

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:

Revised: Wheeler Ridge, LLC Timber Harvest, Orchard Development & Restoration

2. Name of applicant:

Ben Alworth, Wheeler Ridge, LLC

3. Address and phone number of applicant and contact person:

4597 Stemilt Hill Road, Wenatchee, WA
509-662-3613

4. Date checklist prepared:

Original October 2, 2018
Revised November 8, 2019

5. Agency requesting checklist:

Washington State Department of Natural Resources (WDNR)
Washington State Department of Ecology (Ecology)
Chelan County Community Development Department (CCCCD)
Chelan County Natural Resources Department (CCNRD)

6. Proposed timing or schedule (including phasing, if applicable):

Table 1. Estimated Project Timeline:

November 2019	Re-submit revised SEPA Checklist for agency review and public comment
Spring 2020	Harvest timber, grade existing logging roads to haul timber; improve 2.3 miles of Chelan County road per easement #682477 dated 2/20/1968, install utilities/pipeline on non-exclusive easement #50-094639 dated 12/19/2016, develop site-specific replanting plans for restoration/wildlife corridor enhancements, construct a 8-foot wildlife fence around each orchard, and develop a conservation easement with a private entity to protect 360 acres of habitat.
Fall 2020	Abandon 5,200 feet of non-County relic logging roads by removing road surface, leveling ruts, and revegetating with native plants in open space/wildlife corridors, finalize and record the conservation easement, re-route a 1.0 mile section of Chelan County road, construct irrigation pipes and reservoir, construct seasonal worker housing, construct spray sheds and shop, and plant cherry trees within wildlife fence.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

If the 260 acres are successful at producing fruit, Wheeler Ridge may pursue planting an additional 110 acres of orchards on either Section 16 or Section 21, which will require subsequent SEPA and permitting but is not proposed at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

ATTACHMENT A: Critical Area Report and Wildlife Habitat Mapping and Management Plan – Wetland Delineation and Wetland Ratings Forms. 2018. Updated 2019. SCJ Alliance

Appendices within Attachment A:

- I. Critical Areas Report, Wildlife Habitat Mapping & Management Plan 2018
- II. Wetland Summary 2018
- III. Washington Conservation Science. 2018. Northern Spotted Owl Activity Center Assessment and Subsequent Surveys on Section 17.
- IV. Wildwood Consulting. John Lehmkuhl, PHD. 2019. Survey for Spotted Owl Habitat Section 16 Easements. 2019.
- V. Aspect Consulting. 2018. Section 16 and 17 Upper Wheeler Road Reconnaissance and Planning-Level Geotechnical Consideration. Map Update 2019.
- VI. Schellhass, Forestry, LLC. 2015. Stemilt and Forest Stewardship Plan. 2015.
- VII. Washington Conservation Science. 2019. Stemilt-Squilchuck Landscape Evaluation. Final Report.
- VIII. SCJ Alliance. 2018. Predicting Summer Elk Habitat Potential on Section 17, Wheeler Ridge. Technical Memo. Map Update 2019, Version 2.

- IX. Shiflett, S. 2018. Forty Years of Elk Observations. Section 17 and Section 16.
- X. Four Peaks Consulting. 2018. Surface Water Quality-Quantity Characteristics.
- XI. SCJ Alliance. 2018. Wheeler Ridge Orchards – Trip Generation Analysis and Traffic Impact Review. Technical Memo. 2018. SCJ Alliance. Updated Maps 2019.

ATTACHMENT B: Cultural Resource Investigation. 2016 & 2018. Cultural Resource Consultants.

ATTACHMENT C: Steffen's Meadow Restoration and Planting Plan. 2016. Chelan County Natural Resources Department.

ATTACHMENT D: Steffen's Meadow Road Re-Location and Meadow Restoration. 2018. Pete Lopushinsky. WDFW.

Other Resources Consulted:

Chelan County GIS. 2018.

Chelan County Comprehensive Plan. 2017-2020.

Chelan County Shoreline Master Program (SMP). 2019.

Stemilt Community Forest Projects. 2019. Chelan County Natural Resources Department. PowerPoint.

Jurisdictional Determination. Dept of Ecology and U.S. Corps of Engineers. 2019. *Pending*.

WDFW is currently processing bull elk data and updating elk priority species mapping in the Stemilt Basin – predicted due date 2020. *Pending*.

WDNR Forest Practices Rule – Practices related to growing, harvesting, or processing timber, including but not limited to, road construction and maintenance, thinning, salvage, harvest, reforestation, brush control, and using fertilizers or pesticides are regulated through the Washington State Forest Practices Act.

WDNR Stream Typing has been completed for this project. On-line.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Proposals in the Stemilt Basin

1. Chelan County Natural Resources Department, WDFW, and WDNR have a project proposal identifying enhanced motorized and non-motorized recreation on adjacent public lands (Final Stemilt-Squilchuck Recreation Plan, 2019). The Chelan County Natural Resources Department issued a SEPA non-project DNS for the Stemilt-Squilchuck Recreation Plan's (April 19, 2019). This plan identified additional motorized/non-motorized recreational access and opportunities within the proposed project area which could affect this proposal; and
2. Chelan County Stemilt-Squilchuck Community Forest Plan, Chelan County Natural Resources Department. PowerPoint Presentation, WDFW. The Stemilt Basin Fuels Reduction/Landscape Scale Restoration Units include a shaded fire break on Section 16 and Section 17 through proposed orchard units # 1 & #2 (Figure 1).

10. List any government approvals or permits that will be needed for your proposal, if known.

WDNR, Forest Practices Application

WDNR Road Maintenance and Abandonment Plans

WDNR Hydraulic Project Approval

WDFW, Ecology and Chelan County Community Development Department Critical Areas Review

Washington State Department of Ecology Wetland Delineation and Wetland Ratings Forms

Washington State Department of Ecology Construction Storm Water General Permit

Washington State Department of Ecology Storm Water Pollution Prevention Plan Approval

Washington State Department of Health Seasonal Housing Permit

Washington State Department of Ecology Exempt Well Approval and/or Washington State Department of Health, Office of Drinking Water Approval

Chelan County Natural Resources Department SEPA Threshold Decision

Chelan Douglas Health District Septic Tank Permit

County Public Works Permit for Road Activities/Improvements within Right-of-Way

Chelan County Utility Franchise Agreement – Lower Stemilt Irrigation District Addition

Chelan County Building Permits

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to

describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

SEE FIGURE 2

Description of the revision/addendum: These revisions do not substantially change the project.

