



CORRECTED DIRECTOR'S DECISION

APPLICANT: Thomas Lumpkin

LANDOWNER: Same

FILE NO.: C17-0013

REQUEST: The Columbia River Gorge Commission received an application for new cultivation of up to 35 acres of vineyard in nine plots, with associated agricultural structures, each to be fenced with game fencing. Existing and new dirt farm roads will be used; no grading or tree removal is proposed for road development. The applicant proposes to construct a new accessory building viewing platform, and two dormer window additions to the home, solar panels on the barn roof and a second set of pole-mounted solar panels at the north end of the property surrounded by a wooden fence. The applicant proposes a new ranch style wooden gate at the entrance to the property.

LOCATION: The subject parcel is located at 19 Balch Road, Lyle, WA in the west half of Section 28, Township 3 North, Range 12 East, W.M., Klickitat County, Washington (Klickitat County Parcel Number 03122800000500).

LAND USE

DESIGNATION: The subject parcel is designated Small-Scale Agriculture in the General Management Area (GMA) and is 126 acres in size.

DECISION:

Based upon the following findings of fact, the land use application by Thomas Lumpkin to develop new cultivation, associated agricultural structures, a new accessory building and accessory structure is consistent with the standards of Section 6 and the purposes of the Columbia River Gorge National Scenic Area Act, P.L. 99-663, the Management Plan for the Columbia River Gorge National Scenic Area (Management Plan), and approvable under Commission Rule 350-81, and is hereby **approved**.

CONDITIONS OF APPROVAL:

The following conditions of approval are given to ensure that the subject request is consistent with the standards of Section 6 and the purposes of P.L. 99-663, and the Management Plan and approvable under Commission Rule 350-81. Compliance with them is required. **This decision must be recorded in county deeds and records to ensure notice of the conditions to all successors in interest** (Management Plan, Review Uses Guideline 1, pg. II-96).

1. To ensure notice of the conditions to successors in interest, this Director's Decision, Staff Report for C17-0001, and approved site plan shall be recorded in county deeds and records at the Klickitat County Assessor's Auditor's Office. Once recorded, the applicants shall submit a copy of the recorded document to the Executive Director at the Commission.

2. Any new land uses or structural development such as roads, improved trails, new buildings and structures, or additions to existing buildings and structures not included in the approved application or site plan will require a new application and review.
3. The development shall be constructed as shown on the approved project description including paint colors, site plan, and elevation drawings. Any changes shall be reviewed and approved by the Executive Director before the changes are implemented.
4. The solar addition to the barn building shall be entirely black, including panels and frame, to minimize reflectivity.
5. New agricultural structures, the trellises, above-ground irrigation, and field fencing materials, shall be non-reflective and dark earth tone or black in color.
6. The applicant shall observe all site buffers and mitigation measures described in the Historic Resource Protection Plan (Donnermeyer, 2017). The applicant shall notify the Gorge Commission and request a staking inspection of the road buffer. The applicant may continue to use the road as a functional farm road. Any further action to alter or upgrade the road shall be reviewed by Commission to determine whether additional cultural review or permitting is required.
7. The applicant shall avoid disturbing the wetland during construction of the new entry gate by limiting all construction activities to graveled or paved areas. All excess material resulting from the gate installation shall be placed at least 75 feet from the wetland on a previously disturbed vehicle turn-around area.
8. No cultivation shall be established within the stream channels or within the 50-foot intermittent stream buffers identified in the approved mitigation plan.
9. The applicant shall develop a Grazing Plan within 5 years of the Director's Decision.
10. The applicant shall follow mitigation measures and best management practices described in the approved mitigation plan (Conservation Plan, Underwood Conservation District, 2018) including:
 - The applicant shall ensure that vineyard fences are maintained so that stream flow does not become obstructed.
 - All trees within a 50-foot buffer of identified western gray squirrel nests shall be retained. Any future development proposed for these buffers shall require a demonstration that the nest site is no longer occupied and is not likely to become occupied in the future.
 - No more than the seven oak trees identified on the approved site plan shall be removed as part of this development.
 - Replacement oaks shall be planted at a ratio of 8:1 in the area identified in the mitigation plan, or other suitable sites as determined by Conservation District staff or other professional arborist or ecologist. Replacement trees shall be at least 2 feet tall upon planting and shall be monitored for success for at least 10 years. Any trees that do not survive shall be replaced.
 - Additional existing saplings on the property shall be caged from grazing and browsing to improve survival. Cage fencing shall be maintained for at least 3 years from the time of installation.

- Wherever possible, existing cattle fencing shall be removed from the property to facilitate deer movement. All new boundary and cattle fencing shall be upgraded to wildlife-friendly guidelines described in the plan.
- At a minimum, 100 native shrubs shall be planted and monitored for three years. At least 75% survival must be demonstrated to satisfy this mitigation requirement.
- Annual monitoring reports shall be submitted for the first 3 growing seasons (beginning at the time of planting) for all replanting mitigation, including oak trees, browse exclusion fencing (cages), native shrubs, and stream vegetation. Reports shall include photographs and measures to demonstrate success. If monitoring indicates the standards described in this plan are not being met, the applicant will report strategies to improve the results. This might include adding plantings, watering, or weed management.

11. If cultural resources are discovered during construction activities, all activities within 100 feet of the cultural resources shall immediately cease and the applicants shall notify the Gorge Commission within 24 hours of discovery and the State Physical Anthropologist, Dr. Guy Tasa at (360) 586-3534 or guy.tasa@dahp.wa.gov. The cultural resources shall remain as found and further disturbance is prohibited until permission is granted by the Executive Director of the Gorge Commission.

