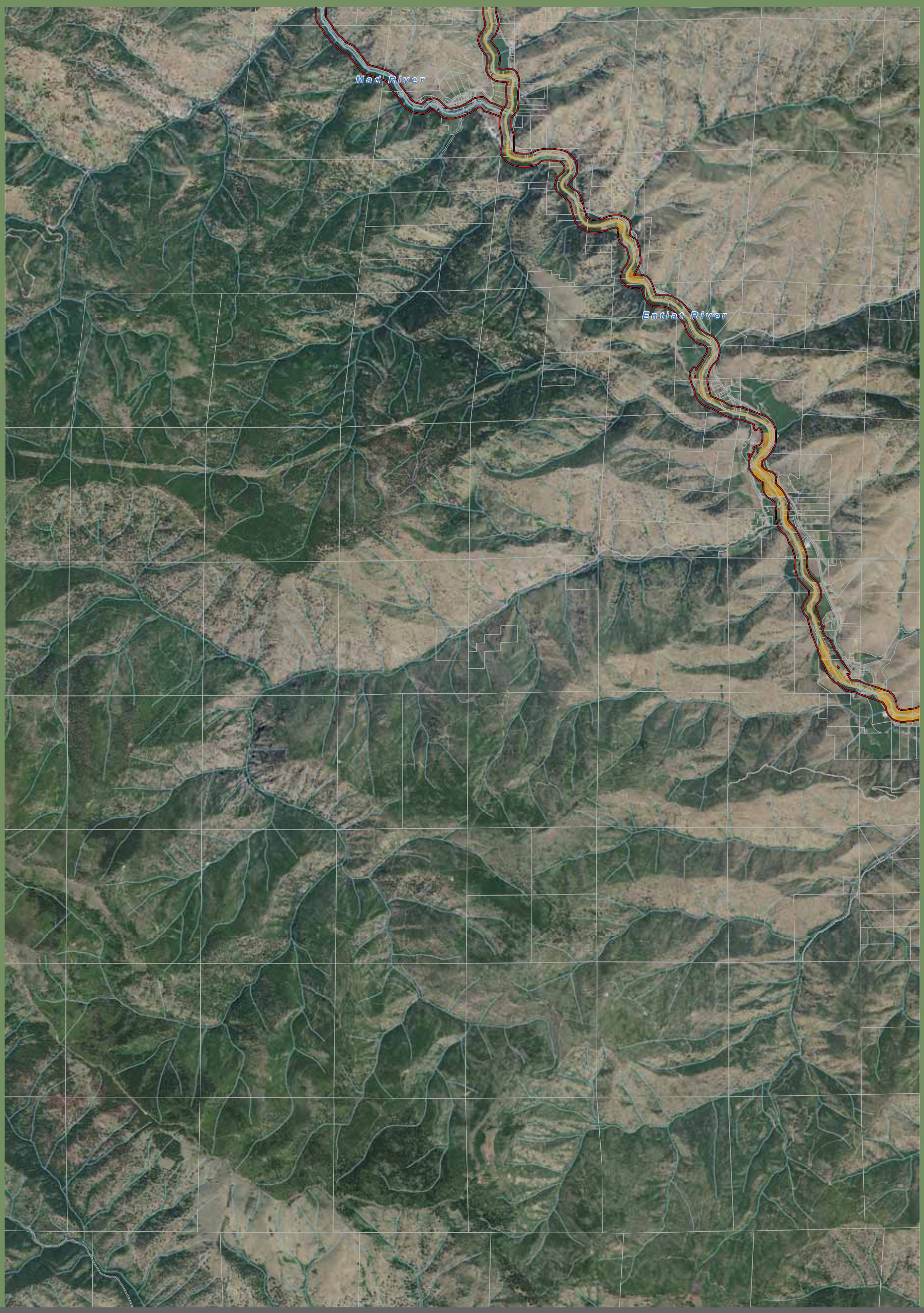

SMP Regulatory Channel Migration Zone
29

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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Miles
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March 2012
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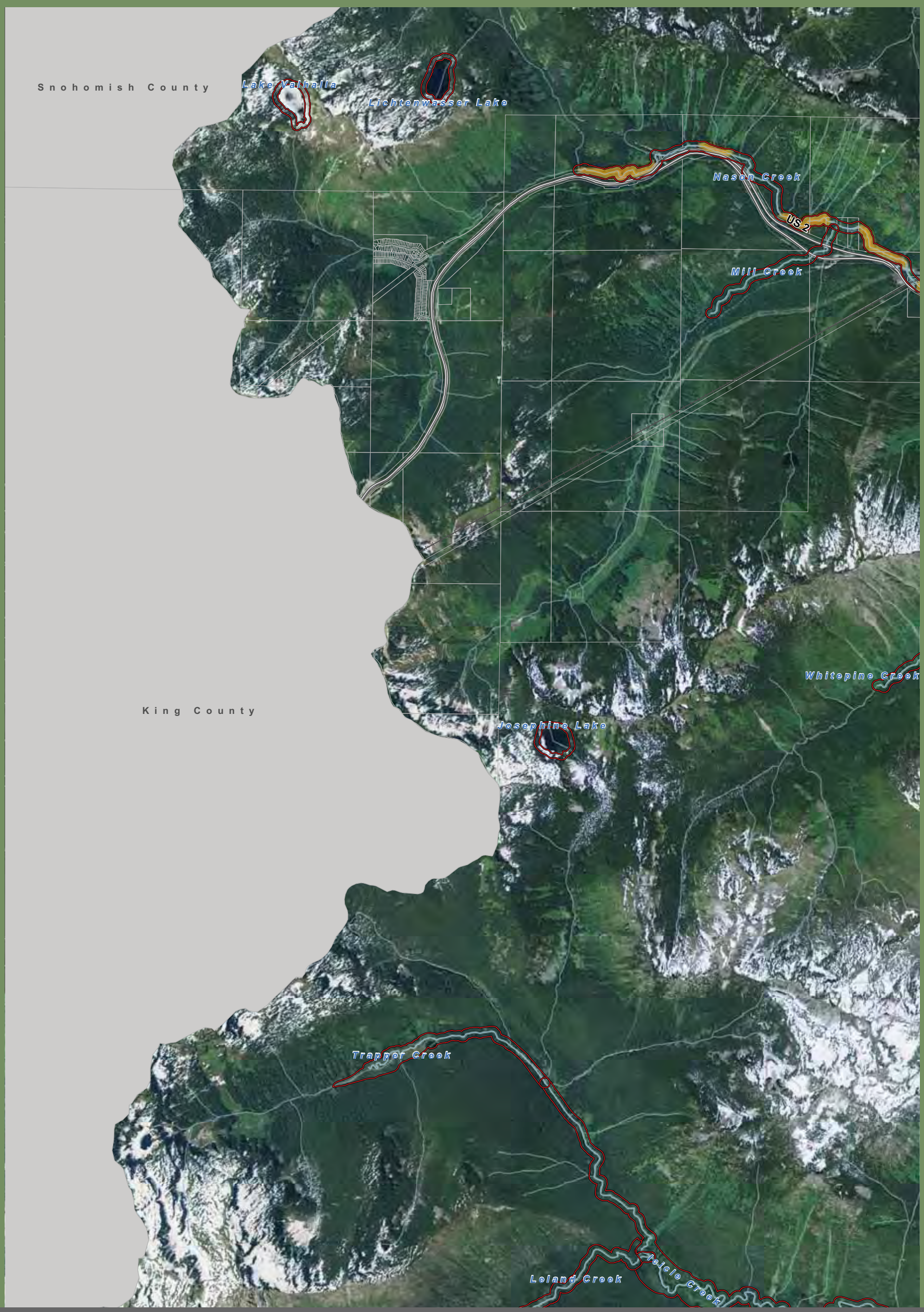

SMP Regulatory Channel Migration Zone
30

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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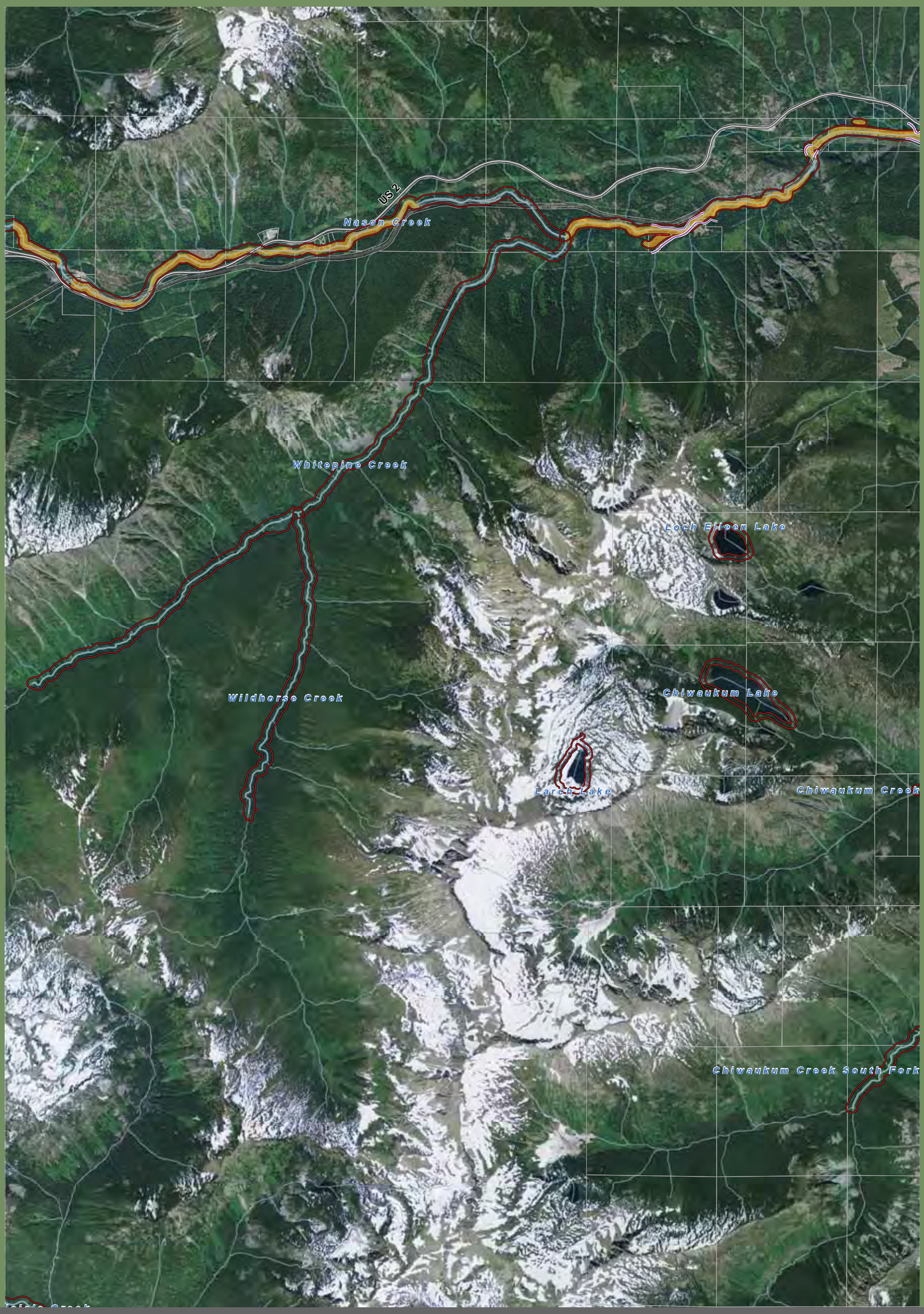

SMP Regulatory Channel Migration Zone
31

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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Miles
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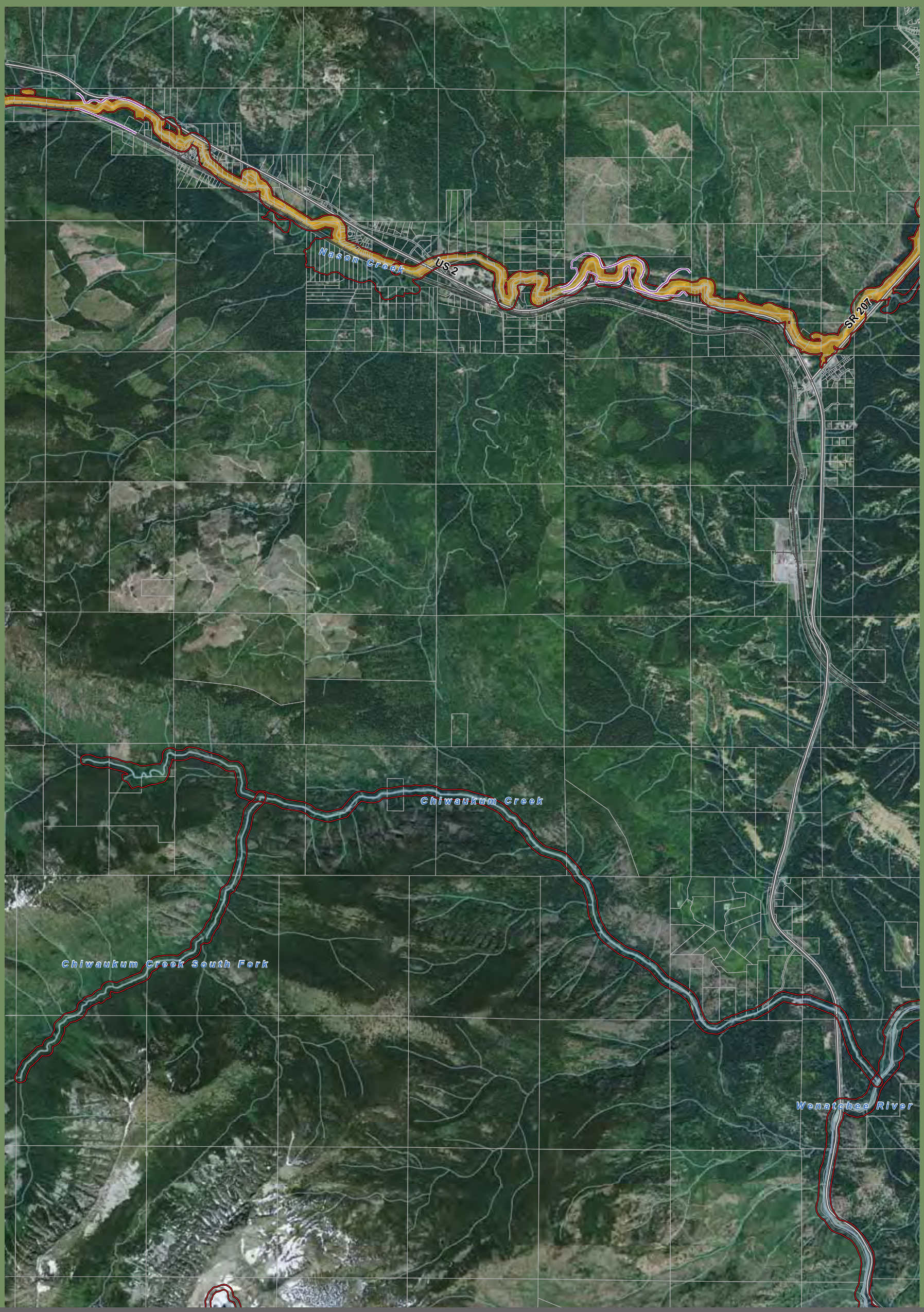

SMP Regulatory Channel Migration Zone
32

Chelan County Shoreline Master Program

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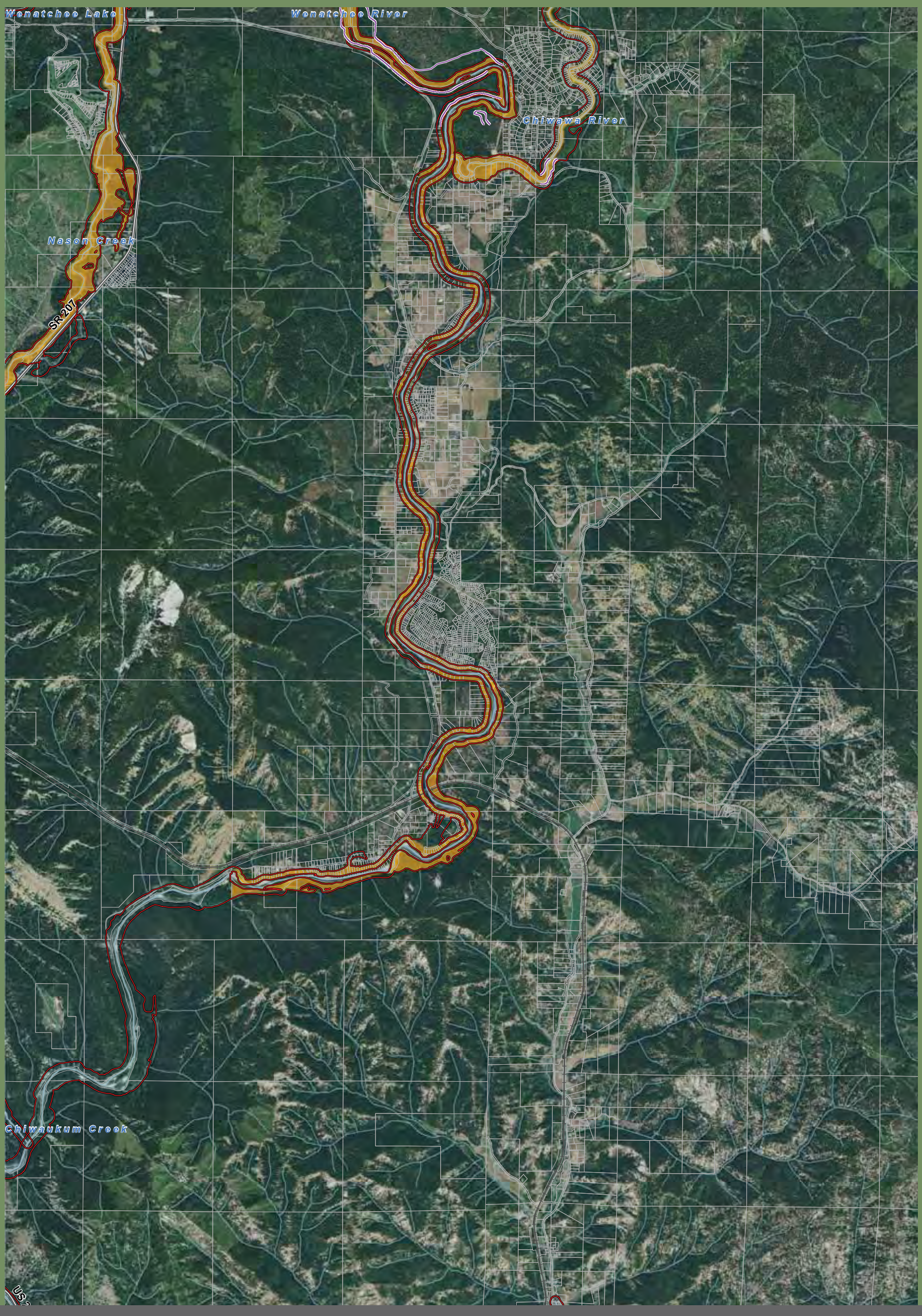

SMP Regulatory Channel Migration Zone

33

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

- SMP Regulatory Channel Migration Zone
- Ecology HMZ Lines
- Rivers & Streams
- Highways
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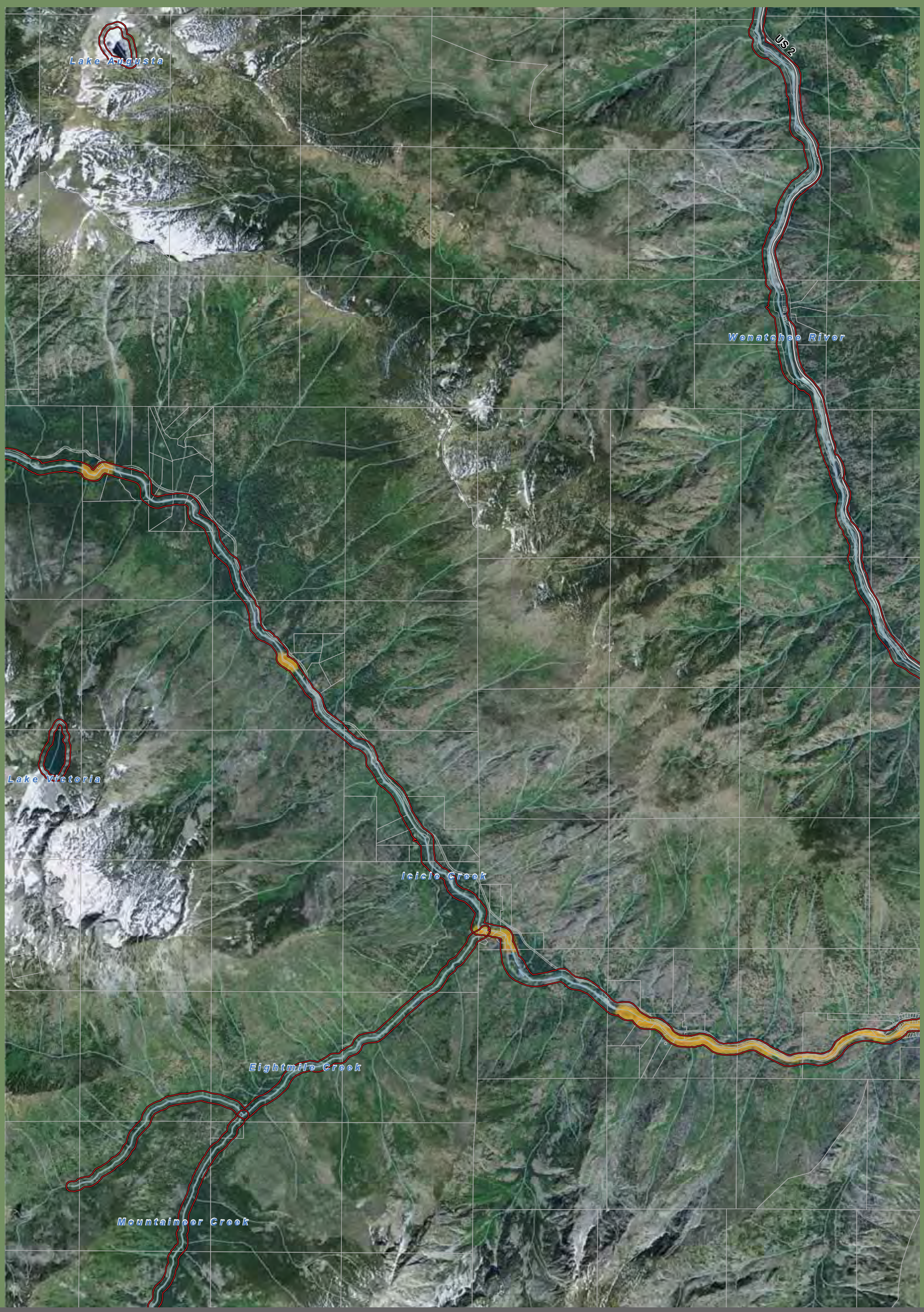

SMP Regulatory Channel Migration Zone

36

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5

Miles

1 inch = 4,000 feet

March 2012

Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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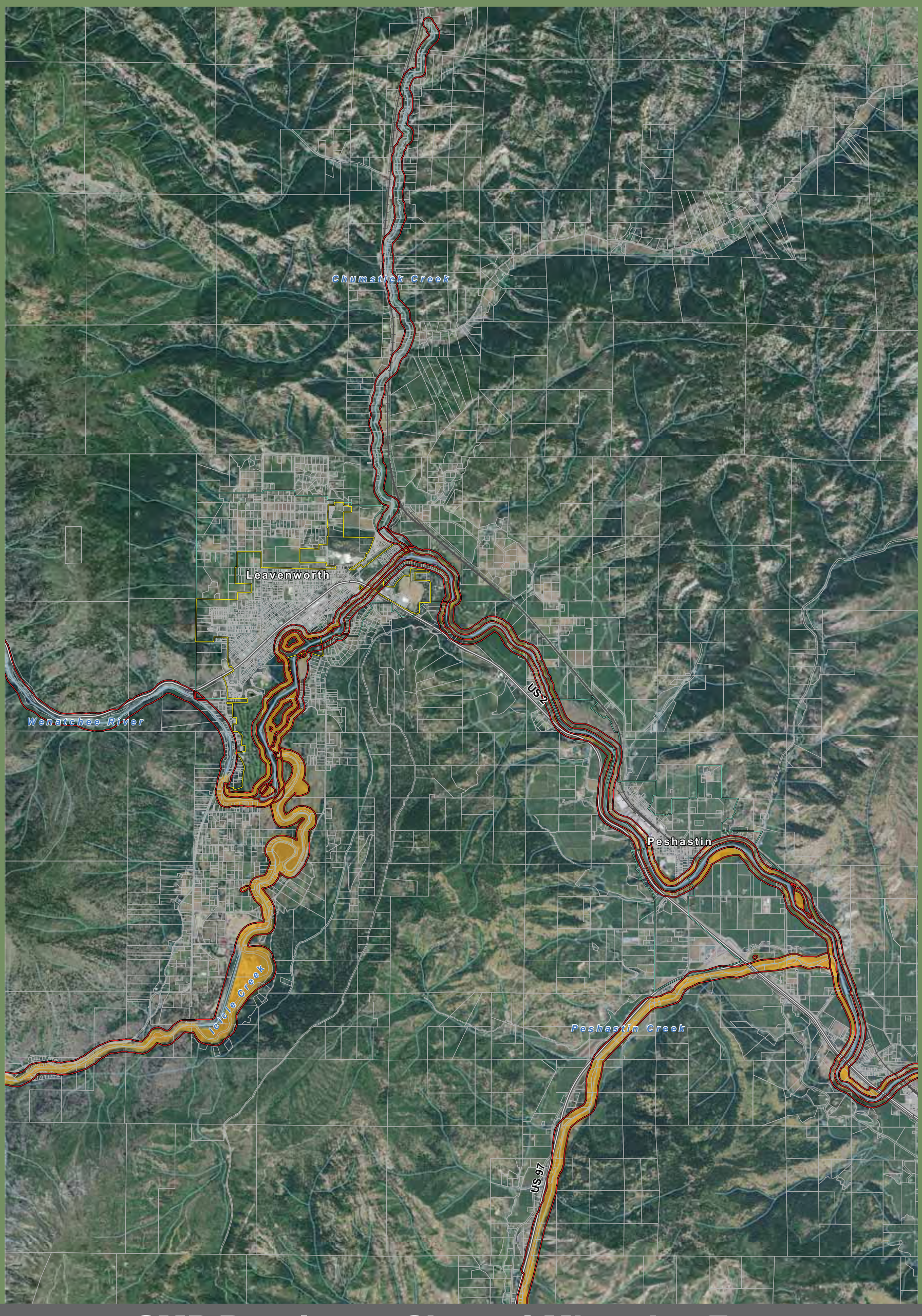

SMP Regulatory Channel Migration Zone
37

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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Miles
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March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

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SMP Regulatory Channel Migration Zone
39

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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SMP Regulatory Channel Migration Zone
40

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
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March 2012
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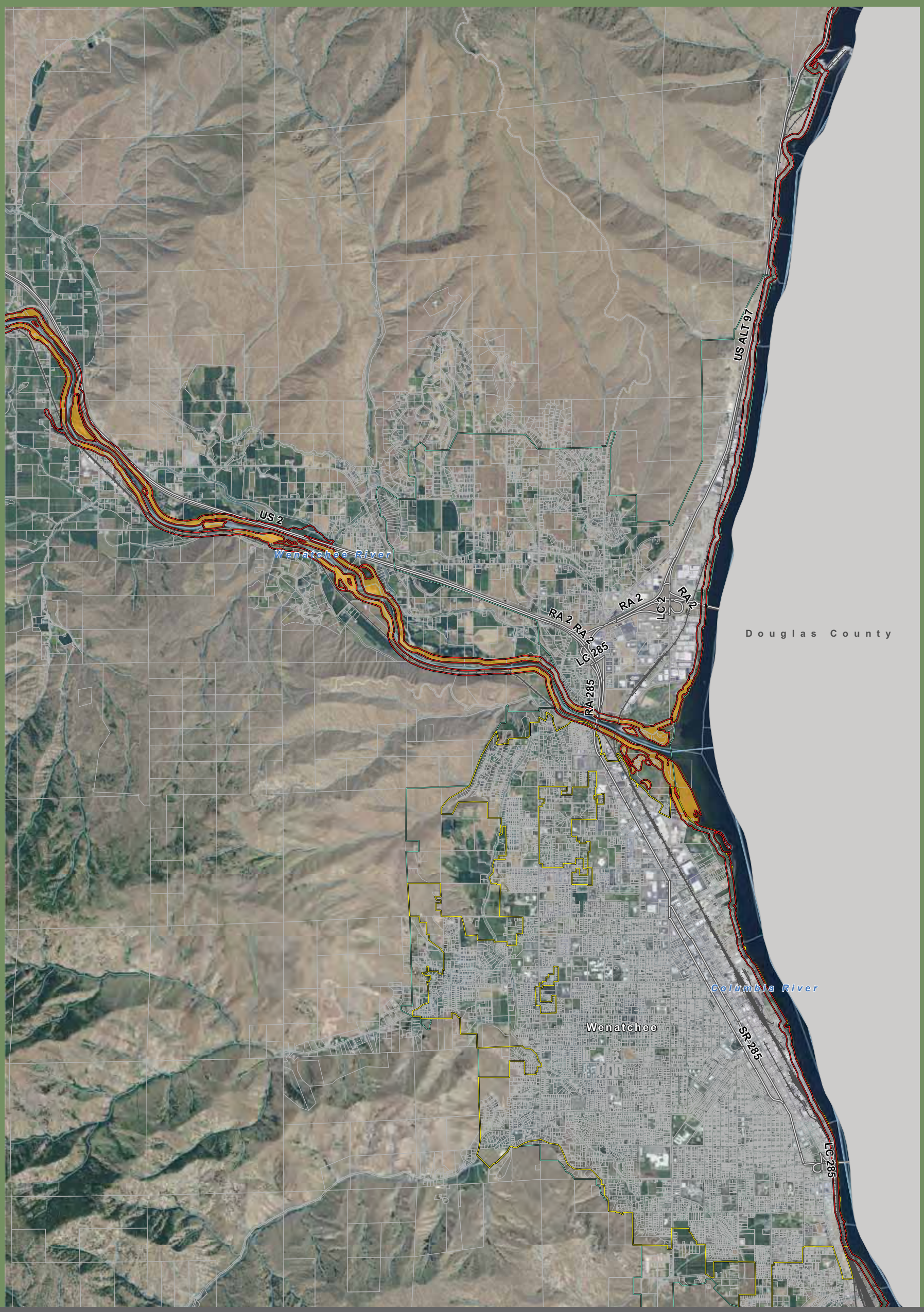

SMP Regulatory Channel Migration Zone
41

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch = 4,000 feet

March 2012
Data: WA DOE, WA OFM, USFWS, FEMA, NPS, USACE

- SMP Regulatory Channel Migration Zone
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APPENDIX E: PUBLIC ACCESS PLAN



Fire Helicopter on Lake Chelan, Stehekin Area, 2015

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APPENDIX E: PUBLIC ACCESS PLAN

1. Introduction

Among other goals and requirements, the Shoreline Management Act identifies shoreline public access as a preferred use (RCW 90.58.020). Due to extensive government ownership along shorelines throughout Chelan County – 75% of shoreline jurisdiction acres are publicly owned – current and potential park and public access opportunities are fairly abundant. However, the present public access opportunities may not be ideally located, improved, or accessible. The purpose of this document is to present a shoreline public access plan that can be integrated into the overall Shoreline Master Program Update and address opportunities and gaps in shoreline public access.

The Shoreline Master Program Guidelines (Guidelines; WAC 173-26) indicates public access "should" be required for new private uses of a certain type or size and "shall" be required for new public uses. The WAC includes a threshold to provide physical and visual access when a subdivision of land into five or more parcels is proposed; it is also required for commercial, industrial and recreational development.

A site-by-site approach to providing public access may not be appropriate for Chelan County because it may result in uncoordinated and piecemeal public access facilities that do not connect residents and tourists to desired destinations.

An alternative to the site-by-site approach is to conduct a shoreline public access planning process. The WAC 173-26-221(4)(c) describes this process as follows:

> *Local governments should plan for an integrated shoreline area public access system that identifies specific public needs and opportunities to provide public access. Such a system can often be more effective and economical than applying uniform public access requirements to all development. This planning should be integrated with other relevant comprehensive plan elements, especially transportation and recreation. The planning process shall also comply with all relevant constitutional and other legal limitations that protect private property rights.*
>
> *Where a port district or other public entity has incorporated public access planning into its master plan through an open public process, that plan may serve as a portion of the local government's public access planning, provided it meets the provisions of this chapter. The planning may also justify more flexible off-site or special area public access provisions in the master program. Public participation requirements in WAC 173-26-201 (3)(b)(i) apply to public access planning.*
>
> *At a minimum, the public access planning should result in public access requirements for shoreline permits, recommended projects, port master plans, and/or actions to be taken to develop public shoreline access to shorelines on public property. The planning should identify a variety of shoreline access opportunities and circulation for pedestrians (including disabled persons), bicycles, and vehicles between shoreline access points, consistent with other comprehensive plan elements.*

In summary, this shoreline public access plan is intended to meet the Shoreline Master Program Guidelines by recognizing local conditions and providing a regional perspective to meet current and future community shoreline access needs.

In particular, this shoreline public access plan does the following:

- Integrates with other community comprehensive and parks plans
- Identifies needs and opportunities
- Summarizes public participation in past and present recreation planning efforts
- Results in identification of actions to be taken to develop public shoreline access to shorelines on public property, recommended projects, and/or requirements for shoreline permits, recognizing that the planning process may also justify more flexible off-site or special area public access provisions

2. Shoreline Public Access Laws and Rules

Public access refers to the ability of the general public "to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations" (WAC 173-26-221(4)(a)). Public access can be physical access such as via a trail or park and/or visual such as a view corridor from a road.

Public access is a preferred use per the Shoreline Management Act (RCW 90.58.020). The Shoreline Master Program (SMP) Guidelines require that public access be provided with most new development, except that more flexibility is allowed where there is a coordinated public access planning process (WAC 173-26-221(4)(c)). When public access is addressed in the SMP, it implements the "public trust doctrine" which is a common law principle holding that "the waters of the state are a public resource owned by and available to all citizens equally for the purposes of navigation, conducting commerce, fishing, recreation and similar uses." While the doctrine "protect(s) public use of navigable water bodies below the ordinary high water mark," the doctrine "does not allow the public to trespass over privately owned uplands to access the tidelands." Generally, public or private landowners are limited in terms of liability when there are unintentional injuries to any public access users based on state law at RCW 4.24.210.

3. Study Area

The shoreline public access study area addresses parks and recreation facilities and plans associated with Chelan County, the Cities of Cashmere, Chelan, Entiat, Leavenworth and Wenatchee, the utility district, State and Federal lands, and community land trust data. This shoreline public access plan considers all recreation and open space facilities in the County regardless of which agencies manage them, because most shoreline parks and recreation facilities are used or could be used by the entire region's residents as well as tourists. A map of Chelan County, current urban growth boundaries, and US Census County Subdivisions appears in Figure 1 on the following page.

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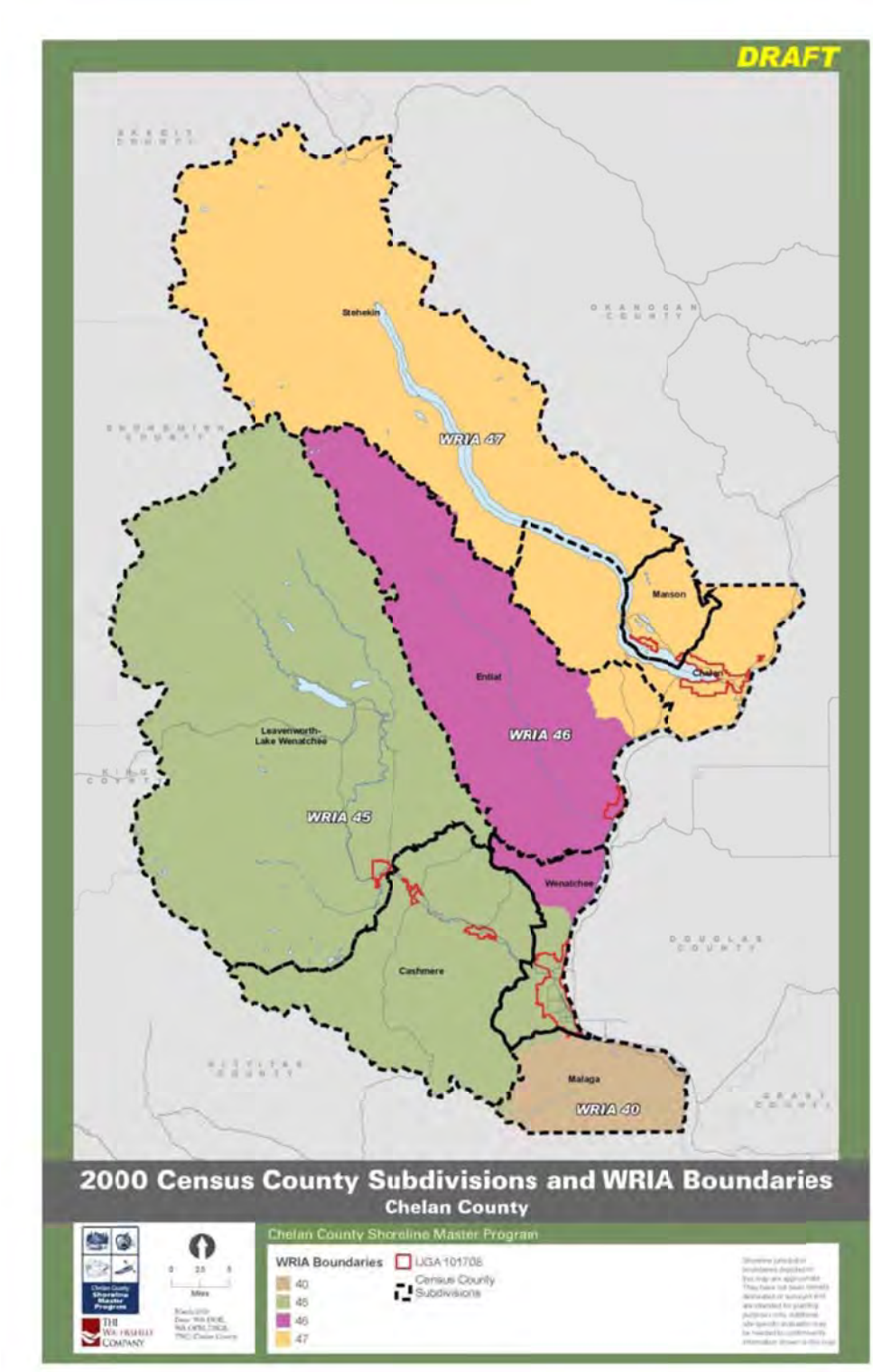

Figure 1. 2000 Census County Subdivisions and WRIA Boundaries

APPENDIX E: PUBLIC ACCESS PLAN

4. Shoreline Recreation Goals and Plans

In addition to federal and state agencies, Chelan County and the Cities of Cashmere, Chelan, Entiat, Leavenworth, and Wenatchee, as well as special districts such as the Chelan County Public Utilities District (PUD), have developed parks and recreation plans that address shoreline public access. These plans are summarized below. To supplement the current plans, this shoreline public access plan includes additional goals and policies to guide future shoreline uses and activities (see Section 8).

