4.0 LEGAL AND PERMITTING REQUIREMENTS

The purpose of this section is to review legal and permitting issues that may govern the feasibility of constructing a rubber dam structure at the outlet of Lake Wenatchee to impound water in the lake to a greater level than naturally occurs during summer and fall.

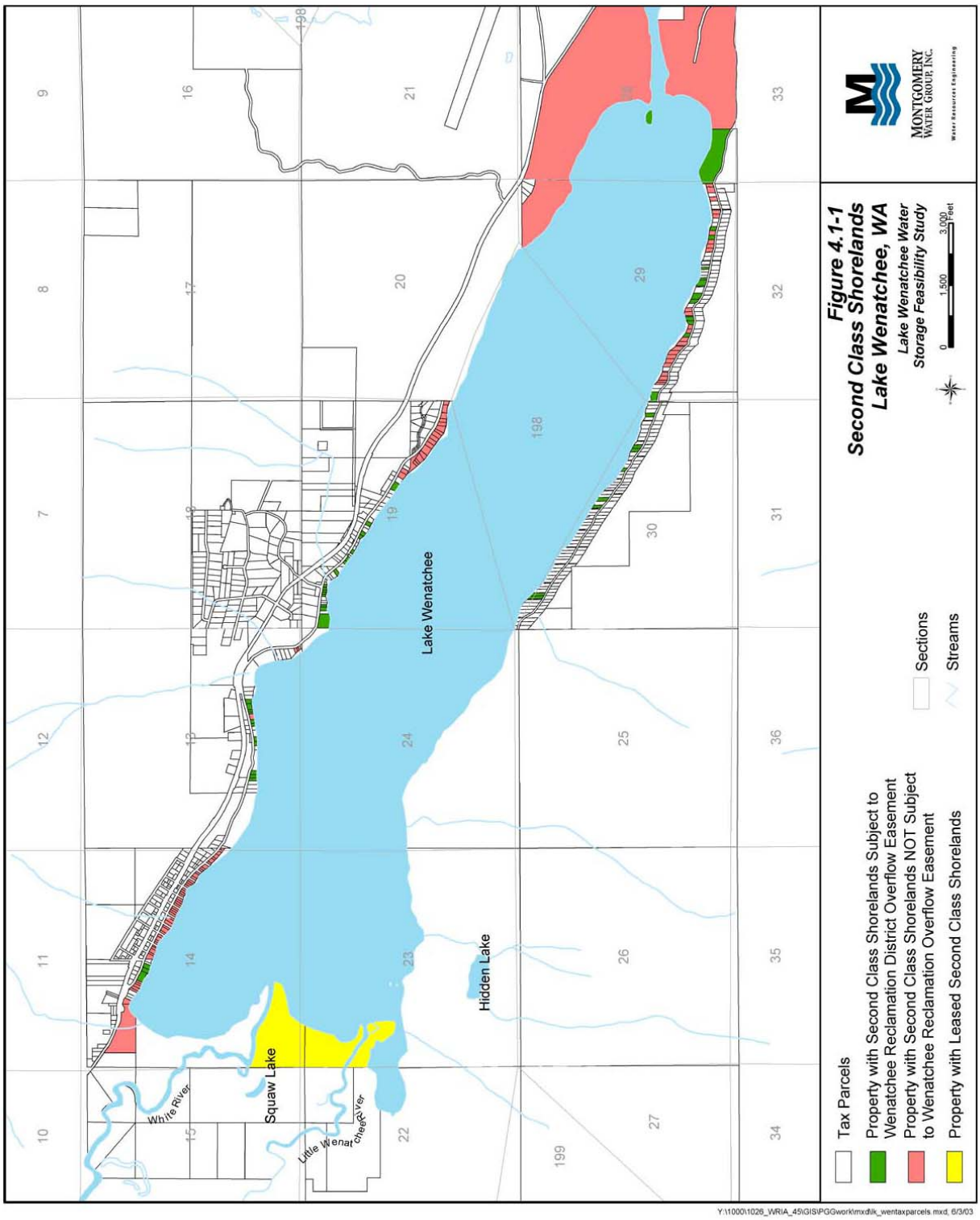
4.1 STATUS OF PREVIOUS PERMIT AND EASEMENTS

The Wenatchee Reclamation District (WRD) was an early proponent of a project to store water in Lake Wenatchee. In 1930, in response to decreased streamflow and concerns about an adequate water supply, the WRD proposed constructing a dam near the location described in Section 3.5 of this report. The dam was proposed to impound 10 feet of water between the normal high water and low water elevations. The estimated storage volume between those elevations was estimated to be 30,000 acre-feet. The WRD applied for a Reservoir Permit to impound water in Lake Wenatchee and applied for easements to inundate state-owned second-class shorelands within Lake Wenatchee. The following paragraphs describe the status of the Reservoir Permit and easements.

4.1.1 Status of Reservoir Permit

As part of the process to develop a reservoir, the WRD applied for a Reservoir Permit from the State of Washington that would allow the WRD to impound water at Lake Wenatchee. The WRD obtained Reservoir Permit No. 115 from the State of Washington Department of Conservation and Development, Division of Hydraulics on December 19, 1934. The permit authorized the WRD to impound 30,000 acre-feet, at a maximum depth of 10 feet and area submerged when full of 3,000 acres. The WRD later assigned this permit to Chelan PUD on September 12, 1963 for their use in studying the feasibility of constructing a dam on the Wenatchee River and impounding Lake Wenatchee. The Washington Department of Ecology (WDOE), the successor agency to the Department of Conservation and Development, gave notice to the PUD on March 24, 1976 that the Reservoir Permit would be cancelled unless the PUD showed cause to the Department why the permit should not be cancelled. The PUD did not respond and the Department, on May 28, 1976, ordered the Reservoir Permit to be cancelled.