12. If human remains are discovered during construction activities, all activities shall cease immediately upon their discovery. Local law enforcement, the Executive Director and Indian Tribal governments shall be contacted immediately. Further disturbance is prohibited until permission is granted by the Executive Director of the Gorge Commission.

DATED AND SIGNED THIS 19 day of April 2018 at White Salmon, Washington.



Krystyna U. Wolniakowski
Executive Director

EXPIRATION OF APPROVAL:

Commission Rule 350-81-044 governs the expiration of this Director's Decision.

This decision of the Executive Director becomes void on the 19 day of April 2020 unless construction has commenced in accordance with Commission Rule 350-81-044(4).

Commission Rule 350-81-044(4) specifies that commencement of construction means actual construction of the foundation or frame of the approved structure.

Construction must be completed within two years of the date that the applicant commenced construction of any structures approved in this decision.

Once the applicant has commenced construction of one element in this decision, the applicant will need to complete all elements in this decision in accordance with Commission Rule 350-81-044. The Commission does not use different "commencement of construction" dates for different elements in this decision.

The applicant may request one 12-month extension of the time period to commence construction and one 12-month extension to complete construction in accordance with Commission Rule 350-81-044(6). The applicant must submit the request in writing prior to the expiration of the approval. If the applicant

requests an extension of time to complete construction after commencing construction, the applicants shall specify the date construction commenced. The Executive Director may grant an extension upon determining that conditions, for which the applicants were not responsible, would prevent the applicants from commencing or completing the proposed development within the applicable time limitation. The Executive Director shall not grant an extension if the site characteristics and/or new information indicate that the proposed use may adversely affect the scenic, cultural, natural or recreation resources in the National Scenic Area.

APPEAL PROCESS:

The appeal period ends on the 19 day of May 2018.

The decision of the Executive Director is final unless the applicant or any other person who submitted comment files a Notice of Intent to Appeal and Petition with the Commission within thirty (30) days of the date of this decision. Information on the appeal process is available at the Commission office.

NOTES:

Any new land uses or structural development such as driveways, parking areas, garages, workshops, fences or other accessory structures; or additions or alterations not included in the approved application or site plan will require a new application and review. New cultivation also requires a new application and review.

This decision does not address local, state, or federal requirements that may be applicable to the proposed development. The landowner is responsible for obtaining all applicable county, state, or federal permits required for the development.

Attachments:

CORRECTED Staff Report for C17-0013

Approved site plan



CORRECTED FACTS AND FINDINGS

COLUMBIA RIVER GORGE COMMISSION STAFF REPORT

APPLICANT: Thomas Lumpkin

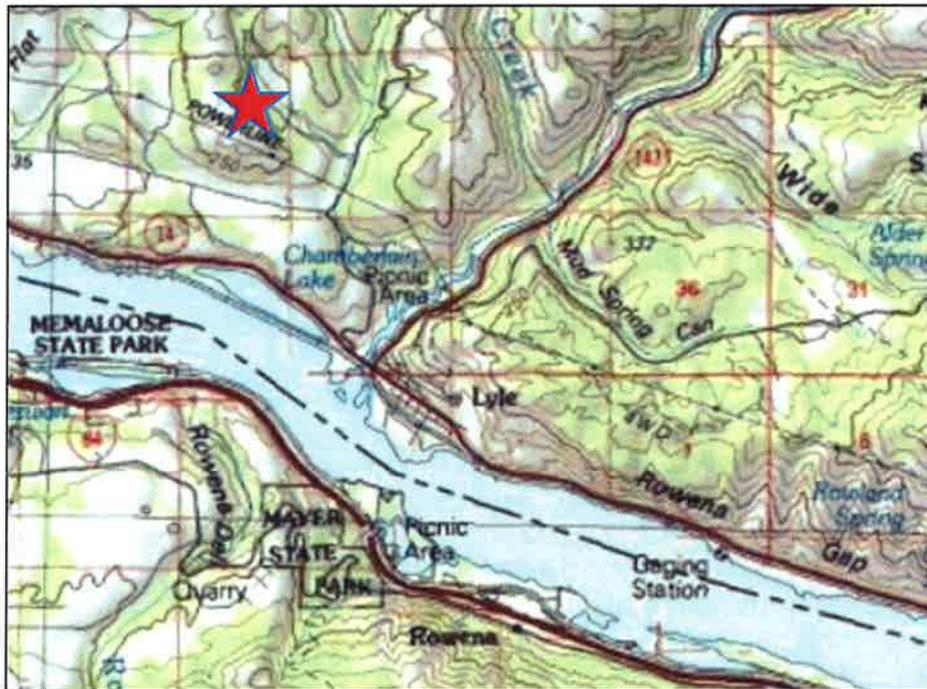
LANDOWNER: same

FILE NO.: C17-0013

REQUEST: The applicant proposes new cultivation of up to 35 acres of vineyard in nine plots, with associated agricultural structures, each to be fenced with game fencing. Existing and new dirt farm roads will be used; no grading or tree removal is proposed for road development. The applicant proposes to construct a new accessory building viewing platform, and two dormer window additions to the home, solar panels on the barn roof and a second set of pole-mounted solar panels at the north end of the property surrounded by a wooden fence. The applicant proposes a new ranch style wooden gate at the entrance to the property.