County, City, PUD and other parks and recreation plans identify projects including shoreline public access improvements. The various agency plans are summarized below and reflected on the maps in Section 9 where possible.

County Plans

In 2007, Chelan County prepared a Comprehensive Parks and Recreation Plan. The plan provides community goals and an indication of potential projects important to consider. By itself, the plan does not qualify as a shoreline public access plan due to the broad nature of the document. However, the following elements of the Comprehensive Parks and Recreation Plan are relevant to the SMP update and to the future shoreline public access plan:

- Vision: Chelan County provides a mix of parks, recreation and open space that complements community character, creates diverse opportunities for residents and visitors, and preserves ecological functions.
- Goals and Policies: Among several, the following are most relevant:
- Goal PR2, Policy 1: Encourage the following criteria to be addressed in the development of park plans by public entities: A. Evaluate the need for new park facilities using the Recreation and Conservation Funding Board format; B. Neighborhood parks should be sited for accessibility and the enhancement of neighborhood; C. Evaluate need for waterfront access and waterfront-dependent activities, activity fields (soccer, etc.), special purpose facilities (sky park, skate park, etc.), indoor facilities, community centers, trails, funding mechanisms, and construction, and maintenance and operation.
- Goal PR2, Policy 3: Encourage public access to shoreline areas in the development and maintenance of park and recreation opportunities, where consistent with the protection of critical areas and private property rights.
- Improvement Program: The improvement program includes additional plans and improvements, such as a Comprehensive Trails Plan, Expo Center improvements, Stemilt Basin Land Exchange and Subarea Plan (Stemilt-Squilchuck Community Vision, TPL), Subarea Parks Planning, Citizen Questionnaire and Feasibility studies, Columbia River Water Access and Boating Plan, Multi-Sport Eight-Plex, Manson's Old Mill Campground, Manson Marina Expansion, and Wenatchee Row and Paddle Boating Facility Upgrade.

APPENDIX E: PUBLIC ACCESS PLAN

City Plans

The Cities of Cashmere, Chelan, Entiat, Leavenworth, and Wenatchee have adopted detailed parks, recreation, open space, and trails plans – focusing on public lands. These plans outline public outreach, goals, policies, levels of service standards, proposed projects, capital costs, and implementation strategies. These cities use the plans to not only document local needs and desires, but also to be positioned to obtain grant funding from state and federal sources. These City plans, listed below, are intended to become shoreline public access plans for each jurisdiction.

- City of Cashmere, Parks and Recreation Comprehensive Plan, 2009-15
- City of Chelan, Parks and Recreation Comprehensive Plan, 2008-14
- City of Entiat, Parks, Recreation, and Open Space Plan, 2009
- City of Leavenworth, Parks and Recreation Comp Plan, April 1997 and Upper Valley Regional Trails Plan, June 2009
- City of Wenatchee, Parks, Recreation & Open Space Plan 2006

Public Utility District No. 1 of Chelan County

One key provider of parks and recreation along shorelines in Chelan County is the Public Utility District (PUD). The PUD maintains 10 facilities and 467 acres.

The PUD has also worked with local communities in the Wenatchee River valley to plan for parks and recreation areas. In March 2003, the Upper Valley Plan (for the Wenatchee River) was completed to develop an interpretive program focusing on sites exhibiting the natural and cultural resources of the Wenatchee River upper valley. The sites are located in Leavenworth, Peshastin, Dryden, Cashmere, and Monitor. The plan was not formally adopted, but serves as a guide to identify interpretive sites, river access points, and habitat enhancement, as well as promoting tourism. Concept plans are included in the Upper Valley Plan for the Wenatchee River and provide more detail (J.T. Atkins & Company PC and J.A. Brennan and Associates PLLC, March 2003).

Land Trusts

Two land trusts are particularly active in Chelan County: The Chelan-Douglas Land Trust and The Trust for Public Land. Both trusts have active programs for land stewardship and open space acquisition in and around Chelan County. Trust planning, stewardship and land acquisitions may help local governments and citizens to further public access goals and prioritize efforts.

5. Public Review Process

In addition to the public outreach opportunities associated with adopted parks and recreation plans, Chelan County sponsored four workshops and distributed questionnaires associated with this Shoreline Public Access Plan. In addition the County met with agency property owners who

APPENDIX E: PUBLIC ACCESS PLAN

could be partners in the implementation of the shoreline public access plan. The public review process is summarized below.

April 2010 Workshops and Questionnaires

Two shoreline public access meetings were held. The first meeting on April 21st was held at the City of Chelan Council Chambers at 6 p.m. and 20 persons participated. The second meeting on April 22nd was a joint public access subcommittee meeting, held at the Confluence Technology Center in Wenatchee at 9 a.m. and 24 persons participated. The meetings began with a presentation about current shoreline public access facilities and plans and an analysis of gaps. County, city staff and consultants facilitated a general question and answer session, followed by small group discussions of the following key questions:

- Is there enough shoreline public access?
- What types of facilities are needed?
- What areas are well served by shoreline public access?
- What shoreline public access standards make sense for Chelan County?
- Where are there gap areas?
- Where are opportunities to fill gaps?
- Where are the priority locations for shoreline public access? Participants could mark corrections and opportunities on posters.

As part of the April 2010 public meetings, and separately via email to a stakeholder database, the County and City of Chelan distributed questionnaires asking similar questions from the public meetings above. The purpose was to provide another method to obtain input. A total of 25 questionnaires were received (10 city questionnaires and 15 countywide questionnaires).

Results varied based on location and individual opinion. Following are potential gaps identified at the workshops and in questionnaires based on geographic locations shown on the following map:

- Lake Chelan Census County Division (CCD)
    - Some see gaps, e.g. north shore, others do not
    - Many identified improvements needed at Don Morse Park and Lakeside Park including parking
    - Several noted the crowds in the summertime
- Wenatchee/Entiat CCDs: Gap on the Columbia River, between Rocky Reach Dam and Entiat
- Malaga CCD: Lacks all types of facilities
- Leavenworth-Lake Wenatchee CCD: Gap at Lake Wenatchee (north shore) and Fish Lake
- Cashmere CCD: Gaps in Peshastin

June 2010 Meetings

As a follow up to the April workshops, two meetings were held, the first on June 9 and the second on June 10, 2010. The June meetings were advertised through the same means as the April meetings. There were 20 participants on June 9th at the meeting at City of Chelan Council

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Chambers and eight participants at the public access subcommittee meeting. The purposes of the meetings were to:

- Describe Gaps & Opportunities shared by participants at the April 2010 meetings
- Describe proposed Shoreline Recreation Policies, Standards & Implementation Strategies
- Allow for small group discussions of questions such as:
    - Shoreline Standards – 15 mile and 1.5 mile distance and percentage of population. Could largely be met by current & planned facilities. Is this a reasonable standard for the County?
    - Policies – What policies do you like? Need to change? Are missing.
    - Shoreline proposals for Malaga, Wenatchee/Entiat, Lake Wenatchee, Chelan. Right location & types of facilities? Are we missing a major gap/opportunity?
    - Implementation. Where should County look for funding? Who are viable partners that could maintain sites? Federal, state, county, city, PUD, parks districts, land trusts, volunteers?

In general there was acceptance of the proposed standards, minimal discussion of policies, general concurrence about the area-specific proposals (e.g. multi-use facility in Malaga, Chelan fishing pier at Dietrich Road, etc.), identification of additional opportunities in some locations, and discussion of funding and maintenance options.

Agency Property Owner Meeting

Chelan County staff invited agency staff from public agencies including the Chelan County Public Utility District, Port of Chelan County, US Bureau of Reclamation, and US Forest Service, as well as an Alcoa representative, to discuss potential public agency and public/private partnerships to addressing public access in gap areas. The meeting was held on July 27, 2010. Staff reviewed a similar presentation as at the June public workshops, and questions regarding opportunities, constraints, and implementation.

Additional Public Outreach Activities

This draft shoreline public access plan will be integrated into the SMP Update process and will be the subject of additional community meetings and hearings. Interested citizens can contact the Chelan County Natural Resources Department for additional information, or view the County's website: http://www.co.chelan.wa.us/nr/nr_shoreline_master_program.html.

6. Parks and Recreation Standards

Various agencies have developed parks and recreation planning standards frequently based on best practices, determined by experts in the field, and through public outreach. Planning standards for public access can take the form of the quantity of a park and recreation facility in relation to population – for example linear feet of trail per 1,000 population. Chelan County reviewed various sources of parks and recreation standards, including:

APPENDIX E: PUBLIC ACCESS PLAN

- **Locally adopted standards.** Each City in Chelan County has developed standards in their parks, recreation, open space and trails plans.
- **State guidance.** The Washington State Recreation and Conservation Office (RCO) has developed preliminary standards in the 2008 document "Defining and Measuring Success: The Role of State Government in Outdoor Recreation." These are community wide, not shoreline specific.
- **Other studies for small communities.** In 2003, the State of Colorado Department of Local Affairs funded a study called "Small Community Park & Recreation Planning Standards" for small communities of 10,000 population or less.
- **National sources.** The National Recreation and Park Association (NRPA) has developed parks and recreation; however these are focused on recreation programmed parks in urban metropolitan areas. These standards could still apply in communities the size of Wenatchee.

Preliminary RCO standards are illustrated in Table 1. There are baseline and enhanced guidelines that address participation and proximity. The RCO "proposes to test the level of service concept in cooperation with the National Park Service in future grant cycles of the federal Land and Water Conservation Fund grant program." For the purposes of the Chelan County shoreline public access plan, the preliminary RCO standards were adapted for use, recognizing that the state goal was to ensure outcomes were measured consistently and funding choices were being made in a comparable manner across the state.

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Table 1. Preliminary RCO Level of Service Standards for Local Agencies Communitywide

State Agency Level of Service Indicators					
Indicator	Level of Service Ratings				
	A	B	C	D	E
Baseline Criteria: Sustainable Access					
Sustainable access The agency provides sustainable access while meeting this percentage of its resource protection goals	More than 70%	61-70%	51-60%	50-59%	0-50%
Enhanced Criteria: Service Area, Population-Based (Equity)					
Distance to parks, trails, access sites Percentage of population within 1 hour of a state site	66-100%	51-65%	36-50%	21-35%	0-20%
In-Depth Criteria: Function-Based Guidelines					
Agency-based assessment Percentage of facilities that are fully functional per their specific design and safety guidelines	81-100%	61-80%	41-60%	21-40%	0-20%
Public satisfaction Percentage of users satisfied with the condition (facility condition, cleanliness, etc.) of outdoor access and recreation facilities	66-100%	51-65%	36-50%	35-49%	0-35%
Operations and Maintenance On average, routine operations and maintenance funded at this percentage of annual need	81-100%	61-80%	41-60%	21-40%	0-20%
Access Percentage of facilities that may be accessed safely via foot, bicycle, or public transportation	66-100%	51-65%	36-50%	21-35%	0-20%

Source: Washington State Recreation and Conservation Office (RCO) in the 2008 document "Defining and Measuring Success: The Role of State Government in Outdoor Recreation."

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After reviewing example standards and following discussion at shoreline public access meetings, Chelan County is proposing the following standards:

- More than 90% of resident population within 15 miles of regional boating, fishing, trails, parks, and open space facilities.
- More than 50% of resident population within 1.5 miles of local/community shoreline parks and trails.

Both proposed regional and local standards are oriented to shoreline public access facilities whereas RCO standards are countywide. The 15 mile standard is a higher standard than the 25 mile RCO standard for regional parks and trails, but reflects the County topography and importance of regional facilities to the residents and local economy. The 1.5 mile standard is the same as RCO standards though oriented to shoreline facilities. Even when just considering shoreline facilities, the analysis in this document shows over 90% of the resident population within a 15 mile radius of a current or planned shoreline facility and over 50% of the population at within a 1.5 mile radius of a current or planned shoreline facility.

7. Public Access Analysis & Objectives by Census County Divisions

To compare how different parts of the County are served, the sections below describe quantity and proximity of shoreline recreation opportunities in relation to residents and tourists. The County geography, population, and tourists are divided into Census County Divisions (CCDs), which happen to be similar to Watershed Resource Inventory Areas. Please see Figure 1. A wide range of recreation and open space facilities are found along County shorelines, including parks, protected open space, trails, campgrounds, fishing easements, boat launches, marinas, and other facilities. Please see the Public Access maps in Section 9.

Analysis

This section addresses the amount of shoreline recreation facilities in proximity to residents and tourists. The number of acre or miles of facilities includes only those portions in the shoreline jurisdiction.

Tables 2 and 3 present acres of shoreline parks and acres of shoreline public and protected lands in relation to the Year 2000 and Year 2030 populations. Observations include that all areas have some amount of protected lands along shorelines, but that parks which typically have more formal opportunities to recreate such as picnic areas, trails, etc. are less abundant. Additionally, if no additional formal park acres are provided beyond adopted plans already considered, the acres per 1,000 population countywide would drop by about 34% between 2000 and 2030.

All CCDs have shoreline public and protected lands, largely due to federal lands in the upper watersheds and PUD lands along the Columbia River, as well as other City, County, and state

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holdings. Relative to other CCDs, Stehekin has an abundance of facilities and a very small population – it is an outlier. Chelan, Entiat, and Leavenworth-Lake Wenatchee CCDs have moderate amounts of park acres per 1,000 population. On the other end of the spectrum, due to its relatively higher population, the Wenatchee CCD has a small amount of parks and open space per 1,000 population. Much of the central Wenatchee shoreline waterfront is fully available for shoreline recreation, but less available to the north and south extremes of the Urban Growth Area. Wenatchee has plans to add shoreline recreation acres in its Urban Growth Area, but specific sites are not identified. The Cashmere CCD has fewer acres per 1,000, though its share increases by 2030 due to adopted plans. In Manson, acres per 1,000 are low; this is due to several of the parks and open space sites that have parcels extending into aquatic areas which are not counted in the acres. Malaga is not served by formal shoreline parks and has only a small amount of public or protected land.

Table 2. Acres of *Shoreline* Parks and Protected Lands per 1,000 Population Year 2000

CCD	Total Acres	Other Public & Protected Lands (acres)	Parks (acres)	2000 Population	Total acres per 1,000 population	Public & Protected acres per 1,000 population	Park acres per 1,000 population
Cashmere	800	791	8	10,824	73.9	73.1	0.8
Chelan	761	654	107	6,222	122.3	105.0	17.2
Entiat	3,343	3,299	44	2,130	1,569.6	1,549.0	20.5
Leavenworth & Lake Wenatchee	17,844	17,725	119	5,902	3,023.3	3,003.2	20.1
Malaga	176	176	-	3,506	50.3	50.3	-
Manson	95	90	5	3,248	29.3	27.8	1.6
Wenatchee	200	144	56	34,678	5.8	4.2	1.6
Stehekin	8,677	6,078	2,599	106	81,861.1	57,341.2	24,519.9
TOTAL	**31,896**	**28,958**	**2,938**	**66,616**	**478.8**	**434.7**	**44.1**
TOTAL (without Stehekin)	**23,219**	**22,880**	**339**	**66,510**	**349.1**	**344.0**	**5.1**

Source: The Watershed Company; GIS Analysis; US Census 2000

APPENDIX E: PUBLIC ACCESS PLAN

Table 3. Acres of Shoreline Parks and Protected Lands per 1,000 Population Year 2030

CCD	Total Acres	Other Public & Protected Lands (acres)	Parks (acres)	2030 Population	Total acres per 1,000 population	Public & Protected acres per 1,000 population	Park acres per 1,000 population
Cashmere	836	791	44	16710	50.0	47.3	2.7
Chelan*	761	654	107	9521	79.9	68.6	11.3
Entiat	3,343	3,299	44	3,204	1,043.4	1,029.8	13.6
Leavenworth & Lake Wenatchee	17,844	17,725	119	8,813	2,024.7	2,011.2	13.5
Malaga	176	176	-	5,146	34.3	34.3	-
Manson	95	90	5	4,825	19.4	18.7	1.1
Wenatchee*	200	144	56	53,295	3.8	2.7	1.0
Stehekin	8,677	6,078	2,599	181	47,940.8	33,571.0	14,359.7
TOTAL	**31,930**	**28,958**	**2,974**	**101,695**	**314.0**	**284.8**	**29.2**
TOTAL (without Stehekin)	**23,253**	**22,880**	**375**	**101,514**	**229.1**	**225.4**	**3.7**

**Cities in these CCDs propose additional parks that would contribute additional acres when sited.*

*** Due to the lack of intercensal data at the CCD level, the 2030 numbers represent year 2008 to 2030 growth added to year 2000 Census information. Excludes 5,484 in population growth between 2000 and 2008. Based on State Office of Financial Management information, it is estimated that about 70% of this growth occurred in the cities (mostly in Wenatchee) and 30% in unincorporated Chelan County. This would slightly reduce the acres per 1,000 population for the Cities and the County. At a total County level, adding in 5,484 population would decrease the total acres per 1,000 to 297.9, decrease the public/protected acres per 1,000 to 270.2, and the parks acres per 1,000 to 27.8 (instead of 29.2).*

Sources: The Watershed Company; GIS Analysis; Chelan County Comprehensive Plan 2009

Table 4 presents miles of trails per 1,000 population for Year 2000 and 2030 periods. Countywide, there is about 1.5 mile of shoreline trail per 1,000 population, which would be reduced to 1.4 mile per 1,000 population by 2030 even if accounting for some planned trails in adopted City plans. CCDs well served include Entiat and Stehekin because of lower populations and greater opportunities in the upper watersheds for hiking trails. Leavenworth- Lake Wenatchee is also relatively well served and would improve with the implementation of the Upper Valley Regional Trails Plan. Chelan and Manson have particularly low miles per 1,000 population. Wenatchee is also low in terms of miles per 1,000 population but is serving a large urban population and has an extensive waterfront recreation area; the City and PUD have plans to extend shoreline recreation in the northern UGA. Malaga is not served by trails along the shoreline.

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Table 4. Current and Planned Trail Miles per 1,000 Population – Year 2000 and 2030

CCD	2010 Miles	2000 Population	2000 Miles per 1,000 population	2030 Miles	2030 Population**	2030 Miles per 1,000 population
Cashmere	3.6	10,824	0.3	6.7	16,710	0.4
Chelan	0.5	6,222	0.1	2.2	9,521	0.2
Entiat	21.5	2,130	10.1	24.6	3,204	7.7
Leavenworth & Lake Wenatchee	57.3	5,902	9.7	87.4	8,813	9.9
Malaga	0.0	3,506	-	0.0	5,146	-
Wenatchee	2.8	34,678	0.1	2.8	53,295	0.1
Stehekin	15.2	106	143.0	15.2	181	83.7
TOTAL	**101.3**	**66,616**	**1.5**	**139.3**	**101,695**	**1.4**
TOTAL (without Stehekin)	**86.2**	**66,510**	**1.3**	**124.1**	**101,514**	**1.2**

*** Due to the lack of intercensal data at the CCD level, the 2030 numbers represent year 2008 to 2030 growth added to year 2000 Census information. Excludes 5,484 in population growth between 2000 and 2008. Based on State Office of Financial Management information, it is estimated that about 70% of this growth occurred in the cities (mostly in Wenatchee) and 30% in unincorporated Chelan County. This would slightly reduce the acres per 1,000 population for the Cities and the County. At a total County level, adding in 5,484 population would decrease 2030 miles per 1,000 to 1.3 instead of 1.4.*

Sources: The Watershed Company; GIS Analysis; US Census 2000; Chelan County Comprehensive Plan 2009

Table 5 shows the number of boat launches and the population and tourists they may serve. Entiat, Cashmere, and Manson CCDs have the most well served resident population and Malaga the least well served. The potential for boat launch use is highest in Wenatchee, Leavenworth-Lake Wenatchee and Chelan CCDs. However, it should be noted that the capabilities of the boat launches are different, with lake boat launches used for motorized boats and river launches used for non-motorized watercraft; an exception is the Columbia River which is used by motorized craft. A motorized boat launch within 15 miles of residents or tourist accommodations may not be possible in some cases given lack of water navigable by a motorized craft.

Table 5. Estimated Population and Tourists Served by Boat Launches – Year 2000 and 2030

CCD	Boat Launches 2010	2000 Population	2000 Tourist est*	Total served per launch	2030 Population	2030 Tourist est*	Total served per launch
Cashmere	3	10,824	70,886	27,282	16,710	264,664	93,963
Chelan	6	6,222	306,846	42,615	9,521	1,145,660	156,825
Entiat***	2	2,130	39,751	14,148	3,204	148,417	20,180
Leavenworth & Lake Wenatchee	3	5,902	405,538	87,746	8,813	1,514,143	323,208
Malaga****	1	3,506	0	0	5,146	0	0
Manson	4	3,248	11,553	21,273	4,825	43,136	77,601
Wenatchee	3	34,678	163,116	107,110	53,295	609,020	374,519
Stehekin	-	106	3,525	0	181	13,160	0
Total	**22**	**66,616**	**1,001,215**	**48,538**	**101,695**	**3,738,200**	**153,596**

** Estimated tourists based on Washington State Department of Commerce study of tourist expenditures in the County (Washington State Travel Impacts: 1991-2009) divided by average per trip expenditures. Project tourists to the year 2030 by using an average annual growth rate derived from 10 years of historic data.*

*** Due to the lack of intercensal data at the CCD level, the 2030 numbers represent year 2008 to 2030 growth added to year 2000 Census information. Excludes 5,484 in population growth between 2000 and 2008. Based on State Office of Financial Management information, it is estimated that about 70% of this growth occurred in the cities (mostly in Wenatchee) and 30% in unincorporated Chelan County. This would slightly reduce the acres per 1,000 population for the Cities and the County. At a total County level, adding in 5,484 population would increase the total population served per launch to 153,815instead of 153,596.*

**** In the CCD there are two facilities. The City of Entiat plans to add three new facilities. The 2030 numbers reflect this increase from 2 to 5 launches in the CCD.*

***** While there is a boating facility in this CCD it is currently not open to the public.*

Sources: The Watershed Company; GIS Analysis; US Census 2000; Chelan County Comprehensive Plan 2009

At a regional scale, most of the resident and tourist population (over 90%) is within 15 road miles of public access facilities as shown in Tables 6 and 7 and in Section 9. Under typical circumstances this would mean a 15-minute drive for residents or visitors to arrive at a walking trail in summer evenings or a 15-minute drive to a boat launch or a fishing spot on a weekend. See above regarding lack of water navigable by a motorized craft in some locations. Additionally, some of the fishing locations are unimproved easements and may be difficult to access.

Table 6. Residential Population within 15 Miles of Various Forms of Public Access (Current and Planned)

CCD	Boating		Fishing		Trails		Parks		All Other Open Space	
	2000	2030*	2000	2030*	2000	2030*	2000	2030*	2000	2030*
Cashmere	10,824	16,710	10,824	16,710	10,830	16,719	10,824	16,710	10,824	16,710
Chelan	6,209	9,501	5,904	9,035	6,206	9,496	6,209	9,501	6,222	9,521
Entiat	1,926	2,897	2,029	3,052	2,128	3,201	1,955	2,941	2,130	3,204
Leavenworth & Lake Wenatchee	5,900	8,810	5,902	8,813	5,909	8,823	5,900	8,810	5,902	8,813
Malaga**	3,506	5,146	3,506	5,146	3,434	5,041	3,463	5,093	3,506	5,146
Manson	3,248	4,825	3,248	4,825	3,248	4,825	3,248	4,825	3,248	4,825
Wenatchee	34,678	53,295	34,678	53,295	34,712	53,346	34,678	53,295	34,678	53,295
Stehekin	106	181	42	72	50	86	11	18	106	181
Total population <15 miles	**66,397**	**103,395**	**66,055**	**100,838**	**66,517**	**101,543**	**66,288**	**101,184**	**66,616**	**101,695**
Pop >15 miles	219	3,782	561	6,339	99	5,634	328	5,993	0	5,482
Percent	0.3	3.5	084	5.91	0.1	5.3	0.5	5.6	0.0	5.1

** Due to the lack of intercensal data at the CCD level, the 2030 numbers represent year 2008 to 2030 growth added to year 2000 Census information. Excludes 5,484 in population growth between 2000 and 2008. Based on State Office of Financial Management information, it is estimated that about 70% of this growth occurred in the cities (mostly in Wenatchee) and 30% in unincorporated Chelan County. This would slightly change the 2030 results presented. Growth in cities is more likely to be located near facilities.*

*** While there is a boating facility in this CCD it is currently not open to the public.*

Sources: The Watershed Company; GIS Analysis; US Census 2000; Chelan County Comprehensive Plan 2009

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Table 7. Estimated Tourists* at Accommodations within 15 Miles of Various Forms of Public Access (Current and Planned)

CCD	Boating		Fishing		Trails		Parks		All Other Open Space	
	2000	2030*	2000	2030*	2000	2030*	2000	2030*	2000	2030*
Cashmere	70886	264404	70886	264404	70886	264404	70886	264404	70886	264404
Chelan	306846	1144535	304496	1135771	306846	1144535	306846	11445535	306846	1144535
Entiat	29960	111751	12141	45285	29960	111751	12141	45285	29960	111751
Leavenworth & Lake Wenatchee	405538	1512656	399272	1489284	405538	1512656	392810	1465181	405538	1512656
Malaga**	0	0	0	0	0	0	0	0	0	0
Manson	11553	43094	11553	43094	11553	43094	11553	43094	11553	43094
Wenatchee	10371	389303	10371	389303	10371	389303	10371	389303	10371	389303
Stehekin	3525	13147	783	2922	2350	8765	0	0	3525	13147
Total population <15 miles	**932678**	**347889**	**903502**	**3370061**	**931504**	**3474508**	**898606**	**3351801**	**932678**	**3478891**
Pop >15 miles	0	0	29177	108829	1175	4382	34072	127089	0	
Percent	0.0%	0.0%	2.9%	2.9%	0.1%	0.1%	3.4%	3.4%	0.0%	0.0%

** Estimated tourists based on Washington State Department of Commerce study of tourist expenditures in the County divided by average per trip expenditures. Project tourists to the year 2030 by using an average annual growth rate derived from 10 years of historic data.*

Source: The Watershed Company; GIS Analysis

Both resident population and tourist accommodations within 1.5 miles of current or planned parks and trails are presented on maps in Section 9. Tourist accommodations are generally located within 1.5 miles of recreation facilities: 66% are near parks and 77% are near trails. Table 8 focuses on current and future resident population within 1.5 miles of parks and trails facilities. At this scale, about 50% of the population is in proximity of trails and 70% in proximity of parks, mostly within the urban growth areas or fringes. Reviewing data and maps, the areas where at least half or more of the current or future population is in close proximity to current or planned parks *or* trails include: Cashmere, Chelan, Entiat, Manson and Leavenworth-Lake Wenatchee and Wenatchee CCDs. Malaga population is further than 1.5 miles. Stehekin population is further than 1.5 miles to formal parks but very close to protected open space.

Table 8. Residents within 1.5 miles of Current and Planned Parks and Trails

CCD	Total Resident Population		Population within 1.5 miles of trails		Population within 1.5 miles of parks	
	2000	2030*	2000	2030*	2000	2030*
Cashmere	10,824	16,710	7,779	12,009	7,454	11,507
Chelan	6,209	9,521	2,963	4,534	3,856	5,900
Entiat	1,926	3,204	1,241	1,867	1,078	1,622
Leavenworth & Lake Wenatchee	5,900	8,813	4,014	5,993	3,444	5,143
Malaga**	3,506	5,146	0	0	390	573
Manson	3,248	4,825	8	11	2,455	3,648
Wenatchee	34,678	53,295	19,895	30,575	29,392	45,172
Stehekin	106	181	0	0	0	0
Total	**66,397**	**101,695**	**35,628**	**54,389**	**4,7445**	**72,429**
Percent			53.5%	50.8%	71.2%	67.6%

** Due to the lack of intercensal data at the CCD level, the 2030 numbers represent year 2008 to 2030 growth added to year 2000 Census information. Excludes 5,484 in population growth between 2000 and 2008. Based on State Office of Financial Management information, it is estimated that about 70% of this growth occurred in the cities (mostly in Wenatchee) and 30% in unincorporated Chelan County. This would slightly change the 2030 results presented.*

Sources: The Watershed Company; GIS Analysis; US Census 2000; Chelan County Comprehensive Plan 2009

Areas that may require additional attention particularly in terms of residential population in proximity to trails or parks include:

- Chelan UGA, northern
- Wenatchee UGA, northern
- Malaga CCD
- Cashmere CCD, western
- Leavenworth-Lake Wenatchee CCD, northern

Opportunities

As part of the Chelan County Shoreline Public Access planning process, agencies and citizens were asked their thoughts on public access opportunities – either for improving existing sites or for adding new ones. The opportunities were noted on maps of the whole county. Several opportunities have been considered in the implementation strategy in Section 8 and others can be considered the future as the County updates its parks and recreation plans. See the maps and documentation in Section 9. A partial list is shown in Table 9.

Table 9. Shoreline Public Access Opportunities – April 2010

CCD	Partial List of Opportunities
Cashmere	WDFW site – opportunity for developed access
Peshastin	Peshastin Mill Flats [1], Dryden Dam, Lynn St .Easement
Chelan	Don Morse Park, Lakeside Park, Proposed Lakeside Water Street Neighborhood Access, Chelan River
Entiat	City waterfront plan area and Entiaqua Park, Entiat River public access, Columbia River PUD property
Leavenworth	UGA private park
Lake Wenatchee	North shore Lake Wenatchee, road around lake, Fish Lake
Malaga	PUD, County, US Govt properties, public/private partnership
Manson	Bureau of Reclamation, Manson Marina, Pine Crest, private
Wenatchee	South of bridge, two access/restoration sites

[1] After the April 2010 public workshops, the Port of Chelan County adopted a policy allowing limited public access. Based on a June 10, 2010 article in The Wenatchee World: "The former Peshastin mill site is now open for nonmotorized recreational use. A new policy approved last week by the Port of Chelan County and the Peshastin Community Council opens the 64-acre site along the Wenatchee River to hikers, bicycle riders, anglers, swimmers, picnickers and other recreational users, with some limits, said Steve Keene, chairman of the community council. Motorized vehicles, fires, smoking and camping are prohibited in the area. Recreational users of the area do so at their own risk and liability, Keene stated in a news release." (http://www.wenatcheeworld.com/news/2010/jun/10/old-mill-site-now-open-to-limited-public-use/)

8. Implementation

Shoreline Public Access Policies

The Shoreline Master Program is required to contain policies (and regulations) guiding public access. In addition to policies of adopted parks and recreation plans, the following proposed policies are intended to be incorporated into the Shoreline Master Program and apply Countywide:

1. **Types of public access.** Public access includes both physical and visual approaches to shorelines. Scattered, small access points with low levels of alteration are preferred by some recreators for certain uses (e.g., fishing), but not others (e.g., RV camping, swim beaches, picnicking, event facilities).
2. **Increase public access where appropriate.** Chelan County and Cities should seek to increase the amount and diversity of public access to shorelines consistent with shoreline public access plans, the natural shoreline character, property rights, public rights under the Public Trust Doctrine and public safety.
3. **Priorities.** Public access should be maintained, enhanced, and increased in accordance with the following priorities unless found infeasible:

APPENDIX E: PUBLIC ACCESS PLAN

- Maintain existing public access sites and facilities, rights of way, and easements.
- Provide new or enhance existing public access opportunities on existing public lands and easements.
- Acquire property or easements to add public access opportunities to implement adopted public access plans and/or to recognize opportunities to protect areas that hold unique value for public enjoyment.
- Encourage public access to shorelines as part of shoreline development activities.

4. **Public access planning standards.**
    a. Chelan County should, in partnership with other federal, state, special district, and municipal agencies aim for a shoreline public access system that results in:
        - More than 90% of resident population within 15 miles of regional boating, fishing, trails, parks, and open space facilities.
        - More than 50% of resident population within 1.5 miles of local/community shoreline parks and trails.
    b. Cities should implement planning standards that are consistent with their adopted parks and recreation plans as identified in Appendix G.
5. **Implementation.** Chelan County and the Cities should implement shoreline public access plans contained in Appendix G that focus on development of shoreline recreation to meet growing resident populations and tourists. Implementation strategies should address public access and recreation standards and a capital improvement program. The County and Cities should periodically review the shoreline public access plans, every seven years. (RCW 90.58.080)
6. **Public access exceptions.** Public access should not be required where it is demonstrated to be infeasible due to reasons of incompatible uses, safety, security, or impact to the shoreline environment or due to constitutional or other legal limitations that may be applicable.
7. **Willing property owners.** Local governments and other agencies should seek willing property owners to participate in public access projects. Where purchase of property is negotiated, local governments, agencies, or private parties seeking off-site mitigation areas are obligated to pay fair market value for private properties included in public access projects.
8. **Respect private property.** Public access does not include the right to enter upon or cross private property, except on dedicated public rights-of-way or easements or where development is specifically designed to accommodate public access. The design of public access should minimize potential impacts to private property and individual privacy. This may include providing a physical separation to reinforce the distinction between public and private space, and may be achieved by providing adequate space, and/or through screening with landscape planting or fences.
9. **Safety and Environment.** Design of public access should be consistent with public safety and preservation/conservation of the natural amenities. Where public access is determined to be incompatible due to reasons of safety, security, or impact to the shoreline, the

proponent should consider alternate methods of providing public access, such as offsite improvements, viewing platforms, separation of uses through site planning and design and restricting hours of public access. Off-site public access improvements may be allowed if such improvements would provide a greater public benefit and reduce safety and environmental impacts.

10. **Visual access.** Views to shorelines contribute to the Chelan County quality of life, tourism economy, and property values. Flexible development standards, such as height, bulk, scale, setbacks, lighting, and view corridors, should be established to assure preservation of unique, fragile, and scenic elements and to protect existing views from public property or large numbers of residences.
11. **Roads, streets, and alleys abutting bodies of water.** Roads, streets, and alleys abutting bodies of water should be preserved, maintained, consolidated enhanced, and/or created for public access. Vacations of roads, streets, and alleys should be discouraged and only allowed in strict compliance with RCW 35.79.035 (Streets and Alleys) or RCW 36.87.130 (County Roads).
12. **Fishing easements**. In consultation with the Washington State Department of Fish and Wildlife, Chelan County should review fishing easements on the Wenatchee River, Entiat River, and other shoreline water bodies.5 Chelan County should work in partnership with the Washington State Department of Fish and Wildlife, Chelan County Public Utility District, County, Cities, land trusts, and others to improve public access to the fishing easements. Actions may include improving access on unused sites, consolidating access points for maintenance purposes, or land surplus, exchanges or purchases, etc.

Public Access Implementation Strategies

The County will implement its shoreline public access plan through implementation of adopted parks and recreation plans and the County budget as well as application of standards. The County may also revisit its shoreline public access plan during periodic reviews of the SMP, anticipated every seven years. (RCW 90.58.080)

Current facilities and planned facilities in adopted plans prepared by the County, City, PUD, and state and federal agencies allow Chelan County to meet the regional shoreline public access standards. At a local level, most of the County meets parks and trails public access standards, though there are a few gaps. The sections below provide a tracking matrix to ensure planned facilities are implemented and to provide additional planned facilities in gap areas.

Public Access Projects & Funding – Gap Areas

Within gap areas, conceptual proposals have been developed to address shoreline public access. As the proposals have not be sited on a particular property yet, cost estimate ranges represent what a type of facility might cost on a site where development of the desired facility was feasible ranging from easy access on gentle slopes to more difficult access on steeper slopes. All the estimates include some site restoration, mitigation plantings along with design and construction engineering, permitting assistance and Washington State sales tax. All proposals assume location

on public property. If private acquisition is needed, those costs would be in addition to the cost ranges below.

Table 11. Shoreline Public Access – Gap Area Projects and Funding

CCD	Project Description	Responsibility
Chelan	Dietrich Road fishing pier with ADA access, vault restroom, small parking area	City of Chelan, potential partners, Chelan County and other special district or State agencies
Leavenworth Lake Wenatchee	Public park & boat launch on north shore	Chelan County, potential partners, other special district or State agencies
Wenatchee Entiat	Columbia River – between Rocky Reach & Entiat, water trail for kayaks on the Columbia River	Chelan County, potential partners, other special district or State agencies
Malaga	Park with boating facilities, trail and fishing	Chelan County, potential partners, other special district or State agencies

Source: Project Groundwork

Funding for the proposals could include a variety of sources, such as:

- Local Funds
- General obligation bonds
- Donations, bequests, gifts
- Revenue bonds
- Matching grant
- Land and Water Conservation Fund
- National Audubon Society Together Green Innovation Grant
- NOAA/American Rivers Habitat Restoration partnership
- Partner with a local teacher and the National Environmental Education Foundation for outdoor education grants
- Recreation and Conservation Funding Board
- Small Grants Program at U.S. Fish & Wildlife Service, Division of Bird Habitat Conservation
- WA State Parks Commission
- Washington Wildlife and Recreation Program

- Washington Wildlife and Recreation Program – Habitat Conservation
- Washington Wildlife and Recreation Program – Outdoor Recreation Account

Policies and Standards

The development of shoreline public access in terms of uses, projects, and design standards shall be consistent with the Chelan County Comprehensive Parks and Recreation Plan, 2007 and this Shoreline Public Access Plan.