A new Reservoir Permit will need to be applied for to impound water in Lake Wenatchee. Section 4.4 describes the process for applying to the WDOE for a new Reservoir Permit.


Lake Wenatchee
Hidden Lake
Squaw Lake
White River
Little Wenatchee River
Tax Parcels
Property with Second Class Shorelands Subject to Wenatchee Reclamation District Overflow Easement
Property with Second Class Shorelands NOT Subject to Wenatchee Reclamation Overflow Easement
Property with Leased Second Class Shorelands
Sections
Streams
Figure 4.1-1
Second Class Shorelands
Lake Wenatchee, WA
Lake Wenatchee Water Storage Feasibility Study
0
1,500
3,000 Feet
MONTGOMERY WATER GROUP, INC.
Water Resources Engineering
Y:\1000\1026_WRIA_45\GIS\PGGwork\mxd\lk_wentaxparcels.mxd, 6/3/03

4.1.2 Status of Overflow Easement

The WRD also applied to the State of Washington Commissioner of Public Lands in 1930 for the right to overflow the bed and shores of Lake Wenatchee and a portion of the Wenatchee River. The Department issued an Order on May 9, 1944 stating "the Wenatchee Reclamation District, its successors or assigns, is hereby granted the right, privilege, and authority to perpetually back and hold water upon and over the bed and shores of Lake Wenatchee and a portion of the Wenatchee River…" The WRD paid the state $3,138.75 to compensate for the "damage resulting to the state by the exercise of the right to overflow and inundate" and the damage amount "has been determined by statute and includes the value of the land to be overflowed, as well as all damages to adjoining lands of the state resulting from such overflow and inundation." The grant is subject to the rights of previous purchasers of second-class shorelands and a reservation of second-class shorelands on Emerald Island, part of the state park. A copy of the Order issued by the Commissioner of Public Lands and supporting Report and Supplemental Report of Engineer are included in Appendix B. The Order and the supporting reports contain descriptions of the properties where second-class shorelands were already purchased or were reserved by the Commissioner.

Copies of Deeds for second-class shorelands around Lake Wenatchee were obtained from the Washington Department of Natural Resources (DNR), who currently manage state-owned shorelands. Those Deeds were reviewed and classified into categories of Deeded second-class shorelands subject to an easement for overflow by WRD and those not subject to an easement for overflow. Of the approximate 70,000 feet of shoreline around Lake Wenatchee and the Wenatchee River to the site of the potential impoundment structure approximately 24,700 feet or 35% of the total shoreline length have second-class shorelands that have been sold and deeded to adjacent property owners. Of those second-class shorelands, approximately 19,600 feet were already purchased prior to the grant to WRD. An additional 780 feet were reserved surrounding Emerald Island in the state park. Exhibit 4-1 shows the location of those properties with Deeded second-class shorelands.

A comparison of the Deeds provided by DNR to the description of properties contained in the Order was made and some differences between the two sets of property descriptions were found. Because of the preliminary nature of this study, we did not pursue a more thorough search of DNR records to ascertain if the differences are due to not having all of the Deeds or if mistakes were made in writing the Order. Additional research would need to be performed prior to starting a program of determining the exact status of Deeds to second-class shorelands around Lake Wenatchee.

The Deeds for second-class shorelands issued by the state after 1942 were written subject to an easement for the right to overflow granted to WRD. Three exceptions were found in Deeds written in 1956, 1963 and 1966. The reason those Deeds did not contain an exception is not known. Other Deeds written during and after that time period contain the provision that the second-class shorelands are subject to overflow by WRD.

The Commissioner's Order was also written with a clause stating "if the construction or erection of a water power plant, reservoir or works for impounding water shall not be commenced within three years from the date of this order and be diligently prosecuted and completed within six years from the date of this order, this grant may be forfeited by the Commission of Public Lands by serving written notice of such forfeiture upon the Wenatchee Reclamation District, its successors or assigns, but the Commissioner for good reason shown to his satisfaction may extend the time within which such work shall be

completed." No records have been found that indicate the Commissioner, or its successors, have started a process that would lead to forfeiture of the overflow easement.

The WRD assigned the overflow easement to Chelan PUD in 1963. The PUD reassigned the overflow easement to WRD in 1990. Both documents were recorded with the Chelan County auditor. The WRD currently owns the overflow easement and would be able to convey the easement to any project proponent.

For the alternative of storing water to Ordinary High Water (El. 1870.3) a project proponent would need to purchase easements from property owners who hold Deeds to second-class shorelands that are not subject to an overflow easement. The total length of second-class shorelands that require new easements is estimated to be 20,380 feet, which includes private property and Emerald Island. The property owner with the most second-class shorelands requiring new easements is Washington State Parks & Recreation, with a total length of approximately 9,430 feet (including Emerald Island).

For the alternative of storing water to 1872.4, a project proponent would need to purchase easements to flood private property above OHW in addition to the easements described in the previous paragraph. For that alternative, easements for the entire shoreline length (approximately 70,000 feet) would be required.

4.2 COMPLIANCE WITH TRIBAL NATION RIGHTS

4.2.1 Tribal Fishing Rights

The enactment of the Yakama Indian Treaty (1855) and subsequent executive order of July 2, 1872, the majority of the original Native Americans who inhabited regions that are presently Chelan, Kittitas, Yakima, Okanogan, and Douglas counties were resettled onto the Yakama Nation and Colville Confederated Tribes reservations. As guaranteed by the Yakama Treaty of 1855, the Yakama Nation reserved the right to continue to fish outside of the established reservation without interference from states or the federal government. The majority of the Wenatchee Basin was encompassed within lands ceded by the Yakama Nation to the U.S. government (Wenatchee River Subbasin Salmon and Steelhead Plan 1990).