LOCATION: The subject parcel is located at 19 Balch Road, Lyle, WA in the west half of Section 28, Township 3 North, Range 12 East, W.M., Klickitat County, Washington (Klickitat County Parcel Number 03122800000500). See map below.

LAND USE DESIGNATION: The subject parcel is designated Small-Scale Agriculture in the General Management Area (GMA) and is 126 acres in size.



COMMENTS FROM OTHER INDIVIDUALS/AGENCIES/GOVERNMENTS:

Notice of the subject request was mailed to property owners within 500 feet of the subject parcel and the following individuals/agencies/governments:

Cowlitz Indian Tribe
Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of Warm Springs Reservation of Oregon
Nez Perce Tribe
Klickitat County Planning Department
Klickitat County Building Department
Klickitat County Health Department
Klickitat County Auditor
Klickitat County Public Works
U.S. Forest Service National Scenic Area Office
Friends of the Columbia Gorge
White Salmon Library
Washington Department of Fish and Wildlife

This proposed development was originally noticed in October 2016 under the file number C16-0007. Written comments were received from the following individuals at that time:

Amber Johnson, Washington Department of Fish and Wildlife
Barbara Sexton
Cathy Wood
David Ripma
Frank Slavens
Marge Dryden, Heritage Resources Program Manager, U.S. Forest Service, Columbia River Gorge National Scenic Area
Robert McCormick
Steven McCoy, Friends of the Columbia Gorge

The comments received and input from technical experts at the U.S. Forest Service and Washington Department of Fish and Wildlife informed significant changes and clarifications to the original proposal. Staff issued a new notice under a new file number, C17-0013, to reflect these changes. Written comments in response to this notice were submitted by:

David Ripma
Robert McCormick
Steve McCoy, Friends of the Columbia Gorge

All comments submitted under the C16-0007 file number remain part of the record for the current C17-0013 file, and those submitting comment only under the C16-0007 file number have standing to appeal this decision. These comments, where applicable, are addressed in the following findings of fact. In addition, the public comments and associated information received by the Commission were shared with the applicant and relevant comments were discussed in meetings between staff and the applicant.

Following the Commission's notice of the Director's Decision on April 3rd, 2018, staff received inquiries and information from neighboring landowners related to water use. We followed up with additional

coordination with Washington Department of Ecology. This staff report has been corrected to provide clarification about the regulatory role of each agency (See Findings D.2-D.6).

BACKGROUND:

The applicant submitted initial application materials to the Gorge Commission in summer of 2016. Commission staff advised the applicant that several changes to the proposed development would be necessary to comply with the Management Plan. Staff required the applicant to submit additional elements before accepting the application as complete. These elements included the locations of all trees to be removed, a demonstration of the existing uses of agricultural and accessory buildings on the property, and other required information. A final application, incorporating these recommendations, was submitted in October 2016.

The Commission sent notice in October 2016 under the file number C16-0007 and received comments primarily about wildlife habitat and Oregon white oak, visual impacts of the solar panels, water resources and groundwater well impacts, and concerns about the potential for increased visitation. In response, the applicant submitted additional information. The applicant clarified that the trails indicated on the original site plan were not going to be improved with any grading or surfacing and would not be open to the public. The applicant provided a wildlife survey and adjusted the vineyard layout to reduce the number of oaks proposed to be cut. The updated site plan represented significant adjustments to the original proposal such that staff assigned the application a new file number, C17-0013 and issued a second public notice.

After that time, the applicant further refined the proposal and site plan to resolve the resource concerns. Staff required a natural resources mitigation plan, irrigation plan, and additional information. Due to concerns about the potential effects on Oregon white oak, the applicant withdrew his request to build a suspended tree deck addition to the existing single-family dwelling. During the review process, staff learned that the well at the southern end of the property was drilled in November 2016 without prior review and approval. That well is being reviewed as an after-the-fact agricultural structure. Cultural and natural resources review were both extensive and involved input from the USFS and other agencies. Additional information related to the comments we received are addressed in the following findings of fact.

FINDINGS OF FACT:

A. LAND USE

1. The subject parcel is located in Small-scale Agriculture in the General Management Area.
2. The subject parcel is currently used for cattle grazing, hay production, gardens, and a small orchard with existing irrigation. See the Conservation Plan Existing Conditions map, on file with the Commission, for more detail. Existing development includes:

Single-family dwelling: 980 square feet in size

Accessory buildings: a 179-square-foot shed

Agricultural buildings: a 3,757-square-foot barn and a 1,583-square-foot agricultural shop building

A well located next to the barn building (after-the-fact)

3. The applicant has proposed the following new uses:

New cultivation to include approximately 35 acres of vineyard grapes in nine separate fields; associated agricultural structures including trellises and above-ground irrigation in each of the fields; 4,000 feet of buried main line irrigation; a 12,000-gallon buried storage tank connecting to an existing well (after-the-fact) next to the existing barn; a second new well and 5,000-gallon buried storage tank with 2,500 feet of buried main line irrigation located in the northwest portion of the property, a well pump and 439-square-foot free-standing solar panel array to service this northern well; an addition to an existing barn agricultural building to install 439 square feet of rooftop solar panels. The free-standing solar array and rooftop solar panels will be used only for the agricultural use of the property;

New 384-square-foot accessory building pavilion deck, 16 feet in height, located within proposed vineyard field 4;

New accessory structure ranch gate at the existing driveway;

Additions to an existing single-family dwelling of two dormer windows;

Approximately 6,000 total linear feet of new deer exclusion fencing surrounding individual proposed field.