The County shall apply its adopted policies to developments proposed in shoreline jurisdiction. Section 8a above lists key policies which are also included in the draft Shoreline Master Program.

The County shall apply its code to address parks and recreation, including but not limited to the following:

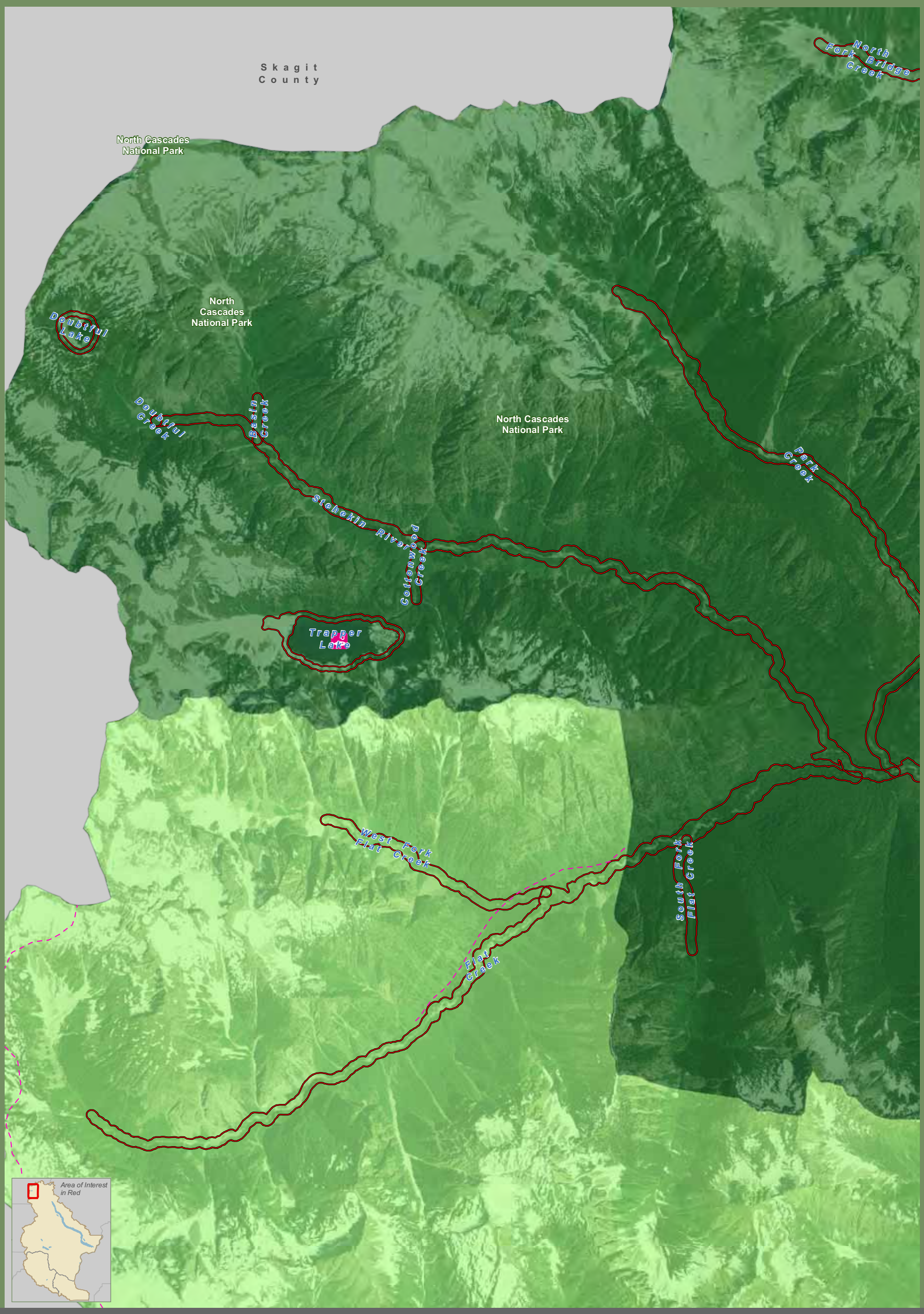
- Chapter 13.04 State Environmental Policy Act
- Title 15 Development Standards, Article IV. Pedestrian Facilities, Walkways and Trails

Public access standards, including an incentive program to complete public access in the gap areas in particular as well as encourage public access elsewhere, are provided in the draft Shoreline Master Program.

9. Supporting Maps

The following maps are provided for reference and in support of the shoreline public access plan:

- Public Access inventory maps, 48000 scale, July 2010, attached
- Public Access analysis maps, June 2010, available upon request



Public Access
01

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

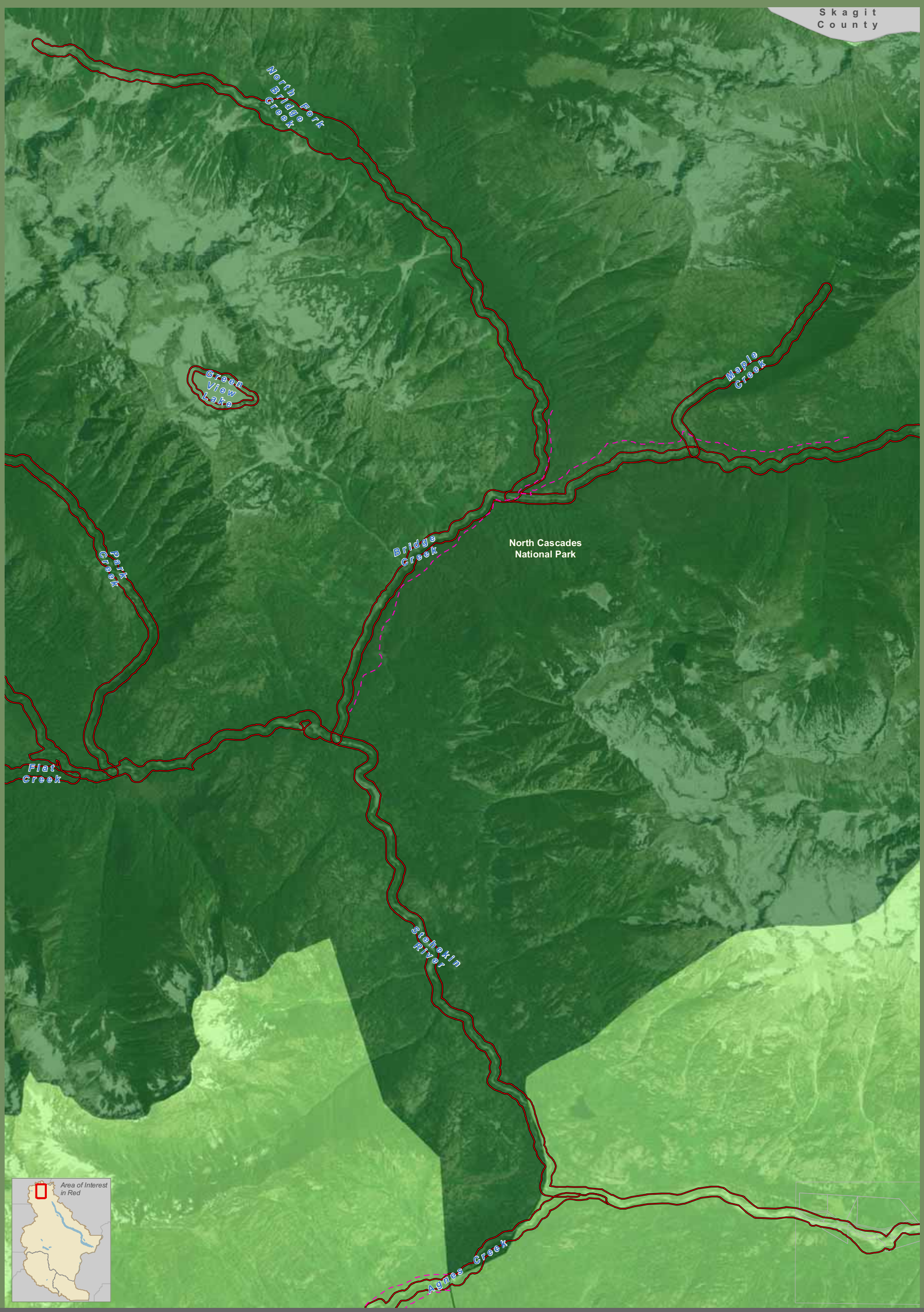
0 0.25 0.5
Miles
1 inch equals 4,000 feet

March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF

Public Access, Parks, and Other Public Lands

- Boat Launch
- Campground
- Comm. Dock/Marina
- Fishing Access
- Horse Camp
- Marina
- Other Boating Facility
- Picnic Area
- RV Camp
- Ski Area
- SnoPark
- Trailhead
- Visitor Info Site
- Winter Rec. Facility
- Fishing Easement
- Fishing Easement with Boatlaunch
- Parks
- Other Public and Protected Lands
- Potential ROW Access
- View Corridors
- Hiking Trails
- Proposed Trails
- Highways
- Railroads
- Parcels
- Jurisdiction
- City Boundaries
- UGA Boundaries

Shoreline jurisdiction boundaries depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.



Public Access
02

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch equals 4,000 feet

March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF

Public Access, Parks, and Other Public Lands

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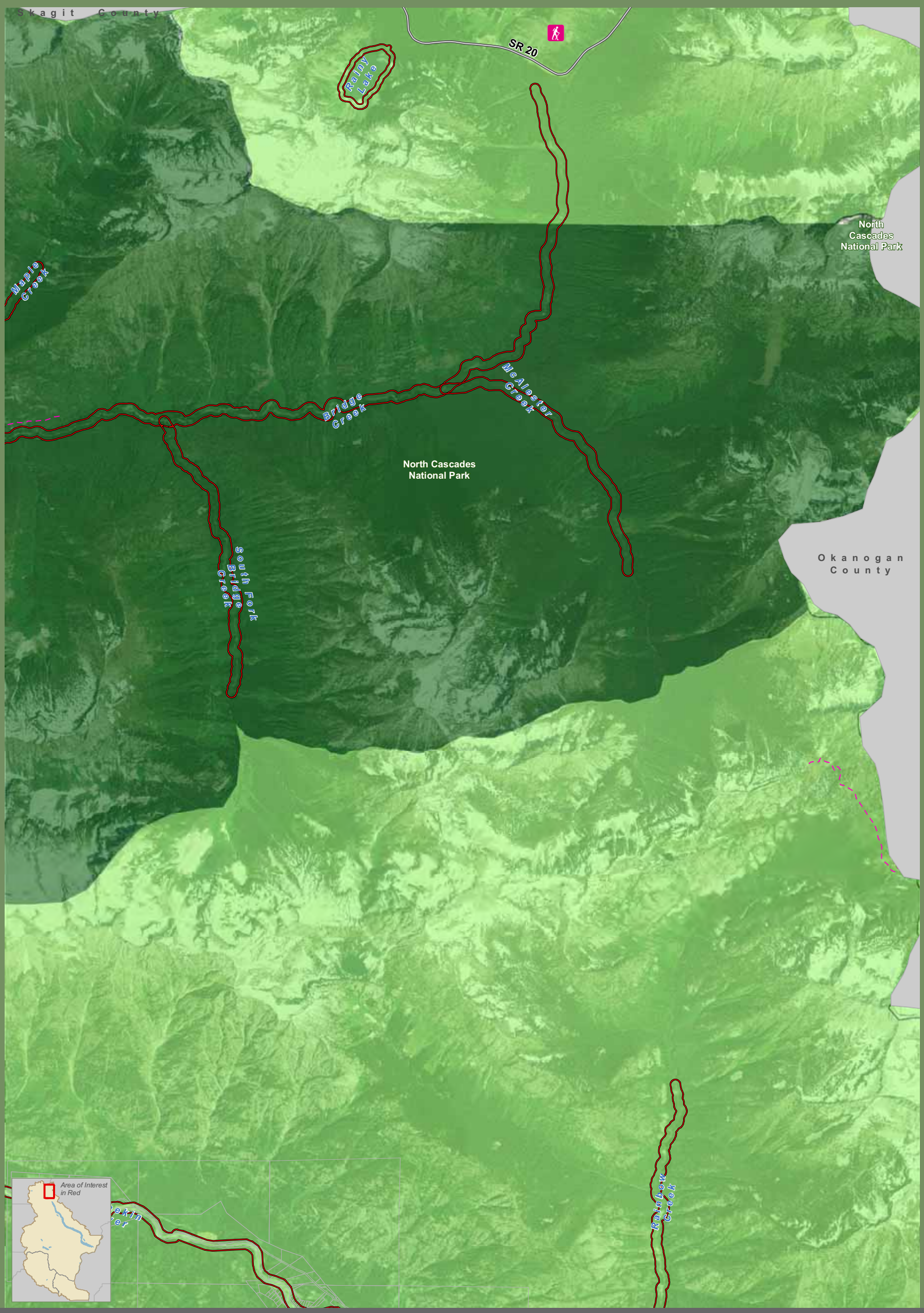

Public Access
03

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch equals 4,000 feet

March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF

Public Access, Parks, and Other Public Lands

- Boat Launch
- Campground
- Comm. Dock/Marina
- Fishing Access
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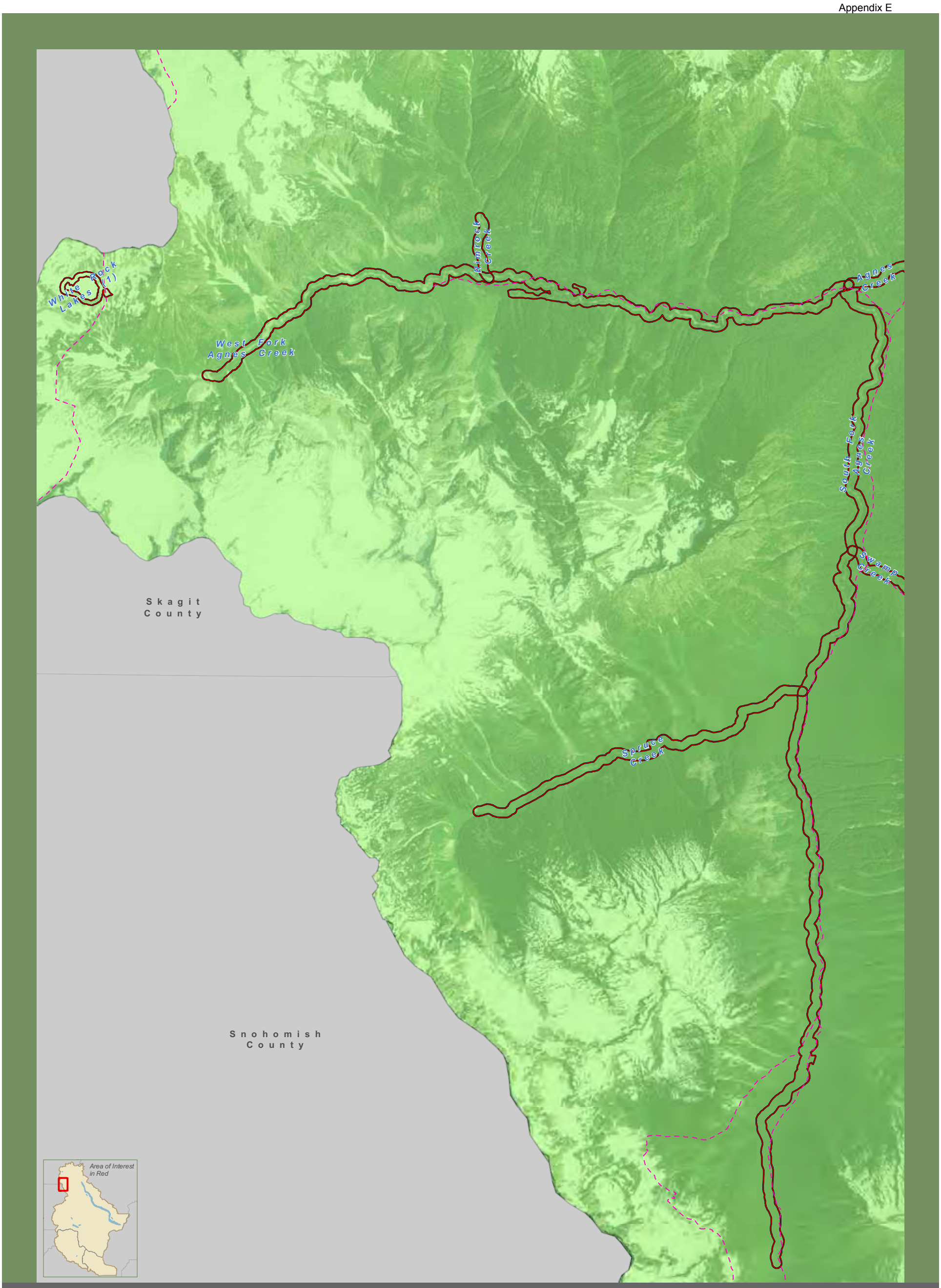

Public Access
04

Public Access, Parks, and Other Public Lands

- Boat Launch
- Campground
- Comm. Dock/Marina
- Fishing Access
- Horse Camp
- Marina
- Other Boating Facility
- Picnic Area
- RV Camp
- Ski Area
- SnoPark
- Trailhead
- Visitor Info Site
- Winter Rec. Facility
- Fishing Easement
- Fishing Easement with Boatlaunch
- Parks
- Other Public and Protected Lands
- Potential ROW Access
- View Corridors
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- Proposed Trails
- Highways
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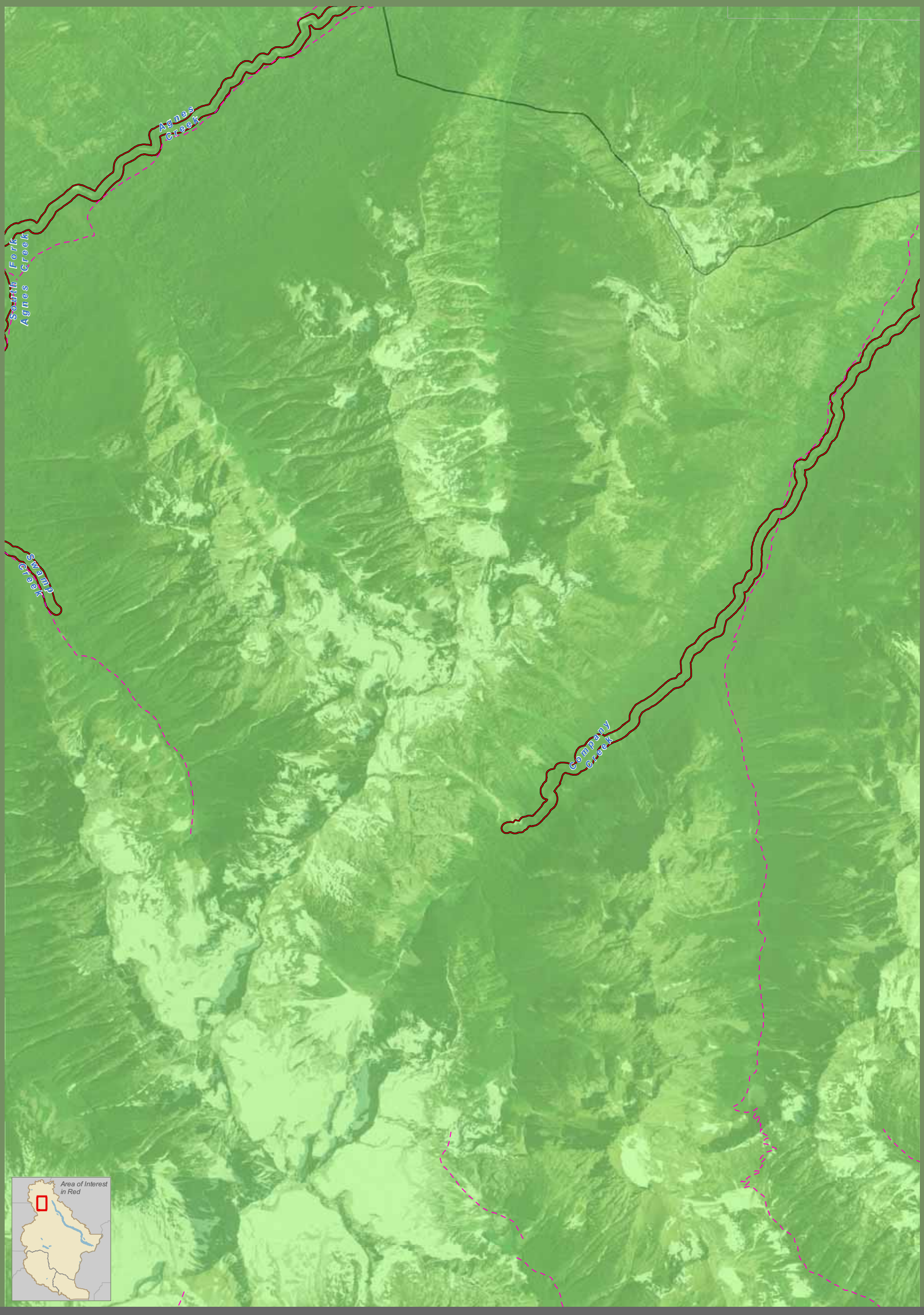
Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch equals 4,000 feet

March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF



Public Access
05

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
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March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF

Public Access, Parks, and Other Public Lands

- Boat Launch
- Campground
- Comm. Dock/Marina
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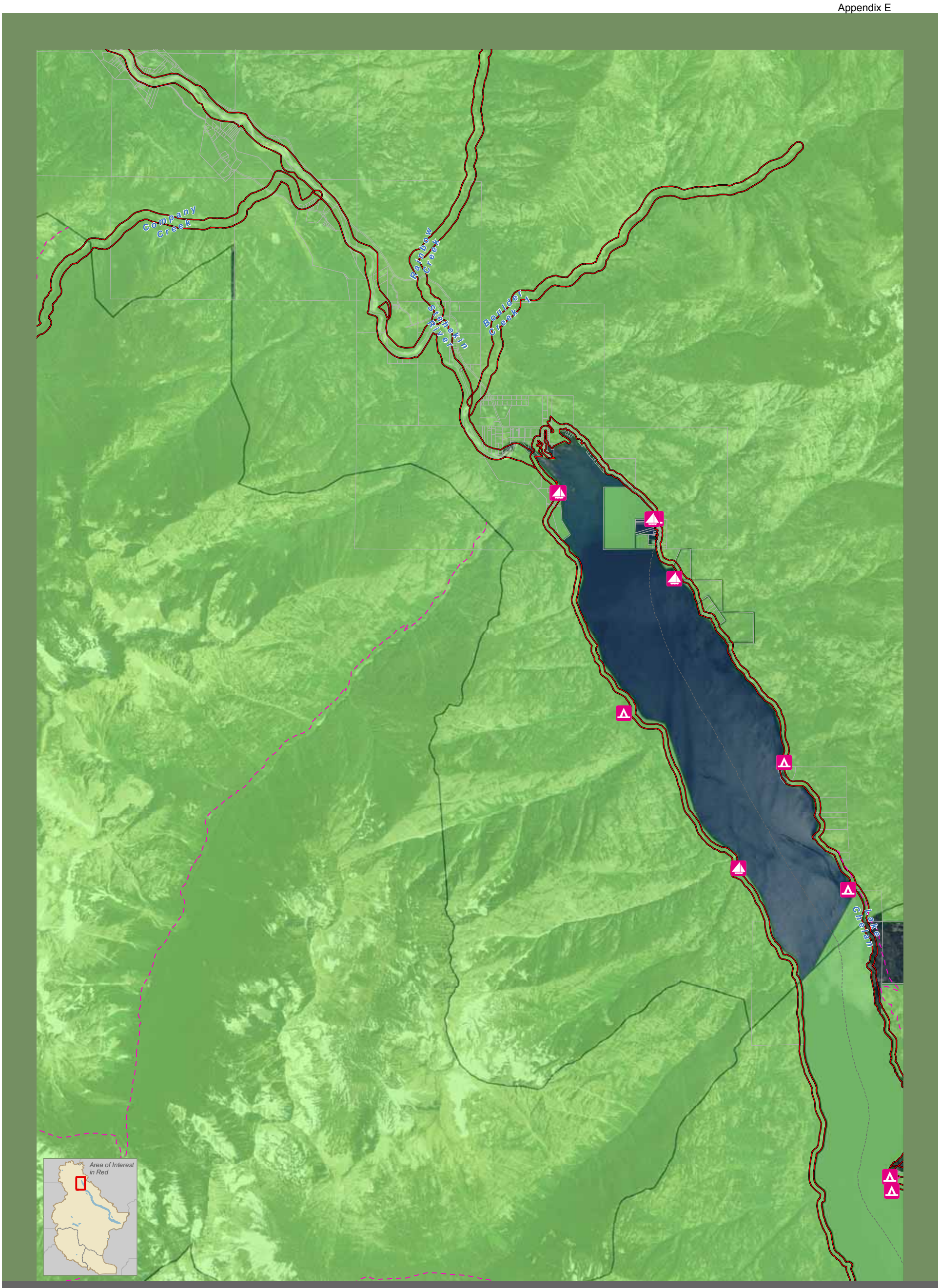

Public Access
06

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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March 30, 2010
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Public Access, Parks, and Other Public Lands

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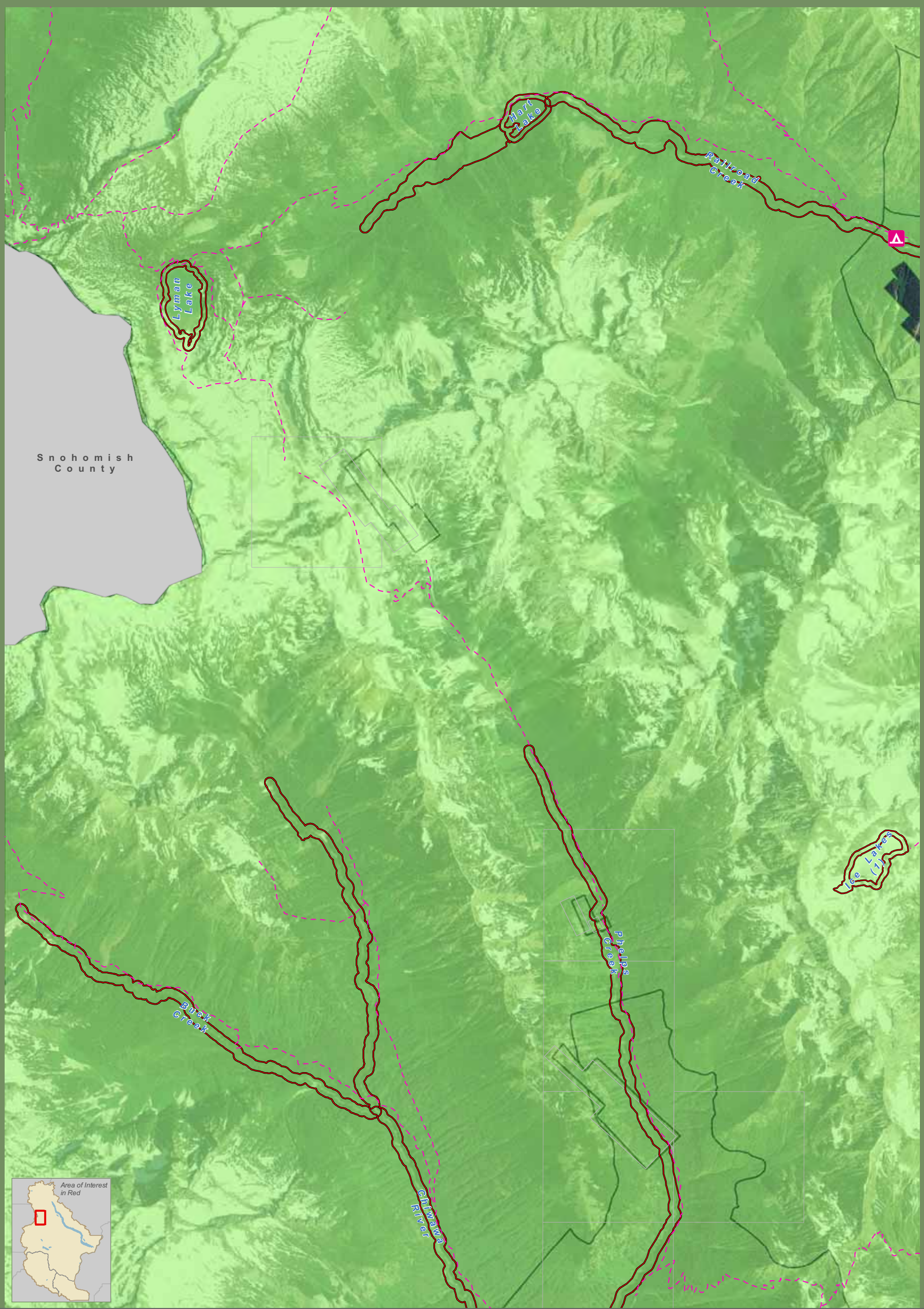

Public Access
07

Public Access, Parks, and Other Public Lands

- Boat Launch
- Campground
- Comm. Dock/Marina
- Fishing Access
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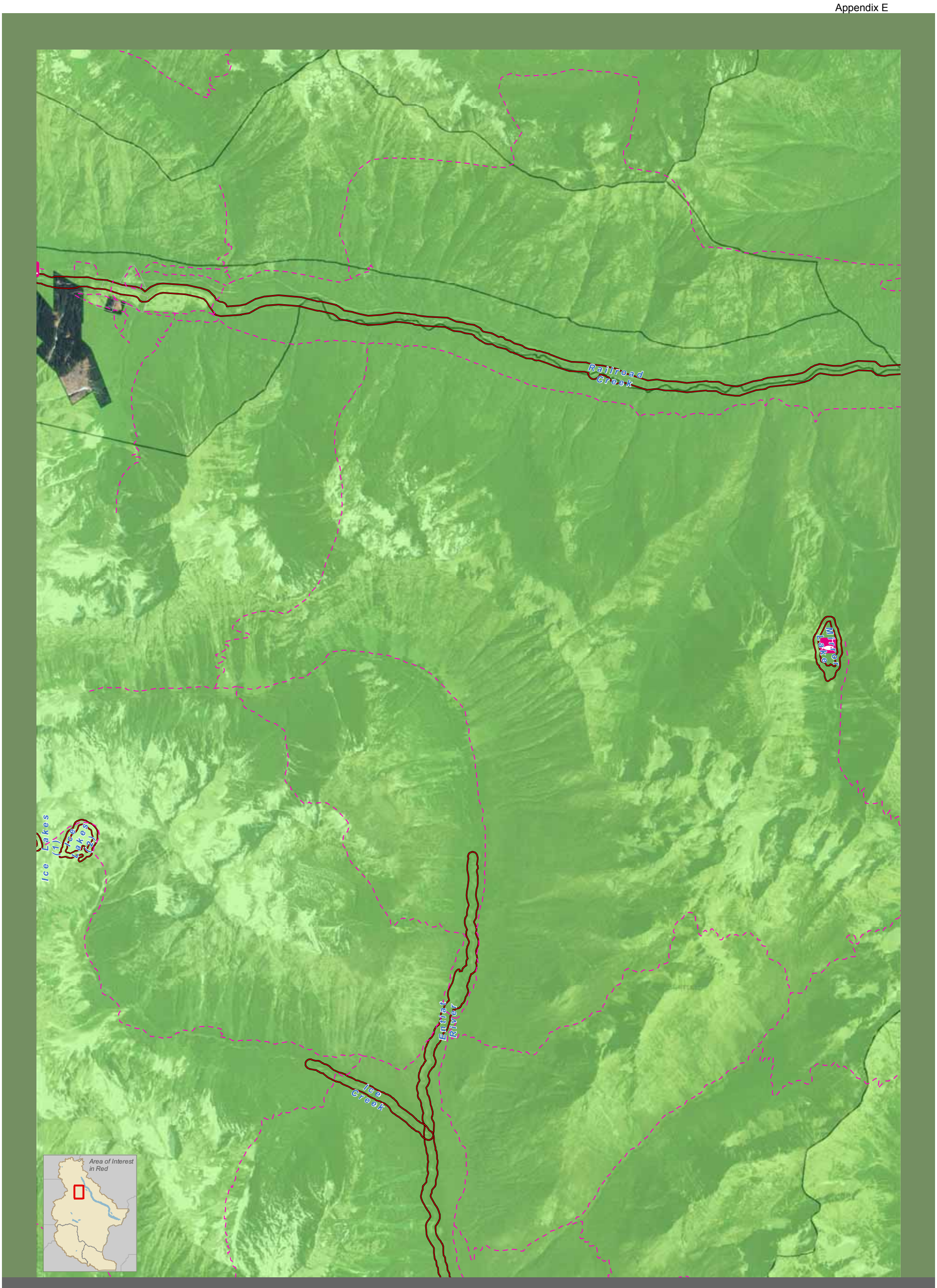
March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF

THE WATERSHED COMPANY



Public Access
08

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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Miles
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March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF

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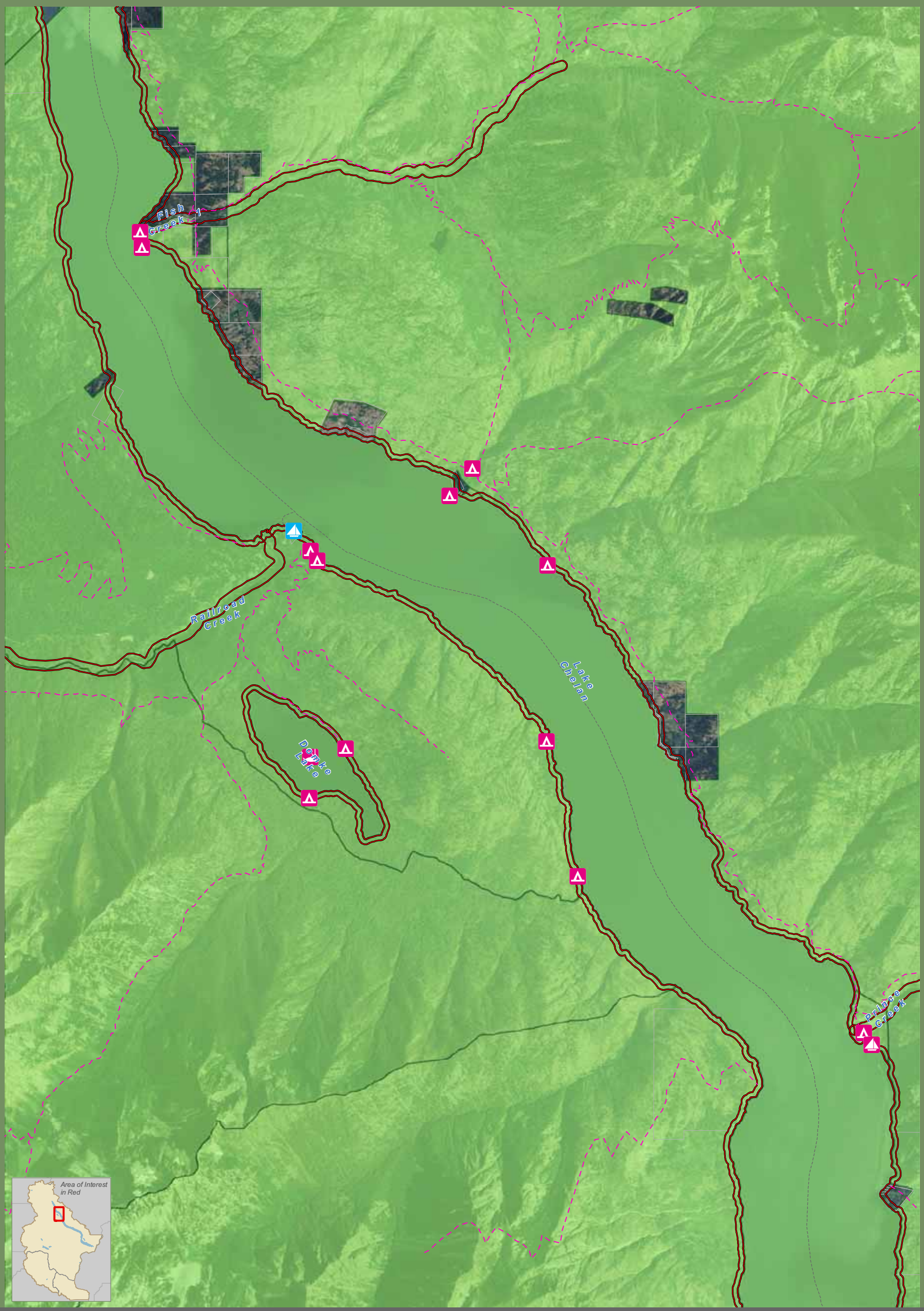