1. Due to concerns expressed by agencies, the project element to pipe a Ns stream is not being proposed for this project.
2. Locations of potential rock pits has been updated on the project map.
3. The Orchard #1 boundary has been revised on the Eastern edge adjacent to the two-track trail re-route.
4. The Orchard #2 boundary has been revised and will further comply with Chelan County Code stream and wetland protection standards/buffers.
5. Technical reports have been updated to reflect orchard boundary changes and Ns stream piping updates as applicable.
6. The Critical Area Report and Conceptual Mitigation Plan has been updated to address several questions and clarifications requested by resource agencies during the SEPA review period.
7. The conservation easement acreage has been revised from 390 acres to 360 acres.
8. Updated Chelan County Comprehensive Plan and Chelan County SMP consistency data and provided additional Best Management Practices (BMPs) in several sections.
9. Updated "proposals" in the Stemilt Basin List since 2018 (checklist question #9).

These documents have been provided to meet Chelan County's request for additional information and do not substantially change the project. Chelan County recently requested the following information be provided in this SEPA revision:

1. Describe short-term impacts associated with illegal road removal and habitat enhancement (see Attachment A, Critical Areas 2019 report update for additional details);
2. Further describe buildings and building infrastructure, including housing units, loading docks, chemical mixing operations, emergency turn-around, carpool parking and other related facilities typically requested at the building permit stage; and
3. Identify rock pit locations on Section 17 and Section 9 including the quantity of rock required to meet Chelan County Primitive Road Requirements in the SEPA checklist; this information is a requirement of the FPA application process.

Previously submitted project elements (Sections 17, 16, & 9):

Timber Harvest, Utilities, Deer Fence & Road Abandonment/Permanent Closures

1. Fill ruts and grade to use existing logging roads to remove 1,460 mbf of timber on Section 17 prior to abandonment/restoring.
2. Remove 30 mbf of timber on Section 16 within existing easements for utilities/pipelines, and 2.3 miles of Chelan County road improvements.
3. Install two, 15-inch culverts in an existing private road per WDNR requirements.
4. Use a designated rock pit on Section 9 and/or 17 for use in road improvements.
5. Haul timber from the site using existing logging roads.
6. Slash piles on landings may be burned during the fall or chipped and spread out.
7. Install a 12-inch buried irrigation pipeline and an 8-inch buried irrigation pipeline from Section 9 and within the Section 16 easement to Section 17. Most of the pipeline will be installed adjacent to Upper Wheeler Road.
8. Install three buried power distribution utility lines and associated vaults within the Section 16 easement to connect to the shop/seasonal housing located on Section 17. Most of the utility line will be installed adjacent to Upper Wheeler Road.
9. Construct an 8-foot tall wildlife fence around each orchard unit
10. Abandon 5,200 feet of non-Chelan County roads on Section 17.
11. Develop and maintain 360 acres via a conservation easement to protect and maintain habitat for elk and other wildlife.

Road Closure-Restoration

A major objective of this proposed project is to remove an illegal road from a sensitive meadow and restore the natural hydrology of the meadow. Illegal access and uses such as vehicle traffic on the road and associated 4 x 4 vehicle traffic

entering the meadow from the green dot road are creating on-going damage to the natural hydrology of the meadow when soils are saturated. Deep ruts, expanding road width, and pooling of water in the road surface are indicators showing increasing damage and hydrologic alteration in the meadow.

1. Remove and restore 5,200 feet of non-Chelan County roads within forest upland habitat and within a sensitive meadow area abandoned after timber harvest (Figure 3).
 - a. The deep ruts, expanding road width, and pooling of water in the road surface are indicators showing increasing damage and hydrologic alteration in the meadow from illegal recreational uses (i.e. mud bogging); and
 - b. Smooth out ruts and replant using native trees, grasses, and forbs in meadow areas; use weed-free straw to keep the soil moist and plantings protected to restore and enhance habitat conditions for wildlife; the road surface in the meadow will be de-compacted using machinery and roadside ditches and deep ruts will be blended to level surface; use wetland plant and shrub species including aspen saplings to restore and enhance habitat conditions for wildlife.
2. In consultation with WDFW, retain a certified restoration ecologist and wetland scientist to develop site specific planting plans to enhance open space including planting trees, shrubs, forbs, grasses and legumes known to be nutritious for deer and elk (Attachment A).

Passive Recreation

1. Continue to provide seasonal passive (non-motorized) recreation on existing single and doubletrack public use trail within Section 17.
2. Replace and re-locate approximately 1,500 feet of a single and doubletrack public use trail so public users can continue to connect to the existing trail on Section 17 under contract with Evergreen Mountain Bike Alliance, Central Chapter (Figure 3).

Orchard Development & Operations

1. Plant a three (3) unit orchard complex totaling 260 acres with tractor roads and grass planted between each tree row (Table 2):
 - a. Unit 1: 120 acres includes orchard trees, 9.9-acre-foot reservoir, ½ acre loading dock, 8-foot-tall wildlife fence, 2 acres of 24-person seasonal housing/5,000 sf shop/storage/gas pumps, and irrigation pipeline/utilities, and an internal orchard road.
 - b. Unit 2: 80 acres includes orchard trees, ½ acre loading dock, 8-foot-tall wildlife fence, an internal orchard road, and new/replacement culvert across Ns stream within existing road
 - c. Unit 3: 60 acres includes orchard trees, ½ acre loading dock, 8-foot-tall wildlife fence, and an internal orchard road.
2. Conduct spring maintenance (i.e. pruning, weed control).
3. Harvest fruit each summer.
4. Use bird controls (i.e. falconers) to deter fruit eating birds from the orchard during late summer and fall.
5. Conduct fall maintenance (i.e. pruning/topping, compost application, fertilizing, etc.).

Wildfire Management

1. Use forest thinning techniques and other WDNR forest health guidelines (i.e. prescribed burns) to reduce fire danger risks.
2. Provide vertical stand structure and age class distribution in any future stands to maximize habitat potential for wildlife.
3. As necessary, use the 9.9-acre-foot reservoir for fire suppression.
4. Orchard development will serve as a fire break to protect adjacent public lands acquired for habitat conservation and recreation.
5. Road improvements will assist fire fighters to fight wildfire if necessary.

Table 2. Orchard development structures description per orchard unit #; orchard units will be located outside of prescriptive riparian/shoreline buffers per Chelan County Municipal Code requirements.