The original project narrative included some items that are no longer being considered. The applicant is **not** proposing any road improvements, new road culverts, upgraded trails, a tree deck addition to the existing dwelling or additions to the existing agricultural buildings (other than the new solar panels proposed on the existing barn). Any development or ground disturbing activity that would create or improve any vehicle access, trails, or any additions to any structures and buildings (other than as approved in this decision) require a new application and the Executive Director's approval before beginning development activities.

4. Commission Rule 350-81-190(1)(a) allows new cultivation subject to compliance with guidelines for the protection of cultural resources (350-81-540) and natural resources (350-81-560 through 350-81-590). Commission Rule 350-81-074(1)(a)(A) specifies, "Any operation that would cultivate land that has not been cultivated, or has lain idle, for more than 5 years shall be considered new cultivation."

The proposed new vineyards would cultivate land that has not been previously cultivated. The new vineyards are considered new cultivation and could be allowed if they comply with the guidelines for protection of cultural and natural resources.

5. Commission Rule 350-81-190(1)(b) allows agricultural structures subject to compliance with guidelines for the protection of scenic, cultural, natural, and recreation resources (350-81-520 through 350-81-620)

The trellises, above-ground irrigation in each of the fields, buried main line irrigation, two water storage tanks, pumps and the free-standing solar panel array and addition to the existing barn to install rooftop solar panels are agricultural structures that are allowed, and will be reviewed for compliance with the applicable guidelines.

Along with a PUD power connection, the two solar arrays, one stand-alone and another roof-top mounted, would power the movement of water from springs and two well pumps up new irrigation lines for the new vineyards. Each array is proposed to be 439 square feet in size,

producing 5 kilowatts of power each. The Management Plan expressly prohibits industrial uses in the National Scenic Area. It is common practice among Plan implementers to require the applicant to demonstrate that the amount of power generated by a solar development does not exceed the needs of the proposed use. In this case, the solar proposed would not be connected to the power grid. The new solar developments are to power spring and well water uphill to provide irrigation for the new vineyard plots. The following information was provided by the applicant: "From the bottom of my well to the highest point is about 1000ft and I need about 40 pounds of pressure at the top. The irrigation company says that I will need a 7.5 horse power (hp) pump in the well to pump to the storage tank plus a booster pump from the storage tank that will run sequentially. One hp takes about 746 watts, thus I need about 5KW to drive the pumps one at a time. The area of solar panels to produce 5KW is about 400-500 sq ft." The applicant provided an irrigation plan developed by a professional contractor.

The applicant proposes new irrigation to supplement what is currently provided by spring sources. He has investigated what will be required to obtain the proper Department of Ecology permits, which requires a demonstration that any new water rights not adversely impact neighboring water rights. The applicant will be required to obtain any state-required water right and well development permits from the Washington Department of Ecology. The applicant stated "The approximately 42.7 acres of proposed vineyard would have a planted area of about 35 acres. There would be about 52,500 vines planted on this 35 acres. Each vine will need about 1 gal per day during the growing season, especially to get established. This equals about 2,200 gal/hr or 37 gal/minute. Vineyard development will start in the south which will be fed by the existing well and some spring water from the existing water system. The overall irrigation system is linked together but the southern well probably will not supply enough water for all vineyards and the energy cost of pushing water from the south to the northern vineyards on a routine basis would be too expensive. The pipe friction and elevation gain must be considered. In order to have adequate capacity for the northern vineyards and have adequate overall capacity for a major heat event and to be conservative about the water yield capacity the additional well is proposed for the north. The potential productivity of a well is a big unknown so excess capacity of an irrigation supply system must be built in."

The proposed new solar array is greater than 200 square feet and is included as a review use in this application.

6. Commission Rule 350-81-050 provides a list of developments eligible for expedited review, including:

(b) Additions and covered decks for existing buildings, provided the existing building is at least 500 square feet in area and the addition or covered deck is no larger than 200 square feet in area and no taller than the height of the existing building.

(e) In the General Management Area, woven-wire fences for agricultural use that would enclose 80 acres or less.

The existing dwelling is 980 square feet in size. The addition of two dormer windows to an existing dwelling are less than 200 square feet, not taller than the existing building height, and do not impact any existing conditions of approval for development. These can be allowed through an expedited review process, according to Commission Rule 350-81-050, however they will be included as an element of the larger project and will be reviewed under a full review process.

The fencing around the new cultivation would enclose approximately 42.7 total acres, which meets the size requirement off subsection (e) and is thus eligible for expedited review. However, the fencing is an agricultural structure and dependent on the other elements of this larger development proposal. The new fencing will be included in the full review.

7. Commission Rule 350-81-190(1)(f) allows new accessory buildings larger than 200 square feet in size or taller than 10 feet in height on any legal parcel larger than 10 acres in size subject to compliance with guidelines for the protection of scenic, cultural, natural, and recreation resources (350-81-520 through 350-81-620) and 350-81-190(1)(f)(A) through (C)

- (A) *The combined footprints of all accessory buildings on a single parcel shall not exceed 2,500 square feet in area. This combined size limit refers to all accessory buildings on a parcel, including buildings allowed without review, existing buildings and proposed buildings.*
- (B) *The footprint of any individual accessory building shall not exceed 1,500 square feet.*
- (C) *The height of any individual accessory building shall not exceed 24 feet.*

The proposed pavilion will have a roof and thus is considered a building rather than an accessory structure (See Commission Rule 350-81-020(20)). The pavilion is intended to serve as a viewing deck for grape growers and guests of the homeowner. As explained by the applicant, several of the property's vineyard plots will be leased to individuals cultivating unique varieties of grape. The pavilion is meant to provide a showcase view and area for individual growers to meet with the landowner. Still, it is considered an accessory building to the existing residence because it is not a necessary part of the agricultural operation. The Executive Director has twice previously found that the subject parcel is a legal parcel. See Commission files C08-0016 and C07-0014.