Public Access
09

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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March 30, 2010
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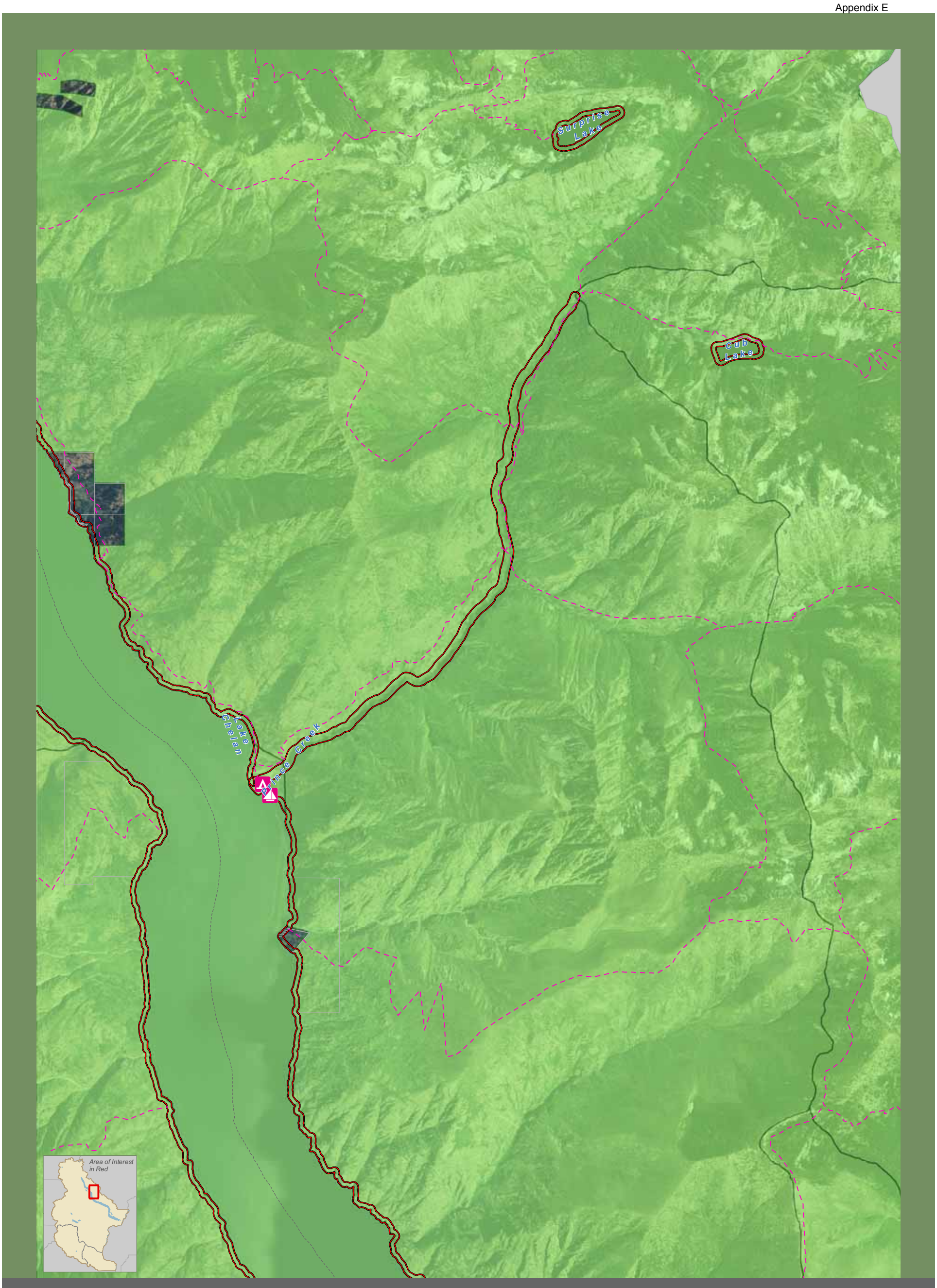

Public Access
10

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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March 30, 2010
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Public Access, Parks, and Other Public Lands

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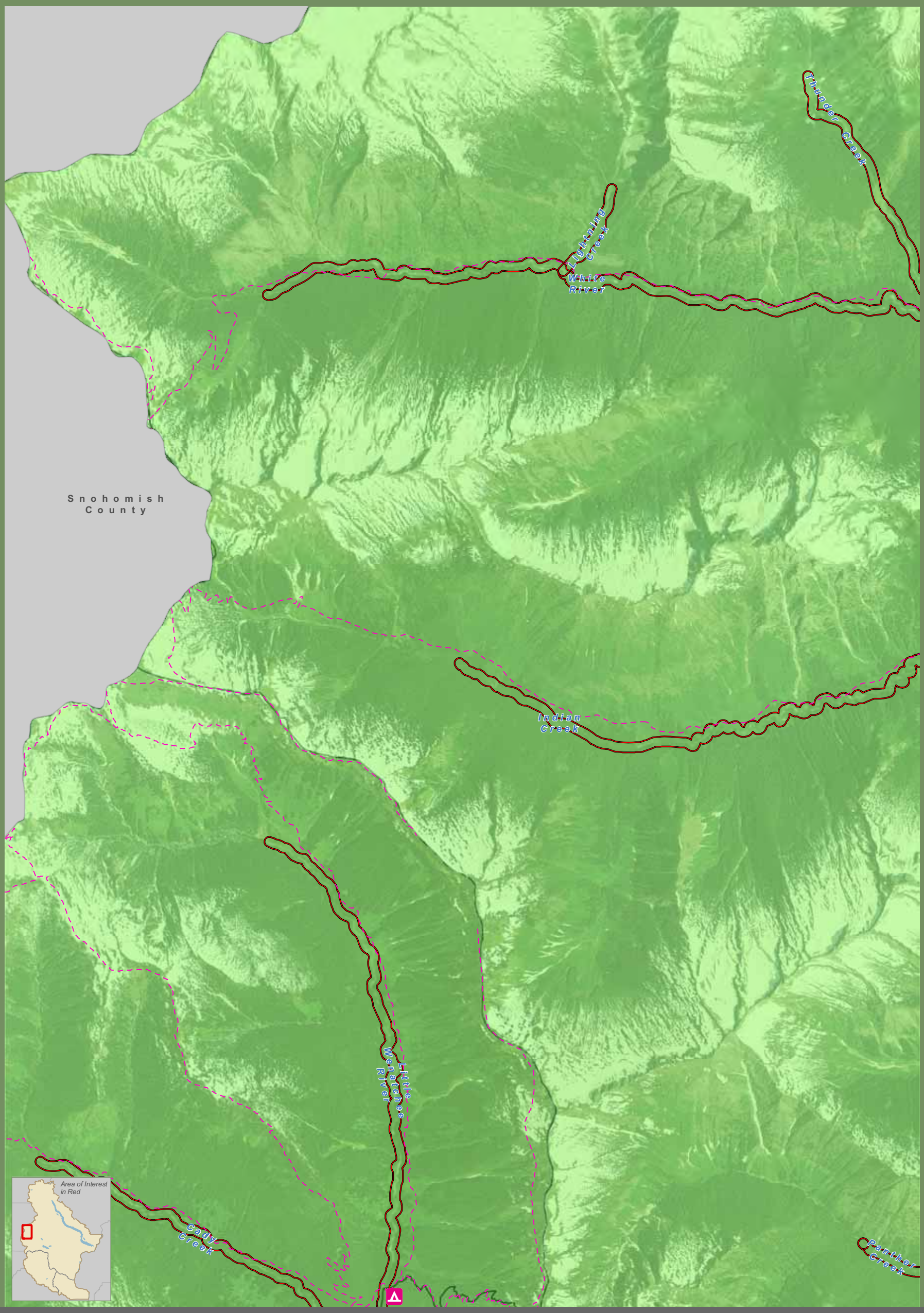

Public Access
11

Chelan County Shoreline Master Program
THE WATERSHED COMPANY

0 0.25 0.5
Miles
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March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF

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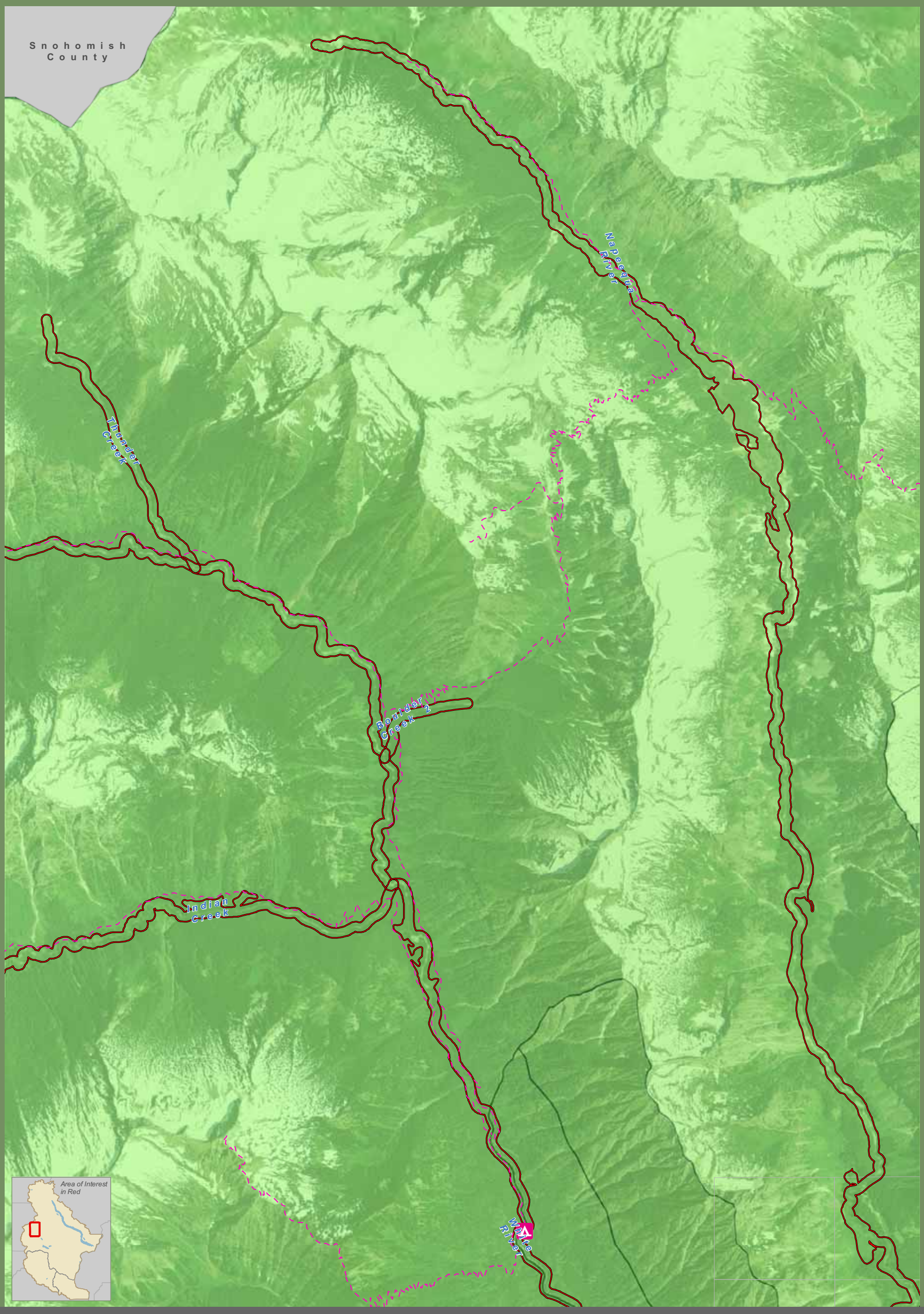

Public Access
12

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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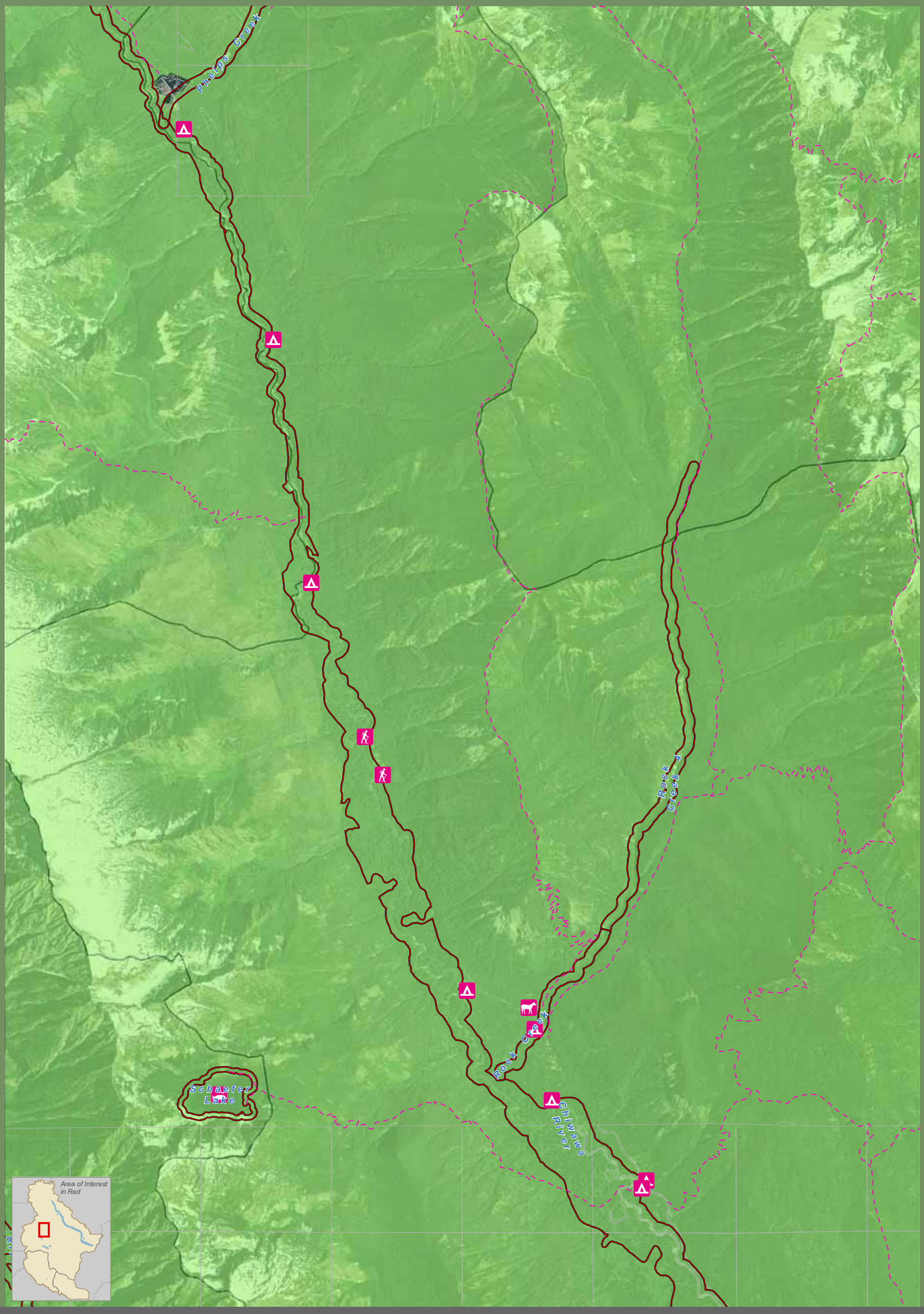

Public Access
13

Public Access, Parks, and Other Public Lands

- Boat Launch
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Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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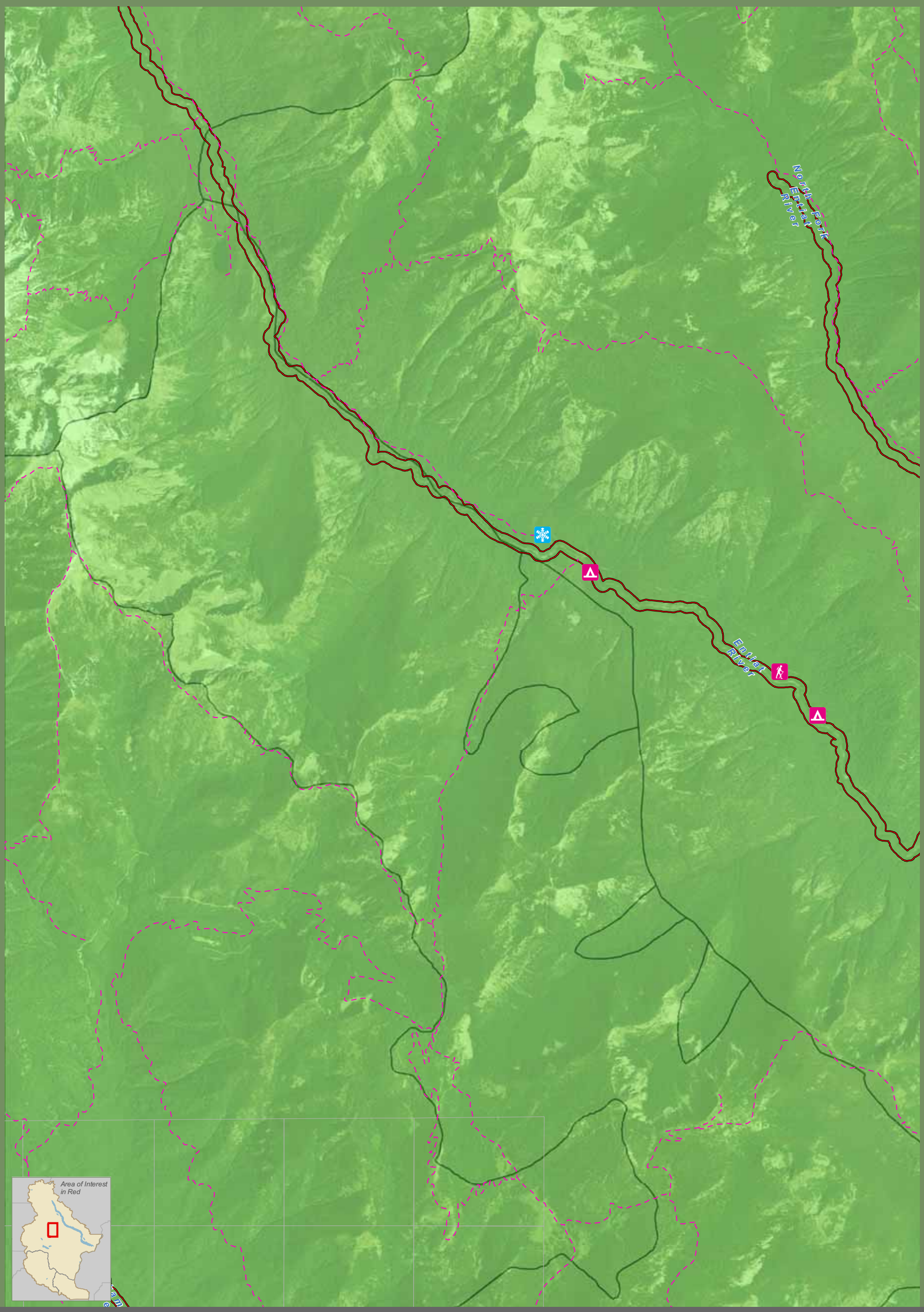

Public Access
14

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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March 30, 2010
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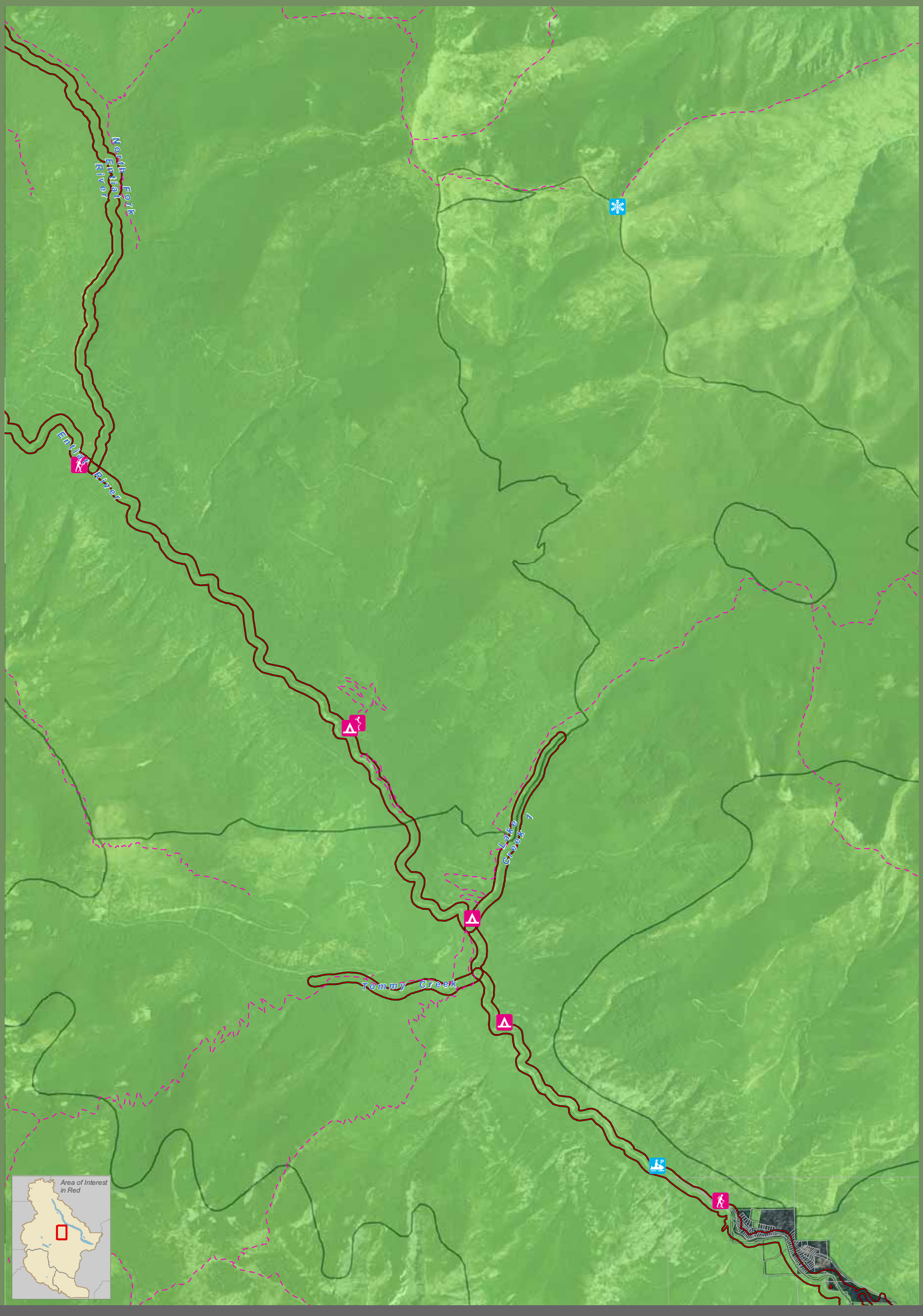

Public Access
15

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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March 30, 2010
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Public Access, Parks, and Other Public Lands

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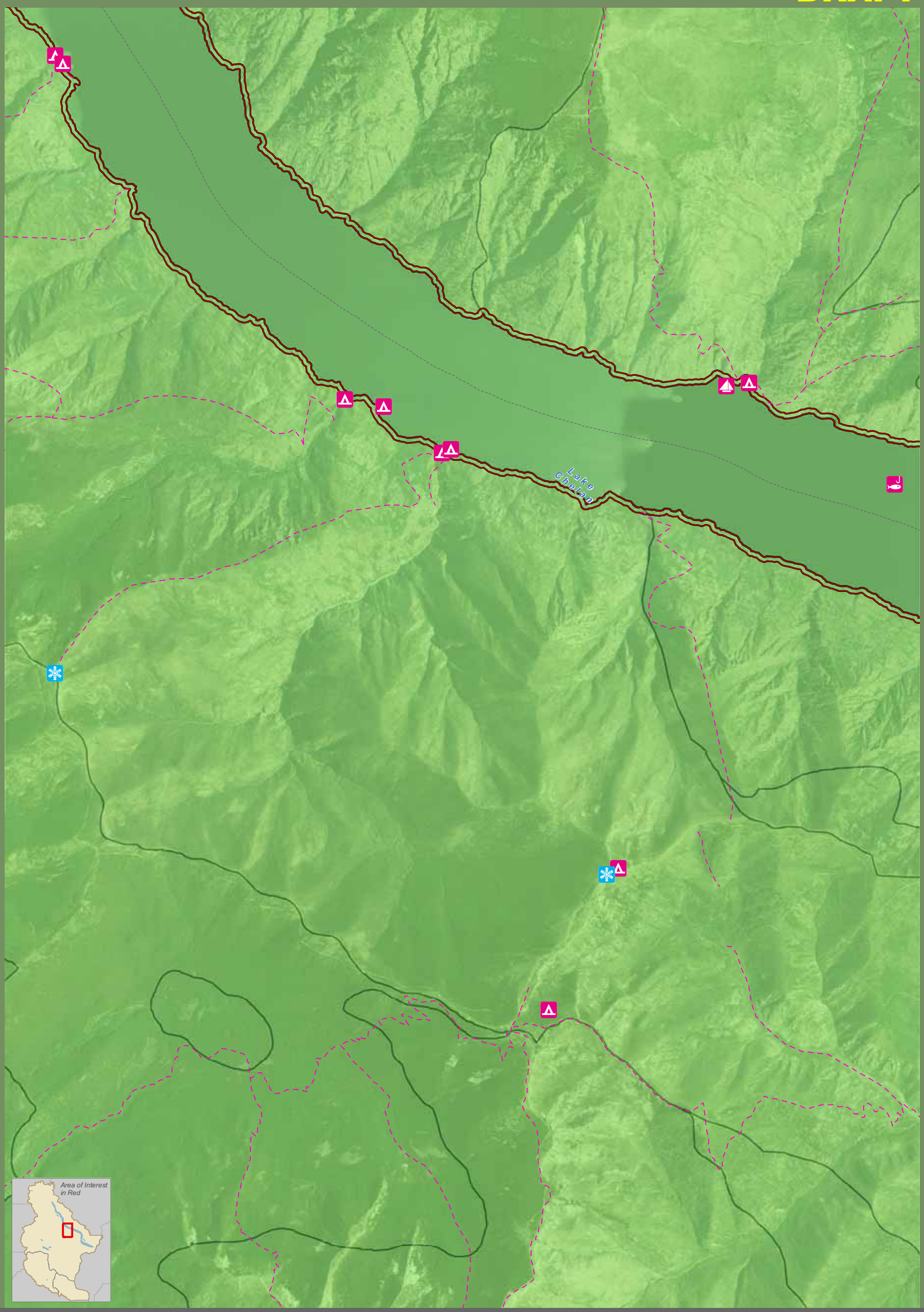

Public Access
16

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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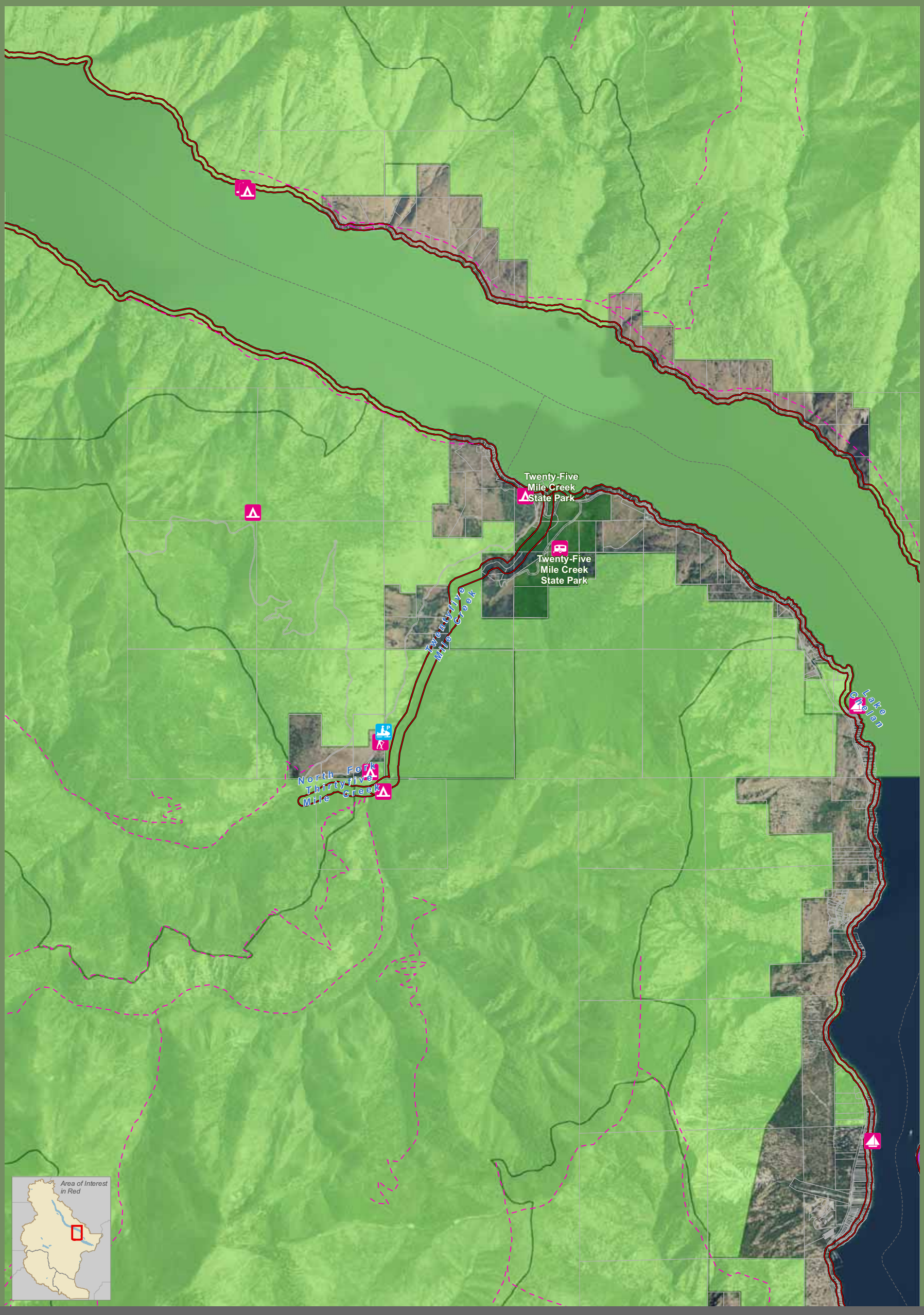

Public Access
17

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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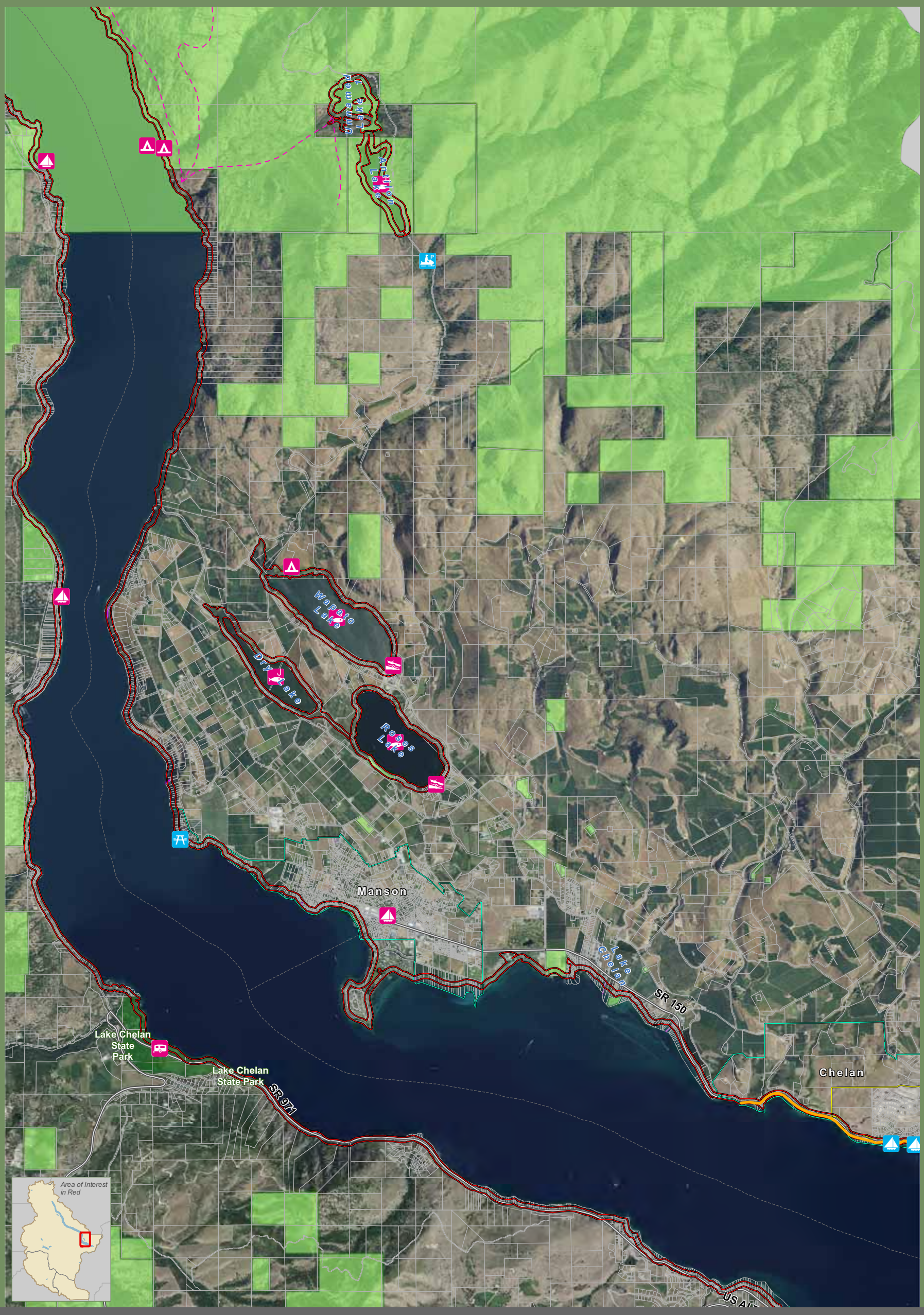

Public Access
18

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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March 30, 2010
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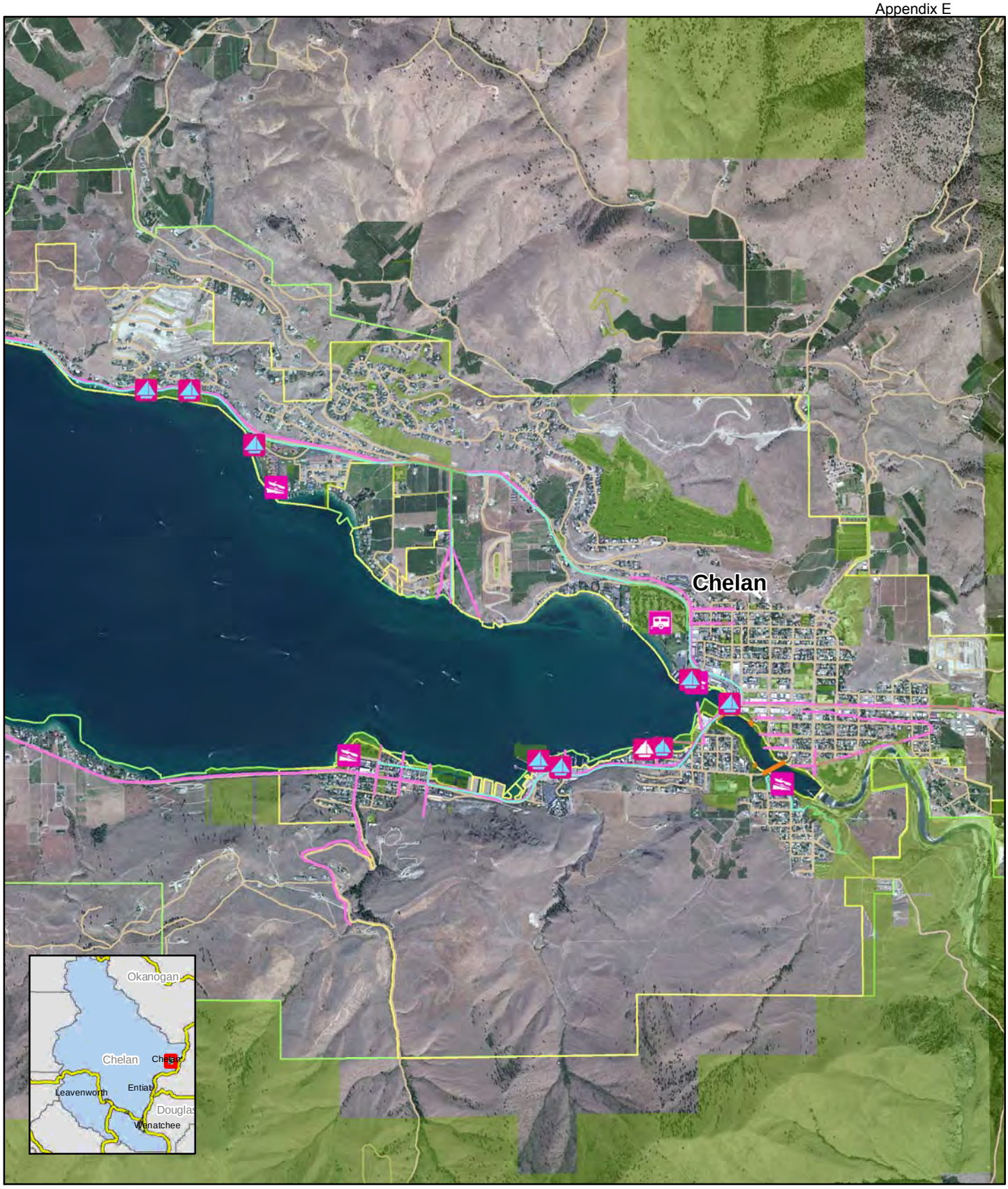
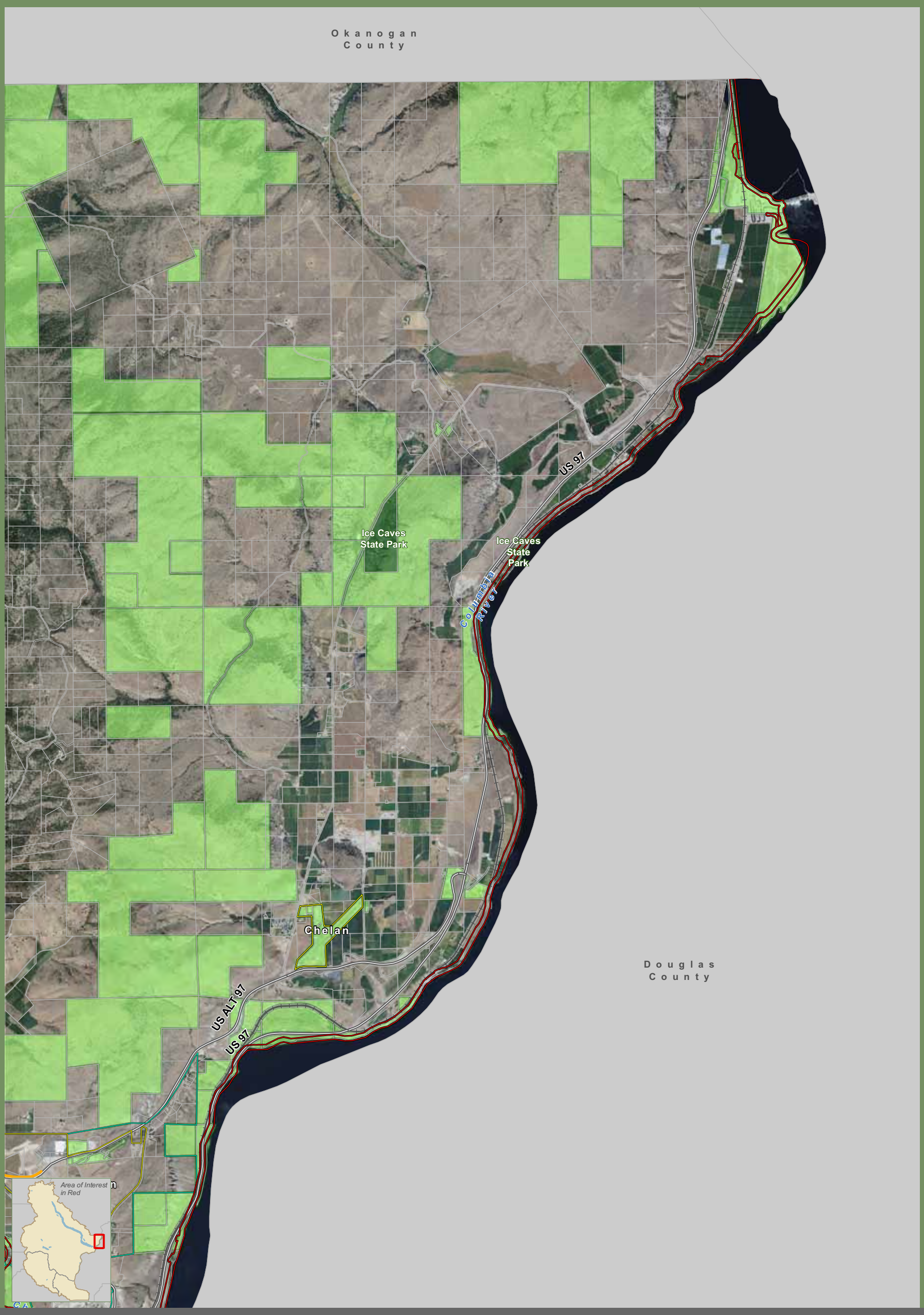


Public Access Map 19

- Boat Launch
- Campground
- Comm. Dock/Marina
- Fishing Access
- Other Boating Facili
- Picnic Area
- RV Camp
- Visitor Info Site
- Winter Rec. Faciliti
- Proposed Trails
- Existing Trails
- View Corridors
- City Limits
- Urban Growth Areas
- Tax Exempt Parcels

The County makes no warranty, expressed or implied, concerning the data's content, accuracy, currency or completeness, or concerning the results to be obtained from queries or use of the data. All data is expressly provided "AS IS" and "WITH ALL FAULTS". The County makes no warranty of fitness for a particular purpose, and no representation as to the quality of any data. The Requester shall have no remedy at law or equity agaisnt the county in case the data provided is inaccurate, incomplete or otherwise defective in any way.