Orchard Unit #	Acres	New Structures	Water Resources
1	120	9.9-acre-foot reservoir Seasonal worker housing/shop Irrigation pipe Underground electrical distribution 8-foot-tall wildlife fence Loading docks	N/A
2	80	8-foot-tall wildlife fence *New culvert installation on Ns streams on an existing road Loading docks	Ns Stream 50 Foot Buffer Wetland 75 Foot Buffer
3	60	8-foot-tall wildlife fence *Culvert replacement on Ns streams on an existing road Loading docks	Wetland 75 Foot Buffer Np stream 100 Foot buffer
Total	260 acres		

*Two, 15-inch culverts will be installed in an existing, private road which will required from WDNR per FPA approval process.

Future Phase if Section 17 plantings are successful (est. 10 years) – will require subsequent SEPA analysis: (1) Optional 100-acre foot reservoir on Section 21¹ with optional irrigation pipe to Section 17; (2) Discuss optional land exchange with WDFW to connect large, contiguous habitats in the Stemilt Basin for migrating elk and other wildlife; and (3) Optional 160 acres of orchard development on Section 16 or optional 110 acres of orchard development on Section 21.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

SEE FIGURE 2

Section 17 (private):

The proposed project is located on Wheeler Ridge, within the Stemilt Basin, Chelan County, Washington State (Figure 8). The project is located on private property owned by Wheeler Ridge, LLC at Township 21N; Range 20 EW; Section 17 and totals 640 acres. The geographic ID/Parcel # is 2120170000000 and is not designated as Open Space, Historic Property, or Multi-Family Redevelopment. The Land use Code is 88 and the Owner ID is 96173. Mailing Address: 4597 Stemilt Hill Road, Wenatchee, WA

Section 16 (public land with easement):

The proposed project easement is located on WDFW owned lands adjacent to Section 17. The geographic ID/Parcel # is 212016000000 and is not designated open space.

Section 9 (private):

The proposed project will use an existing road and reservoir to connect the pipeline within an existing orchard. The geographic ID/Parcel # is 212009430010 and 212009440050.

B. Environmental Elements

1. Earth

a. General description of the site:

The project site is generally forested with an open meadow/wetland area.

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

¹ Wheeler Ridge, LLC could construct a larger reservoir if it will help local water districts with water storage needs; would require a cost share from beneficiaries for the additional 200 acre-feet and subsequent SEPA.

b. What is the steepest slope on the site (approximate percent slope)?

45% is steepest slope within the proposed project site.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

General

Stemilt silt loam, 0-25 % slopes (39.9%); Stemilt silt loam, 25 to 45% slopes (60.1%)

Agricultural Land of Long-Term Commercial Significance

The proposed orchard development is in an area designated by the Nature Resources Conservation Service as "*Farmland of Statewide Importance*" to meet the Nation's short- and long-range needs for food and fiber.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Chelan County GeoHazards GIS database indicates there are unstable slopes within the larger geographical area (including Mission Ridge and Squilchuck drainage), which includes the proposed project area. Aspect Consulting (2018; updated 2019) completed a site reconnaissance to observe and delineate geological hazards (Attachment A). The site shows signs of past slope instability from natural processes. Past failures were observed on slopes of 20 degrees and greater within the geologic unit mapped as mass-wasting deposits. Areas where evidence of past slope instability was observed include the northeastern corner of Section 17, northwestern third of Section 17, and Orr Creek Tributary. The primary mechanism for slope failure within the proposed project area is over steepening of sidewalls resulting from long-term drainage incision. No active or recent slope failures were observed (Attachment A).

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

An existing 2.3 miles of Chelan County road will be improved by grading and adding base rock/top course gravel. 2.3 miles of Chelan County road improvements and an estimated 1.0 mile will need to be relocated outside orchard unit #1 and #2 to Chelan County road standards to maintain existing public use (Figure 2). Source of rock and gravel will come from local sources not to exceed 2 acres; total cubic yards of rock for the entire project is estimated to be 20,900 cubic yards. The Road Maintenance and Abandonment Plan is a forest road inventory and schedule for needed road work and requires WDNR approval, which includes locating the rock pits to be used. Smaller internal orchard roads and loading/staging areas will require grading and occur within each fenced orchard complex unit.

Minor excavation will occur to install utilities/pipelines. Stump removal, grading, and minor excavation within the orchard develop for housing, orchard roads, pipeline installation (est. 6-feet maximum depth) per typical construction requirements. Fill includes excavated soils and gravel to secure the pipes. Roads abandoned will require grading prior to revegetation/restoration activities. This activity will not require extra fill to be brought in; excess soil from the road surface decompaction should provide enough fill for the roadside ditches and ruts.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Timber

The possibility of erosion will be minor during timber activities and will be managed via the FPA permit and through Chelan County Public Works and Department of Ecology approved BMPs. Landings will be located on well-drained areas and sloped to ensure any water drains onto the forest floor. Water will be managed properly to avoid rutting, slumping of road, and erosion of roadbed to reduce sediment dispersion. Ditches will be constructed with approval from Chelan County Public Works Department to ensure water does not flow directly into streams and wetlands. Water collected in ditches will be directed to the forest or other vegetated areas

through ditch-outs. Exposed soils on edges of roads will be seeded with native grasses to minimize erosion. Rock will be used on-site to provide a durable road surface to improve weather resiliency and deep enough to prevent rutting.

Linear Utility Installation

Per Chelan County Code 13.18.010 (2)(D) Linear construction projects, such as a pipeline or underground utility line installation, that do not result in the installation of any impervious surface and that replace ground with in-kind material or materials with similar runoff characteristics is exempt from the requirements of this Chapter. The possibility of erosion will be minor during linear installation of utilities and will be managed through Chelan County Public Works and Department of Ecology approved BMPs.

Clearing

Per Chelan County Code 13.18.010 (2)(c)(iv) commercial agricultural practices involving working the land for production is exempt from the requirements of this Chapter. The possibility of erosion is minor but is expected to subside once orchard trees are planted and grass is planted between orchard rows. BMPs will be developed based on technical guidance provided in the Washington State Department of Ecology Stormwater Management Manual for Eastern Washington. Appropriate BMPs will be implemented throughout the orchard. During road improvements, BMPs will be used for drainage to minimize saturation of soils on steep slopes and erosion.

Restoration

The illegal road is being removed to restore ecosystem processes and enhance areas for elk during summer months. Short-term impacts of these efforts include minimal sediment loss from de-compacting soil to prepare the area for restoration and noise from machines.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Less than 1% of the site will be covered with impervious surfaces and will occur at the loading docks and the housing/shop development area. The primitive road surfaces will not be paved.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

BMPs will be developed based on technical guidance provided in the Washington State Department of Ecology Stormwater Management Manual for Eastern Washington. Throughout orchard development, appropriate BMPs will be implemented. Clearing of native landcover will be minimized on slopes 40 degrees or greater. Areas within the orchard development with over 20% grade will be terraced to allow farming and limit erosion. Where timber must be harvested to support orchard development, native grass, shrub, and soil will be maintained to minimize runoff, erosion, and subsurface infiltration.