The area of the Columbia River north from Priest Rapids Dam and extending to the Canadian border, including the tributaries, is part of the aboriginal territory of numerous Native American Tribes. Those tribes include, but not limited to, the Chelan, Wenatchee, Entiat, Columbia (Moses band), Yakama, Palouse, Okanogan, and Nespelem tribes. This entire area was used extensively by Indian people for fishing as well as being an integral part of their culture and religious way of life. It is still a significant resource area and includes many places considered sacred by Indian people today. (Wenatchee River Subbasin Salmon and Steelhead Plan 1990).

Among those tribes who signed the Yakama Indian Treaty at Walla Walla, Washington and reserved the rights to fish off-reservation were the Yakama, Chelan, Wenatchee, Entiat and Columbia tribes. The Confederated Tribes and Bands of the Yakama Nation and its members, as the legal successors in interest to those tribes, reserved those rights for itself and its members. Today members of those tribes reside on and off the reservation (Wenatchee River Subbasin Salmon and Steelhead Plan 1990).

In 1905 the U.S. Supreme Court ruled on its first case involving Native American fishing rights in the Pacific Northwest. The case of *United States v. Winans* (198 U.S. 371) upheld the treaty provisions of the Yakama Nation securing the rights of the tribe to fish at "usual and accustomed places."

On February 12, 1974, Federal Judge George Boldt issued an historic ruling reaffirming the rights of Washington's Indian tribes to fish in accustomed places. The Boldt Decision revolutionized the state fisheries industry and led to violent clashes between tribal and non-tribal fishermen and regulators. In 1979, the Ninth Circuit Court of Appeals upheld Boldt's ruling, and on July 2, 1979, the U.S. Supreme Court largely affirmed it. Principles established by the Boldt Decision have since been applied to other resources, including shellfish.

The treaty Indian tribes of Washington possess off-reservation instream flow water rights associated with their treaty fishing rights. Tribal instream flow rights were first recognized in the general stream settlement and associated federal proceedings involving rights of the Klamath Indian Tribe in Oregon's Klamath Basin (United States v. Adair, 723 F.2d 1394 (1983)). Tribal instream rights that derive from the treaties typically hold priority date of "time immemorial."

Tribal instream rights have been recently recognized and implemented through the courts in the Yakama Basin of eastern Washington. South of the Wenatchee Basin, the Yakama Basin example provides a regional corollary for the proposed impoundment structure project. Decisions include the Yakima Basin general stream adjudication, in which the state Supreme Court recognized the primacy and priority of tribal in stream rights (Ecology v. Yakama Reservation Irrigation District, 121 Wn.2d 257 (1993)). An earlier federal decision required the Bureau of Reclamation to release water from its Yakama Project reservoirs to protect fish as well as provide water to its irrigation district customers (Kittitas Reclamation District v. Sunnyside Valley Irrigation District, 763 F.2d 1031 (1985)).

Recently, several Indian tribes have negotiated agreements with major water users to establish and protect instream flows for fisheries. A notable example involves the agreement between the Muckleshoot Indian Tribe and Tacoma Public Utilities (TPU) addressing exercise of TPU's municipal water rights on the Green River. The agreement recognizes that current flows established by rule (WAC 173-509-030) are not adequate to protect Green River fisheries and propose new higher minimum flows.

As a result of the treaty rights to fish, tribes that were party to the treaties retain substantial governmental authority over the activities that affect hunting and fishing. Thus, treaty tribes have a right to co-manage and to participate equally in fishery management decisions affecting the Columbia River including its tributaries. Such co-management responsibilities include harvest management, habitat development or modification, fish culture and enhancement projects, as well as habitat utilization and restoration (Wenatchee River Subbasin Salmon and Steelhead Plan 1990).

4.2.2 Government-to-Government Consultation

Regulations that promote the protection of the Wenatchee Basin fisheries and habitat while facilitating government-to-government consultation between Tribal governments and federal agencies include the Watershed Planning Act and the Salmon Recovery Act.

The Watershed Planning Act 1998 (HB 2514) provides $3.9 million for counties, cities, water suppliers, tribes, state agencies, and representatives of a wide range of interests to join together to debate water

issues. HB 2514 provides a structure for resolving conflicts about water that involves the interest groups in the watershed.

Watershed planning and management under HB 2514 provides an opportunity to improve or protect water quality, habitat and in stream flows. Other watershed planning and management efforts have been completed or are underway that do not depend on the HB 2514 process and may also support salmon recovery, such as the Salmon Recovery Act.

The Salmon Recovery Act 1998 (HB 2496) created a framework to set priorities for salmon restoration projects within watersheds and provides a forum for locally initiated projects to contribute to recovery. All partners will need to ensure these local processes use resources effectively, identify local needs and opportunities, promote retention of local options, and coordinate existing as well as new efforts.

4.2.3 Project Effects on tribal fisheries

Minimal effects to Tribal fisheries are anticipated based on the current rubber dam impoundment structure construction and operational scenarios. Section 6 in this report details the potential impact to aquatic resources found with the Wenatchee Basin.

A brief summation of Section 6 is given here.