0 1,550 3,100 6,200 Feet



Public Access
20

Public Access, Parks, and Other Public Lands

- Boat Launch
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Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF



Public Access
21

Public Access, Parks, and Other Public Lands

- Boat Launch
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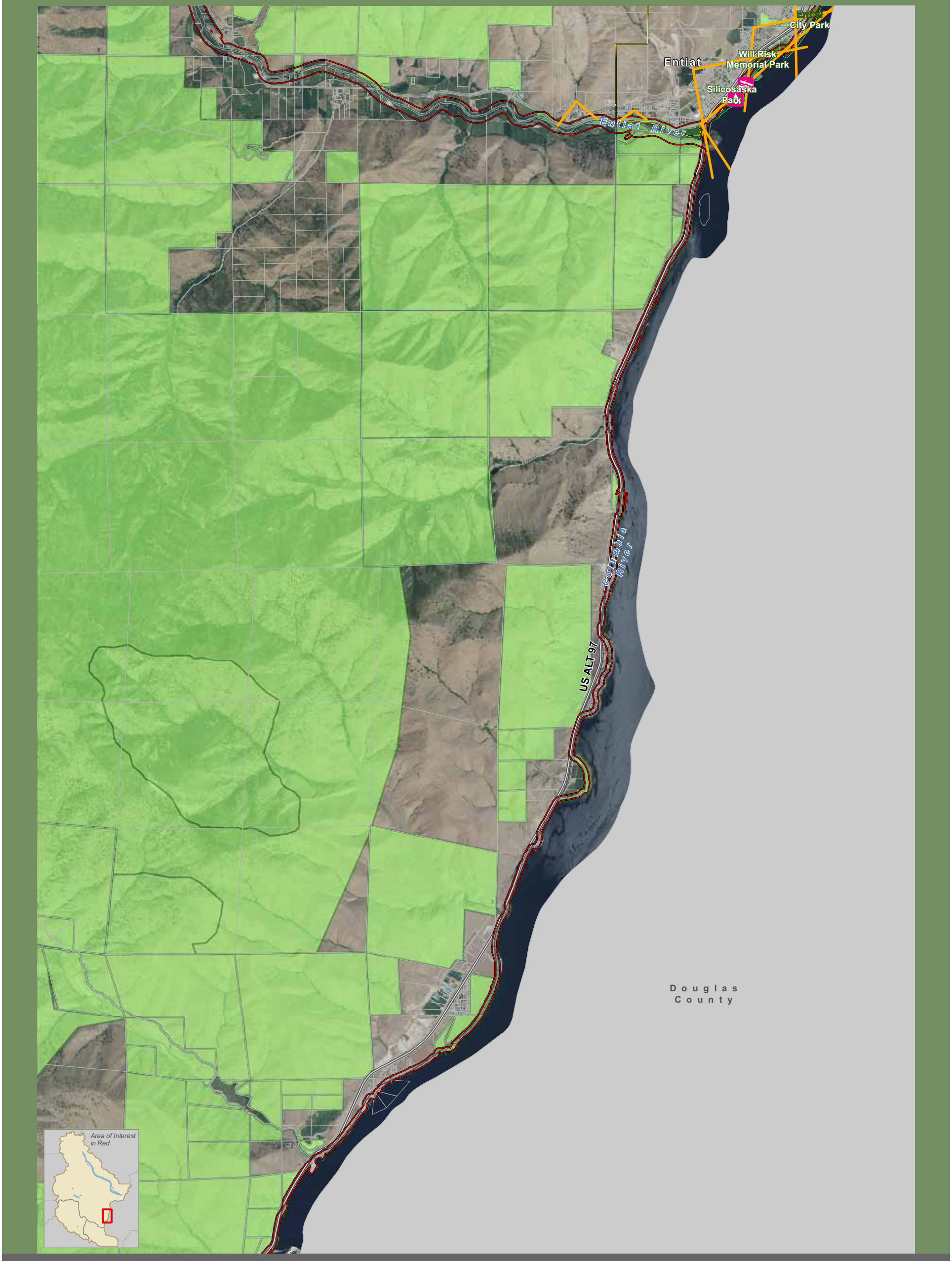

Public Access
22

Chelan County Shoreline Master Program

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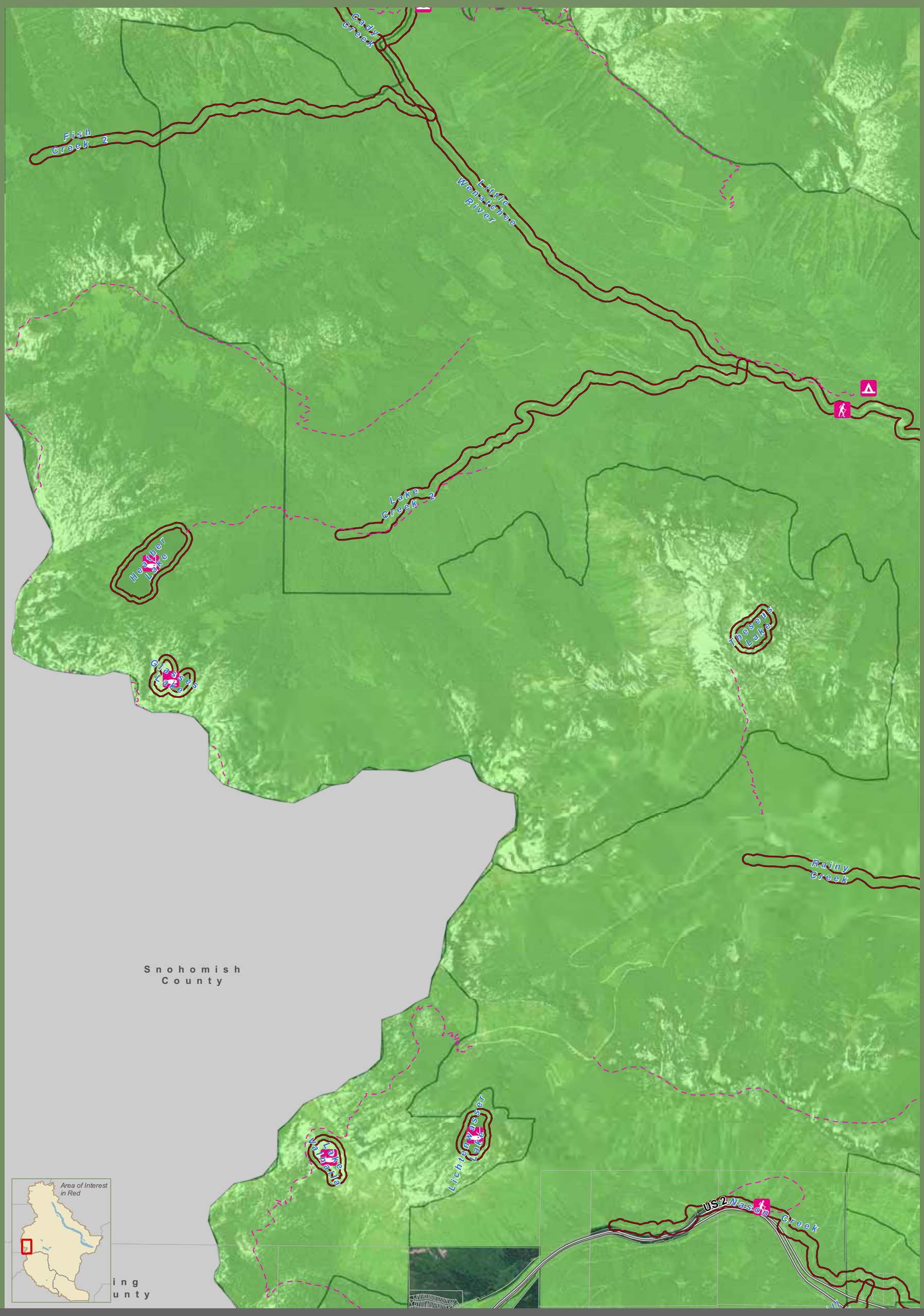

Public Access

23

Public Access, Parks, and Other Public Lands

- Boat Launch
- Campground
- Comm. Dock/Marina
- Fishing Access
- Horse Camp
- Marina
- Other Boating Facility
- Picnic Area
- RV Camp
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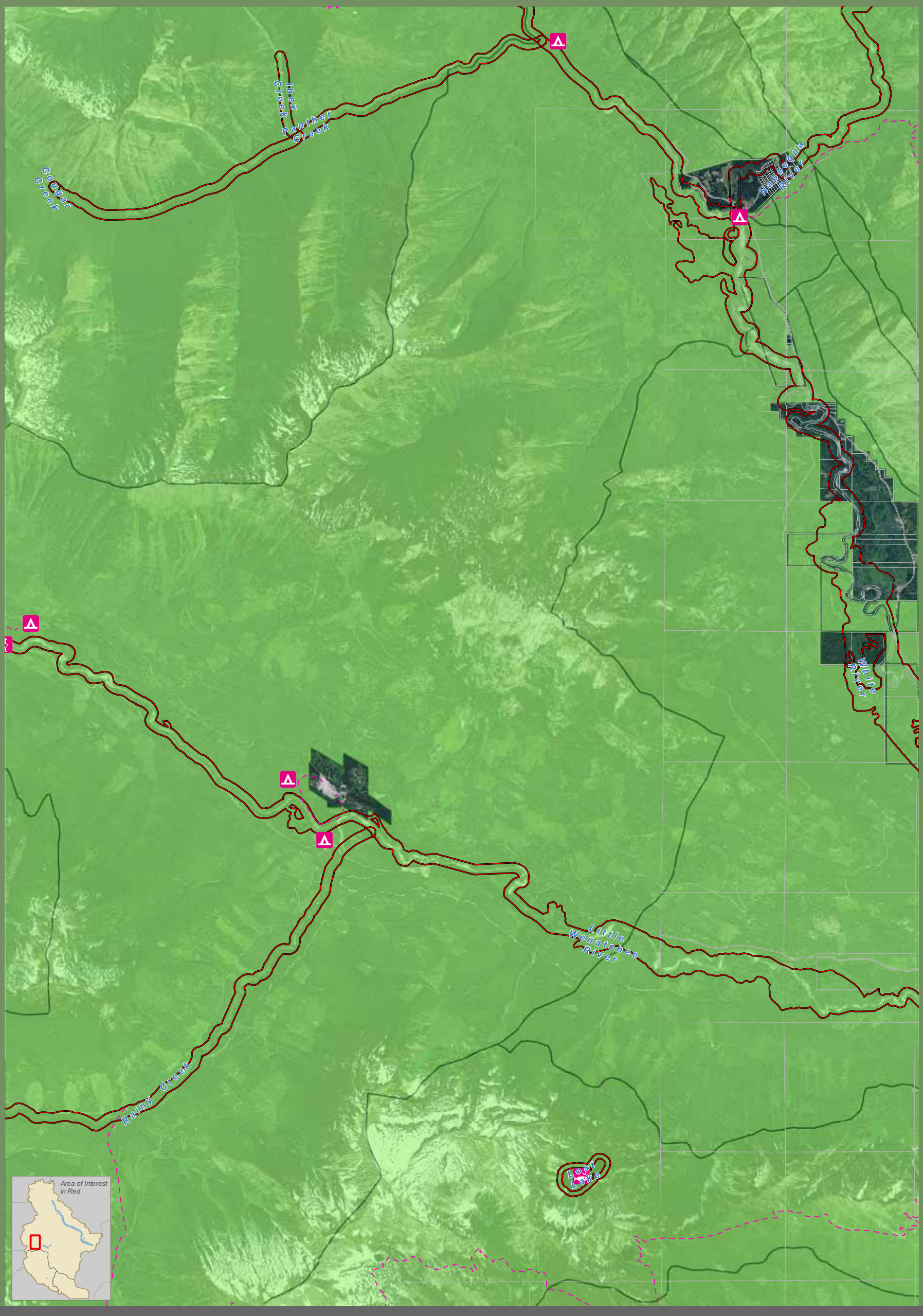
Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch equals 4,000 feet

March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF



Public Access

24

Chelan County Shoreline Master Program

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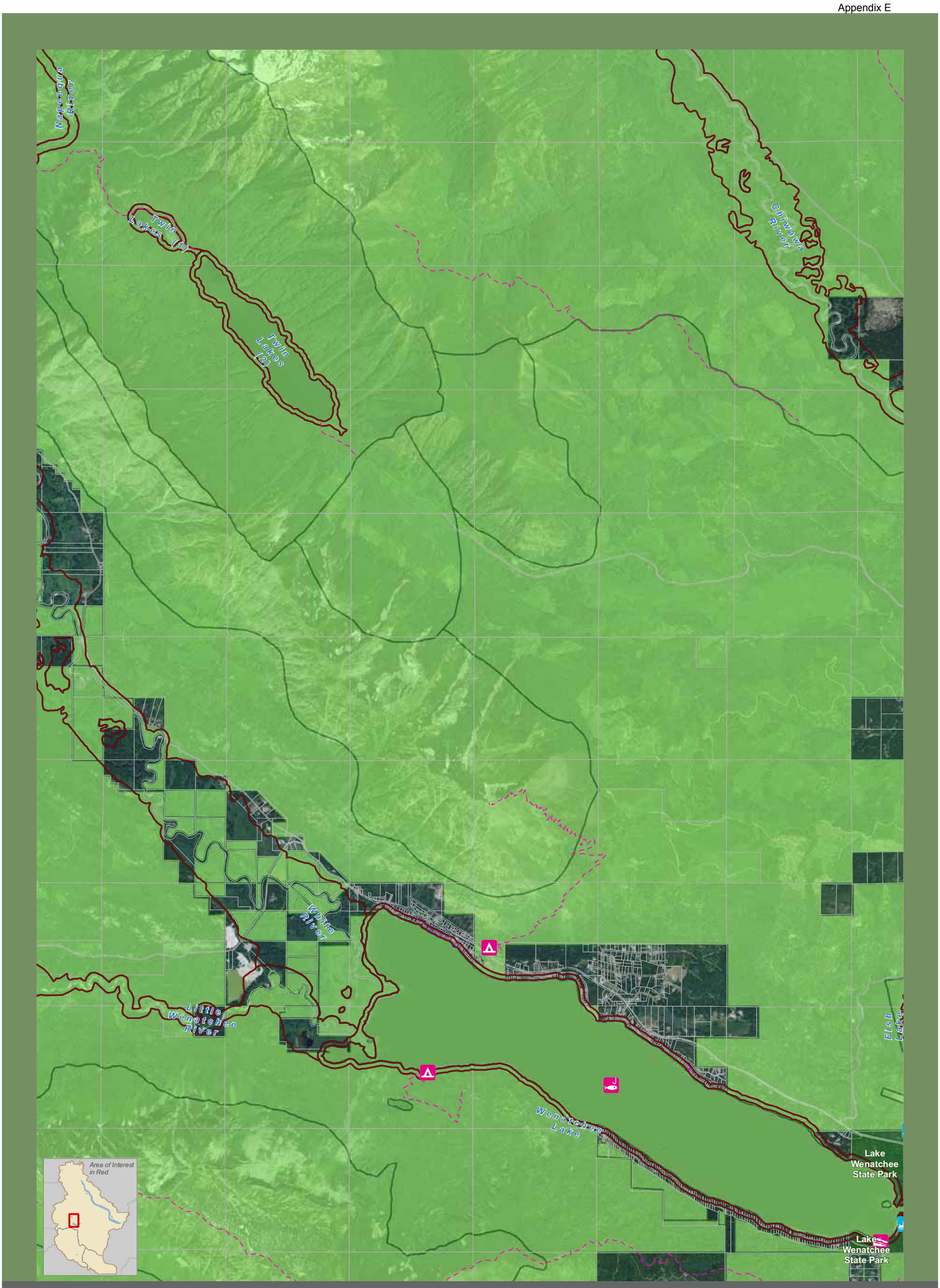

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25

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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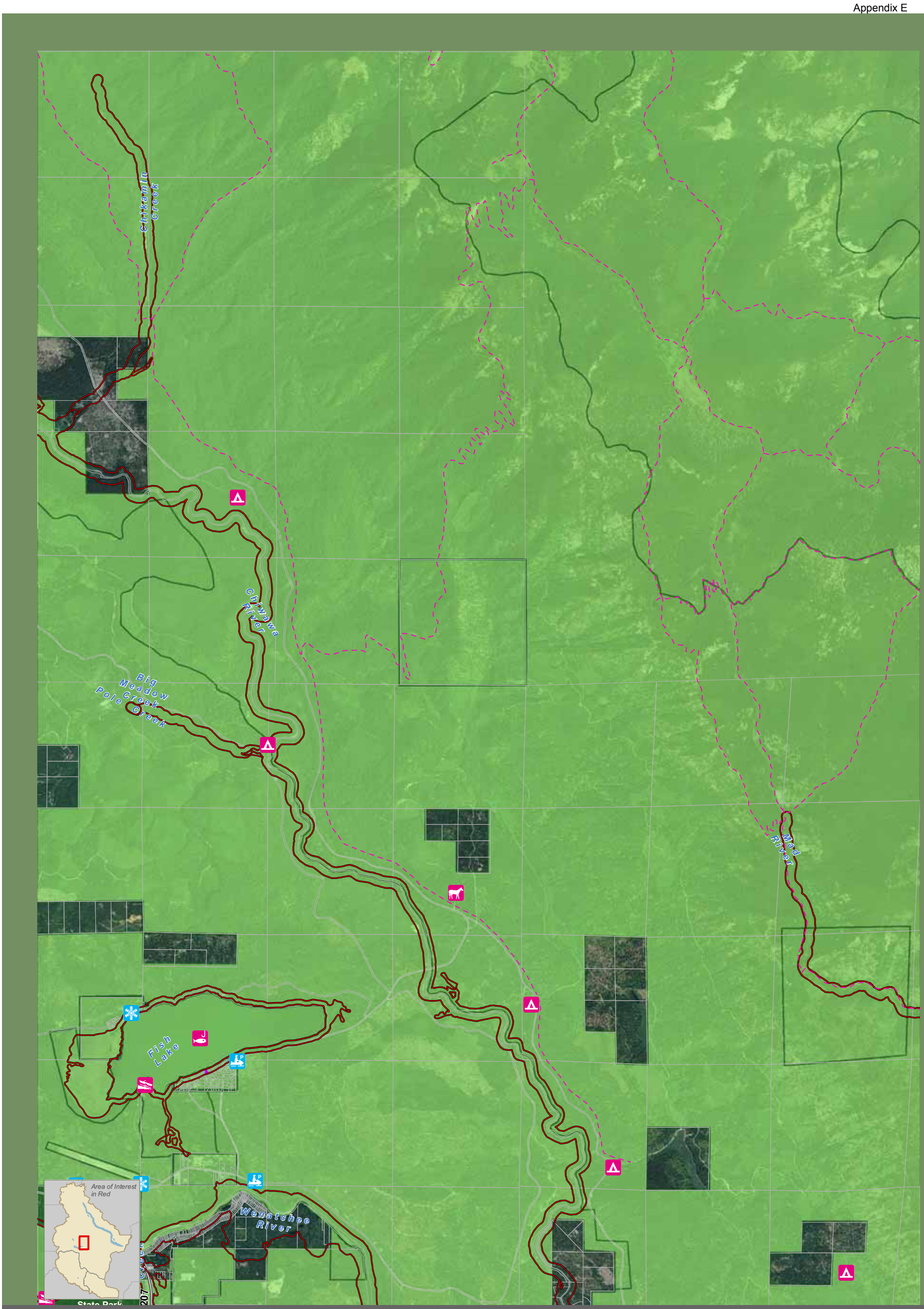
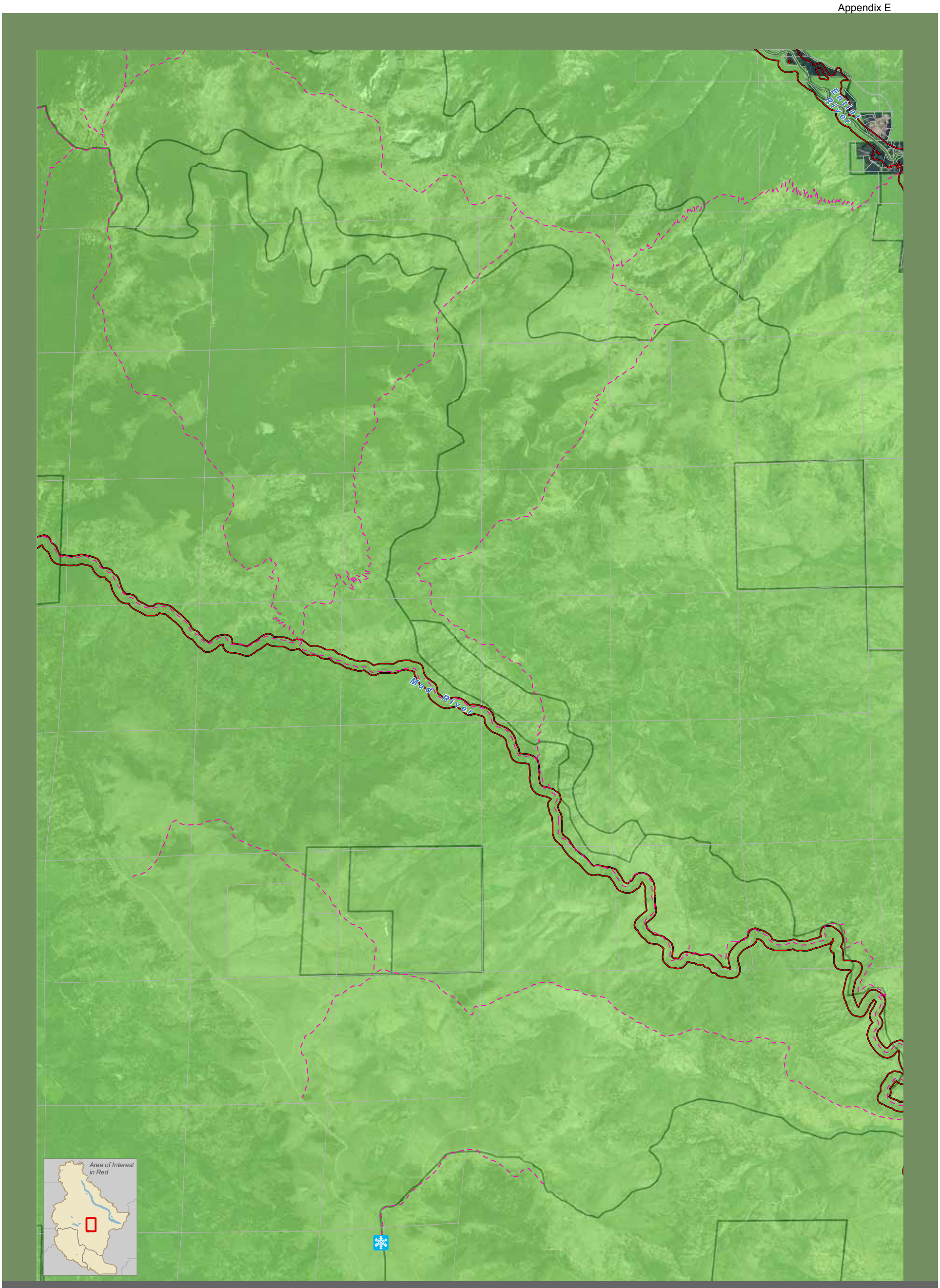


Public Access
26



Public Access
27

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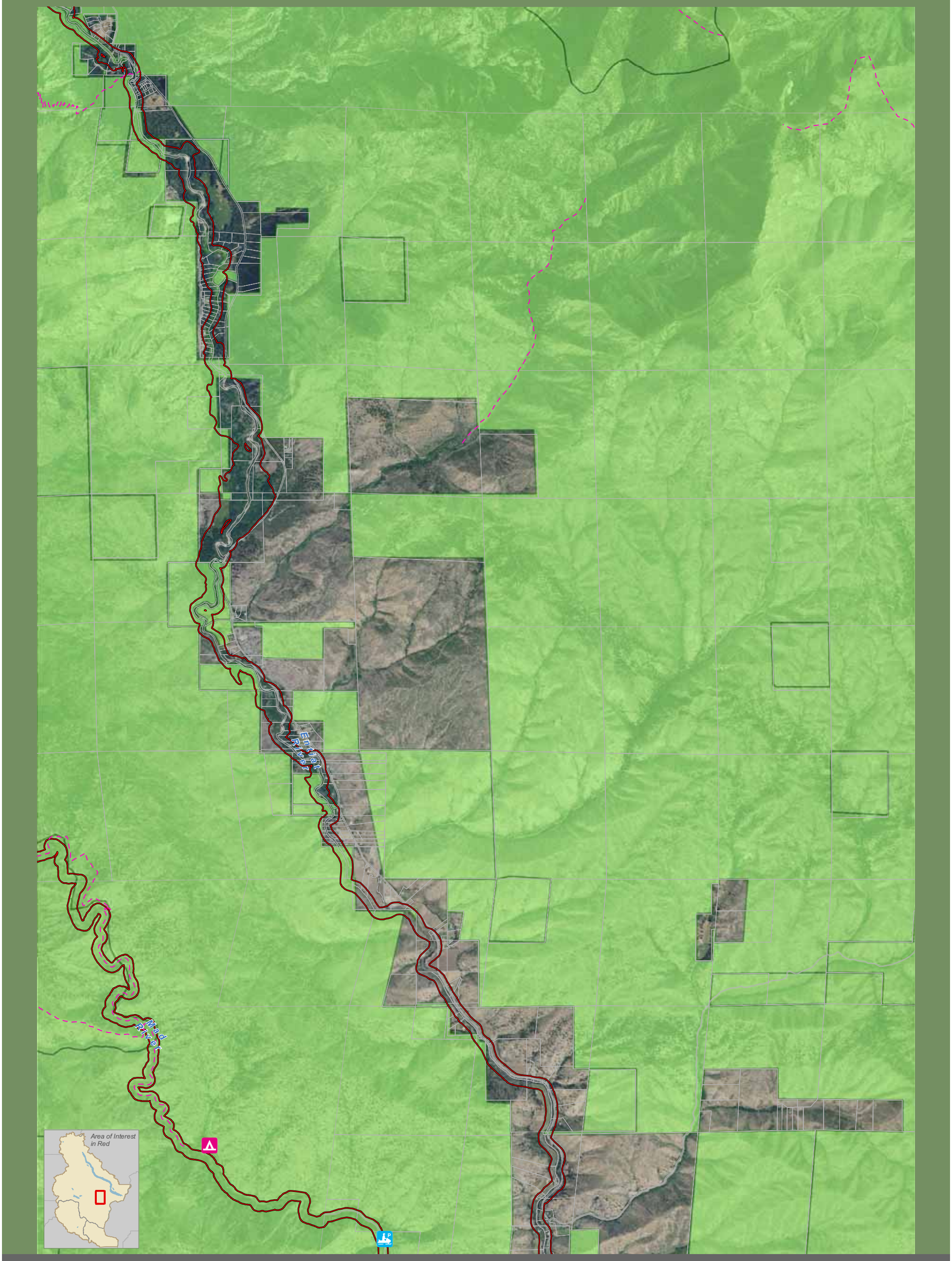

Public Access
28

Chelan County Shoreline Master Program

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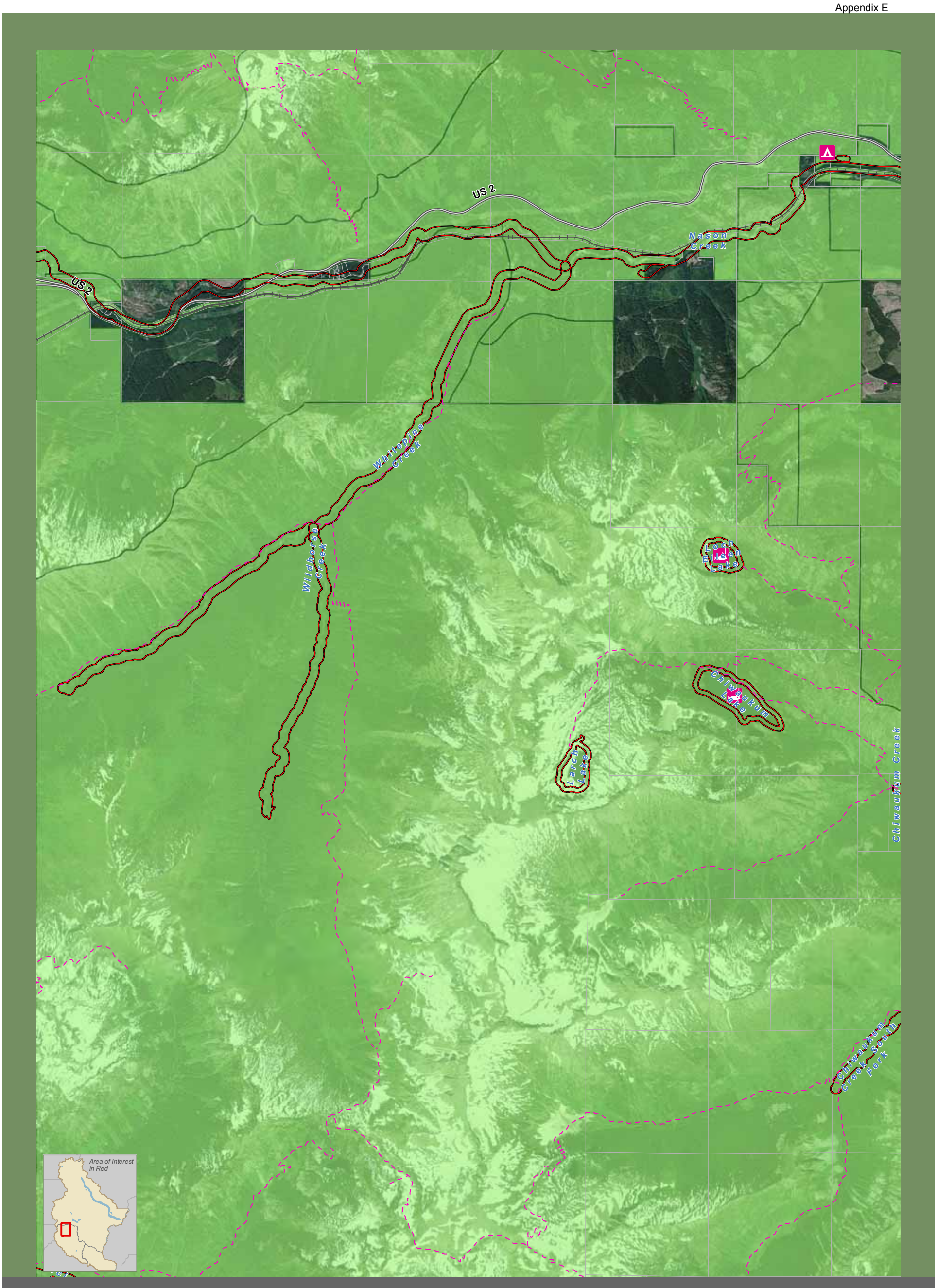

Public Access

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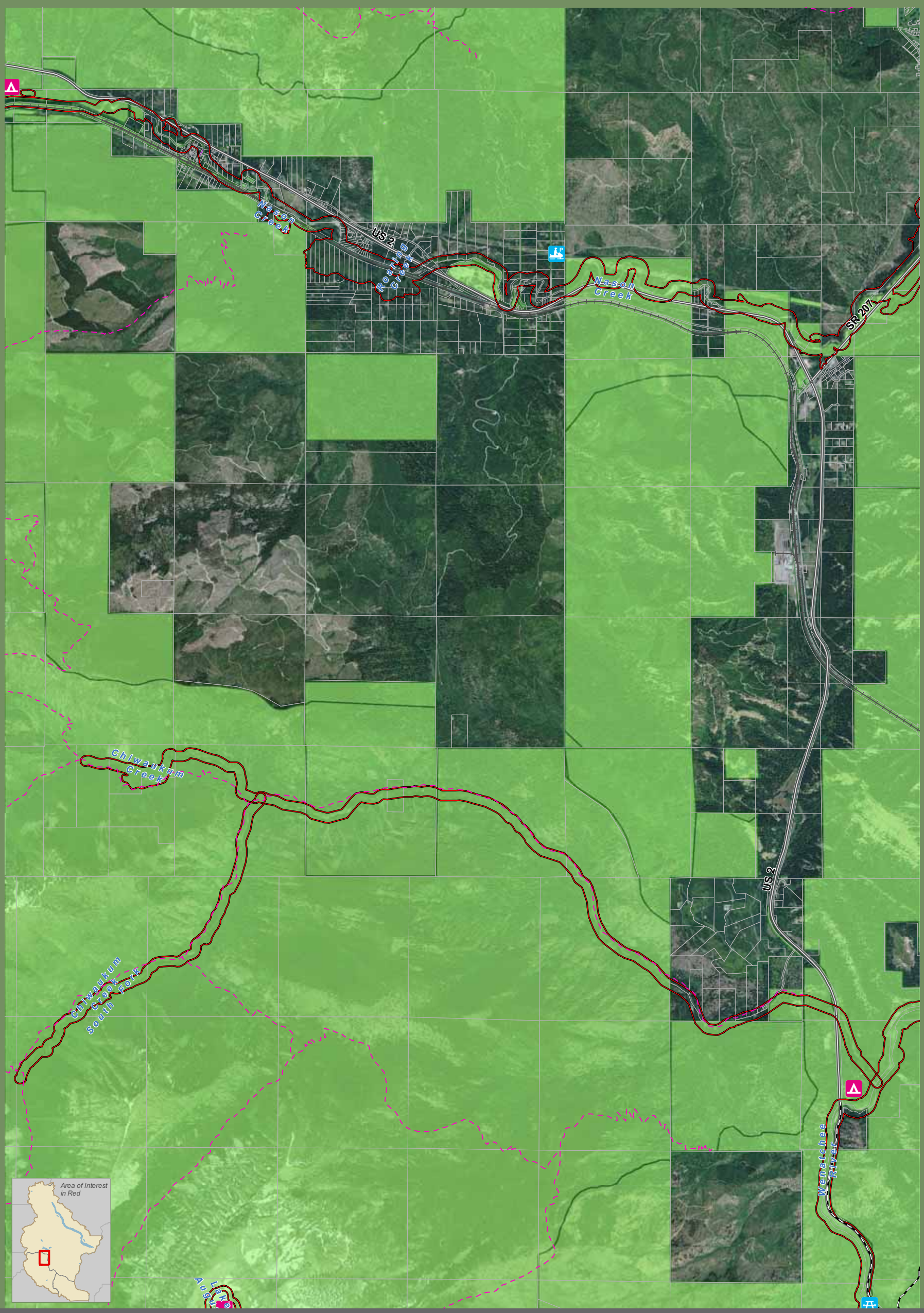