The proposed project will be required to comply with federal and state agency air quality standards. Nuisance dust from short-term construction activities will be controlled through Washington State Department of Ecology approved BMP's and potentially further conditioned in state permits (i.e. WDNR Forest Practices and/or Dept. of Ecology Construction Stormwater Permit). Dust control BMPs will be integrated into each project element including but not restricted to roads, rock pit activities, and exposed surfaces such as land clearing.

During road improvements, BMPs will be used for drainage to minimize saturation of soils on steep slopes and erosion. Roadside drainage will be designed on the uphill side with properly sized culverts to maintain natural drainages. Of the 640 forested acres located on Section 17, 360 acres will remain in forest habitat to reduce erosion and maintain slope stability. Road removal and wetland-meadow enhancement is expected to improve current erosion occurring from illegal recreational activities.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Federal and state agencies set air quality for outdoor use and the proposed project is expected to comply with those standards, even during short-term rock crossing efforts. Minor emissions during the use of heavy equipment would occur during tree removal, road activities, and during construction. These emissions will be localized to the location of the machinery during timber harvest, planting and annual agricultural operations. Minor emissions during annual orchard operations. Emissions of orchard spray during operations per permit requirements. When there isn't a forest fire or prescribed burning, air quality conditions in the Wenatchee Valley tend to be good (Dept. of Ecology, Air Monitoring Network, 2019).

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Machinery will be turned-off when not in use to reduce emissions. A proportion of the agricultural workforce will reside on-site in temporary, seasonal housing or near-by in existing seasonal agricultural worker housing. Orchard staff carpool to and from the site when possible to control emissions. Fruit is hand-picked by employees not machines. All required spray applications will comply with federal and state regulations. The proposed project will be required to comply with federal and state agency air quality standards.

3. Water

a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The Stemilt Creek watershed and the Squilchuck Creek watershed are within the proposed project area. Both watersheds drain to the mid-Columbia River about 6.5 miles north of Section 17. WDNR Stream Type maps were consulted and revised following field work carried out with WDNR staff. Two Ns streams located north that drain into the perennial stream are within very incised channels (as deep as 6 feet in sections) and contribute sediment to the perennial stream during winter and spring runoff events.

There are three (3) wetlands in the area (Attachment A). Wetlands were delineated using the 2014 Eastern Washington Rating System, as required in Chelan County code. Orchard development will comply with wetland buffers and identified in the final CAO report and pursuant to Chelan County Code Chapter 11.80 Wetland Areas and Wetland Overlay District (WOD) as amended and Chelan County Code Chapter 11.78 Critical Areas to protect water quality.

In spring of 2018, Four Peaks Consulting collected surface water systems data in the projects area to provide an initial characterization of baseline surface water resources in Section 17 (see critical areas report 2019 update Attachment A). None of the streams within the proposed project area are listed on the Washington State Water Quality Standards to determine which designated uses apply (WAC 173-201A).

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes. Two, 15-inch culverts will be installed within an existing, private road on Section 17 per WDNR requirements – one new and one to replace an existing culvert (Figure 5). In addition, an element of the conceptual mitigation plan is to remove illegal roads and revegetate to improve habitat/hydrological function within the wetland-meadow. Site plans will be developed per WDNR requirements; channel banks will be stabilized with straw and/or grass seed to prevent erosion and the riparian zone will be planted with native riparian species per WDNR permit conditions.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Fill is not anticipated to be required to smooth out ruts in areas which have been heavily degraded from illegal roads/recreational uses such as mudbogging within the wetland meadow.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No. The orchards will be irrigated with existing water rights from the Lower Stemilt Irrigation District (LSID). The project area was annexed into the LSID boundary to facilitate irrigation service from that purveyor. LSID has a large existing portfolio of water rights that are sourced from Stemilt Creek and the Columbia River as well as additional recently acquired rights sourced from the Columbia River. Together these rights provide enough instant and annual quantities to serve the existing and proposed orchards served by the District from existing authorized diversions.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

The potable water needs of the project are estimated at less than 5,000 gallons per day. This potable demand is expected to be met with an exempt well unless otherwise determined by the Washington State Department of Ecology and/or the Washington State Department of Health, Office of Drinking Water.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

There will be no waste materials discharged into the ground or surface waters. A septic system will be installed to support agricultural worker housing per the Chelan-Douglas County Health District.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Short-term runoff may occur as a result of timber harvest activities, road improvements, road removal, and seasonal run-off from snowmelt and other natural precipitation events. By eliminating illegal access to user-built roads and restoring disturbed areas with native vegetation, it is expected seasonal run-off patterns will improve hydrological functions in the wetland area. Installing adequately sized culverts per WDNR specifications (15-inch) will control surface and runoff water.

Stormwater will be managed to meet guidance provided in the Washington State Department of Ecology Stormwater Management Manual for Eastern Washington, Ecology permits, and the SWPPP. Irrigation conservation practices minimize the amount of water infiltrating below the root zone to reduced water consumption rates and limit effects of irrigation water use on slope stability. According to the WIG and Washington Department of Ecology's Guidance Document, GUID-1210, only about 15% to 25% of irrigation water would enter the soil column below the root zone. The balance is evaporated or taken up by vegetation. Additionally, because irrigation occurs during the driest months of the year, the volume of water infiltrating below the root zone due to irrigation will be less than what occurs during the wet weather months.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

None that are known. Spray fill stations and storage will be constructed to capture spills per applicable laws/requirements.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The proposed project will generally improve natural hydrology and drainage patterns within the wetland-meadow by removing roads, restoring these areas, and prohibiting public access by installing a gate. Existing drainage patterns of steep, topographic lows will remain the same. Orchard development is located outside of seasonal and perennial stream buffers, therefore will not affect drainage patterns.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Chelan County road improvements will be designed to reduce or control surface and ground runoff water per Chelan County Public Works requirements, Ecology permit guidance, and the SWPPP. Professional engineers will be retained to develop road plans and all plans will incorporate County approved BMPs and will monitor BMP effectiveness during construction and operations. Removal of roads and restoration of areas impacted by illegal user-built roads, mud bogging, dispersed camping, and relic logging roads will be revegetated to control unnatural seasonal run-off rates. Stormwater will be managed to meet guidance provided in the Washington State Department of Ecology Stormwater Management Manual for Eastern Washington. Internal orchard roads will be constructed and maintained to reduce and control surface and runoff water. Road drainage designs will be completed in consultation with Chelan County Public Works Department during the permitting process. Installing adequately sized culverts per WDNR specifications will control surface and runoff water.