- The operation of the rubber dam will generally result in increased lake levels during some or all of the months of July, August and September, and increased flows in the mainstem Wenatchee River during August and September;
- The operation of the rubber dam to augment flows in the mainstem Wenatchee River during late-summer/early-fall could benefit the upstream migration and holding of adult steelhead, chinook, and coho salmon;
- Operation of the rubber dam is not anticipated to affect flows or water levels important to adult salmonid migration and holding in the tributaries or in Lake Wenatchee;
- Steelhead spawning will not be affected by project operations, because steelhead spawn in the spring;
- Operation of the rubber dam will not affect high-flow rearing habitat in the mainstem Wenatchee River;
- Operation of the rubber dam is not expected to adversely influence smolt outmigration patterns or survival;
- Operation of the rubber dam will not affect high-flow conditions in the mainstem Wenatchee River;
- The operation of the rubber dam is not anticipated to affect juvenile outmigration in the tributaries or in Lake Wenatchee; and
- Operation of the rubber dam is not anticipated to affect predation and competition in the tributaries.

4.2.4 Recommendations

The construction and operation of the rubber dam impoundment structure as currently planned downstream from the confluence of Lake Wenatchee and the Wenatchee River would have an anticipated negligible effect to Tribal fisheries in the Wenatchee Basin. With appropriate government-to-government consultation, facilitated by the Watershed Planning Act and/or the Salmon Recovery Act, the proposed project would not infringe upon the rights granted to the treaty Indian tribes of Washington, which have been upheld in both the Ninth Circuit Court of Appeals and the U.S. Supreme Court.

4.3 REGULATORY AUTHORITY

This section describes entities that may own and operate the rubber dam and the framework they may operate within. Because of the nature of the project, the rubber dam impoundment structure would be operated by a public entity. A potential federal entity is the U.S. Bureau of Reclamation (USBR), which operates numerous reservoirs throughout Washington State (and the West). Although this project would not have an irrigation or power component, the USBR may be interested if there are substantial fisheries benefits from the project, which in turn may help them satisfy their responsibility under the Federal Columbia River System (FCRS) Biological Opinion. The USBR has been designated an "action agency" along with the Bonneville Power Administration and the U.S. Army Corp of Engineers. As directed in the ESA, these action agencies have consulted with National Oceanic and Atmospheric Administration (NOAA) Fisheries on the management of the FCRS. The Biological Opinion issued in 2000 directs the action agencies to participate in salmon recovery efforts.

A state agency that could construct and operate the project is the WDOE. The department has participated in the design, construction and operation of the Lake Osoyoos control structure, which regulates the level of Lake Osoyoos in Okanogan County, Washington. The project was implemented in conjunction with the Province of British Columbia. It is operated by WDOE in accordance with operating guidelines set forth by the International Joint Commission. A six-member Board of Control is responsible for overseeing management and compliance with operational orders. Operational decisions are made by WDOE accounting for storage, fisheries and recreation objectives (Symonds, 2001).

Local agencies that could construct and operate the project are Chelan PUD, Chelan County and the Wenatchee Reclamation District. Of those agencies, the PUD would be the most likely candidate for operations because of their extensive experience in operating dams, reservoirs and fish ladders and their regulatory compliance staff. The Wenatchee Reclamation District could operate the project as they have experience in operating water control structures. Chelan County would not likely be a candidate, as they do not have the experience and staff needed to operate the project.

As the rubber dam would serve multiple objectives, operation would require a cooperative effort between the rubber dam operator, fisheries agencies and other interested parties. The dam would be operated within a framework agreed to prior to construction of the project to ensure the multiple objectives are met. In similar situations, committees or Boards are assembled to perform the following functions:

1. Serve as a clearinghouse for hydrologic and meteorological data,
2. Forecast inflow to lake and run operational models,
3. Specify date of storage water capture based upon normal, drought and flood years,
4. Recommend preferred lake levels to enhance or not degrade fisheries in Lake Wenatchee,
5. Specify flows releases to Wenatchee River based upon:

a. instream flow needs
b. fisheries interests (both lake & river)
c. water use needs
d. recreation, navigation & tourism concerns
e. special interests

6. Meet periodically or annually to review lake management and compliance with legal agreements,
7. Issue annual report documenting the performance of the project.

The operating committee or Board of Control should be comprised of WDOE, WDFW, USFWS, Chelan County and the project operator if different from the agencies listed. A tribal representative may also be on the Board or provide input to state and federal agencies.

4.4 PERMITTING REQUIREMENTS

This section provides an overview of applicable federal, state and local permits and other regulatory approvals necessary for construction of the rubber dam impoundment structure and operation of the reservoir. Likely major permits, approvals and related conditions associated with each are described, including permit timeframes, agency contacts, potential issues, project features submit to permits, potential approaches and mitigation requirements.

4.4.1 List of Permits

The federal, state and local permits and regulatory approvals necessary for construction of the rubber dam structure are provided in Table 4.4-1.

Corps of Engineers 404/Section 10

The principal federal laws that regulate activities in navigable waters and wetlands are Sections 404 and 401 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

A Corps permit is required when locating a structure, excavating, or discharging dredged or fill material in waters of the United States, including wetlands, or transporting dredged material for the purpose of dumping it into marine waters. A Corps permit is required for the activity of constructing a rubber dam structure in the bed of the Wenatchee River because it would require placing fill material in a regulated water body.

Any activity planned for waters in Chelan County are administered by the Central Washington field office, Chelan, WA, of the Seattle District, U.S. Army Corps of Engineers. The timeframe for processing a complete project such as this would likely be 6 to 12 months from the time of application, assuming the SEPA, NEPA, and ESA process is complete.