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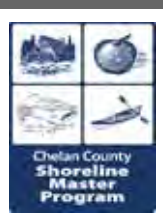

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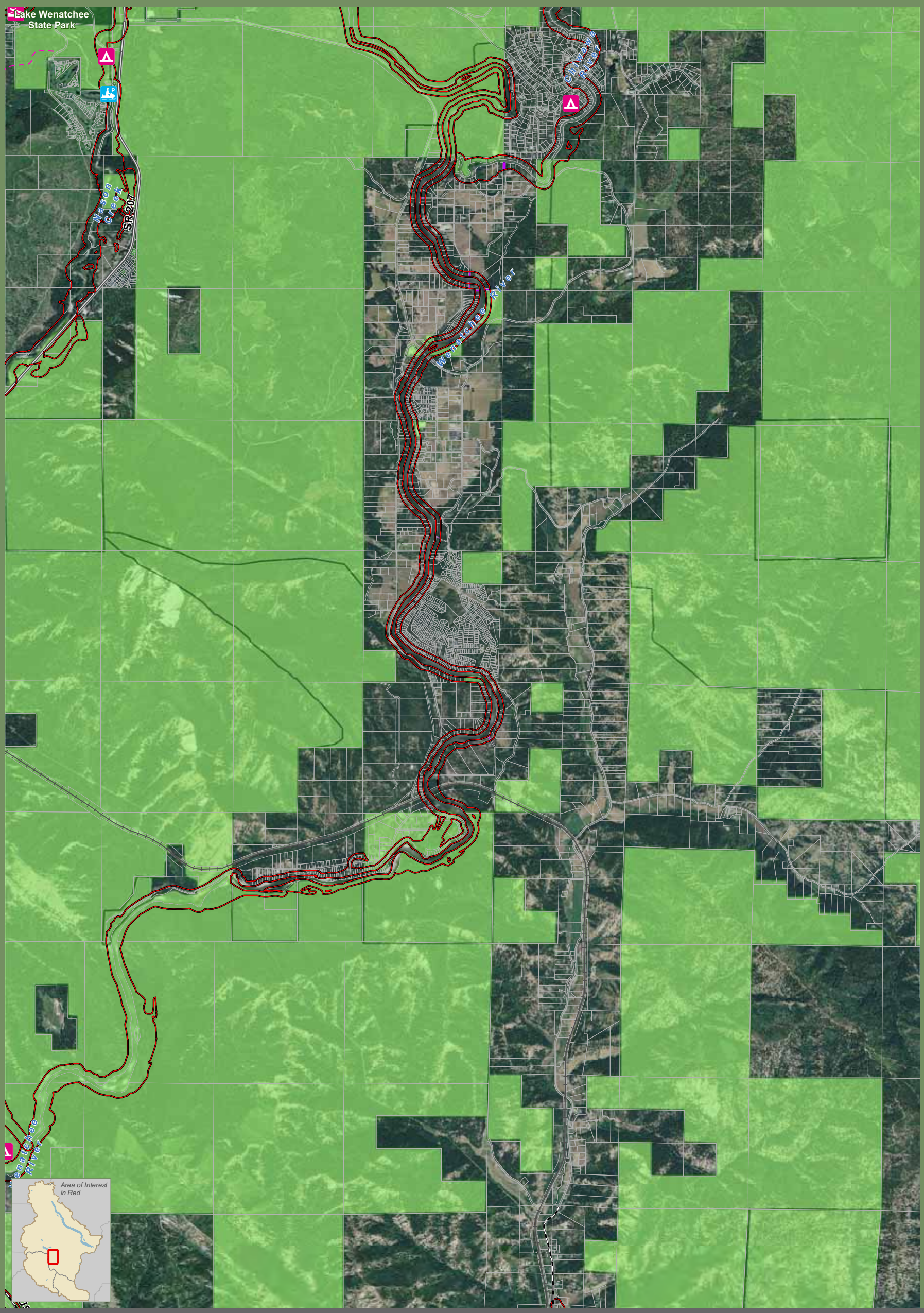

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33

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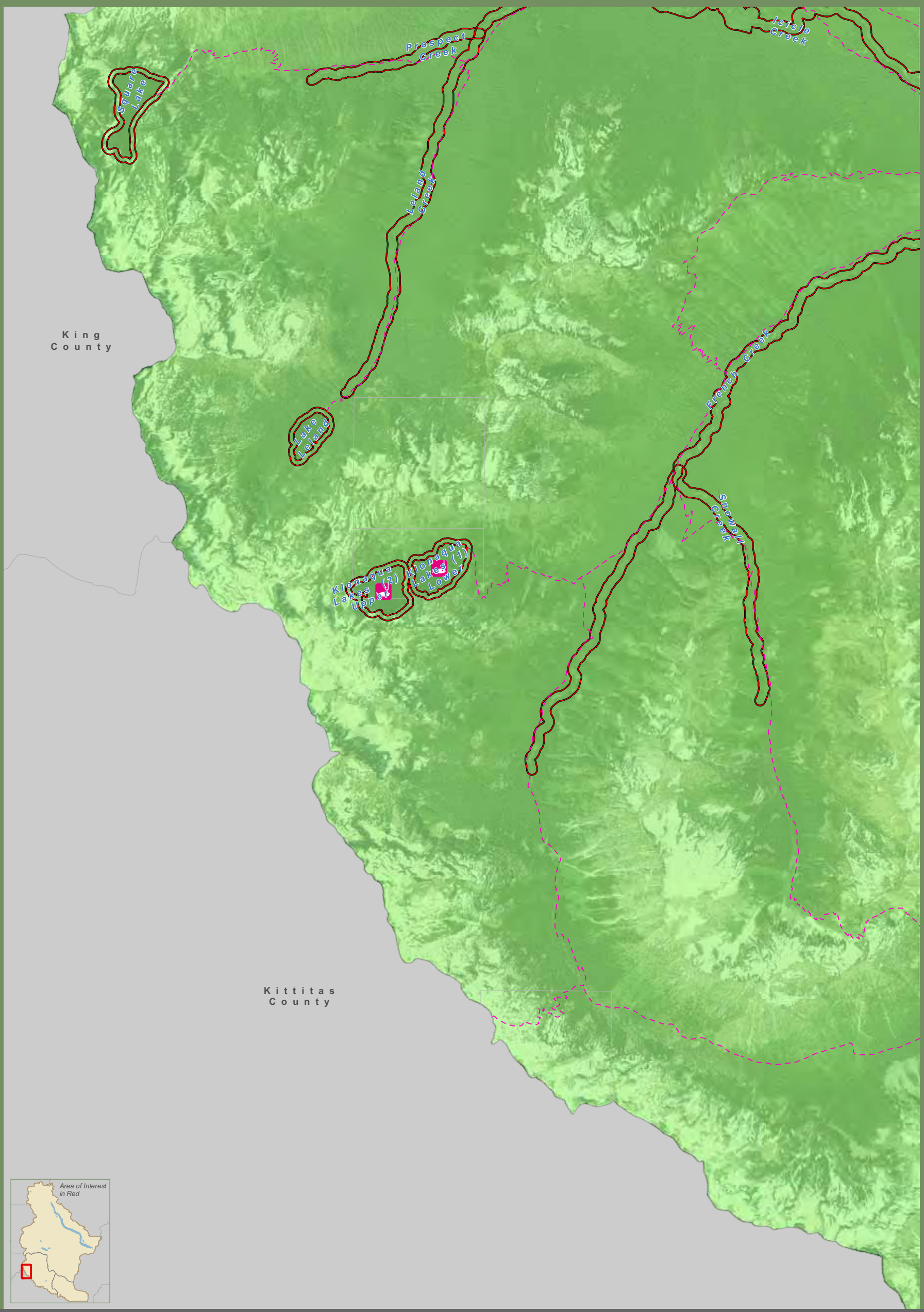

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34

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

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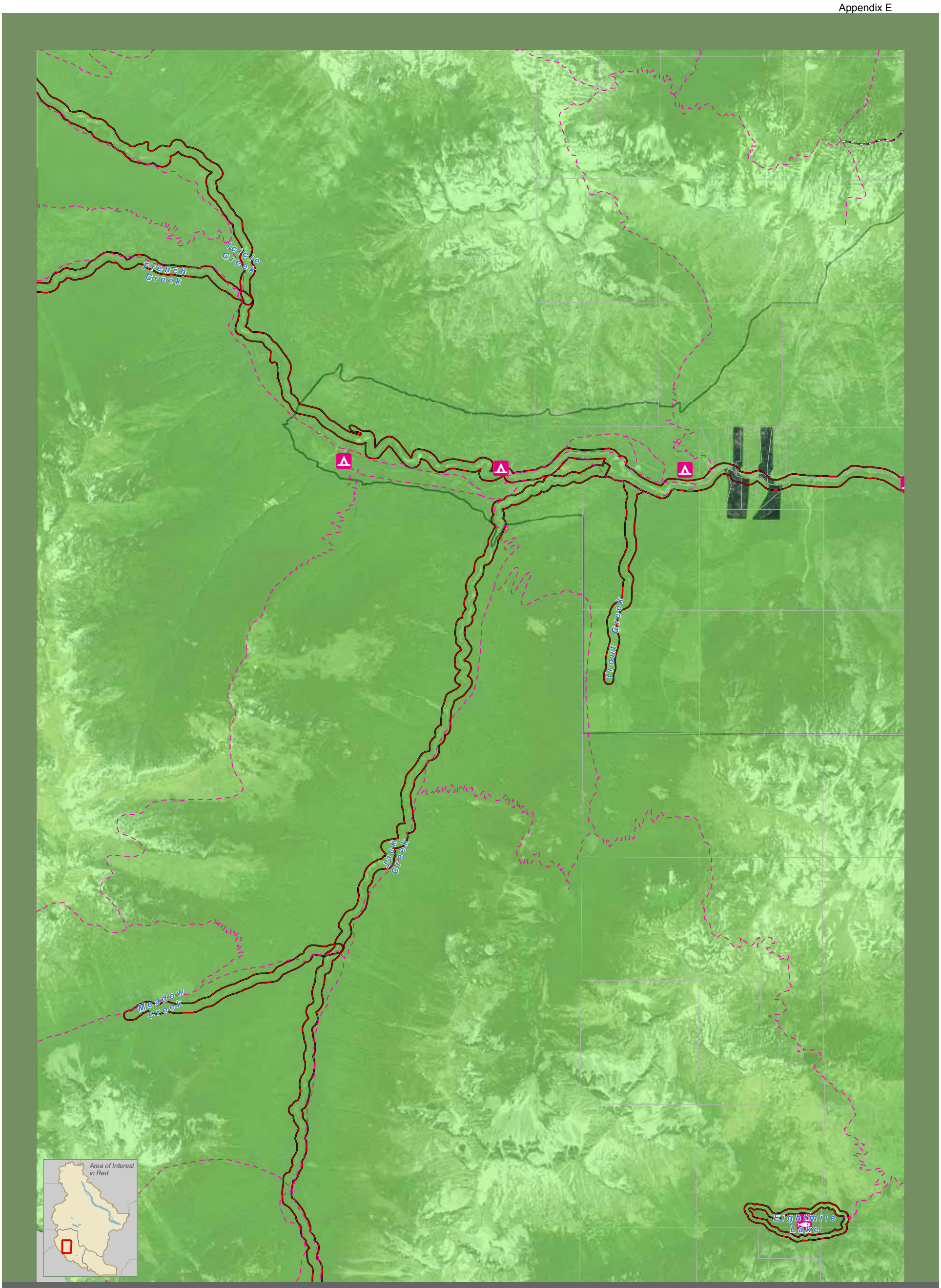

Public Access
35

Chelan County Shoreline Master Program

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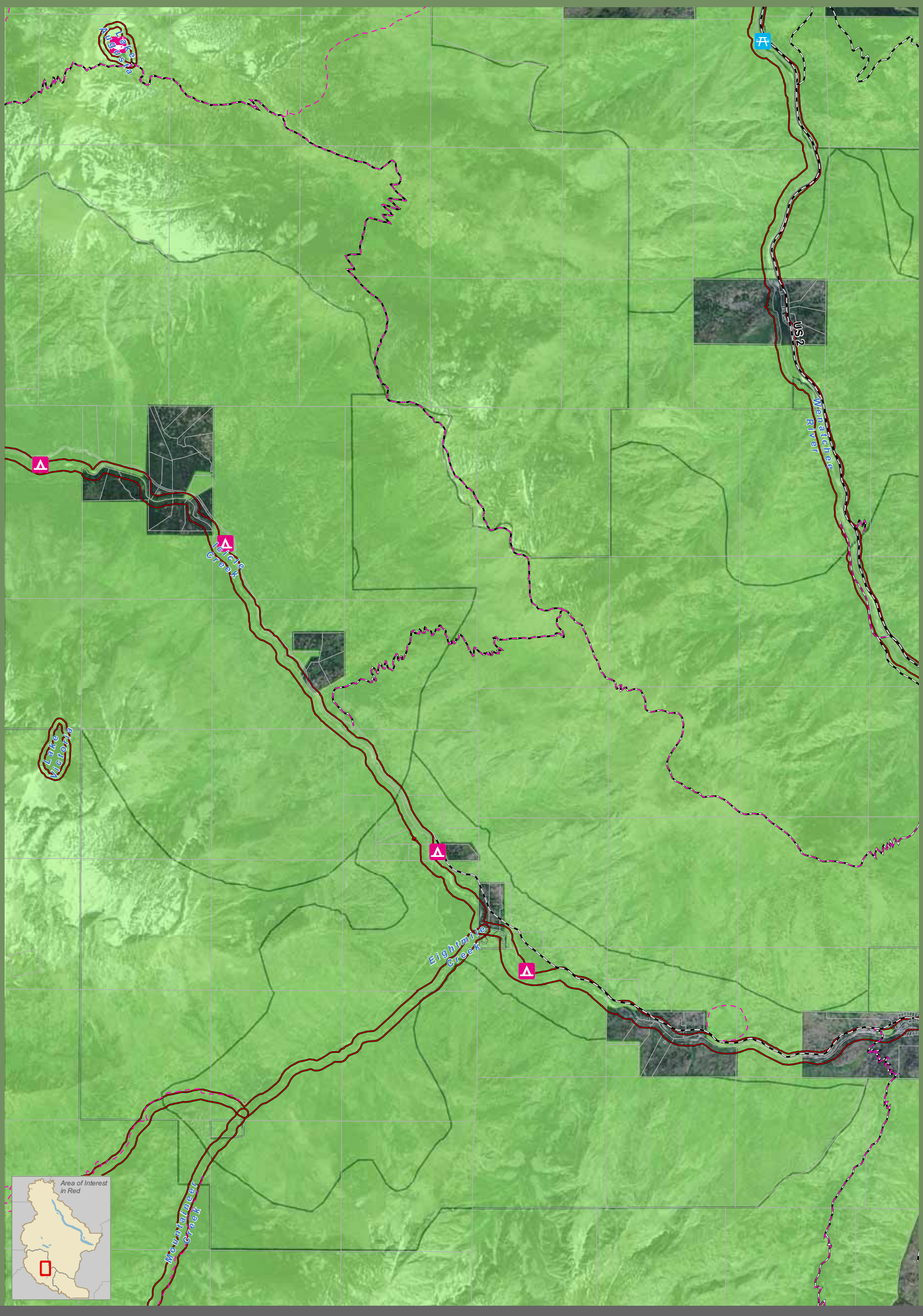

Public Access
36

Chelan County Shoreline Master Program

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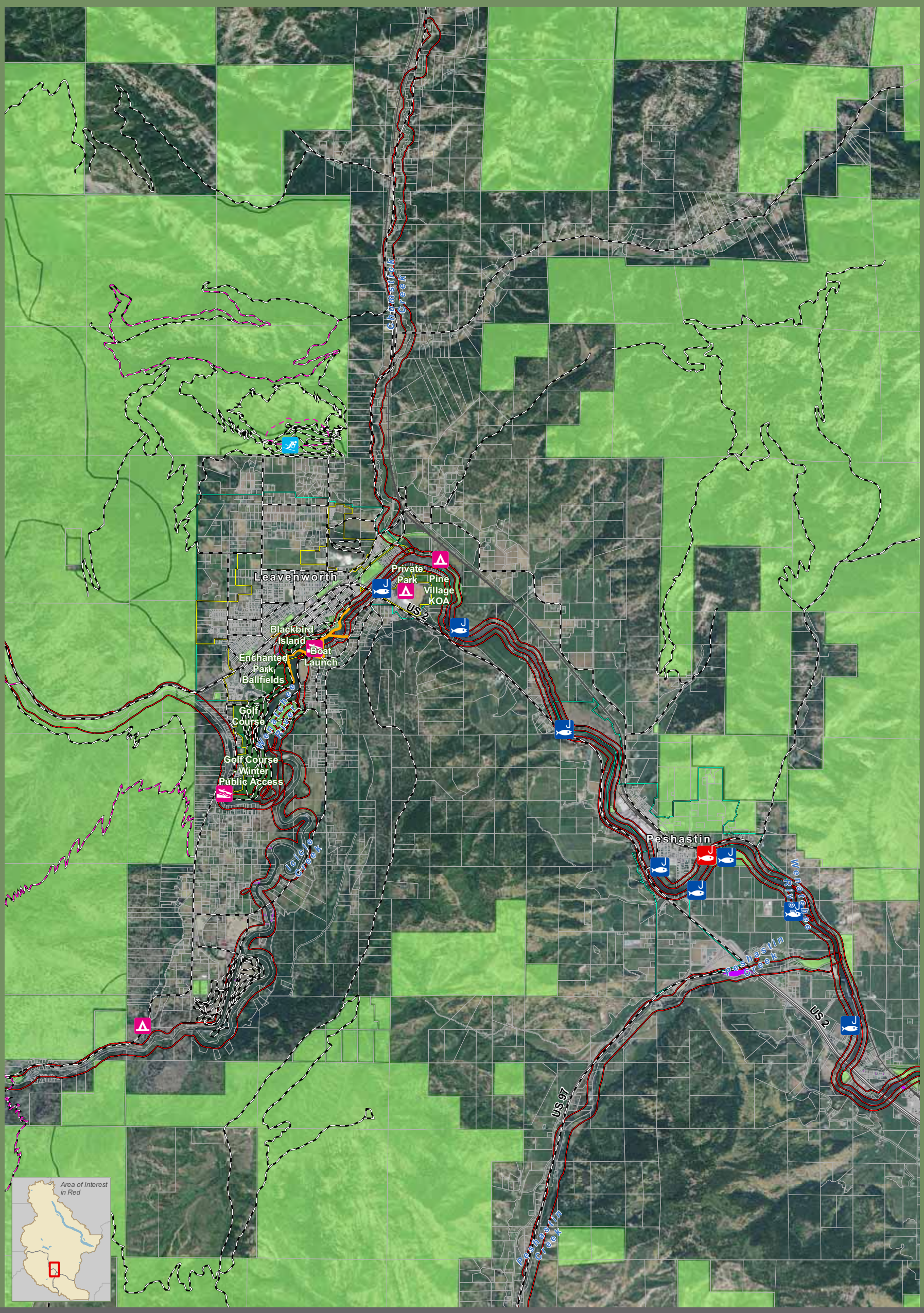

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37

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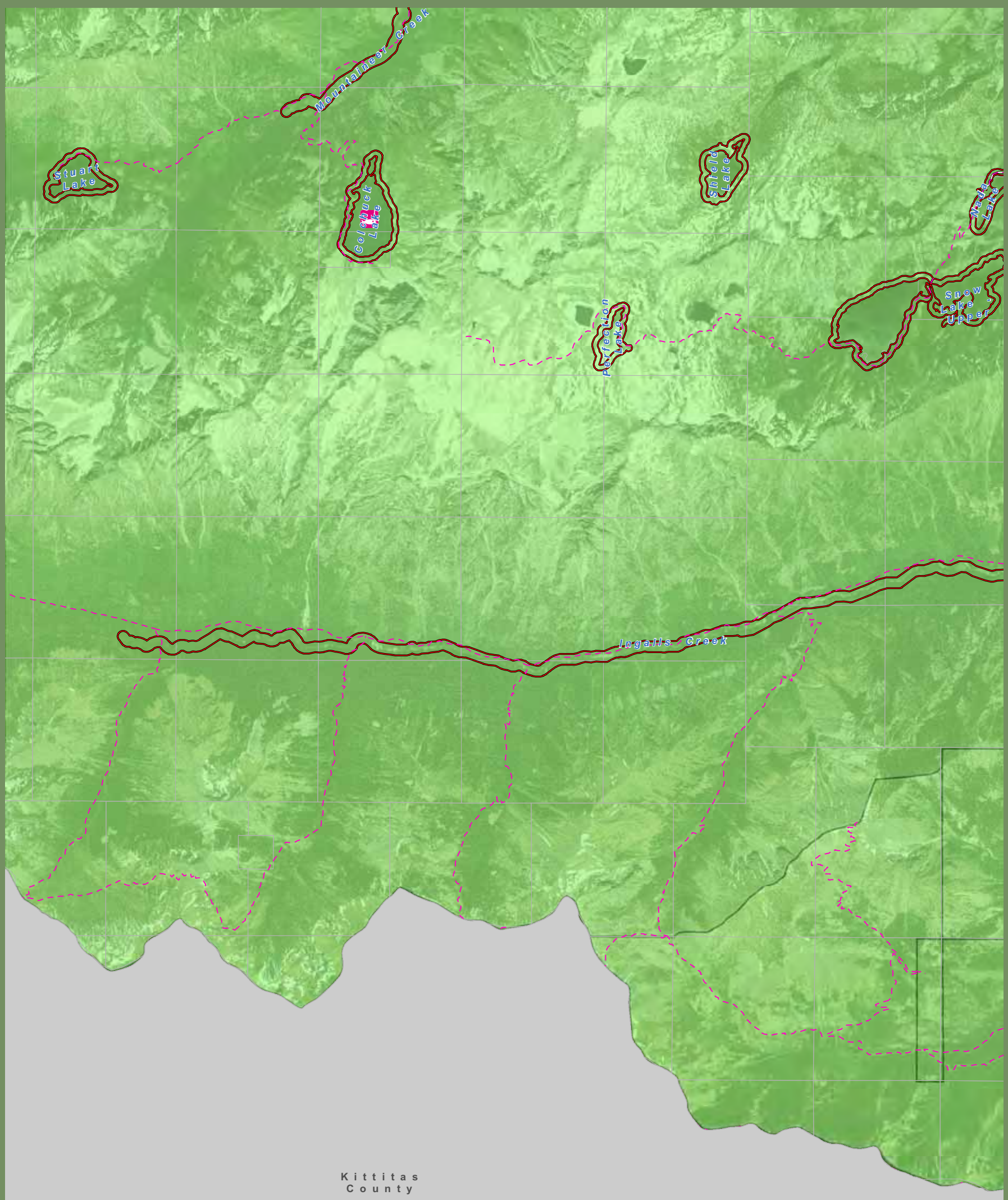

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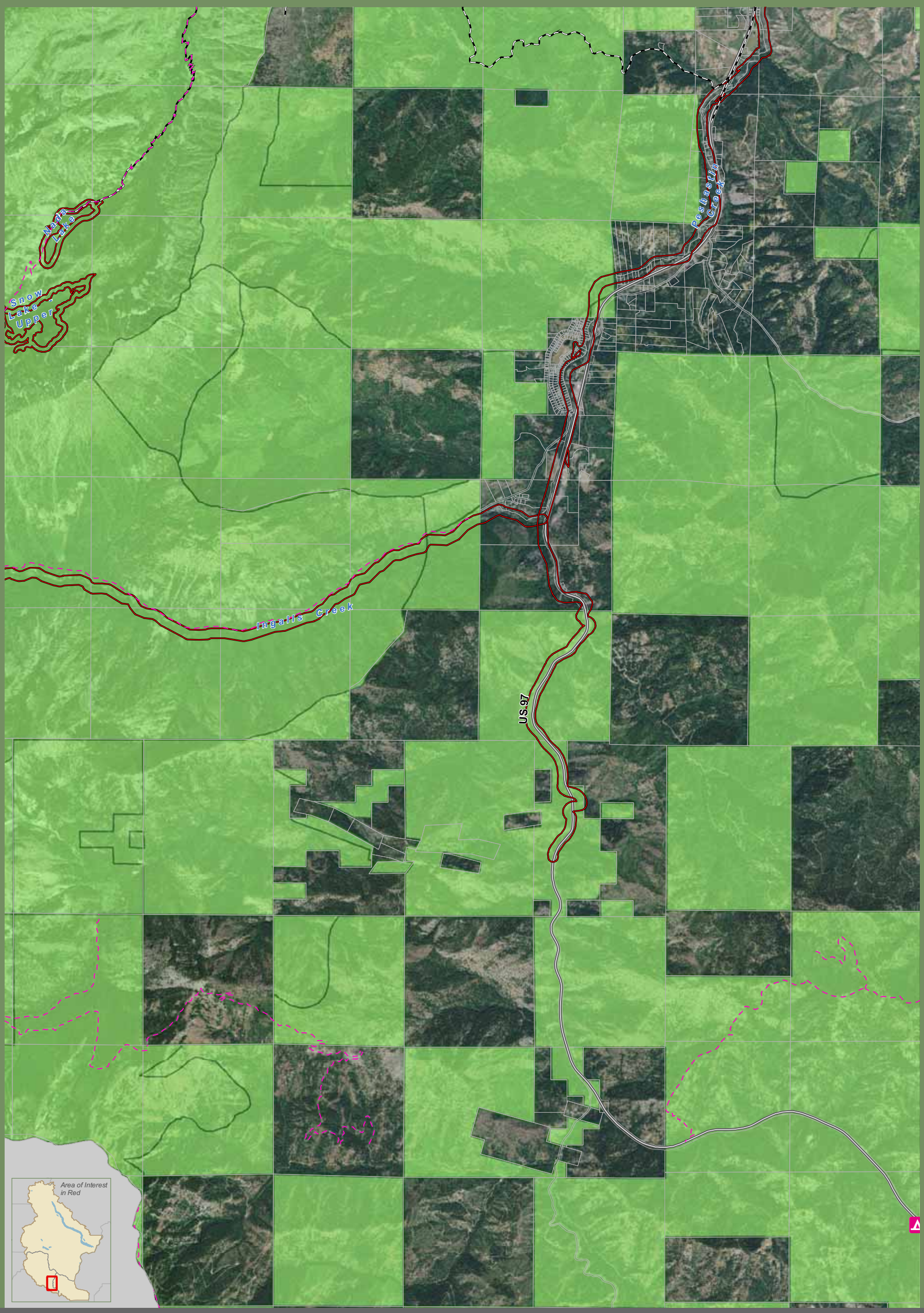

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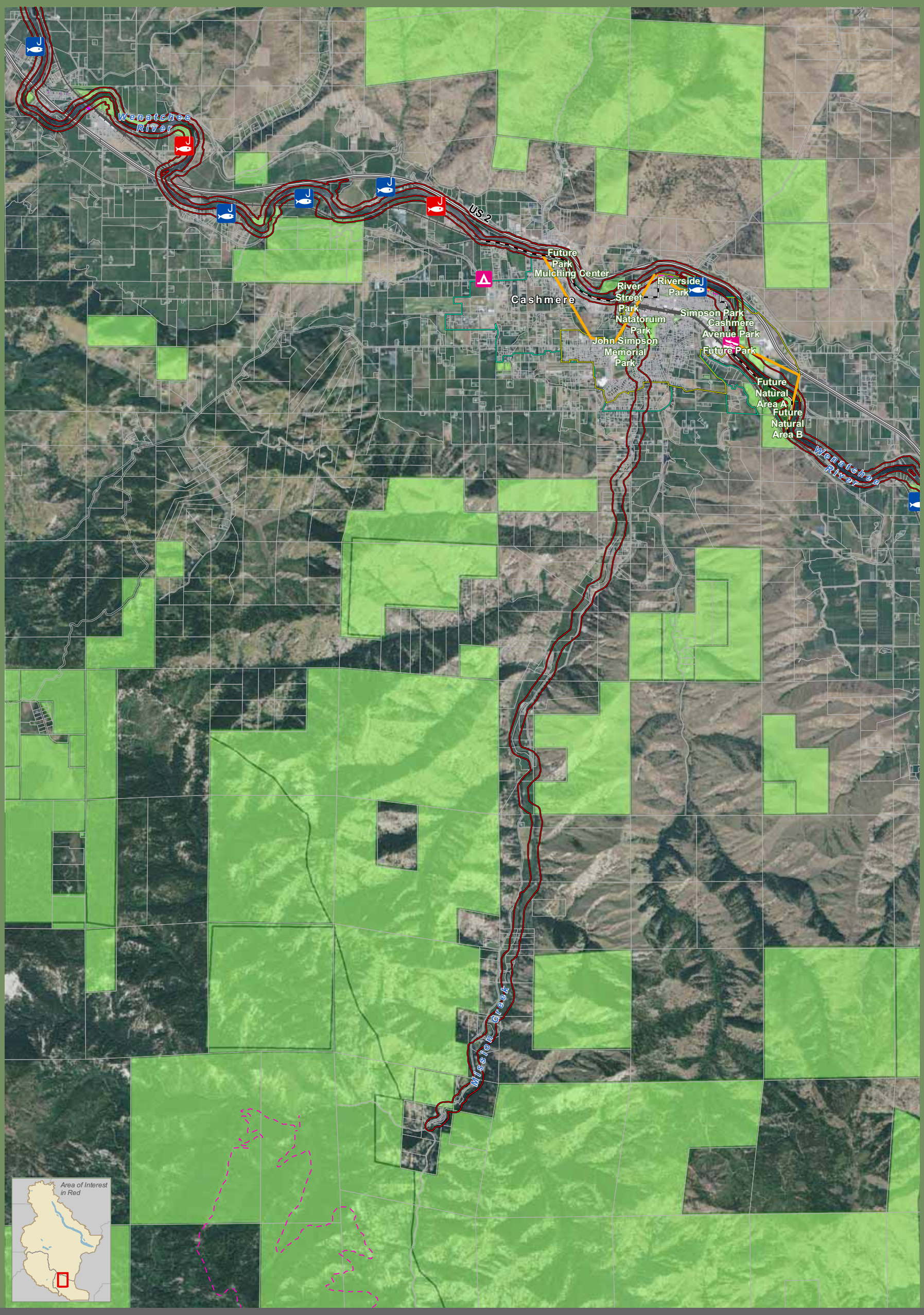

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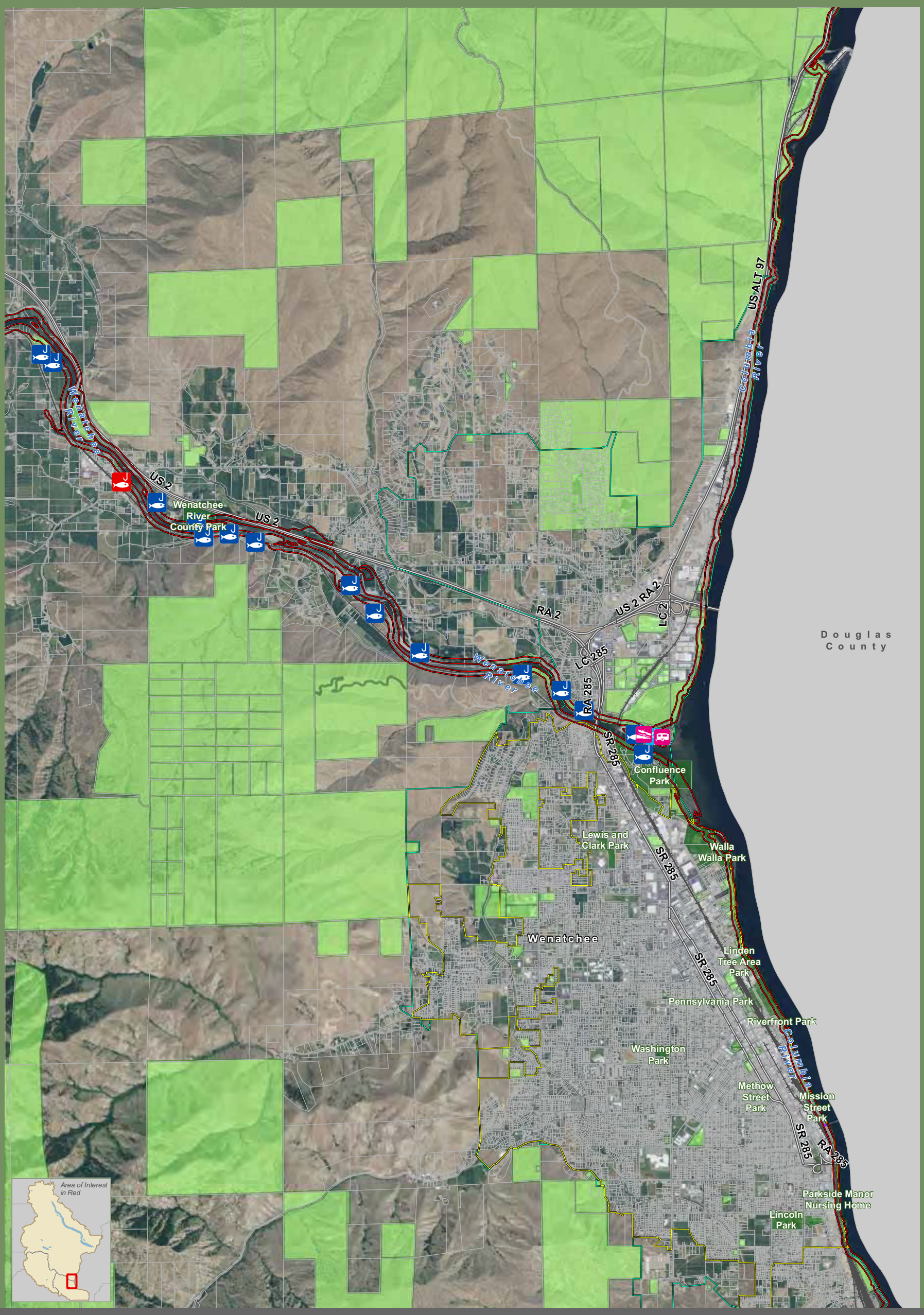

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Chelan County Shoreline Master Program

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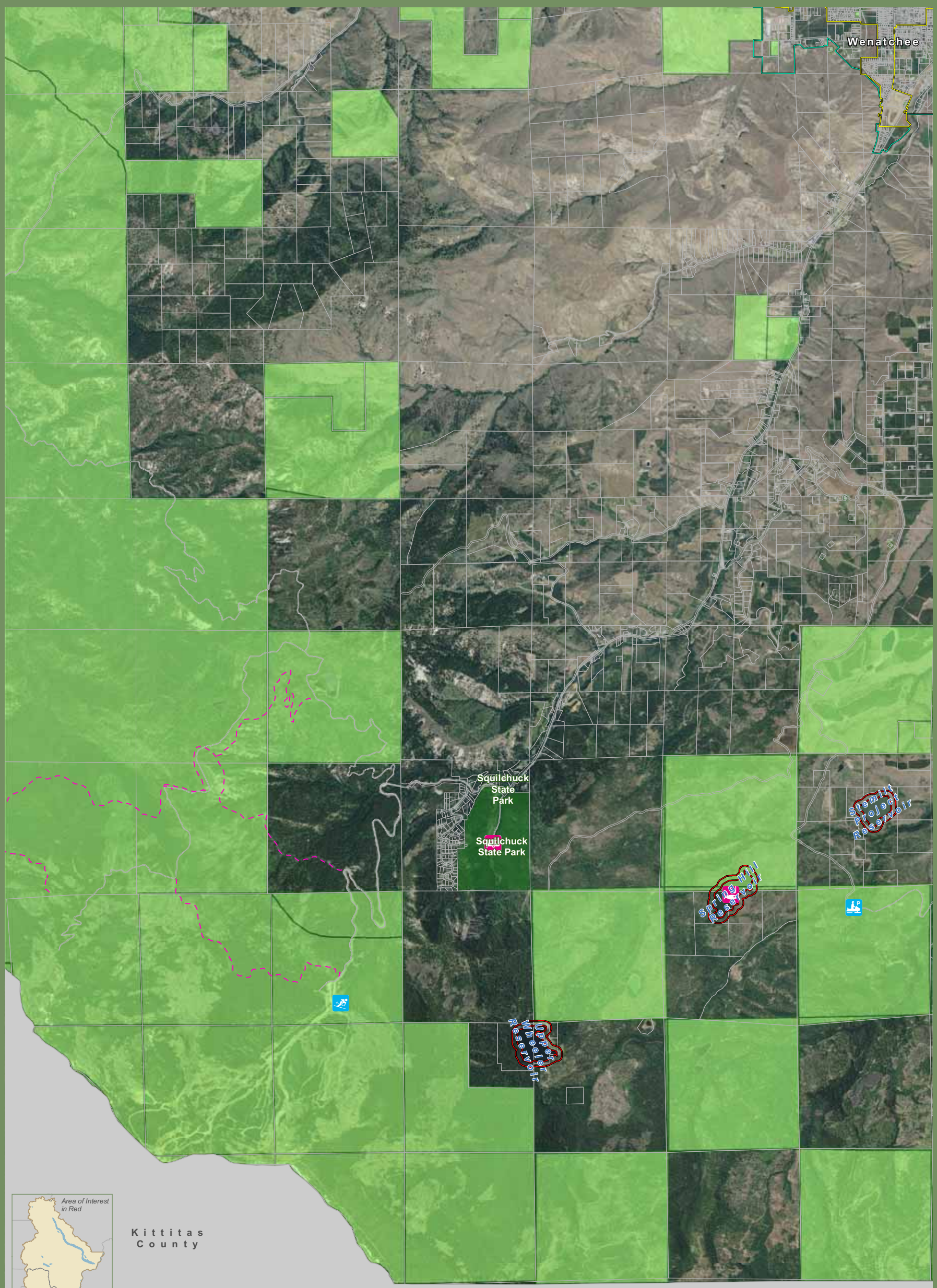