4. Plants

a. Check the types of vegetation found on the site:

- ☒ deciduous tree: alder, maple, aspen, other
- ☒ evergreen tree: fir, cedar, pine, other
- ☒ shrubs
- ☒ grass
- ☐ pasture
- ☐ crop or grain
- ☐ Orchards, vineyards or other permanent crops.
- ☒ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Existing vegetation within the proposed orchard development units on Section 17 and within the existing Section 16 easements consists of a mosaic of herbaceous communities, shrub land, forests (primarily ponderosa pine), and some riparian/wetland species (Attachment A). Approximately 265 acres of vegetation will be removed or altered excluding restoration activities for orchard development (Table 3). Brush may need to be trimmed back to restore adequate road width. The meadow restoration element will also have minimal disturbance on existing vegetation because the areas to be restored are currently illegal roads or denuded areas that have been damaged from illegal trespassing see Attachment A for additional details.

Forest

Overall, 80% of Section 17 is forested with both single and multi-layered stands of both single and mixed species composition. There is mistletoe in both Douglas-fir and ponderosa pine overstories which is a threat to the young understory layer. Forest species composition within the Section 16 easements is the same as Section 17, dominated by Douglas-fir and ponderosa pine. There are no forests on Section 9 as this area has been developed.

Uplands & Grasslands

Communities of wildrye, bitterbrush, big sage brush, native bunchgrass, wildflowers, annual grasses and native forbs such as Bingen lupine, and buckwheats dominate uplands on Section 17 and within the Section 16 easements. Trees observed were primarily Ponderosa pine, red alder, and a handful of Quaking Aspen. Additional shrubs observed included Oregon grape, oceanspray, snowberry, and wild rose. Herbs, ferns, and vines dominant in uplands included Arrow leave balsamroot, violet, wild geranium, bleeding heart, and trillium.

Riparian & Wetland/Meadow Community

These areas consist of primarily two dominant trees species, Quaking aspen and Red alder. Wetland shrubs included service berry, twinberry, red osier dogwood, wild crabapple, and wild rose. An array of herbs, ferns and vines were observed and included water parsley, wild columbine, yellow lily, wild iris, sedge spp, coltsfoot, small-fruited bulrush, horsetail, spike rush, and spreading buttercup. The vegetation from within to outside of the wetland areas reflected a transition from wetland to upland conditions, as would be expected. The majority of wetland vegetation was Facultative, reflecting the seasonally wet conditions expected in this area. Obligate vegetation was documented only in Wetland C or near road crossings where water backed up above partially blocked culverts.

c. List threatened and endangered species known to be on or near the site.

There are no, known listed or endangered plant species on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

See Attachment A for proposed measures to use native plants, as well as enhance existing low-quality habitat/vegetation.

e. List all noxious weeds and invasive species known to be on or near the site.

All noxious weeds will be controlled and if required, reported to the Chelan County Weed Control Board. Wheeler Ridge, LLC will implement BMPs to avoid the spread of noxious weeds to wildlife corridors and adjacent habitats.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other: Turkeys,
mammals: deer, bear, elk, beaver, other: Cougar and bobcat
fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site.

There are no known threatened or endangered species known to be on or near the site. There are no fish bearing streams located within the proposed project area.

WDFWs PHS database identified a single owl (unknown status) previously located approximately 0.9 miles west of the proposed project in 1996, and a single resident owl approximately 1.8 miles to the south in 1998. In 2018, the Washington Conservation Science Institute conducted a northern spotted owl Activity Center Assessment and subsequent surveys within Section 17 per U.S. Fish and Wildlife Services guidelines (USFWS 2012). No spotted owls were detected (Table 4; Attachment A). Information has been provided to WDFW to supporting updating the PHS database. In 2019, John Lehmkuhl, PhD conducted a northern spotted owl survey within easements on Section 16 and did not detect northern spotted owls or identify owl habitat within the easements (Attachment A).

Table 3. Northern spotted owl Activity Center Assessment results, Washington Conservation Science Institute, 2018.

# of Visits	Date	Completed Survey	Spotted Owl Detected?
1	04/26/2018	Yes	No
2	05/31/2018	Yes	No
3	06/11/2018	Yes	No
4	07/19/2018	Yes	No
5	07/26/2018	Yes	No
6	08/03/2018	Yes	No

d. Is the site part of a migration route? If so, explain.

No. Central Washington State is primarily located within the Pacific Flyway and Bird Conservation Region 9 – Great Basin. Of the species identified in the Great Basin, none are expected to occur within the proposed project area. Results from summer collared cow elk did not indicate elk migrated through Wheeler Ridge though the sample size was small (372) (WDFW, Colockum Elk Study II: 2008-2012).

e. Proposed measures to preserve or enhance wildlife, if any:

See Attachment A for proposed measures to preserve, enhance, and/or mitigate impacts to wildlife.

The WDFW PHS database indicated Section 17 and Section 16 provides breeding habitat for elk during summer months (WDFW, no source date).

e. List any invasive animal species known to be on or near the site.

There are no known invasive animal species at or near the site.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Utilities will be used to provide electricity for irrigation pumps, seasonal housing, and outbuildings for power and heat. A pipeline will be installed to connect to existing Section 9 orchard reservoir (Figure 1).

b. Would your project affect the potential use of solar energy by adjacent properties?
If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any:

None proposed at this time.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?
If so, describe.

1) Describe any known or possible contamination at the site from present or past uses.

NA.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

NA.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
There will be orchard spray, motor oils, gasoline, and other orchard operational chemicals stored during construction and for operations. All chemical inventories will be listed in accordance with Washington State Department of Ecology, Washington State; Labor and Industries.
- 4) Describe special emergency services that might be required.
The proposed reservoir will provide fire suppression in the event of a forest fire. County road improvements may provide better service to emergency service vehicles requiring access to adjacent public lands and/or to fight fire.
- 5) Proposed measures to reduce or control environmental health hazards, if any:
No environmental health hazards are anticipated to occur. BMPs will be implemented to minimize risk. If there is an inadvertent leak from heavy equipment it will be cleaned-up immediately with an Ecology approved spill kit. Spill collection facilities will be used at spray fill station to prevent ground contamination from leaching chemicals. The proposed 9.9-acre-foot reservoir could provide fire suppression access in the event of wildfires on or near the properties. Non-commercial thinning to selectively log as part of a long-term plan to make this privately-owned forestland more resilient to fire, disease and climate change, and provide additional forage habitat for wildlife during the summer months. Chelan County Road improvements are being privately funded and will support safe access for firefighting suppression and emergency vehicle access.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

There are no known noises in the area which may affect the proposed project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Levels of noise from timber harvest, logging trucks, site clearing, trucks hauling fruit, and other equipment is expected to be minimal, seasonal, and typically from sunrise to later afternoon typically. Noise from typical bird sound deterrents will be minimal and used in conjunction with non-noise deterrents such as Falconers, bird ribbons, and bird shields.