The parcel currently has only one existing accessory building, a 179 square-foot shed. The proposed new 384 square-foot pavilion would not exceed the combined footprint of 2500 square feet; the proposed pavilion is less than 1500 square feet in size; and the proposed pavilion is 16 feet in height, less than the maximum height of 24 feet. The proposed pavilion is allowed subject to compliance with the guidelines to protect scenic, cultural, natural, and recreation resources.

8. Commission Rule 350-81-190(1)(d) allows accessory structures for an existing or approved dwelling that are not otherwise allowed outright or eligible for expedited review.

The proposed gate is not a building because it does not have a roof supported by walls or columns (See Commission Rule 350-81-020(20)). The gate is 18 feet in height, which is taller than the 10-foot maximum for expedited review of accessory structures, as described in Commission Rule 350-81-050. The proposed gate is allowed subject to compliance with the guidelines to protect scenic, cultural, natural, and recreation resources.

9. Commission Rule 350-81-076 establishes setback requirements for new buildings on parcels adjacent to agricultural lands. The setback requirement for livestock grazing with a terrain barrier is 20 feet. The pavilion is sited more than 20 feet downslope from a significant natural rise and some vegetative screening. Moving the building further downslope would increase its visibility from KVAs and potentially encroach upon the proposed new agricultural use (vineyard).

Conclusion: The proposed new building (pavilion) meets the required setback for new buildings adjacent to agricultural lands. New cultivation is considered a change in agricultural use from grazing to vineyard, rather than a loss of agricultural land.

Conclusion: The proposed new cultivation of wine grapes and related agricultural structures, deer fencing, addition to the existing home, new gate accessory structure, and the new accessory building are allowed as review uses, subject to the guidelines for protections of scenic, cultural, natural, and recreation resources contained in Commission Rules 350-81-520 through -620 and described below.

B. SCENIC RESOURCES

The Commission has a Composite Seen Areas dataset—a mapping tool that shows areas visible from key viewing areas—which indicates portions of the parcel may be visible from the Rowena Plateau, the Columbia River, Cook-Underwood Road, the Historic Columbia River Highway, State Route 14, Interstate 84, and State Route 141. Staff made several site visits to the subject property and to key viewing areas, and used GoogleEarth tools to determine that the proposed pavilion and portions of the new cultivation, with associated trellises and fencing, would be visible from one or more of these key viewing areas.

1. Commission Rule 350-81-520(1) lists guidelines for all review uses in the GMA that apply to all proposed development. Of these, the following guidelines apply.
 - (a) *New buildings and roads shall be sited and designed to retain the existing topography and to minimize grading activities to the maximum extent practicable.*
 - (b) *New buildings shall be compatible with the general scale (height, dimensions and overall mass) of existing nearby development. Expansion of existing development shall comply with this guideline to the maximum extent practicable.*
 - ...
 - (d) *A site plan and land use application shall be submitted for all new buildings, except for buildings smaller than 60 square feet in area and less than or equal to 10 feet in height, as measured at the roof peak. The site plan and application shall include all information required in the site plan guidelines in "Review Uses" 350-81-032(5). Supplemental requirements for developments proposed on lands visible from key viewing areas are included in the key viewing areas guidelines in this chapter.*
 - (e) *For all proposed development, the determination of compatibility with the landscape setting shall be based on information submitted in the site plan.*

Compliance with (a): The proposed new building does not require grading; the site plan describes a raised platform on four posts, with dimensions shown in Figure 4 of the application materials. The building is 24 by 16 feet, or 384 square feet, and 16 feet in height. The proposed additions to the existing home and barn do not require grading and do not add square footage to either existing building.

Compliance with (b): To determine compatibility with existing nearby development, the Commission compares square footage (an estimate of mass) and dimensions of existing development on surrounding parcels. In this case, the new building proposed is the 384 square-foot open air pavilion, 16 feet in height. Staff obtained Klickitat County records for twelve properties within a quarter mile of the subject parcel, in both Agriculture and Residential designations. Dwellings on these parcels ranged in size from 1200 to 3864 square feet with accessory buildings ranging in size from 96 to 1812 square feet. All but one parcel had at least one accessory building not apparently serving an agricultural purpose, at an average size of 760 square feet. Four of these parcels had multi-story dwellings and/or barn buildings taller than the proposed pavilion. The proposed new building is

smaller in terms of mass, height, and dimensions when compared to the largest or the average surrounding development.

Compliance with (d): The applicant submitted a site plan with the required elements. Pursuant to 350-81-032(5)(j), the portion of the parcel affected by the proposed use is shown in sufficient detail. Subsequent maps were developed with the applicant to include additional detail and features.

Compliance with (e): Discussion of compatibility with the landscape setting is in findings B.3 and 4 below, where this report discusses Commission Rule 350-81-520(3).

Conclusion: The applicable guidelines of Commission Rule 350-81-520(1) have been met.