Public Access
42

Chelan County Shoreline Master Program

THE WATERSHED COMPANY

0 0.25 0.5
Miles
1 inch equals 4,000 feet

March 30, 2010
Data: WA DOE, WA OFM, TPL, TNC, Chelan County, WA State Parks, WNF

Public Access, Parks, and Other Public Lands

- Boat Launch
- Campground
- Comm. Dock/Marina
- Fishing Access
- Horse Camp
- Marina
- Other Boating Facility
- Picnic Area
- RV Camp
- Ski Area
- SnoPark
- Trailhead
- Visitor Info Site
- Winter Rec. Facility
- Fishing Easement
- Fishing Easement with Boatlaunch
- Parks
- Other Public and Protected Lands
- Potential ROW Access
- View Corridors
- Hiking Trails
- Proposed Trails
- Highways
- Railroads
- Parcels
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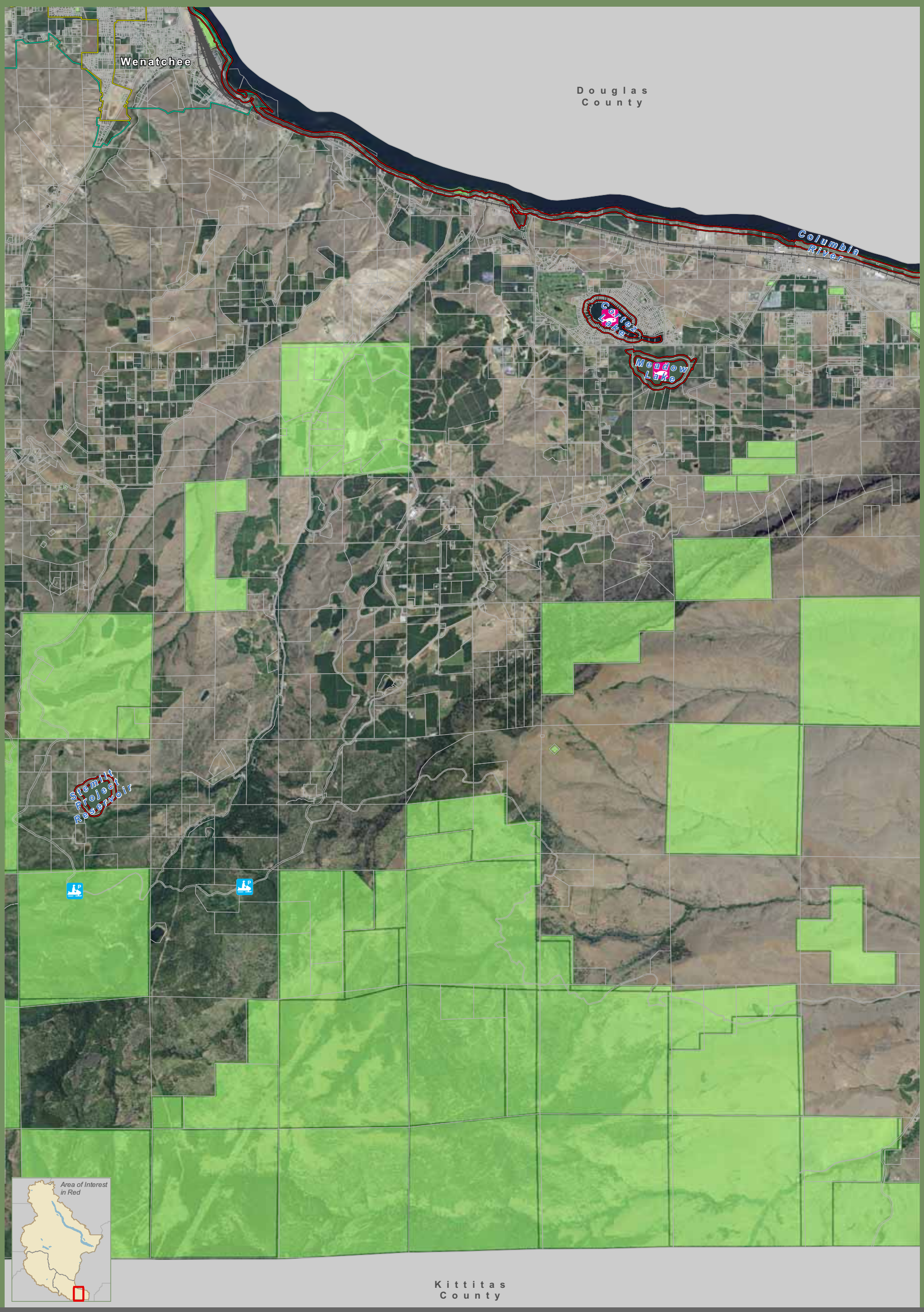

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- Other Boating Facility
- Picnic Area
- RV Camp
- Ski Area
- SnoPark
- Trailhead
- Visitor Info Site
- Winter Rec. Facility

*Access only via public lands

- Fishing Easement
- Fishing Easement with Boatlaunch
- Other Public and Protected Lands
- Potential ROW Access
- View Corridors
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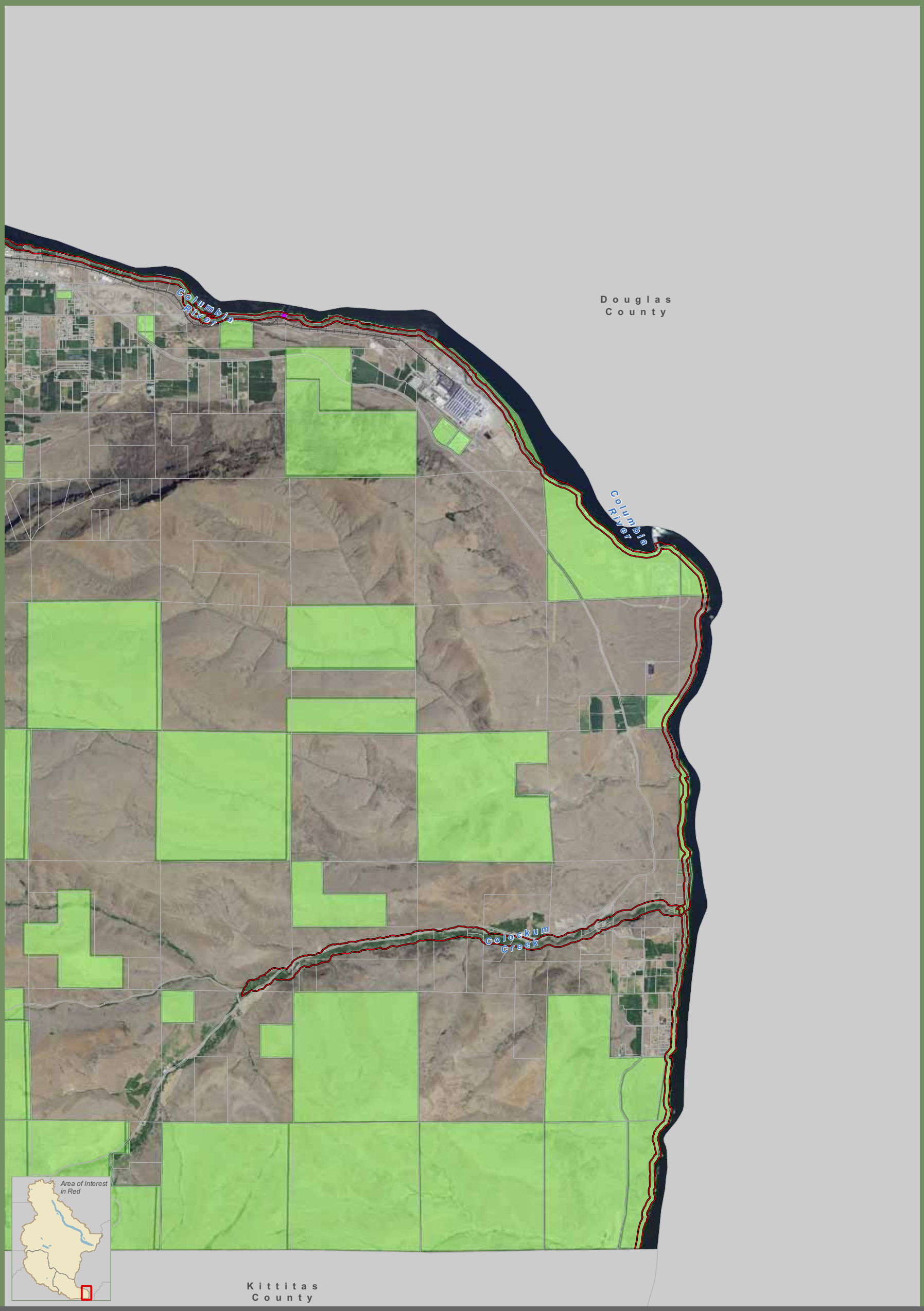

Public Access
44

Public Access, Parks, and Other Public Lands

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APPENDIX F: GOALS AND POLICIES

GENERAL REGULATION POLICIES 1

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GENERAL REGULATION POLICIES

4.1 Archaeological and Historic Resources

A. **Preservation, Restoration, Education.** Whenever possible, archeological or historic sites should be preserved for scientific study and public observation. In areas known to contain significant archaeological and historic data, a condition should be placed on shoreline permits which would allow for site inspection and evaluation to ensure proper salvage of such data.

B. **Impact Avoidance.** Any proposed site development and/or associated site demolition work should be planned and carried out so as to avoid impacts to the cultural resource or to provide appropriate mitigation.

C. **Consultation.** Consultation with professional archaeologists and historians is encouraged to identify areas containing potentially valuable archaeological data, areas of inadvertent discovery and to establish procedures for salvaging data. Appropriate agencies to consult include, but are not limited to, the Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Colville Reservation, and the Washington State Department of Archaeology and Historic Preservation (DAHP).

D. **Adjacent Cultural Site.** If development or demolition is proposed abutting an identified historic, cultural or archaeological site, then the proposed development should be designed and operated so as to be compatible with continued protection of the historic, cultural or archaeological site.

4.2 Ecological Protection and Critical Areas

A. **No net loss of ecological functions.** Shoreline use and development should be carried out in a manner that prevents or mitigates adverse impacts, both on site and to the extent that impacts may propagate up- or downstream, so that the resulting ecological condition does not become worse than the current condition. For each development, this means assuring no net loss of ecological functions and processes relative to the existing condition, protecting critical areas designated in Appendix B of this SMP, and protecting additional established shoreline buffers in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property.

   Shoreline ecological functions that should be protected include, but are not limited to, fish and wildlife habitat, food chain support, and water temperature maintenance. Shoreline processes that should be protected include, but are not limited to, water flow; erosion and accretion; infiltration; ground water recharge and discharge; sediment delivery, transport, and storage; large woody debris recruitment; organic matter input; nutrient and pathogen removal; and stream channel formation/maintenance.

B. **Evaluating potential for adverse impacts**. In assessing the potential for new uses and developments to cause adverse impacts on ecological functions or processes, the following should be considered:

   1. Effects on ecological functions and ecosystem processes; and
   2. Effects that occur on-site and effects that may occur off-site; and
   3. Immediate effects and long-term effects; and
   4. Direct effects of the project and indirect effects; and
   5. Individual effects of the project and the incremental or cumulative effects resulting from the project added to other past, present, and reasonably foreseeable future actions; and
   6. Compensatory mitigation actions that offset adverse impacts of the development action and/or use.

C. **Development standards should protect functions.** Development standards for density, frontage, buffers, impervious surface, shoreline stabilization, vegetation conservation, buffers, critical areas, and water quality should protect existing shoreline ecological functions and processes. During permit review, the Shoreline Administrator should consider the expected impacts associated with proposed shoreline development when assessing compliance with this policy.

4.3 Flood Hazard Reduction

A. **Implement flood hazard plans and regulations.** Ensure public and private development applications site and design flood control measures consistent with appropriate engineering principles, including guidelines of the Natural Resource Conservation Service, the U.S. Army Corps of Engineers, Chelan County Multi-Jurisdiction Natural Hazard Mitigation Plan, watershed plans, restoration plans, critical area regulations, floodplain regulations, and stormwater management plans and regulations in order to prevent flood damage, maintain the natural hydraulic capacity of floodways, and conserve limited resources such as fish habitat, water, and soil.

B. **Non-structural methods preferred.** Where feasible, non-structural methods to protect, enhance, and restore shoreline ecological functions and processes and other shoreline resources should be encouraged as an alternative to structural flood control works. Non-structural methods may include, but are not limited to, shoreline buffers, land use controls, relocation, wetland restoration, dike removal, biotechnical measures, stormwater management programs, land or easement acquisition, voluntary protection and enhancement projects, or incentive programs.

C. **When non-structural flood control is infeasible.** New structural flood control works should only be allowed in shoreline jurisdiction when it can be demonstrated by a scientific and engineering analysis that they are necessary to protect existing development, that impacts to ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss, that appropriate vegetation conservation actions are undertaken, and where non-structural flood hazard reduction measures are infeasible. **Avoid structural flood control works.** New or expanding development or uses in shoreline jurisdiction, including subdivision of land, that would likely require structural flood control works, such as dikes, levees, revetments, floodwalls, channel realignment, gabions or rip-rap, within a river, channel migration zone, floodway, or lake should not be allowed.

D. **Bioengineered flood control works.** Encourage returning river and stream corridors to more natural hydrological conditions. Flood control works should be bioengineered to enhance ecological functions, create a more natural appearance, improve ecological processes, and provide more flexibility for long-term shoreline management.

E. **Avoid damage to other properties.** Flood control works and shoreline uses, development, and modifications should be located, designed, constructed and maintained so their resultant effects on geohydraulic shoreline processes will not cause significant damage to other properties or shoreline resources, and so that the physical integrity of the shoreline corridor is maintained.

4.4 Public Access

A. **Types of public access.** Public access includes both physical and visual approaches to shorelines. Scattered, small access points with low levels of alteration are preferred by some users (e.g., fishing), but not others (e.g., RV camping, swim beaches, picnicking, event facilities).

B. **Increase public access where appropriate.** Encourage increasing the amount and diversity of public access to shorelines consistent with the Shoreline Public Access Plan, the natural shoreline character, property rights, public rights under the Public Trust Doctrine[1], and public safety.

C. **Priorities.** Public access should be maintained, enhanced, and increased in accordance with the following priorities unless found infeasible or unconstitutional:

   1. Maintain existing public access sites and facilities, rights of way, and easements.
   2. Provide new or enhance existing public access opportunities on existing public lands and easements.
   3. Acquire property or easements to add public access opportunities to implement adopted public access plans and/or to recognize opportunities to protect areas that hold unique value for public enjoyment.
   4. Encourage public access to shorelines as part of shoreline development activities.

D. **Findings.** Support public access in private development with demonstrated nexus, proportionality and reasonable necessity for the public access requirement.

E. **Public access planning standards.** Encourage partnership with other federal, state, special district, and municipal agencies, aim for a shoreline public access system that results in:

   1. More than 90% of resident population within 15 miles of regional boating, fishing, trails, parks, and open space facilities.
   2. More than 50% of resident population within 1.5 miles of local/community shoreline parks and trails.

   See Appendix E for current and future levels of service.

F. **Implementation.** Support implementation of the Shoreline Public Access Plan contained in Appendix E to meet growing resident and tourist populations. Implementation strategies should address public access and recreation standards and a capital improvement program. Encourage periodically review the Shoreline Public Access Plan, at a minimum every eight years.

[1] The "public trust doctrine" is a common law principle holding that "the waters of the state are a public resource owned by and available to all citizens equally for the purposes of navigation, conducting commerce, fishing, recreation and similar uses." While the doctrine "protect(s) public use of navigable water bodies below the ordinary high water mark," the doctrine "does not allow the public to trespass over privately owned uplands to access the tidelands." See: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/public_trust.html.

G. **Public access exceptions.** Public access should not be required where it is demonstrated to be infeasible due to reasons of incompatible uses, safety, security, or impact to the shoreline environment or due to constitutional or other legal limitations that may be applicable.

H. **Willing property owners.** Encourage willing property owners to participate in public access projects, such as through conservation easements and trail easements.

I. **Respect private property.** Public access does not include the right to enter upon or cross private property, except on dedicated public rights-of-way or easements or where development is specifically designed to accommodate public access. The design of public access should minimize potential impacts to private property and individual privacy. This may include providing a physical separation to reinforce the distinction between public and private space, and may be achieved by providing signage, adequate space, and/or through screening with landscape planting or fences.

J. **Safety and environment.** Public access should be designed consistent with public safety objectives. Public access design should also conserve or protect natural amenities. Where public access is determined to be incompatible due to reasons of safety, security, or impact to the shoreline, the proponent should consider alternate methods of providing public access, such as offsite improvements, viewing platforms, separation of uses through site planning and design and restricting hours of public access. Off-site public access improvements may be allowed if such improvements would provide a greater public benefit and reduce safety and environmental impacts.

K. **Visual access.** Views to shorelines contribute to the quality of life, tourism economy, and property values. Support flexible development standards, such as height, bulk, scale, setbacks, lighting, and view corridors, to assure preservation of unique, fragile, and scenic elements and to protect existing views from public property or large numbers of residences, particularly where development would exceed three stories in height.

L. **Roads, streets, and alleys abutting bodies of water.** Roads, streets, and alleys abutting bodies of water should be preserved, maintained, consolidated enhanced, and/or created for public access.

M. **Fishing easements**. In consultation with the Washington Department of Fish and Wildlife, review fishing easements and work in partnership with the Washington Department of Fish and Wildlife, Chelan County Public Utility District, Cities, land trusts, and others to improve public. Actions may include adding identifiable signage, improving access on unused sites, consolidating access points for maintenance purposes, or land surplus, exchanges or purchases, etc.

N. Accessibility. Public access should be provided as close as possible to the water's edge without causing significant ecological impacts and should be designed in accordance with the Americans with Disabilities Act.

4.5 Vegetation Conservation and Shoreline Buffers

A. **Conserve shoreline vegetation.** Where new developments, uses and/or redevelopments are proposed, shoreline vegetation, both upland and waterward of the OHWM, should be

conserved to maintain shoreline ecological functions and processes. Important functions of shoreline vegetation include, but are not limited to:

1. Providing shade necessary to maintain water temperatures required by salmonids and other organisms that require cool water for all or a portion of their life cycles.
2. Regulating microclimate in riparian and nearshore areas.
3. Providing organic inputs necessary for aquatic life, including providing food in the form of various insects and other benthic macroinvertebrates.
4. Stabilizing banks, minimizing erosion and sedimentation, and reducing the occurrence and severity of landslides.
5. Reducing fine sediment input into the aquatic environment by minimizing erosion, aiding infiltration, and retaining runoff.
6. Improving water quality through filtration and vegetative uptake of nutrients and pollutants.
7. Providing a source of large woody debris, in appropriate areas/water bodies, to moderate flows, create hydraulic roughness, form pools, and increase structural diversity for salmonids and other species.
8. Providing habitat elements for riparian-associated and aquatic species, including downed wood, snags, migratory corridors, breeding and rearing sites, food, and/or cover.

B. **Native plant list**. Chelan County maintains a list of suggested native plants to be utilized in restoration or mitigation plantings. Property owners may choose species from this list when native plants are desired or required, or may use other native species identified by the Washington Native Plant Society, Washington Department of Natural Resources Natural Heritage Program, Washington Department of Fish and Wildlife, or other agency or entity that has expertise.

C. **Noxious and invasive weeds.** Encourage management and control of noxious and invasive weeds. Control of such species should be done in a manner that retains onsite native vegetation, provides for erosion control, and protects water quality. Use of non-toxic or natural controls is preferred.

D. **Fire Protection.** Support property owner's right to protect structures and land through recognized fire protection practices which include the reasonable modification of vegetation within the shoreline jurisdiction and shoreline buffer.

4.6 Water Quality, Stormwater and Nonpoint Pollution

A. **Do not degrade waters.** The location, construction, operation, and maintenance of all shoreline uses and developments should maintain or enhance the quantity and quality of surface and groundwater over the long term.

B. **Assess and mitigate stormwater impacts.** New developments or expansions or retrofits of existing developments should assess the effects of additional stormwater runoff volumes and velocities, and mitigate potential adverse effects on shorelines through design and implementation of appropriate stormwater management measures.

C. **Low impact development.** Use of low impact development (LID) or similar techniques for minimization of impervious surfaces and management of stormwater runoff is encouraged.

D. **Minimize need for synthetic chemical applications.** Shoreline use and development, including invasive or noxious weed control, should minimize the need for synthetic chemical fertilizers, pesticides or other similar synthetic chemical treatments to prevent contamination of surface and ground water and/or soils and adverse effects on shoreline ecological functions and values. Use of natural and non-synthetic applications are encouraged when treatment is necessary.

E. **Provide and maintain buffers.** Appropriate buffers along all wetlands, streams, and lakes should be provided and maintained for new development in a manner that avoids the need for chemical treatment for vegetation management and be consistent with critical areas ordinances and best management practices.

F. **Existing development.** For existing development, implementation of management plans that minimize or avoid the need for chemical treatments of vegetation in shoreline buffers is encouraged. When lands owned by a County are leased to private parties, a vegetation management plan should be negotiated during lease renewal.

SHORELINE MODIFICATIONS AND USES

5.1 General Upland Shoreline Modification and Use Regulations

This section provides policies and standards addressing preferred layouts of shoreline development and appropriate signage serving the intended use and recognizing shoreline locations.

A. **Designs Avoid Sensitive Areas.** Development and uses should be designed in a manner that directs land alteration to the least sensitive portions of the site to maximize vegetation conservation, both upland and aquatic; minimize impervious surfaces and runoff; protect riparian, nearshore, aquatic and wetland habitats; protect wildlife and habitats; protect archaeological, historic and cultural resources; and preserve aesthetic values.

B. **Location of Nonwater-Oriented Accessory Uses.** Nonwater-oriented accessory development or use that does not require a shoreline location should be located landward of shoreline jurisdiction unless such development is required to serve approved water-oriented uses and/or developments.

   When sited within shoreline jurisdiction, uses and/or developments such as parking, service buildings or areas, access roads, utilities, signs, and materials storage should be located landward of shoreline, riparian and/or wetland buffers and landward of water-oriented developments and/or other approved uses.

C. **Minimize Impacts on Shoreline and Upland Uses.** Development should be located, designed, and managed to minimize impacts on shoreline or upland uses through bulk and scale restrictions, setbacks, buffers, light shielding, noise attenuation, and other measures.

5.2 General Aquatic Shoreline Modification and Use Regulations

A. **Protect beneficial uses, including ecological functions and water-dependent uses.** Shoreline modifications and uses should be designed, located and operated in a manner that supports long-term beneficial use of the shoreline and protects and maintains shoreline ecological functions and processes. Modifications should not be permitted where they would result in a net loss of shoreline ecological functions, adversely affect the quality or extent of habitat for native species, adversely impact other habitat conservation areas, or interfere with navigation or other water-dependent uses.

B. **Minimize and mitigate unavoidable impacts**. All significant adverse impacts to the shoreline should be avoided or, if that is not possible, minimized to the extent feasible and then mitigated.

C. **Protect water quality and hydrograph**. Shoreline modifications and uses should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

5.3 Agriculture

A. **Maintain Agriculturally Productive Lands.** Lands used for agriculture may be maintained in agricultural production.

B. **Encourage Vegetative Buffer.** Support maintenance of vegetation along the shoreline of orchards and farming activities to encourage the slowing of surface water runoff, reduction of siltation, and provide sanctuary for fish and other wildlife.

C. **Avoid Water Pollution.** Agricultural activities should be conducted and buildings designed to avoid surface or groundwater pollution.

D. **Avoid Structures in Floodplains.** Agricultural structures should be located outside of the floodway. Agricultural structures may be placed within the 100-year floodplain when adequate protective measures are implemented.

E. **Manage Water Resources.** Water resources should be managed in accordance with federal and state laws and adopted County watershed plans.

F. **Right to Farm.** The farmer shall have the right to farm, consistent with appropriate local, State and Federal requirements.

G. **Siting and Design.** Land use activities should be sited and designed to avoid and mitigate potential conflicts with adjacent agricultural practices.

H. **Resource Uses in Rural Areas.** Agriculture and timber lands that are not designated resource lands should be accommodated in the rural setting. The development of rural lands should not preclude the existing use of land for agriculture production.

I. **Value Added Activities.** Encourage value-added agricultural activities that strengthen and diversify the agricultural economy.

5.4 Aquaculture

A. **Water-dependent and preferred use.** Aquaculture is dependent on the use of the water area and, when consistent with control of pollution and avoidance of adverse impacts to the environment and preservation of habitat for resident or anadromous native species, is a preferred use of the water area.

B. **Recognize limited availability of suitable locations.** Potential locations for aquaculture activities are relatively restricted because of specific requirements related to water quality, temperature, oxygen content, currents, adjacent land use, wind protection and navigation.

C. **Recognize and facilitate non-commercial aquaculture.** Aquaculture can be commercial or non-commercial. Non-commercial aquaculture is used for the purpose of enhancement and restoration of fish and wildlife resources. The goals and objectives of non-commercial aquaculture include, but are not limited to, supplementation, conservation, restoration, supplementation, mitigation, recreation, education, reintroduction, research, and harvest. Non-commercial aquaculture is location dependent because of the requirement for natal waters. Permitting should be streamlined for facilities that support propagation and acclimation of desirable salmonid species, particularly those covered by the Upper Columbia Salmon Recovery Plan.

D. **Preference for lower-impact methods.** Preference should be given to those forms of aquaculture that involve lesser environmental and visual impacts, and lesser impacts to native plant and animal species. In general, projects that require either no structures or submerged structures are preferred over those that involve substantial floating structures. Projects that involve little or no substrate modification are preferred over those that involve substantial modification. Projects that involve little or no supplemental food sources, pesticides, herbicides or antibiotic application are preferred over those that involve such practices.

E. **Protect ecological functions.** Aquaculture activities should be designed, located and operated in a manner that supports long-term beneficial use of the shoreline and protects and maintains shoreline ecological functions and processes. Aquaculture should not be permitted where it would result in a net loss of shoreline ecological functions, adversely affect the quality or extent of habitat for native species, adversely impact other habitat conservation areas, or interfere with navigation or other water-dependent uses.

F. **Prevent cumulative adverse effects.** Aquaculture that involves risk of cumulative adverse effects on water quality, sediment quality, benthic and other aquatic organisms, and/or wild fish populations through potential contribution of antibiotic resistant bacteria, escapement of non-native species, or other adverse effects on ESA-listed species should not be permitted unless the potential benefits outweigh the potential risks as determined by the appropriate state or federal agencies..

   Consideration should be given to both the potential beneficial impacts and potential adverse impacts that aquaculture development might have on the physical environment; on other existing and approved land and water uses, including navigation; and on the aesthetic qualities of a project area.

G. **Restrictions on experimental aquaculture.** Experimental aquaculture means an aquaculture activity that uses methods or technologies that are unprecedented or unproven in the State of Washington. The technology associated with some forms of aquaculture is still experimental and in formative stages. Therefore, some latitude should be given when implementing the regulations of this section in the development of this use. However, experimental aquaculture projects in waterbodies should be limited in scale and should be approved for a limited period of time, as specified by the regulatory agency.

H. **Protect existing aquaculture.** Legally established aquaculture enterprises, including authorized experimental projects, should be protected from incompatible uses that may seek to locate nearby. Uses or developments that have a high probability of damaging or destroying an existing aquaculture operation are not consistent with these policies.

5.5 Boating Facilities

A. **Recognize that boating facilities are water-dependent uses.** Boating facilities, including portions of marinas and public boat launch facilities, are water-dependent uses. When facilitating public access or providing an opportunity for substantial numbers of people to enjoy the shoreline, boating facilities should be given priority for shoreline location.

B. **Plan and coordinate boating facilities regionally.** Regional needs for marina and boat launch facilities should be carefully considered in reviewing new proposals as well as in

allocating shorelines for such development. Such facilities should be coordinated with park and recreation plans and, where feasible, collocated with other compatible water-dependent uses.

C. **Minimize modifications.** Boating facilities that minimize the amount of shoreline modification, in-water structure, and overwater cover are preferred.

D. **Balance public access and ecological functions.** New marinas should provide physical and/or visual public shoreline access, particularly where water-enjoyment uses are associated with the marina, to the extent compatible with shoreline ecological functions and processes and adjacent shoreline use.

E. **Limitations on accessory uses.** Accessory uses at boating facilities should be limited to water-oriented uses, or uses that provide physical and/or visual shoreline access for substantial numbers of the general public. Nonwater-dependent accessory uses should be located outside of shoreline jurisdiction or outside of the shoreline buffer whenever possible.

F. **Minimize impacts to adjacent uses and users.** New boating facilities should be located, designed, constructed and maintained to avoid adverse impacts such as noise, light and glare; aesthetic impacts to adjacent land uses.

G. **Site facilities appropriately.** New boating facilities should be located at sites where suitable environmental conditions, shoreline configuration, access, and compatible or similar uses are present.

H. **Consider navigation and other recreation opportunities.** Boating facilities should not unduly obstruct navigable waters and should consider adverse effects to recreational opportunities such as fishing, pleasure boating, swimming, picnicking and shoreline access and viewing.

5.6 Breakwaters, Jetties, Groins, Weirs and Barbs

A. **Allowed circumstances.** Breakwaters, jetties, groins, weirs and barbs located waterward of the OHWM should be allowed only where necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose.

B. **Use less-impacting alternatives.** Alternative structures, including floating, portable or submerged breakwater structures, or several smaller discontinuous structures, should be considered where physical conditions make such alternatives with less impact feasible.

C. **Shoreline Conditional Use Permit required.** Breakwaters, jetties, groins, weirs, barbs and similar structures should require a Shoreline Conditional Use Permit, except for those structures installed to protect or restore ecological functions, such as woody debris, engineered log jams, or habitat-forming rock weirs installed in streams.

D. **Protect critical areas.** Breakwaters, jetties, groins, weirs and barbs should be designed to protect critical areas and should provide for mitigation according to the sequence defined in Section 4.2.2.A.

5.7 Dredging and Dredge Material Disposal

A. **Permitted.** Dredging should be permitted for water-dependent uses and/or essential public facilities only when necessary and when alternatives are infeasible or less consistent with this SMP. Dredging as part of flood hazard abatement, ecological restoration or enhancement, beach nourishment, public access or public recreation should be permitted.

B. **Prohibited.** Dredging of bottom materials for the primary purpose of obtaining material for fill, construction, or beach nourishment should not be permitted.

C. **Disposal.** Spoil disposal on land outside of shoreline jurisdiction is generally preferred over open water disposal. Disposal of dredged material on shorelands or wetlands within a river's channel migration zone should be discouraged.

D. **Cooperative management programs.** Long-term cooperative management programs that rely primarily on natural processes should be pursued to prevent or minimize conditions which make dredging necessary.

E. **Siting and design.** New development should be sited and designed to avoid or to minimize the need for new maintenance dredging.

F. **Ecological impacts.** Dredging and dredge material disposal shall be done in a manner that avoids or minimizes significant ecological impacts. Impacts that cannot be avoided should be mitigated in a manner that assures no net loss of shoreline ecological functions.

G. **Navigation channels and basins.** Dredging for the purpose of establishing, expanding, relocating or reconfiguring navigation channels and basins should be allowed where necessary for assuring safe and efficient accommodation of existing navigational uses and then only when significant ecological impacts are minimized and when mitigation is provided. Maintenance dredging of established navigation channels and basins should be restricted to maintaining previously dredged and/or existing authorized locations, depths and widths.

5.8 Fill and Excavation

A. **Minimize fill and excavation.** Fill and excavation should only be permitted to the minimum extent necessary to accommodate an approved shoreline use or development. Enhancement and voluntary restoration of landforms and habitat are encouraged.

B. **Location.** Fills and excavation should be located and developed so that water quality, hydrologic and runoff patterns are not altered.

C. **Shoreline stabilization.** Fill should not be allowed where shoreline stabilization would be required to maintain the materials placed.

D. **Restoration.** Excavation and grading may be permitted landward of the OHWM for projects with the primary purpose of restoring ecological functions and natural character.

E. **Creation of uplands.** Fill in waterbodies, floodways, channel migration zones, and/or wetlands should not be permitted for creation of new uplands, unless it is part of an approved ecological restoration activity or provides some other public benefit.

F. **Permitted Fill.** Fill should be permitted in limited instances to restore uplands where recent erosion has rapidly reduced upland area where the erosion has not been caused by the landowners own actions of vegetation removal or improper stormwater handling, to build protective berms outside required buffers and nourish beaches for shore stabilization or recreation, to restore or enhance degraded shoreline ecological functions and processes, or to facilitate upland development outside required buffers otherwise allowed by and consistent with this SMP.

5.10 Forest Practices

A. **Avoid Steep Slopes.** Forest practices should be avoided on shorelines with slopes of such grade that large sediment runoff will result unless adequate restoration and erosion control including seeding, mulching, matting and replanting can be expeditiously accomplished.

B. **Protect Waterways and Floodplains.** Special attention should be directed to forest practices activities including thinning, harvest and road construction to prevent the accumulation of slash and other debris in contiguous waterways and their floodplains.

C. **Visual Impacts.** The visual impact of forest practices should be considered in all shoreline areas.

D. **Buffer Zone.** The use of buffer zones along forested shorelines is encouraged in order to retard surface runoff, reduce siltation, provide shade for fish, and be aesthetically pleasing.

E. **Water Quality.** Timber harvesting practices on shorelines should be conducted to maintain State and Federal water quality standards as appropriate.

F. **Current Use Taxation.** Support the maintenance of forest lands in timber and current use property tax classification consistent with RCW 84.28, 84.33, and 84.34.

G. **Multiple Economic Uses.** Multiple economic uses of forest resource lands is encouraged for land uses which do not eliminate or limit commercial forest resource management.

H. **Cooperative Resource Management.** Encourage the concept of cooperative resource management between both private and government agencies.

I. **Minimize Wildfire Potential.** Forest management activities that minimize the potential for wildfires are encouraged.

J. **Icicle Valley Scenic Quality**. Timber practices that maintain the scenic quality of the Icicle Valley should be encouraged.

K. **Icicle Valley Clear Cutting.** If responsible silvicultural procedures and management objectives indicate the need for clear cutting in Icicle Valley, such cuts should be carefully designed in the form of small irregular patch cuts, taking advantage of natural variations in the vegetation and topography.

L. **Logging Roads.** Logging road construction should be minimized as much as possible. The visual and environmental impacts of such roads should be carefully evaluated.

M. **Icicle Valley Watershed – Water Quality.** Water quality impacts to the Icicle Valley Watershed should be addressed.

5.11 Industry

A. **Industrial use preference.** Industries are an appropriate land use along shorelines where compatible with existing land use plans and zoning. However, first priority should be given to water-dependent industries over nonwater-dependent uses, and second priority to water-related industries over nonwater-oriented uses.

B. **Environmental limitations**. Lands designated for industrial development should not include shoreline areas with severe environmental limitations, such as critical areas.

C. **Water and wastewater facilities**. Sewage treatment and potable water facilities should be located with consideration for economic operation and compatibility with surrounding uses.

D. **Cleanup and restoration**. Industrial development and redevelopment should be encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated.

E. **Locations for Industrial.** Support industrial development in designated industrial areas within urban growth areas and in rural lands.

F. **Innovative Techniques.** Promote the use of innovative development techniques such as industrial parks and cottage industries, where appropriate.

G. **Light Industrial.** Encourage the development of light industries.

H. **Revitalization.** Promote revitalization within existing developed industrial areas determined to be suitable for continuing use.

I. **Transition standards.** Promote adequate setbacks, landscape buffers and/or screening to aid in the transition between industrial development and other land uses.

J. **Potential Impacts and Mitigation.** Potential impacts on nearby properties and public facilities and services should be addressed and mitigated when necessary when evaluating industrial development proposals.

5.12 In-Water Structures

A. **Long-term compatibility.** In-water structures should be planned and designed to be compatible with appropriate multiple uses of resources over the long-term, especially in Shorelines of Statewide Significance. Appropriate multiple uses include, but are not limited to, public access, recreation, and fish migration.

B. **Considerations.** The location, design, construction and maintenance of in-water structures should give due consideration of watershed processes, including prevention of damage to other properties and other shoreline resources from alterations to geologic and hydrologic processes; and ecological functions, with special emphasis on protecting and restoring priority habitats and species.

C. **Siting and design.** In-water structures shall be sited and designed consistent with appropriate engineering principles, including, but not limited to, guidelines of the Washington Department of Fish and Wildlife, Natural Resources Conservation Service, and the U.S. Army Corps of Engineers. Planning and design of in-water structures should be

consistent with and incorporate elements from applicable watershed management and restoration plans and/or surface water management plans.

D. **Non-structural and non-regulatory alternatives.** Non-structural and non-regulatory methods to protect, enhance, and restore shoreline ecological functions, processes and other shoreline resources should be encouraged as an alternative to in-water structures. Non-regulatory and non-structural methods may include public facility and resource planning, land or easement acquisition, education, voluntary protection and enhancement projects, or incentive programs.

E. **Prohibited development and uses.** New or expanding development or uses in the shoreline, including subdivision of land, that would likely require structural flood control works within a stream, lake, river, channel migration zone, or floodway should not be allowed.

F. **Enhance ecological function.** In-water structure proposals should incorporate native vegetation to enhance ecological functions, create a more natural appearance, improve ecological processes, and provide more flexibility for long-term shoreline management. Such features include vegetated berms; vegetative stabilization including brush matting and buffer strips; and retention of existing trees, shrubs and grasses on stream banks, if possible.