Typical hours of operations are the same as existing agricultural activities throughout Chelan County (sunrise to sunset). Rock pit activities will only be permitted during the hours of 5 am and five-thirty pm, Monday – Saturday unless Chelan County determines it would be a noise nuisance to operate outside of these hours. Per Chelan County Code, farm equipment noise is exempt from 9.44.0090 Vehicle and Watercraft Noise Restrictions.

- 3) Proposed measures to reduce or control noise impacts, if any:

Operations are seasonal. Orchards already operate on Wheeler Ridge and throughout the Stemilt Basin. Levels of noise will be minimized by turning-off machinery when not in use.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The area is a historical working forest and will not affect current land uses on nearby or adjacent properties. Adjacent properties include other orchard development, forested lands, residential, Squilchuck State Park, and public and private lands zoned as Commercial Forest Lands.

Commercial Forest Lands provide long term commercial significance to Chelan County and other uses that eliminate the continuation of commercial forest resource management should be discouraged, however these lands have been converted to conservation lands for wildlife habitat protection and recreation. Though Forest/Timber Lands polices advocate promoting multiple uses of forest lands, the County does not promote uses of forest lands where such uses eliminate or limit commercial forest resource management. WDFW purchased² Commercial Forest lands (Section 16 and Section 22) from WDNR for the protection³ of *Oncorhynchus mykiss* (wild steelhead), habitat for the Endangered Species Act (ESA) Listed Gray Wolf and their prey species mule deer and elk and to protect suitable habitat for ESA Listed northern spotted owls commercial opportunities. This newly acquired area totals 1,275 acres, eliminates the ability to continue commercial forest resource management, and has been incorporated into the Colockum Wildlife Area (Colockum Wildlife Area 2017 Management Plan Update, WDFW). Enhanced recreational opportunities are being planned within the Stemilt Basin on Section 16 (Stemilt-Squilchuck Recreation Plan, 2019).

The Stemilt-Squilchuck Basin is a popular destination for recreational enthusiasts because it offers an array of year-around activities including but not limited to reservoir fishing, dispersed camping, wildlife viewing, horseback riding, biking, hiking, backcountry skiing, snowshoeing, snowmobiling, ATV riding, and hunting. There are several lakes within the Stemilt Basin that are managed by WDFW for fishing opportunities. In the spring, WDFW stocks Clear Lake with catchable-size Rainbow trout. WDFW will occasionally plant fingerling Tiger Trout in the late spring. Clear Lake is 4 acres and can be accessed from Stemilt Loop Road. Another popular lake is Lily Lake. This is a reservoir lake stocked with Rainbow trout and can be accessed a mile south of Stemilt Loop Road. Black Lake is a reservoir operated by the Wenatchee Heights Reclamation District. Each spring WDFW plants Rainbow, Tiger, and Brown trout in Black Lake which is accessed by taking Stemilt Loop Road to Orr Creek Road.

This proposal will not affect current land uses (private) or adjacent properties. Adjacent lands are either in agriculture or open space.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Yes. The site has been logged several times and has been considered a working forest. Other lands adjacent to or near the proposed project footprint are developed orchards or recreational lands such as Squilchuck State Park and WDFW multi-use lands.

The Natural Resource Conservation Service has identified soils within the proposed project footprint as "Farmland of Statewide Importance"; Section 16 includes "Farmland of Unique Importance" in the northern portion. The proposed orchard development will protect lands designated by the Nature Resources Conservation Service as "Farmland of Statewide Importance" to meet the Nation's short- and long-range needs for food and fiber. Section 16 has been converted from "Farmland of Unique Importance" to habitat conservation lands but remain zoned for Commercial Forestry.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

Large-scale agricultural operations have existed within Chelan County and the Stemilt Basin for decades. This orchard development is typical of existing working orchard operations located adjacent to or near the proposed project and throughout Chelan County. The proposed project is further complemented by existing orchard operations, equipment, storage, and seasonal agricultural worker housing that already exists near the proposed project area and is owned by Wheeler Ridge, LLC and its affiliates. Oversized equipment will be typical of equipment that has been utilized in the Stemilt Basin for decades.

² WDFW secured federal Endangered Species Act funding to buy the remaining two sections of DNR trust land, appraised at \$1,778,000, to protect Stemilt Basin habitat for elk, deer, wolves, and other wildlife species.

³ Methow Phase 8 Section 6 Proposal, 2008. Washington State Department of Fish and Wildlife.

c. Describe any structures on the site.

There are no structures at the site now. Potential, future structures include a 9.9-acre-foot reservoir, loading docks, installation of a wildlife fence, utilities, seasonal agricultural worker support facilities, fuel station, outbuildings, and spray sheds.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

RR20 for Section 17 and Section 9; Section 16 is zoned Commercial Forest

f. What is the current comprehensive plan designation of the site?

Section 17 & Section 9: Rural Residential (RR20). The Comprehensive Plan directs agricultural development in areas that are designated as either Farmland of Unique Importance or Farmland of Statewide Significance. The proposed project area is located within both those designations.

Section 16: Commercial Forest. The Comprehensive plan directs other activities on Commercial Forest Lands that do not eliminate commercial forestry from the land. The proposed project pipeline easement on Section 16 and Section 16 road improvements will not eliminate future commercial timber harvest. Section 16 has been converted to habitat resource protection lands per a Section 6 ESA funding transfer from USFWS to WDFW, however the underlying land use has not been updated to reflect this conversion.

g. If applicable, what is the current shoreline master program designation of the site?

Per Chelan County SMP Designations, the proposed project area is likely designated Rural and "Agriculture, aquaculture and forestry consistent with the rural character and the maintenance of shoreline ecological functions and processes should be encouraged".

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes. WDFW has identified Class II Fish and Wildlife areas. There are no fish bearing streams within Section 17, Section 9, or within the Section 16 utility/pipeline easement (WDNR, Hydro-layers, 2018; Chelan County SMP 2019). Some areas and adjacent lands are designated *Landslide and/or Erosion* areas per Chelan County GIS layers.

i. Approximately how many people would reside or work in the completed project?