ESA Section 7 Consultation (Biological Assessment)

The Endangered Species Act (ESA) serves to identify species of plants and animals that are considered to be in danger of extinction (endangered) or species that are likely to become endangered (i.e., threatened). The law is administered by the U.S. Fish and Wildlife Service (USFWS) for terrestrial plants and animals, including resident fish, and by the NOAA Fisheries for marine animals and anadromous fish. These two

agencies are collectively referred to as "the Services." Compliance with requirements of Section 7 of the ESA is triggered when there is a "Federal Nexus," which occurs when a federal agency is involved in constructing a project, providing funds for project implementation, or has regulatory jurisdiction over a proposed action. Federal action agencies are required to consider the impacts of proposed federal projects on threatened and endangered species found in the project area for proposed projects.

The responsible federal agency is required to document the degree to which the proposed action will impact any threatened or endangered species found in the proposed project area. The agency makes a determination of "no effect," "not likely to adversely affect," or "likely to adversely affect."

"No effect" determinations indicate that listed species will not be affected by the proposed action, typically because their habitat will not be altered or the species is not found in the area at the time of year when the proposed activity will occur, and the project actions would have no direct, indirect, or cumulative effects on listed species. No effect determinations are documented by the responsible federal action agency in a memo format and are generally not circulated to USFWS or NOAA Fisheries.

Table 4.4-1
List of Likely Federal, State and Local Permits and Regulatory Approvals

Permit Type	Timeframe	When Applicable	Regulatory Agency
Federal - Corps of Engineers 404/Section 10	6 to 12 months, depending on completion of SEPA process and Section 7 Consultation	Locating a structure, excavating, or discharging dredged or fill material in a Water of the U.S., including wetlands	U.S. Army Corps of Engineers Seattle, WA 98124 Regulatory Branch (206) 764-3495
Federal - Section 7 Consultation (Biological Assessment)	6 to 12 months	Required for Corps 404 Permit if federally listed threatened or endangered species may be affected	U.S. Fish and Wildlife Service National Oceanic and Atmospheric Administration Fisheries (206) 860-3200
Federal -NEPA	See SEPA below	For projects with Federal Nexus.	Federal lead agency to be determined
State - Dam Safety Construction Permit	2 to 4 months Longer for complex projects	Constructing, modifying, or repairing any dam or controlling works for storage of 10 or more acre-feet of water	Washington Department of Ecology Water Resources Program Dam Safety Section (360) 407-6600
State - Clean Water Act Section 401, Water Quality Certification	Concurrent with Corps 404 permit process. WDOE has up to 6 months after public notice to issue 401 cert.	Applying for a federal license or permit to conduct any activity that might result in a discharge of dredge or fill material into water or wetlands, or excavation in water or wetlands	Washington Department of Ecology Shorelands & Environmental Assistance Program (509) 574-3992
State -Water Reservoir Permit	Likely 12 months, can be expedited	Constructing a barrier across a stream, channel, or water course, if the barrier will create a reservoir	Washington Department of Ecology Water Resources Program (509) 574-3989
State -Hydraulic Project Approval (JARPA)	2 to 3 months; concurrent with Corps 404 permit process	Work that uses, diverts, obstructs, or changes the natural flow or bed of state waters	Washington State Department of Fish and Wildlife Fish and Wildlife Habitat Program (360) 902-2534
State - Section 106 of the National Historic Preservation Act	3 to 6 months; Longer for complex projects	Federal or federally assisted projects	Washington State Office of Archaeology and Historic Preservation in coordination with lead Agency (360) 586-3065
State - Aquatic Lease	6 – 12 months	May be required for impounding water onto State-owned lands	Washington Dept. of Natural Resources (360) 902-1400
State - NPDES	3 – 6 months	Construction sites > 5 acres	Washington Dept. of Ecology (509) 457-7107
County - Shoreline Conditional Use / Substantial Development	3 – 6 months but likely same time frame as EIS	Projects valued at $2,500 or more located on the water or shoreline area	Chelan County Department of Building/Fire Safety and Planning (509) 667-6225
County -State Environmental Policy Act (SEPA)	EIS process with public comment is usually 12 months, although appeals can stretch this out to 3 or more years	Scoping of project inputs would likely determine EIS is required	Chelan County Department of Building/Fire Safety and Planning (509) 667-6225
County - Chelan Co. Critical Areas Ordinance	Same as Shoreline and SEPA	Applicable to projects within Critical Areas defined by Chelan County.	Chelan County Building, Fire Safety, Planning Department (509) 667-6225

Action agencies typically document "Not likely to adversely affect" determinations in a way that is consistent with their own internal policies. A document is prepared that describes the proposed project, project impacts, conservation measures, and effects determination that is then submitted to the Services for their review. The Corps of Engineers routinely prepares Biological Evaluations (BE) to document its process through which the determination of "not likely to adversely affect" determination was made. This determination is the appropriate one when any potential effects of the activity will be insignificant or unlikely to occur. The BE is circulated to USFWS and/or NOAA depending upon the species involved. USFWS and/or NOAA will then issue a letter of concurrence with the determination, or not concur. If a nonconcurrence letter is sent, then the Services advise the action agencies to request formal consultation.

A biological assessment (BA) must be prepared whenever an action agency proposes a major construction project that will result in significant environmental effects (i.e., will require preparation of a NEPA EIS). A BA is also prepared when the action agency has determined that a project is likely to adversely affect a protected species. The action agency requests initiation of formal consultation with USFWS and/or NOAA. In response to this request, the Services will prepare a Biological Opinion (BO), which first determines whether the adverse effects would jeopardize the continued existence of any species. If a jeopardy determination is made, the Services identify reasonable and prudent alternatives (RPA) that are intended to avoid jeopardy to the species. The action agencies must implement these measures or appeal to higher authority. If jeopardy is not determined, then the Services identify reasonable and prudent measures (RPM), which the action agencies must implement to reduce impacts to listed species. Jeopardy determinations are rare.