5.13 Mining

A. **Ecological function.** The determination of whether there will be no net loss of ecological function should be based on an evaluation of the reclamation plan required for the site and shall consider impacts on ecological functions during operation. Preference should be given to mining proposals that result in the creation, restoration, or enhancement of habitat for priority species.

B. **Location.** Mining should not be located on shorelines where unavoidable adverse impacts, such as noise, vibration, odor, dust or other effects, on other users or resources, taken together, equal or outweigh the benefits from mining. The operator may be required to implement measures such as buffers, limited hours, or other mitigating measures to minimize adverse impacts. Mining of shorelines having high value for public recreation should not be permitted.

C. **Post-mining restoration.** Mining, particularly surface or strip mining, should provide for timely restoration of disturbed areas to a biologically productive, attractive, semi-natural, or other useful condition through a reclamation process consistent with regulations administered by the Department of Natural Resources and other applicable local standards.

D. **Where permitted.** Mining should only be permitted where detailed operation plans and studies prepared pursuant to Section 4.2.2, Ecological Protection and Critical Areas, and Appendix B, Critical Areas Regulations demonstrate that:

   1. Fish habitat, upland habitat and water quality will not be significantly harmed; and

   2. The operation will not adversely affect geologic or hydrologic processes, channel alignment, nor increase bank erosion or flood damage.

E. **Minimize adverse impacts.** Mining operations should be located, designed, and managed so that they do not subject other appropriate uses to substantial or unnecessary adverse

impacts from of the operation. The operator may be required to implement measures such as buffers, limited hours, or other mitigating measures to minimize adverse impacts.

5.14 Private Moorage Facilities

A. **Moorage as water-dependent use.** Moorage associated with a single-family residence is considered a water-dependent use provided that it is designed and used as a facility to access watercraft.

B. **Preferred moorage.** To minimize continued proliferation of individual private moorage, reduce the amount of over-water and in-water structures, and reduce potential long-term impacts associated with those structures, mooring buoys are preferred over docks and shared (either joint-use docks or community docks) or public moorage facilities are preferred over single-user moorage.

C. **Avoid impacts to ecological functions.** Moorage should be sited and designed to avoid adversely impacting shoreline ecological functions or processes, and any unavoidable impacts to ecological functions should be mitigated.

D. **Minimize interference with navigation and other uses.** Moorage should be spaced and oriented in a manner that minimizes hazards and obstructions to public navigation rights and corollary rights thereto such as, but not limited to, fishing, swimming and pleasure boating.

E. **Minimize size.** Moorage should be restricted to the minimum size necessary to meet the needs of the proposed use.

F. **Materials.** Moorage should be constructed of materials that will not adversely affect water quality or aquatic plants and animals.

5.15 Recreational Development

A. **Promote recreation and public access.** Developments and uses should be designed and operated to provide the public with recreational areas, facilities, and access to the shorelines.

B. **Support facilities and access.** Recreational areas should be supported by multi-use trails and parking to prevent undue concentration and pressure on fragile natural areas. Parking is not a preferred shoreline use, and should be located only as necessary to support an authorized use, minimizing environmental and visual impacts.

C. **Pedestrian-oriented.** Direct access to the water should be via paths, walkways, or other pedestrian-oriented features. Vehicular traffic on beaches and fragile shorelines should be prohibited.

D. **Public acquisition.** To reduce overcrowding of current facilities and avoid adverse impacts on adjacent properties, the increased public acquisition and dedication of land for shoreline parks and recreation areas are encouraged.

E. **Grounds management.** The use of fertilizers, herbicides, and pesticides to maintain recreational facilities such as golf courses and playfields should be closely monitored to

prevent contamination of waterbodies by runoff. Management that utilizes organic treatments, integrated pest management, or non-synthetic chemicals is preferred where feasible and practical over management that utilizes synthetic chemicals.

F. **Scenic views and vistas.** Scenic views and vistas should be preserved in the design of recreational facilities, wherever practical.

G. **State and Federal recreation use preferred to local acquisition.** As an economical alternative to new acquisition by local agencies, the use of State and Federal lands for recreational facilities should be considered.

H. **Evaluate Recreational Needs.** Support the evaluation of recreational activities, including waterfront access and waterfront-dependent or related activities including funding mechanisms, construction, and maintenance and operation needs.

I. **Public Access.** Encourage public access to shoreline areas in the development and maintenance of park and recreation opportunities, where consistent with the protection of critical areas and private property rights.

5.16 Residential Development

A. **Compatibility with shoreline.** All subdivisions and residential development should be compatible with the characteristics of the shoreline and water in order to minimize impacts to the environment.

B. **Cluster development.** Cluster development should be encouraged outside shoreline jurisdiction to minimize disruption of the natural shoreline.

C. **Encourage restoration and environmental design.** Ecological restoration and measures to minimize environmental impacts, such as low impact development and vegetation conservation and enhancement, should be encouraged.

D. **Overwater residential development.** New over-water residential development should be prohibited.

E. **Floating homes.** New floating homes should be prohibited.

Liveaboards may be authorized provided the use is managed to limit impacts to shoreline resources consistent with DNR and other State regulations.

F. **Adequate utilities.** Residential development should have adequate provision for sanitary sewage disposal, storm drainage, and water supply which minimizes harmful effects on shorelines.

G. **Provide public access.** Residential developments should be encouraged to provide public access to shorelines within the development and to minimize impacts of vehicular use and parking near the shoreline.

H. **Housing Options.** Support a mix of housing unit, types and densities to meet the needs of existing and future residents.

I. **Redevelopment and Infill.** Support infill, development, and redevelopment of existing intensely developed rural shoreline areas when consistent with the goals and policies of the Chelan County Comprehensive Plan and this SMP.

5.17 Shoreline Habitat and Natural Systems Enhancement Projects

A. **Design.** Restoration and enhancement of shorelines should be designed using principles of landscape and conservation ecology and should restore or enhance chemical, physical, and biological watershed processes that create and sustain shoreline habitat structures and functions.

B. **Improve shoreline ecological functions.** Restoration and enhancement actions should improve shoreline ecological functions and processes and should target meeting the needs of sensitive plant, fish and wildlife species as identified by Washington Department of Fish and Wildlife, Washington Department of Natural Resources, National Marine Fisheries Service and/or U.S. Fish and Wildlife Service.

C. **Pursue funding.** Encouraged funding from State, Federal, private and other sources to implement restoration, enhancement, and acquisition projects, particularly those that are identified in the Shoreline Restoration Plan or the local watershed plans.

D. **Streamline review.** Support processing guidelines that will streamline the review of restoration-only projects.

E. **Coordination.** Restoration and enhancement projects should be coordinated with local public utility and conservation districts.

F. **Alternative mechanisms.** Restoration and enhancement projects should allow for the use of tax incentive programs, mitigation banking, grants, land swaps, or other programs, as they are developed, to encourage restoration and enhancement of shoreline ecological functions and to protect habitat for fish, wildlife and plants.

5.18 Shoreline Stabilization

A. **Ecological functions and processes.** Shoreline stabilization should be located, designed, and maintained to protect and maintain shoreline ecological functions, ongoing shoreline processes, and the integrity of shoreline features.

   Ongoing stream or lake processes and the probable effects of proposed shoreline stabilization on other properties and shoreline features should be considered.

   Shoreline stabilization should not be developed for the purpose of filling shorelines or creating additional property.

B. **Alternatives.** Structural shoreline stabilization measures should only be used when more natural, flexible, non-structural methods such as placing the development farther from the OHWM, planting vegetation, or installing on-site drainage improvements, beach nourishment and bioengineering have been determined infeasible. Alternatives for shoreline stabilization should be based on the following hierarchy of preference:

   1. No action. Allow the shoreline to retreat naturally, increase buffers, and relocate structures.

2. Flexible defense works constructed of natural materials including soft shore protection, bioengineering, including beach nourishment, protective berms, large woody debris, or vegetative stabilization.
3. Rigid works constructed of artificial materials such as riprap or concrete.

C. **Future stabilization.** Structures should be located and designed to avoid the need for future shoreline stabilization where feasible. Land subdivisions should be designed to assure that future development of the created lots will not require shoreline stabilization.

D. **Protect existing structures.** New or expanded structural shoreline stabilization should only be permitted where demonstrated to be necessary to protect an existing primary structure, including residences, that is in danger of loss or substantial damage, and where mitigation of impacts would not cause a net loss of shoreline ecological functions and processes.

E. **Site-specific design.** Shoreline stabilization on streams should be located and designed to fit the physical character and hydraulic energy potential of a specific shoreline reach.

F. **Public access and other uses.** Shoreline stabilization should not be permitted when it interferes with public access to shorelines of the state, nor with other appropriate shoreline uses including, but not limited to, navigation or private recreation.

G. **Non-regulatory methods.** Non-regulatory methods to protect, enhance, and restore shoreline ecological functions and other shoreline resources, such as resource planning, education, voluntary enhancement and restoration projects and/or incentive programs should be encouraged for shore stabilization.

H. **Coordination.** Shoreline stabilization should be developed in a coordinated manner among affected property owners and public agencies, particularly those that cross boundaries between local governments or other entities with authority over specific land or water areas, to address ecological and geohydraulic processes, sediment conveyance, and beach management issues.

   Where beach erosion threatens existing development, a comprehensive program for shoreline management should be established by the multiple affected property owners.

I. **Public or quasi-public developments.** Provisions for multiple use, restoration, and/or public shoreline access should be incorporated into the location, design and maintenance of shoreline stabilization for public or quasi-public developments whenever safely compatible with the primary purpose. Shoreline stabilization on publicly owned shorelines should not be allowed to decrease long-term public use of the shoreline. For the purposes of this section, a ‘quasi-public development’ shall mean a privately-owned development with a public mandate and/or public funding.

J. **Materials.** Materials used for construction of shoreline stabilization should be selected for long-term durability, ease of maintenance, compatibility with local shoreline features including aesthetic values, and flexibility for future uses.

K. **Adjacent properties.** New development that would require shoreline stabilization which causes adverse impacts to adjacent or down-current properties and shoreline areas should not be allowed.

5.19 Transportation and Parking

A. **Circulation.** Public agencies and developments should provide circulation facilities including roads, streets, alleys, pedestrian, bicycle, and public transportation facilities, consistent with federal, state, or local standards and sufficient to meet adopted levels of service. Agencies should consider provisions for non-motorized and pedestrian features in the design of all roadway and bridge projects.

B. **Essential public facilities.** Comprehensive Plans, which include Shoreline Master Programs, may not preclude the siting of essential public facilities, which include state or regional transportation facilities as defined in RCW 47.06.140.

C. **Location and Minimize land consumption.** Encourage efficient, safe and environmentally sensitive road system development that supports desired land use patterns. Where other options are available and feasible, new roads or road expansions should not be built within shoreline jurisdiction. When transportation facilities must be located along shorelines, efforts should be made to minimize the amount of land consumed. Where feasible, such transportation facilities should be sufficiently set back so that a usable shoreline area remains. Where feasible, roads should not run parallel to shorelines.

D. **Erosion and groundwater.** Roads in shoreline areas should be designed and maintained to prevent erosion and to permit a natural movement of groundwater.

E. **Protect shorelands.** All construction should be designed to protect the adjacent shorelands from erosion, uncontrolled drainage, slides, pollution, and other factors detrimental to the environment. Transportation facilities and parking facilities should be planned, located, and designed where routes will have the least possible adverse effect on unique or fragile shoreline features, will not result in a net loss of shoreline ecological functions or adversely impact existing or planned water-dependent uses.

F. **Fit topography.** Road locations should be planned to fit the topography so that minimum alterations of natural conditions will be necessary.

G. **General maintenance and reconstruction.** Road maintenance and reconstruction should be allowed in accordance with best management practices adopted by the County and the State of Washington Department of Transportation.

H. **Public Access and Trails.** Encourage protection of existing public access and seek opportunities to increase public access, as appropriate. Multi-purpose trails should be encouraged.

I. **Adequate Access.** Circulation plans should include pedestrian, bicycle, and public transportation where appropriate. Circulation planning and projects should support existing and proposed shoreline uses that are consistent with this SMP.

J. **Stehekin Water Transportation.** Support improved water transportation to remote areas, such as Stehekin area.

K. **Water Oriented Transportation – Lake Chelan.** Support cooperative efforts to provide for docking of boats, barges, and float planes, such as at the head of Lake Chelan with common agreement of the National Park Service, the Chelan County Public Utility District, and the Port of Chelan County.

L. **Minimize Impacts to Resource Lands, Critical Areas and Water Quality.** Transportation improvements should be designed and located to minimize disruptions to critical areas and designated resource lands. Roads should be also be designed to minimize impacts on hydrologic systems, including surface and groundwater quality.

5.20 Utilities

A. **Meet demand for utilities.** Utilities should be located to meet the needs of current underserved areas or future growth.

B. **Use existing corridors.** The consolidation and intensification of utility facilities and corridors is encouraged where feasible.

C. **Minimize visual impact.** Whenever feasible, utilities should be placed underground or designed to do minimal damage to aesthetic qualities of the shoreline area.

D. **Upland and underwater utilities.** Upland locations are recommended for utility pipelines and cables.

E. **Restoration of disturbed areas.** Upon completion of installation or maintenance projects on shorelines, all disturbed areas within shoreline jurisdiction should be restored to pre-project conditions.

F. **Outfalls.** Locate outfalls to avoid impacts to critical areas. Design outfalls to reduce impacts to aquatic vegetation and water quality.

G. **Coordination of Utilities, Land Use, and Transportation.** Enhance the efficiency and quality of service from utility providers through the coordination of utility, land use, and transportation planning.

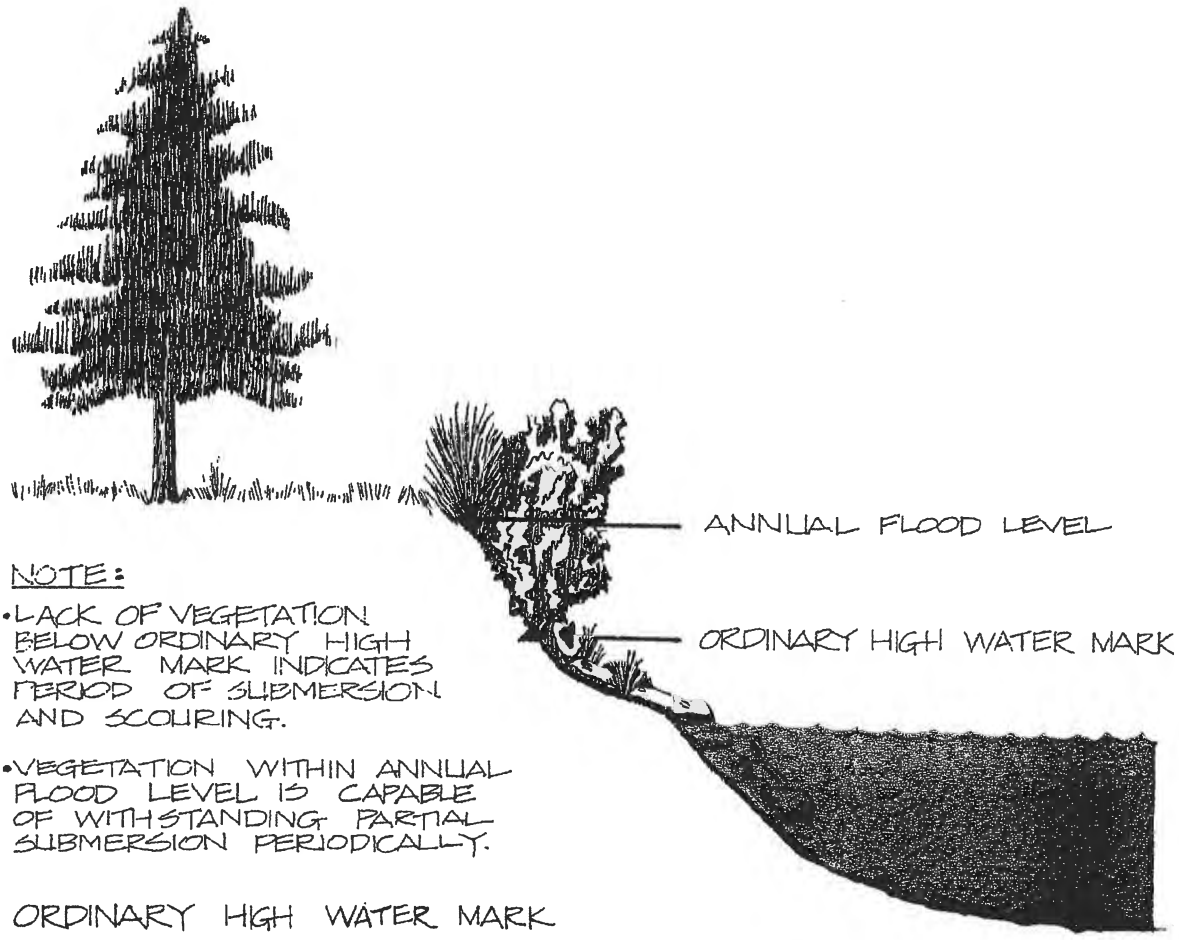
H. **Coordination of Trenching**. Encourage effective and timely coordination of all public and private utility trenching activities.

5.21 Redevelopment, Repair, and Maintenance

5.21.1 Policies

A. Recognize existing legally established uses and developments in the shoreline and allow them to continue consistent with their lawfully established condition.

APPENDIX G: SHORELINE ILLUSTRATIONS



How to Calculate the Midpoint of each Exterior Wall:

$$A = \frac{1290' + 1308'}{2}$$

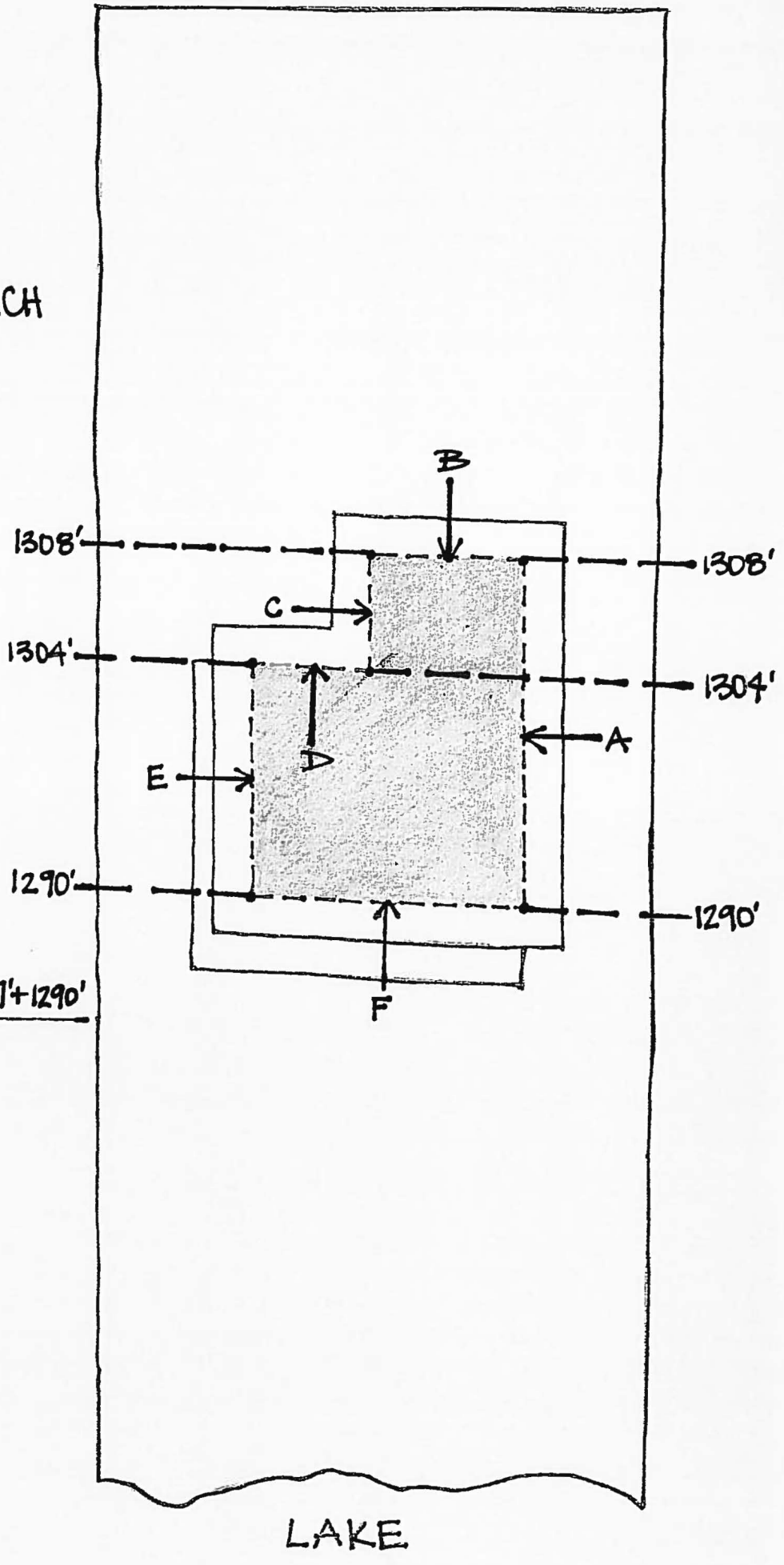
$$A = 1299'$$

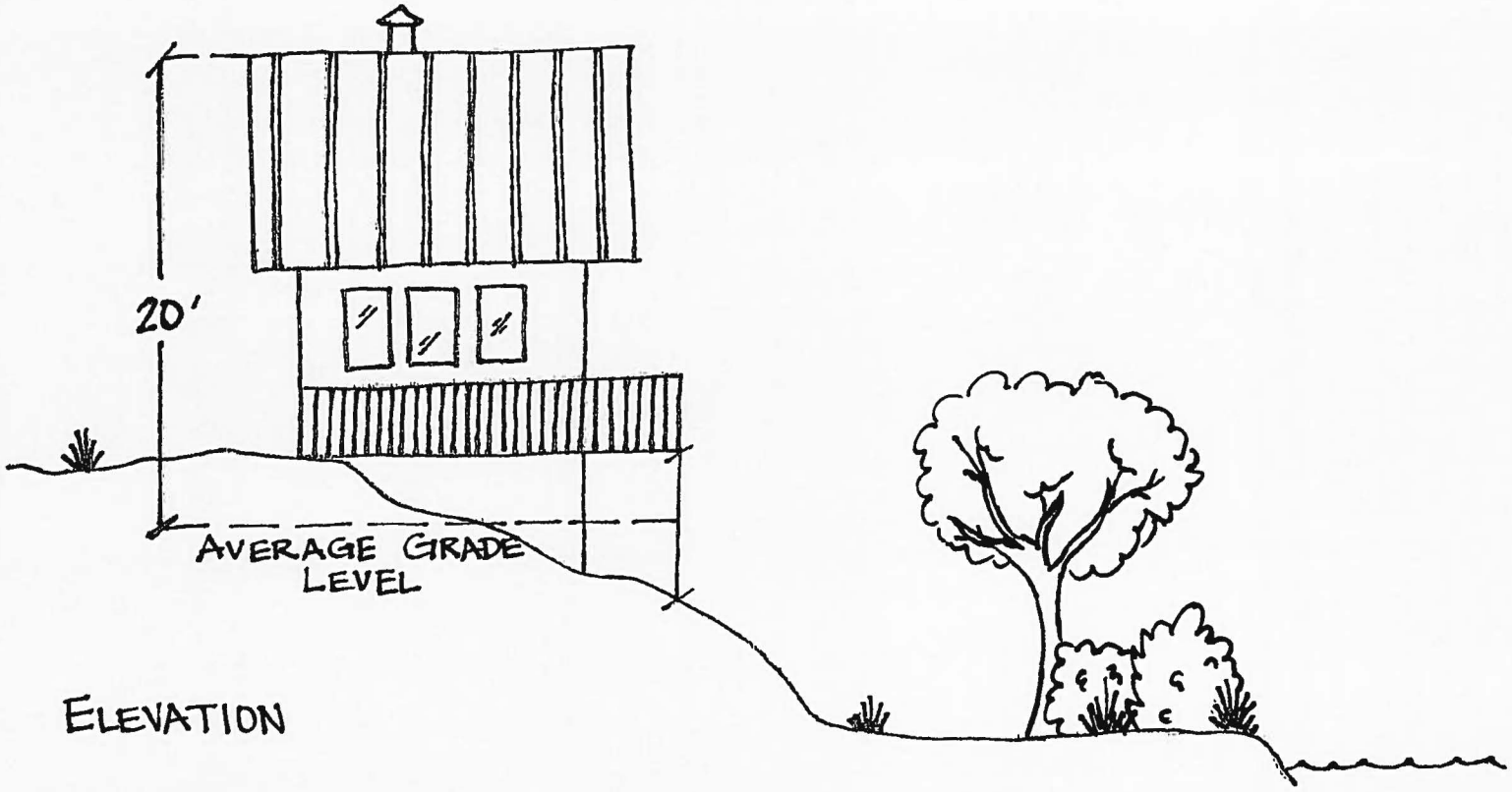
Average Grade Level Formula:

$$\frac{A+B+C+D+E+F}{6}$$

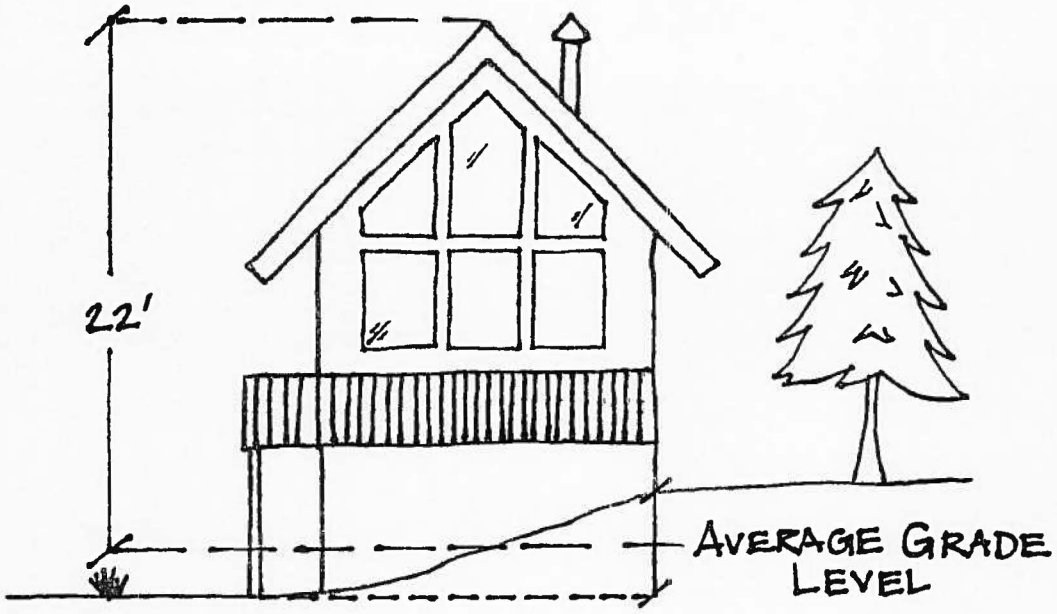
$$\frac{1299'+1308'+1306'+1304'+1297'+1290'}{6}$$

Average Grade Level is 1300'



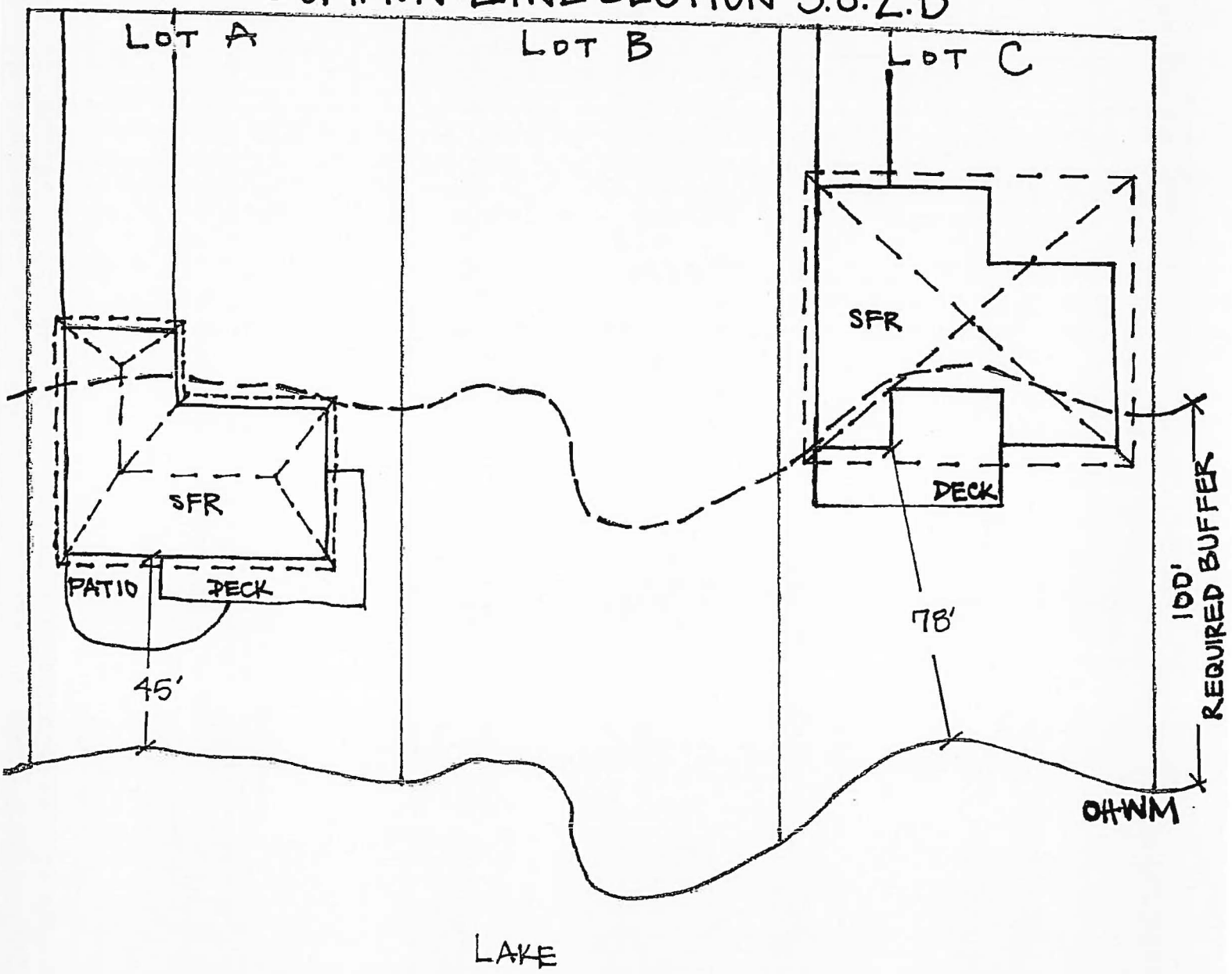


ELEVATION



ELEVATION

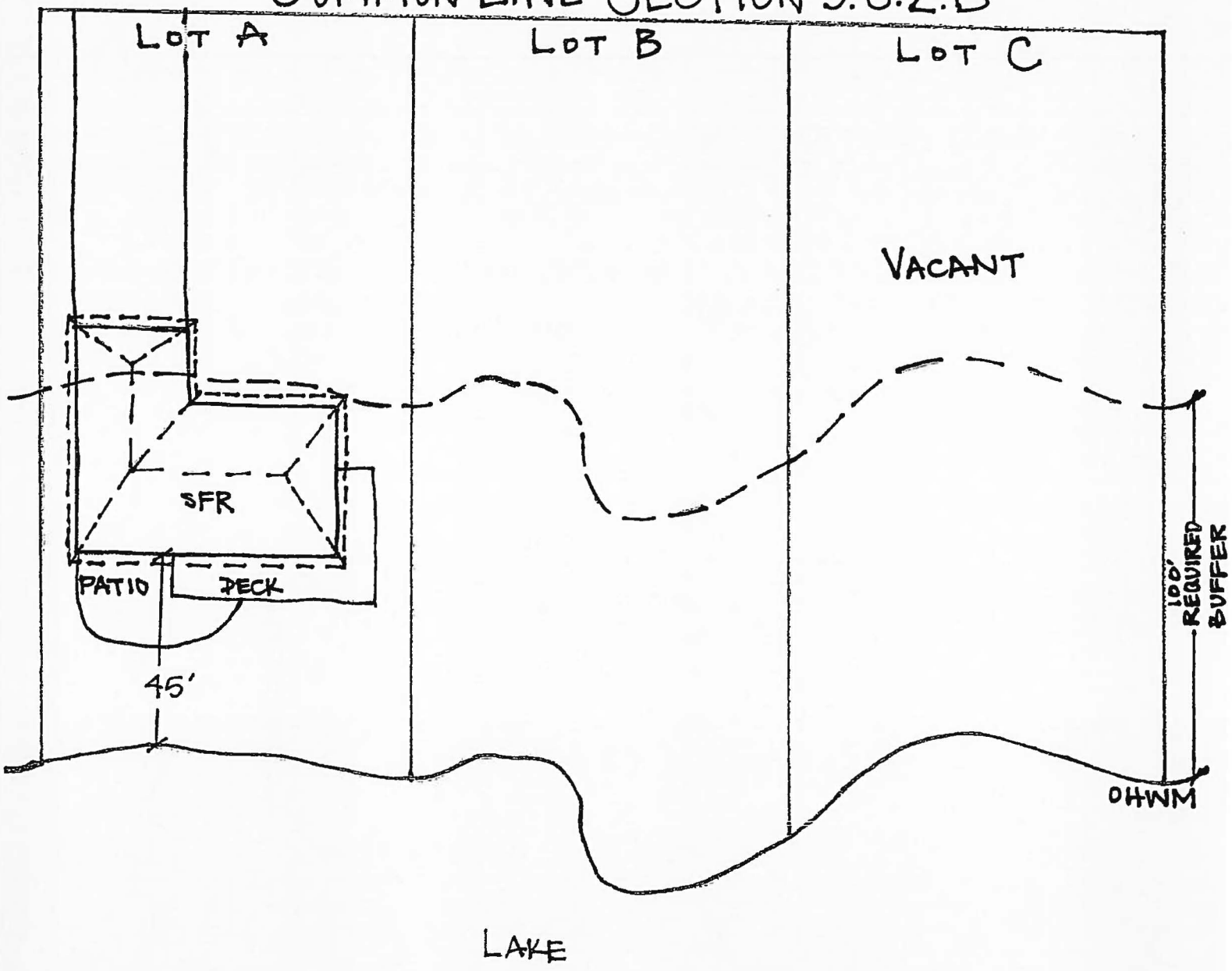
COMMON LINE SECTION 3.8.2.B



FORMULA: (LOT A + LOT C)/2 = COMMON LINE FOR LOT B

EXAMPLE: (45'+78')/2= 61.5' COMMON LINE FOR LOT B

COMMON LINE SECTION 3.8.2.B

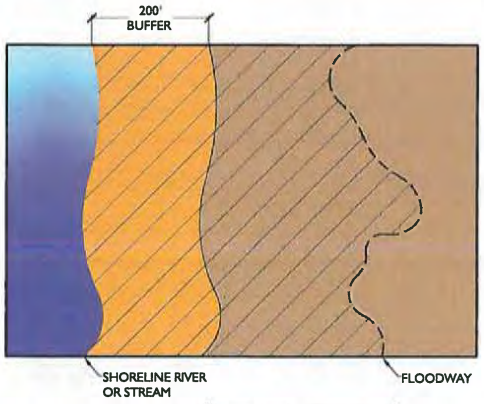


FORMULA: (LOT A + LOT C)/2 = COMMON LINE FOR LOT B

EXAMPLE: (45' + 100')/2 = 72.5' COMMON LINE FOR LOT B

ADDITIONAL ILLUSTRATION OF SHORELINE JURISDICTION -
RELATIONSHIP BETWEEN JURISDICTION, FLOODWAY AND FLOODPLAIN

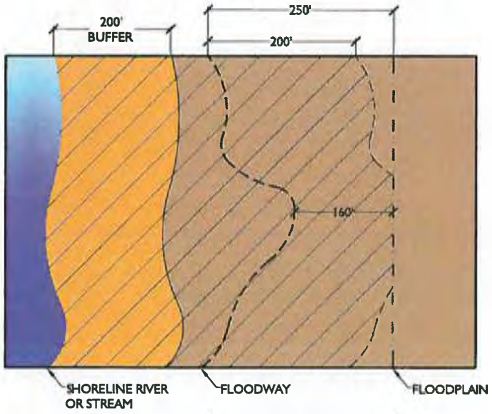
STEP ONE



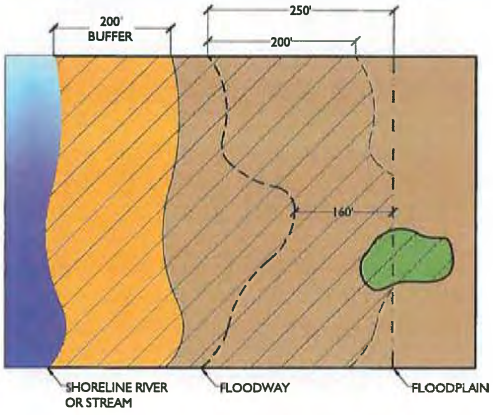
LEGEND:
- STANDARD 200' OHWM BUFFER
- WETLAND
- WATER
- SMP JURISDICTION IN CONJUNCTION WITH FLOODWAY / FLOODPLAIN

ON RIVERS, THE SHORELAND AREA INCLUDES THE ENTIRE FLOODWAY AND CONTIGUOUS FLOODPLAIN AREAS LANDWARD 200 FEET FROM THE FLOODWAY.

STEP TWO



STEP THREE



ON STREAMS, THE ENTIRE WETLAND IS ASSOCIATED IF ANY PART IS LOCATED WITHIN THE 100 YEAR FLOODPLAIN OF A SHORELINE.

PREPARED BY:
THE WATERSHED COMPANY