An estimated 24 agricultural workers may reside on Section 17 between April and September to support on-going orchard operations and to protect fruit from frost.

j. Approximately how many people would the completed project displace?

None. The proposed project is expected to provide 2 full-time jobs; 24 seasonal jobs, and up to 900 jobs during the extended 2-week harvest season annually.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project is compatible with the Chelan County Comprehensive Plan goals and policies to protect and encourage agricultural, the proposed project is consistent with allowable uses within RR20 zoning and is consistent with the Chelan County SMP 2019 management policies and buffer requirements. The proposed project is further compatible with the existing goals and objectives of the WRIA 40 Water Storage Assessment (2007), incorporated into the Shoreline Management Act Program, and fire hazard prevention objectives. Other proposed uses and plans in the area include Mission Ridge Ski Resort expansion and Squilchuck-Stemilt

Basin Recreational Plan (non-project) which are continuing with planning efforts; it is unknown at this time how those project land uses, and plans will impact land and shorelines.

m. **Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:**

This project proposal will convert a historical working forest to irrigated agriculture of long-term commercial significance. It is estimated short-term construction will contribute \$10 million-dollars to the local economy and within the state of Washington and operations/harvest of fruit may contribute an estimated \$10 million-dollars annually to local and state economies.

9. Housing

a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

Housing provided for seasonal agricultural worker housing will not exceed Chelan County Code for RR 20 zoning and will be permitted through the WA State Department of Health as required. The proposed project is expected to provide 2 full-time jobs; 24 seasonal jobs, and up to 900 jobs during the extended 2-week harvest season annually. This housing is only available for on-site, seasonal staff. The Chelan County Comprehensive Plan directs the County to protect the economic viability of the agricultural industry by supporting construction of agricultural worker housing near orchards. Chelan County is directed to consider reducing site development standards and building fees for agricultural housing units. This will assist the agricultural industry to remain economically viable, reduce transportation needs, and provide adequate housing for agricultural workers regulated through the State of Washington (WAC 296-833). Chelan County (page 15 of the Chelan County Comprehensive Plan) encourages the use of the State Program to place temporary housing throughout the County.

b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

None.

c. **Proposed measures to reduce or control housing impacts, if any:**

All seasonal agricultural worker housing will follow applicable Chelan County Codes, as well as other applicable building permit and Department of Health requirements. The housing is located on-site and within the 8-foot-tall wildlife fence to avoid human-wildlife conflict. All dumpsters/garbage cans will be located within the 8-foot-tall wildlife fences and will be locked to avoid attracting wildlife to food spoils, garbage, etc.

10. Aesthetics

a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

The tallest structure will be the spray storage shed and will not exceed 50 feet in height. The exterior of the structure will be galvanized, corrugated metal. Other structures may include utility poles for power and rain covers that may extend 17 feet above cherry tree canopy.

b. **What views in the immediate vicinity would be altered or obstructed?**

No views in the immediate vicinity will be obstructed.

c. **Proposed measures to reduce or control aesthetic impacts, if any:**

None.

11. Light and Glare

a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

Minimal, glare may occur if reflective ribbons are used as bird deterrents.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

Use antiglare materials on all structures. All lights on structures will be directed away from wildlife corridors.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Stemilt and Squilchuck Basin is a popular destination for recreational enthusiasts because it offers an array of year-around activities including but not limited to reservoir fishing, dispersed camping, wildlife viewing, horseback riding, biking, hiking, backcountry skiing, snowshoeing, snowmobiling, ATV riding, and hunting. Most of the areas are accessed by the Chelan County and green dot road systems. Tamarack Saddle, LLC & Mission Ridge Ski and Board Resort have proposed a Master Planned Resort expansion to the existing Mission Ridge Planned Development. Mountain biking, hiking, horseback riding, and trail running are prevalent activities in the area, primarily at Squilchuck State Park. There are several lakes within the Stemilt Basin that WDFW stocks with fish, offering recreational fishing opportunities. Dispersed camping, informal recreation such as hiking, hunting, fishing, wildlife viewing, camping, ATV riding, horseback riding, and pleasure driving occurs on Section 16. There is an on-going planning effort by WDFW to designate trails and camping on Section 16.

The Colockum elk herd are scattered within the Squilchuck-Stemilt Basin and provides harvest opportunities for hunting enthusiasts (WDFW, 2015). The proposed project may influence elk to move back to public lands during fall orchard operations. If elk move to Section 16 and Section 22 as a result of fall orchard operations, elk harvest opportunities may improve for hunters. There is also some turkey hunting in the area. The Squilchuck State Park is also located adjacent to the proposed project. The State Park is heavily visited by mountain bikers, hikers, fat bikers, snow-shoers, and runners. The State Park also accommodates sledding, has an event center, and provides for group camping.

- e. Would the proposed project displace any existing recreational uses? If so, describe.

No. Existing recreational use via an existing single-double trail will be relocated outside the proposed orchard development unit #1 (Figure 4) so it can continue to connect to Section 16 public lands. The proposed project will not displace any existing, legal recreational uses on adjacent lands.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None that are known at this time. However, privately funding improvements to the Chelan County Road may enhance access to adjacent public lands, including access to fight wildfires in the area. The proposed project includes relocating a portion of a single/doubletrack trail on Section 17 outside of the deer fence so that it can continue to connect to Section 16 public lands for existing public use.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

There are no, known historic resources on the site that are eligible for listing (Cultural Resource Consultants, LLC 2018; Attachment B).

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material

evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Cultural Resource Consultants (CRC) conducted a cultural resource overview to identify previously recorded cultural resources and evaluate potential for previously unrecorded cultural resources within the property (Attachment B). Background research did not identify any previously recorded cultural resource sites to be present within the proposed project footprint. Comments received from the Confederated Tribes of the Colville Indian Reservation and the Department of Archaeology and Historic Preservation during previous SEPA review did not include a request for additional investigations.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

The information presented in CRCs final report is based on professional opinions derived from their analysis and interpretation of available documents, records, literature, field investigations and observations. Background research did not identify any previously recorded cultural resource sites to be present within the proposed project footprint, therefore further investigation is not scheduled for this proposed project (Attachment B).

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

If any ground-disturbing or other construction activities result in the inadvertent discovery of archaeological resources, work should be halted in the immediate area, and contact will be made with county officials, the technical staff at DAHP, and tribal representatives. Work will be stopped until further investigation and appropriate consultations have concluded. In the unlikely event of the inadvertent discovery of human remains, work will be immediately halted in the area, the discovery covered and secured against further disturbance, and contact will be made with law enforcement personnel, consistent with the provisions set forth in RCW 27.44.055 and RCW 68.60.055.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Stemilt Loop Road and Upper Wheeler roads will be used to access existing roads across Sections 9 and 16 (Figure 1).