The ESA specifically mandates that the Section 7 process is strictly between the Services and the action agency. However, either the action agency or the Services can request input from others.

National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) is the basic environmental policy for the nation. It applies to (1) federal projects, (2) any project requiring a federal permit, and (3) projects receiving federal funding. NEPA is an umbrella statue that sets up a process to document potential environmental impacts of proposed alternatives to help decision makers take environmental considerations into account in project selection. NEPA also sets up a process to disclose information on the proposed project and solicit comments. Unlike other environmental laws, NEPA does not contain statues that help define project design. Rather, NEPA is a mechanism to identify and describe alternatives and their impacts, and possible ways to mitigate for those impacts.

NEPA review is likely to be required when any action is proposed that requires a federal agency to implement, fund, or approve (e.g., issue federal permit) a proposed action. Potential lead agencies for this project could be USFS (US Forest Service lands affected by project); Corps via 404; USFWS via Section 7; or, if applicable, any agency providing federal funding source.

Washington Department of Ecology Dam Safety Construction Permit

A Dam Safety Construction Permit is required before constructing, modifying, or repairing any dam or controlling works for storage of 10 or more acre-feet of water.

The proponent must submit plans and specifications to WDOE for review and approval. These must be prepared by a qualified professional engineer. Permit processing time averages from 6 to 8 weeks, but varies depending on project complexity. WDOE also inspects the construction of all dams to reasonably secure safety of life and property.

Water Quality Certification (401)

A water quality certification (certification) is required of any applicant for a federal license or permit to conduct any activity that may result in any discharge into surface waters. This includes discharge of dredge and fill material into water or wetlands.

The federal agency is provided a certification from the state that the discharge complies with the discharge requirements of federal law and the aquatic protection requirements of state law. In the case of Corps permit applications, timing of certification is tied to Corps permit applications. Public notice for a water quality certification may be submitted jointly with the Corps public notice.

National Pollutant Discharge Elimination System

As authorized by the Clean Water Act this permit issued by WDOE could be required if construction activities disturb threshold area (formerly set at 5 acres, now set at 1 acre under Phase II requirements.)

Aquatic Use Authorization (Aquatic Lease)

Washington Department of Natural Resources (DNR) typically requires DNR approval/authorization for activities that use state-owned aquatic lands, including beds of state navigable waters. Application time may vary from 6-12 months.

Hydraulic Project Approval (HPA)/Joint Aquatic Resource Permit Application (JARPA)

Any form of work that uses, diverts, obstructs, or changes the natural flow or bed of any fresh water of the state, requires a hydraulic project approval from the Washington State Department of Fish and Wildlife.

A complete application package for an HPA must include a completed Joint Aquatic Resource Permit Application (JARPA) form, general plans for the overall project, and complete plans and specifications of the proposed work within waters of the state. JARPA can be used to apply for Hydraulic Project Approvals, Shoreline Management Permits, Water Quality Certifications, and U.S. Army Corps of Engineers Section 404 and Section 10 permits. The application also must include complete plans and specifications for the protection of fish life.

County Shorelines Management Act Permit (Shoreline Conditional Use / Substantial Development Permit)

These permits are required for any development or activity valued at $2500 or more that is located on a state water or shoreline area. Waters of the state include lakes greater than 20 acres or streams with a mean annual flow of greater than 20 cfs. This requirement also applies to any use or activity that materially interferes with the normal public use of the water or shorelines of the state regardless of cost, for any activity listed as a conditional use in the local master program, and for any activity that requires a variance from the provisions of the local master program. Lake Wenatchee and the Wenatchee River in

the vicinity of the proposed rubber dam impoundment structure are designated rural shorelines. At this time neither the Chelan County Code nor the Chelan County Shoreline Master Plan address dams as a permitted use. A Shoreline Conditional Use permit or a Variance from County Code could be obtained, or the County's code could be permanently amended to add dams as a permitted use.

To obtain a Conditional Use Permit (CUP), the proponent would need to complete a CUP application and submit it to the County's Planning Department for review, by the Land Use Hearing Examiner. The Hearing Examiner may approve the CIP, with or without conditions, or deny the application.

To obtain a variance from Chelan County, the proponent would need to complete a Variance Application form and submit it to the County's Shorelines Administrator. The County would than make a determination on whether to grant the variance, or describe any associated mitigation requirements or other conditions. If a shoreline variance or conditional use permit is required, the WDOE must also approve or deny the permit, or approve the permit with conditions.

To obtain a County code amendment that would add dams as a permitted use, the following process would apply. Chelan County reviews proposed code amendments twice annually, in February and August. A proposed amendment is first brought before the County Planning Commission, which issues a recommendation to the County Commission. The County Commission then reviews the proposed amendment and makes a determination to adopt or reject the amendment. Amendments accepted in the February cycle go into effect in July. Amendments accepted in the August cycle go into effect in January of the next year. permit varies as does processing time. Generally, a public hearing is required. The local official will require an affidavit of public notice, a location map, a topographic map, and a site plan.

Water Reservoir Permit

A reservoir permit is required before constructing any barrier across a stream, channel, or water course, if the barrier will create a reservoir. A reservoir is defined as a dam or dike that will store water to a depth of 10 or more feet at its deepest point, or one that will retain 10 or more acre-feet of water. This project meets those definitions.

Reservoir permit applications require information on the use and capacity of the reservoir and a legal description of the location of the structure. Processing time varies depending on project complexity. The process requires publication of a legal notice for two succeeding weeks.