2. Commission Rule 350-81-520(2) lists guidelines for all review uses that are topographically visible from key viewing areas.
3. Commission Rule 350-81-520(2)(a) states "The guidelines in this section shall apply to proposed developments on sites topographically visible from key viewing areas."

Commission staff conducted site visits and observed that the subject parcel is topographically visible from six key viewing areas (KVAs): State Route 14, Rowena Crest, Interstate 84, State Route 142, Historic Columbia River Highway, and the Columbia River. Thus, the guidelines of Commission Rule 350-81-520(2) are applicable.

4. Commission Rule 350-81-520(2)(b) states:

Each development shall be visually subordinate to its setting as seen from key viewing areas.

Commission Rule 350-81-020(170) defines visually subordinate as follows:

Visually subordinate: A description of the relative visibility of a structure where the structure does not noticeably contrast with the surrounding landscape, as viewed from a specified vantage point (generally a Key Viewing Area, for the Management Plan). As opposed to structures that are fully screened, structures that are visually subordinate may be partially visible. They are not visually dominant in relation to their surroundings.

Gorge Commission staff used mapping software, aerial photography, and field observations to determine which elements of the proposed development would be visible from KVAs, at what distance and to what extent.

The southern third of the property slopes from approximately 570 feet elevation along Old Highway 8 up to 900 feet. This elevation provides topographic screening from SR 14. It also provides topographic screening for segments of I-84, as well as portions of the Historic Columbia River Highway and portions of the Columbia River. A rise to the east runs nearly perpendicular to the Columbia River. The northern two thirds of the property are topographically screened from KVAs to the south and east due to orientation.

The property consists of rolling hills and the existing buildings, driveway, and small garden are topographically hidden from KVAs. The subject parcel is greater than 10 miles from Cook-Underwood Road.

The stand-alone solar array site is not topographically visible from any KVA. The existing home and barn, as well as the proposed additions to each and the entry gate, are not topographically visible as seen from key viewing areas and are screened by existing thick oak woodland to the south.

The new pavilion accessory building location is visible from the Columbia River southwest of the property, Rowena, I-84 at a distance of 2.5 miles, and the Historic Columbia River Highway at a distance of 2 miles.

The subject parcel is primarily in the Oak-Pine Woodlands Landscape Setting; the existing and proposed buildings are within this Landscape Setting. The northeastern portion is in the Pastoral Landscape Setting. In the Oak-Pine Landscape Setting, scattered rural development including fences and cultivation are components of this generally natural-appearing setting. As described in the Natural Resources section of this staff report, the applicant is retaining the majority of existing oak and pine trees on the property. These trees currently screen and visually break up the meadow areas proposed to be planted. Neighboring properties are also largely wooded, with open meadows. Common developments along Old Highway 8 include cleared pastures and fields, row cultivation including small vineyards, and agricultural buildings.

In meadow openings, the proposed vineyard fields and agricultural structures would be visible from the Historic Columbia River Highway, the Columbia River, and I-84. There are vineyard fields and row crops on adjacent properties. The proposal is to retain the majority of existing native vegetation between fields, consistent with the Landscape Setting description. These mature oaks and ponderosa pine, along with topography, screen proposed fields 4, 6, 7, 8, and 9 almost entirely from KVAs. The remaining fields are visible from KVAs at a distance of at least two miles. See Finding 6 below for further detail.

5. Commission Rule 350-81-520(2)(d) states that conditions of approval to achieve the visually subordinate standard shall be proportionate to its potential visual impacts as seen from KVAs and lists the factors.

The proposed pavilion building is partially screened by existing vegetation and is sited at the edge of a meadow opening, beneath the shadows of mature oak trees. The pavilion is sited south of a significant natural contour with mature trees upslope so that the pavilion roof does not break the skyline as seen from key viewing areas. The open-air pavilion consists of a 384-square-foot level platform, four supporting beams, and a roof. Including the post footings, the application states the building will be 16 feet in height, well below the site's tree canopy height. The open-air design and hip roof design minimize the potential for sharp lines to be visible. The applicant proposes a dark earth tone paint (see findings for Commission Rule 350-81-520(1) below), consistent with the shadows on site, and wood materials to reduce the structure's visibility. No reflective materials are proposed.

The stand-alone solar array site is not topographically visible from any KVA. The existing home and barn, as well as the proposed additions to each and the proposed entry gate, are not topographically visible as seen from key viewing areas and are screened by existing thick oak woodland to the south.

A condition of approval states that the solar addition to the barn building shall be entirely black, including panels and frame, to minimize reflectivity.

Topographic screening and distance largely minimizes the visual impacts of the pavilion and new agricultural structures as seen from KVAs. Proposed vineyard fields 1 through 5 will be visible from KVAs, but partially screened by existing vegetation. Oak canopy will remain the dominant visible feature on the property and the Landscape Setting characteristics of scattered cultivation among oak woodland will be retained. Several large oaks are to be retained within the perimeter of the vineyard fields, according to conditions of approval for wildlife habitat resources (See Findings for D. Natural Resources). The layout of small fields across the parcel, with scattered tree cover, and dark and non-reflective trellis and irrigation materials will contribute to visual subordination.

A **condition of approval** requires structures, the trellises, above-ground irrigation, and fencing materials, to be non-reflective and dark earth tone or black in color.

Conclusion: The conditions for design, siting, materials, and color are proportional to the potential scenic impacts. The topographic visibility of above ground development from key viewing areas is limited and the use of colors that blend with the landscape and vegetative screening help ensure the development will be visually subordinate as viewed from key viewing areas.