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Gravel, primitive open space for carpool and tractor parking will be available within the orchard development footprint and designed to comply with Chelan County development regulations.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Yes. An element of this project includes improving 2.3 miles of the existing Chelan County road and relocating 1.0 mile of the existing Chelan County road outside orchard development (Figure 2). Wheeler Ridge, LLC will maintain the improved roads in Section 16 and Section 17 to meet orchard development needs, the intent of the easement, and per Chelan County Public Works recommendations/road standards.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Table 5 illustrates the results of estimated daily traffic generation for existing and future conditions to accommodate the proposed project (Attachment A). Because the harvest periods do not overlap, the proposed project will only add 10 daily round trips to the regular growing season traffic to the area road network during the existing harvest period. The proposed project operations will follow later than current harvest and will generate approximately 68 round trips less than the existing harvest period.

Table 4. Existing and projected daily round trip generation.

Vehicle Type	Seasonal (May to September)			Harvest (Early August)	Harvest (Late August)
	Existing Operations	Proposed Expansion	Total AFTER Expansion	Existing Operations	Proposed Expansion
Passenger Vehicles		10	29	349	290
Vans	0	0	0	4	3
Semi-Trucks	0	0	0	13	10
Straddle Buggies	0	0	0	29	24
Totals	19	10	29	395	327

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No. Current movement of agricultural products on roads and street in this area has occurred for decades.

- g. Proposed measures to reduce or control transportation impacts, if any:

The proposed project will generate essentially no traffic during the off-season and very little traffic throughout the entire year (approximately 20 daily trips per day). (Attachment A). Seasonal worker housing located on-site will further reduce the traffic because workers will not be commuting back and forth during harvest.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No. Wheeler Ridge, LLC provides a carpool van for employees. The proposed project infrastructure could provide immediate and additional resources for law enforcement staff and fire suppression in the event of wildfire(s). All building permit applications will provide project-level details of emergency turnarounds and fire suppression appurtenances for Chelan County Public Works and Fire Department Review.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

There are no known direct impacts on public services.

16. Utilities

- a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____None

- d. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Irrigation water will be provided by LSID. Power will be provided by Chelan PUD.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Ben Alworth

Name of signee Ben Alworth

Position and Agency/Organization Director of Support Operations, KMO

Date Submitted: 11/8/2019

LITERATURE CITED

- Aspect Consulting. 2018. Section 16 and 17 Upper Wheeler Road Reconnaissance and Planning-Level Geotechnical Consideration. Map Update 2019.
- Chelan County Comprehensive Plan Update Code. 2017-2020.
- Chelan County GIS. 2018.
- Chelan County Municipal Code. 2019.
- Chelan County Natural Resources Department. 2019. Final Stemilt-Squilchuck Recreation Plan.
- Chelan County Natural Resources Department. 2019. Final Stemilt-Squilchuck Recreation Plan SEPA non-project DNS.
- Chelan County Natural Resources Department. 2016. Steffen's Meadow Restoration and Planting Plan.
- Chelan County Shoreline Master Program. 2019.
- CORE GIS. 2008. Summer Elk Habitat Potential on State Lands. Funded by the Trust for Public Lands. Facilitated by the Chelan County Natural Resources Department.
- Cultural Resource Consultants. 2016 & 2018. Cultural Resource Investigations.
- Four Peaks Consulting. 2018. Surface Water Quality-Quantity Characteristics.
- Fruit Growers. 2018. Inflatable Dancer.
- Lopushinsky, Pete. 2018. Washington State Department of Fish and Wildlife. Steffen's Meadow Road Re-location and Meadow Restoration Project. SEPA Checklist and DNS.
- Schelhass, Forestry, LLC. 2015. Stemilt and Forest Stewardship Plan. 2015.
- SCJ Alliance. 2018. Critical Area Report and Wildlife Habitat Mapping and Management Plan – Wetland Delineation. Update 2019. Habitat Assessment and Conceptual Mitigation Plan.
- SCJ Alliance. 2018. Predicting Summer Elk Habitat Potential on Section 17, Wheeler Ridge. Technical Memo. Map Update 2019, Version 2.
- SCJ Alliance. 2018. Wheeler Ridge Orchards – Trip Generation Analysis and Traffic Impact Review. Technical Memo. 2018. SCJ Alliance. Updated Maps 2019.
- Shiflett, S. 2018. Forty Years of Elk Observations. Section 17 and Section 16.
- U.S. Army Corps of Engineers and the Washington State Department of Ecology. 2019. Jurisdictional Determination. Pending.
- United States Department of Agriculture. Natural Resources Conservation Service. 2018. Soil Data Access (SDA) Prime and other Important Farmlands.
- United States Department of Agriculture. Natural Resources Conservation Service. 2018. Soil Map Surveys.
- Washington Conservation Science. 2018. Northern Spotted Owl Activity Center Assessment and Subsequent Surveys on Section 17.

- Washington Conservation Science. 2019. Stemilt-Squillchuck Landscape Evaluation. Final Report.
- Washington Department of Fish and Wildlife Priority Habitats and Species Maps 2018 <http://wdfw.wa.gov/mapping/phs/>.
- Washington State Department of Fish and Wildlife. *The Colockum Elk Study II: 2008-2012*. PowerPoint Presentation: https://wdfw.wa.gov/lands/wildlife_areas/colockum/.
- Washington State Department of Fish and Wildlife. Washington State Department of Natural Resources. 2015. *Naneum Ridge to Columbia Ridge Recreation and Access Plan*: https://www.dnr.wa.gov/publications/amp_rec_final_naneum_ridge_to_columbia_river_rec_plan.pdf
- Washington State Department of Natural Resources Forest Practices Application & Rule, 019: <https://www.dnr.wa.gov/programs-and-services/forest-practices>.
- Washington State Department of Natural Resources FPARS mapping system, 2018 (for stream typing): <http://fortress.wa.gov/dnr/app1/fpars/viewer.htm>.
- Washington State Department of Natural Resources, Recreation Program and Washington State Department of Fish and Wildlife, Wildlife Program. January 2015. *Naneum Ridge to Columbia River Recreation and Access Plan*.
- Wildwood Consulting. John Lehmkuhl, PHD. 2019. Survey for Spotted Owl Habitat. Section 16 Easements. 2019.