Normally, a reservoir permit application is accompanied by an application for a permit to use water. This application describes the intended beneficial uses of water that will be withdrawn from the reservoir. Unless otherwise specified, a reservoir permit will allow the permittee to fill the reservoir once a year. The permit specifically states the period during which the reservoir is filled. Any entity proposing to use water stored in a reservoir must file for a permit to use water, which must refer to the reservoir as its source of water. For this project, the use of water may be for instream purposes or to provide water to meet future water needs. The allocation of water for each would need to be determined and water right applications filed for those water needs. However, if the water stored is used exclusively for instream flow supplementation, some protection of those needs is afforded by Chapter 173 – 545 WAC, the IRPP for the Wenatchee River Basin (see Section 2 for discussion). The state's Trust Water Program may also be used to set-aside water for instream flow purposes.

As discussed in the Aquatic Resources Section, a dam or other obstruction across or in a stream must be equipped with a durable and efficient fishway approved by Washington State Department of Fish and Wildlife.

State Environmental Policy Act (SEPA)

The Washington State Environmental Policy Act provides a way to identify possible environmental impacts that may result from governmental decisions. These decisions may be related to issuing permits for private projects, constructing public facilities, or adopting regulations, policies or plans.

Information provided during the SEPA review process helps agency decision-makers, applicants, and the public understand how a proposal will affect the environment. This information can be used to change a proposal to reduce likely impacts, or to condition or deny a proposal when adverse environmental impacts are identified. The intent of SEPA is:

- Integrate environmental review with other agency review processes;
- Integrate environmental review into early planning and use these reviews as the basis for analysis of future projects;
- Combine environmental documents with other documents;
- Use existing environmental information through incorporation by reference or adoption;
- Use exemptions for actions that do not have a significant effect on the environment and, therefore, do not require environmental review;
- Involve the public and other agencies in the review process;
- Write environmental impact statements in plain language that focus on significant issues and only briefly discuss nonsignificant issues; etc.

The Environmental Impact Statement (EIS) is used to document impacts of large and/or controversial projects where significant impacts are expected. Impacts are defined as being significant based on scientific input, public controversy, or legal requirements. The EIS is intended to be a disclosure document, providing decision makers with a systematic evaluation of the environmental impacts of a full spectrum of practicable alternatives including the no action alternative.

The Draft EIS describes all the alternatives being considered, and the expected impacts. Typically a preferred alternative is identified. The Draft EIS is circulated to the public for a minimum of 45 days. After the public review period is complete a Final EIS, which incorporates public input and responds to questions raised by the public, is prepared. The Final EIS is circulated for comment for 30 days, after which the Record of Decision (ROD) is prepared. The ROD describes which alternative the agency has chosen to move forward on and why that decision was made. The ROD also identifies what mitigation will be implemented to compensate for the impacts of the proposed project.

Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on cultural resources (e.g., archaeological sites, historic buildings, and traditional cultural properties) and afford the Advisory Council of Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The Section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties, commencing at the early stages of project planning. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effect and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.

Furthermore, cultural resources located on federal property and on other lands involved in projects relying on federal funding or permits are protected by both federal and state law. State law protects archaeological sites and other cultural resources on private and state lands in Washington. Washington cultural resource law (RCW 27.53) state that no known archaeological site or resource can knowingly be damaged without first obtaining a certified permit.

Due to the multiple state and federal jurisdictional control over the project area, the USDA Forest Service, Washington State Parks, Colville Confederated Tribes, Yakama Indian Nation, and the Washington State Office of Archaeology and Historic Preservation would likely be participants in the Section 106 consultation process for this project. Duration of the Section 106 process could be 3 to 6 months, but could be longer for more complex projects.

Local Chelan County Critical Areas Ordinance

Any activities occurring on land within county jurisdiction would require compliance with local CAO regulations associated with wetlands, fish/wildlife conservation areas, floodplains, and aquifer recharge areas.

4.5 POTENTIAL ISSUES, APPROACHES AND MITIGATION REQUIREMENTS

Potential issues associated with the concept of constructing and operating a rubber dam impoundment structure have been identified in various sections of this feasibility study. Legal issues were identified in this Legal and Permitting Requirements section, potential socioeconomic impacts are described in Section 5.0 and potential environmental impacts are described in Section 6.0. These analyses provide a preliminary view of potential issues based on the storage operation model, operating criteria, and operation model alternatives presented in Sections 3.4 and 3.5; and the impoundment structure described in Section 3.6 of this report.

4.5.1 Legal and Permitting Issues

One major issue identified in Section 4.1.2, relates to "overflow on the bed and shores of Lake Wenatchee" and second-class shorelands and the implications associated with the purchase of easements from property owners for storing water at El. 1870.3 (OHW) or at El. 1872.4. This issue should be addressed in greater detail, given its potential significance relative to project feasibility and costs.

A second issue relates to a dam as a permitted use under the Chelan County Code and Chelan County Shoreline Master Plan. This approval would need to be in the form of either a shoreline Conditional Use Permit or a Variance from the County Code. Because of the significance of this issue, it is recommended that the process for approval begin early to ensure that the project would be designated as an allowable use by Chelan County and approved by the WDOE.

A third issue relates to tribal fishing rights and instream flows for fisheries in the Wenatchee River and ultimately a need for a negotiated agreement and co-management responsibilities for the fishery within the basin. If the project moves ahead to the next study phase, the issues of fishery management/fishing rights and instream flows (as well as the associated issue of management of the rubber dam relative to the Endangered Species Act) should be addressed early in the planning process through definition of a planning approach, schedule, and schedule for meeting with involved parties.