6. Commission Rule 350-81-520(2)(c) states:

Determination of potential visual effects and compliance with visual subordination policies shall include consideration of the cumulative effects of proposed developments.

Commission Rule 350-81-020(40) defines “cumulative effects” as:

The combined effects of two or more activities. The effects may be related to the number of individual activities, or to the number of repeated activities on the same piece of ground. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

The applicant has worked extensively with Commission staff to provide the full scope of possible future development on the 126-acre parcel and to site each element of development to minimize impacts to scenic, natural, cultural, and recreation impacts. This approach also allows us the opportunity to analyze the full potential visual impact of agricultural development on this large area.

On this parcel and many others in the area, including neighboring properties, grazing has historically been the dominant agricultural use. Vineyards are becoming more common in the eastern gorge.

Portions of the lower vineyard fields will be visible from KVAs. Four parcels within .25 miles have some existing row crop and/or vineyard cultivation. All are completely topographically screened from KVAs. Approximately 2.1 miles to the west is a new vineyard development of approximately 16 acres that is partially visible from the same locations as this proposed development. These two developments will both be visible from the Historic Columbia River Highway at a distance of 2 miles or more for approximately 2 miles, from the Columbia River for approximately 1 mile of its length, and Rowena Crest at a distance of 3 miles. The area over which these two developments are visible is roughly between Major Creek and Catherine Creek Open Space and Chamberlain Lake on the Washington side, as seen from the Oregon side of the river. The two developments are separated by

more than 2 miles of natural landscape including oak woodlands and gorge canyon walls. The Management Plan describes the Landscape Settings within this area as scattered rural development and cultivation, among predominately natural vegetation and features. The proposed vineyards and associated development is consistent with and will not change these setting descriptions, with the design standards and conditions of approval described below. As seen from these KVAs, the cumulative visual impact of development in the area meets the standard of visually subordinate.

7. Commission Rule 350-81-520(e) states “New development shall be sited to achieve visual subordination from key viewing areas, unless the siting would place such development in a buffer specified for protection of wetlands, riparian corridors, sensitive plants, or sensitive wildlife sites or would conflict with guidelines to protect cultural resources. In such situations, development shall comply with this guideline to the maximum extent practicable.”

The proposed pavilion is sited at the edge of a meadow and to be partially screened by existing vegetation. The pavilion is sited south of a significant natural contour with mature trees upslope so that the pavilion roof does not break the skyline as seen from key viewing areas and is shaded.

8. Commission Rule 350-81-520 states “(f) New development shall be sited using existing topography and/or existing vegetation as needed to achieve visual subordination from key viewing areas; (g) Existing tree cover screening proposed development from key viewing areas shall be retained as specified in the Landscape Settings Design Guidelines in 350-81-520(3).”

As described in Finding 5 above, the developed is sited using topography and existing vegetation to achieve visual subordination from KVAs. Existing Oregon white oak is being retained to achieve the Landscape Setting characteristic of largely natural vegetation punctuated by rural development and agriculture. Conditions to retain native tree cover are further described in the Findings for Natural Resources below.

9. Commission Rule 350-81-520(h) “The silhouette of new buildings shall remain below the skyline of a bluff, cliff, or ridge as seen from key viewing areas. Variances to this guideline may be granted if application of the guideline would leave the owner without a reasonable economic use. The variance shall be the minimum necessary to allow the use and may be applied only after all reasonable efforts to modify the design, building height, and site to comply with the guideline have been made.”

The proposed pavilion is sited at the edge of a meadow and to be partially screened by existing vegetation. The pavilion is sited south of a significant natural contour with mature trees upslope so that the pavilion roof does not break the skyline as seen from key viewing areas and is shaded.

10. Commission Rule 350-81-520(l) states “Unless expressly exempted by other provisions in 350-81-520, colors of structures on sites visible from key viewing areas shall be dark earth-tones found at the specific site or in the surrounding landscape. The specific colors or list of acceptable colors shall be included as a condition of approval. The Scenic Resources Implementation Handbook will include a recommended palette of colors.”

The applicant provided a paint sample for the pavilion, Castle Gray (ST-147) by Behr and staff approved the color as consistent with dark earth tone colors found on site and recommendations from the Scenic Resources Implementation Handbook.

11. Commission Rule 350-81-520(3)(C) provides the design standards for review uses in the Oak-Pine Woodland Landscape Setting
 - (A) *Structure height shall remain below the tree canopy level in wooded portions of this setting.*
 - (B) *In portions of this setting visible from key viewing areas, the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:*
 - (i) *At least half of any tree species planted for screening purposes shall be species native to the setting. Such species include Oregon white oak, ponderosa pine, and Douglas-fir.*
 - (ii) *At least half of any trees planted for screening purposes shall be coniferous to provide winter screening.*

For substantially wooded portions:
 - (iii) *Except as is necessary for construction of access roads, building pads, leach fields, etc., the existing tree cover screening the development from key viewing areas shall be retained.*

For treeless portions or portions with scattered tree cover:
 - (iv) *Structures shall be sited on portions of the property that provide maximum screening from key viewing areas, using existing topographic features.*
 - (v) *Patterns of plantings for screening vegetation shall be in character with the surroundings. Residences in grassy, open areas or savannahs shall be partly screened with trees in small groupings and openings between groupings.*
 - (vi) *Accessory structures, outbuildings, and access ways shall be clustered together as much as possible, particularly towards the edges of existing meadows, pastures, and farm fields.*
12. Commission Rule 350-81-520(4) contains guidelines for new uses within ¼ mile of scenic travel corridors. The proposed development is greater than ¼ mile of any scenic travel. The guidelines in Commission Rule 350-81-520(4) do not apply.