The project would need to meet the requirements of NEPA and SEPA since the project would affect both federal lands and private/state lands on the lake. The lead agency will determine the environmental reporting process (EIS or EA/SEPA Checklist) to be used to define potential impacts a part of the scoping process. Initiation of the NEPA/SEPA process would ensure that potential environmental issues are identified and addressed early in the pre-design phase. This approach would allow for some issues and potential impacts to be avoided or minimized through project siting, operational modifications and design, thereby potentially reducing the need for mitigation.

4.5.2 Socioeconomic Impacts

Socioeconomic impacts associated with seasonally raising the water elevation in the lake would include impacts to property improvements caused by the higher sustained water elevations, wind-driven waves, and/or saturated soil conditions that could affect legally permitted shore-side property improvements such as footings, septic tanks and STEP sewer system connections, fixed docks, and boathouses. Detailed topographic survey and aerial photographs of the shoreline during pre-design would allow for more accurate locations of impacts to properties based on elevations of the improvements relative to proposed water elevations with the project.

Establishment of a summer water elevation of 1872.4 ft would affect boat ramps at Glacier View and Lake Wenatchee State Park and access to the boat launch also at the state park. That water elevation could also affect portions of the USFS south shore trail and several campsites at Glacier View. Estimated costs of modifying those facilities is presented in the mitigation section below.

Installation of the rubber dam impoundment structure at the Lake Wenatchee State Park would result in the loss of boat access to the Wenatchee River from the boat ramp. The estimated cost of establishing a new access downstream of the rubber dam has been presented in the feasibility cost estimate (Section 3.5.3.9) for the impoundment structure and in the mitigation section below.

The higher water elevations held in the lake could impact recorded archaeological deposits at the Headwater site and potentially increase risk on unrecorded resources.

4.5.3 Environmental Impacts

The project could potentially benefit several life stages of steelhead and chinook salmon in the mainstem Wenatchee River as a result of increased flows during late summer/early fall.

Potential negative impacts include the potential exposure of chinook redds in the mainstem Wenatchee River and sockeye redds along the shoreline of Lake Wenatchee, and stranding of rearing juvenile salmonids resulting from a decrease in water elevations in the lake and river. The approach to addressing these impacts is defined in the additional studies section below.

The project could also result in changes in wetland distribution and community composition along the lake. The quantification of the impacts could be determined through additional studies defined in the section below.

4.5.4 Mitigation Requirements

Mitigation requirements for the project will be defined as a part of the NEPA/SEPA environmental reporting process and as defined during negotiations for project permit approvals. Adverse impacts identified during NEPA and SEPA will be designed to, where possible, eliminate impacts or minimize impacts. Mitigations will also be defined as "conditions" in the JARPA Hydraulic Project Approval (HPA) and as a part of the JARPA Section 10/404.

Two items defined as impact costs in the Socioeconomic Impacts section were for the replacement boat ramp downstream of the rubber dam (($165,000), and extension of the boat ramp and launch access at the Lake Wenatchee State Park ($4,800). These are forms of mitigation that would also be part of the costs for constructing the project.

4.6 REQUIRED EASEMENTS

Besides permits from agencies to construct and operate the rubber dam and reservoir, the project proponent will need to obtain easements to inundate second-class shorelands owned by adjacent property owners that are not subject to an overflow easement, as described in Section 4.1. For the operational scenario of impounding to OHW (1870.3), it is estimated that easements would be required for 20,380 feet of second-class shorelands. For impounding at the higher level studied (1872.4), easements to inundate property would be required for all properties on the lake. There is approximately 70,000 feet of waterfront on Lake Wenatchee.

The other easement required would be from the Washington State Parks and Recreation Commission, who own Lake Wenatchee State Park. A temporary construction easement would be needed for equipment to access the work site and for a staging area to construct the rubber dam impoundment structure. A permanent easement or right of entry would also be needed for equipment to occasionally access and maintain the rubber dam as well as for a small equipment building that houses compressors and control equipment.

4.7 ADDITIONAL STUDY NEEDS

The following is a list of future study needs that are likely needed to fully address permitting and environmental issues.

1. Definition of ultimate use of stored water – instream flow augmentation, supply to future surface water users in the Wenatchee River Basin Watershed, or as mitigation for future groundwater use either in the aquifers supplying the Wenatchee River or in tributaries to the Wenatchee River (Section 2.7).

2. Future Operation Model Refinements – adjusting schedule for raising the rubber dam based on water year (wet, dry, normal) from snowpack conditions; reducing rate of water collection to storage; adjusting releases from storage to focus on lower flow days when water is most needed rather than release at a constant rate (Section 3.5.2.7).

3. Additional research regarding properties defined in the Overflow Easement Order and description of properties provided by Washington State Department of Natural Resources (Section 4.1.2).

4. Develop and negotiate agreement(s) with treaty Indian tribes regarding instream flows to protect fisheries (Section 4.2.1).

5. Define discriminating factors potential property buyers use when considering buying lake shoreline properties (Section 5.2.1.1.2).

6. Conduct systematic archaeological survey of the impoundment structure site and other project elements such as access roads and parking (Section 5.3.4).

7. Conduct temperature modeling in mainstem river (Section 6.5).

8. Conduct instream flow channel study to determine horizontal and longitudinal extent of potential impacts (Section 6.5).

9. Construction details, sequence and impact analyses (Section 6.5).

10. Fish passage details and impact analysis (Section 6.5).

11. Longitudinal survey of lake shoreline and of the Little Wenatchee and White Rivers to identify potential spawning habitat (Section 6.5).

12. Topographic survey to determine elevational range of plant communities and accessibility of off-channel fish habitats at specific lake levels (Section 6.5).

13. Characterization of wetland plant species composition and distribution of wetland plant communities (Section 6.5).

14. Installation and monitoring of ceilometres to determine extent of hydrologic influence on wetlands and groundwater (Section 6.5).