Conclusion: With conditions, the proposed development as described in the applicant's site plan would be visually subordinate from all key viewing areas as discussed in the above findings. The proposed development will not cause adverse scenic impacts, and will not cause adverse cumulative scenic impacts. This proposed development is consistent with Commission Rule 350-81-520(2)(c).

C. CULTURAL RESOURCES

1. Commission Rule 350-81-540 directs the Executive Director to follow procedures and guidelines for cultural resources review; Commission Rules 350-81-540(1)(c)(A) and (B) include guidelines to determine when a cultural resources reconnaissance survey and a historic survey are required for proposed developments.

On February 29, 2017, Marge Dryden, Heritage Program Manager, U.S. Forest Service (USFS), Columbia River Gorge National Scenic Area Office, began conducting field surveys for the project area. Reconnaissance and historical surveys were conducted and resources were identified near the proposed development. The applicant agreed to the recommendations included in the confidential cultural resources report to protect known resources with buffers.

Notice of the determination and copies of the survey report were provided to the treaty tribes and the Washington State Department of Archaeology and Historic Preservation for a 30-day comment

period on August 9, 2017. DAHP responded directly to Ms. Dryden with concerns about the historic road feature in the southern portion of the property. The concerns were resolved and Ms. Dryden provided an updated report describing mitigation measures to protect the road feature. The USFS provided a Historic Resource Protection Plan on September 21, 2017 to further clarify what is recommended. A **condition of approval** requires the applicant to observe all site buffers and mitigation measures described in the Historic Resource Protection Plan (Donnermeyer, 2017), which has been provided to the applicant. The historic road buffer shall be marked with pin flags or other temporary method prior to installation of the vineyard development. The applicant may continue to use the road as a functional farm road. Any further action to alter or upgrade the road shall be reviewed by Commission to determine whether additional cultural review or permitting is required.

The subject parcel contains known resources and is identified as high probability for cultural resources. As noted in the cultural survey report and recommended in Ms. Dryden's letter of review, **additional conditions of approval** include provisions for the inadvertent discovery of cultural resources and discovery of human remains. If cultural resources are discovered during construction activities, all activities within 100 feet of the cultural resources shall immediately cease and the applicants shall notify the Gorge Commission within 24 hours of discovery and the State Physical Anthropologist, Dr. Guy Tasa at (360) 586-3534 or guy.tasa@dahp.wa.gov. The cultural resources shall remain as found and further disturbance is prohibited until permission is granted by the Executive Director of the Gorge Commission.

Conclusion: The proposed development, with all buffers and mitigations recorded in the site plan and conditions of approval, is consistent with the applicable cultural resource guidelines in Commission Rule 350-81-540.

D. NATURAL RESOURCES

1. Commission Rules 350-81-560 through 590 contain provisions for the protection of natural resources, including wetlands (350-81-560); streams, ponds, lakes and riparian areas (350-81-570); sensitive wildlife areas and sites (350-81-580); and rare plants (350-81-590).

According to the Commission's natural resources inventory data, the proposed development is within 1,000 feet of wetland, stream, wildlife habitat, and rare plant resources. Staff provided notice to the appropriate wildlife and resource agencies and worked closely with them to determine potential impacts, changes to the site plan to avoid and minimize impacts, and mitigation.

2. Wetlands

Commission Rule 350-81-020(173) defines "Wetlands" as follows: "Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. This does not include riparian areas, rivers, streams, and lakes."

Commission Rule 350-81-560(7) provides guidance for determining wetland buffer requirements and establishes buffer widths in 560(7)(c)(A) within forest communities: 75 feet, (B) shrub communities: 100 feet, and (C) herbaceous communities: 150 feet.

The Commission's inventory shows wetlands in the southwestern corner of the subject parcel and on adjacent parcels to the west and south. Washington Department of Fish and Wildlife staff indicated initial concerns for runoff into Balch Lake. The applicant provided additional information about the methods planned to limit the amount of fertilizer and chemicals applied. In combination with project siting, this addressed the Department's concern. No new development is proposed within 150 of wetlands on the south end of the property. ~~A spring in the wetlands was registered and developed in the 1940s to serve both the Slavens property (by easement) and the Lumpkin property.~~

Balch Lake is a pond wetland feature surrounded by forest plant communities. The wetland is located on the west side of Balch Road, a paved 25-foot wide road. The gate is proposed to be installed on the opposite side of that road, on an existing gravel driveway entrance to the property. The new structure is to be installed approximately 100 feet from the wetland. A **condition of approval** requires the applicant to avoid disturbing the wetland by limiting all gate construction activities to graveled or paved areas and to deposit any excess material resulting from the gate installation at least 75 feet from the wetland on a previously disturbed vehicle turn-around area.

In addition, the applicant provided a 2007 survey map of seven springs on the property, each recorded with the Washington Department of Ecology. Site visits confirmed that some of these spring sites contain emergent wetland vegetation and surface water at least during a portion of the year. Some of the springs used for stockwatering and domestic irrigation on the property have been developed. No new development is not proposed within the spring sites or wetland buffers for these springs.

Conclusion: With the above described conditions of approval, the proposed development is consistent with provisions for protection of wetland resources.

3. Streams

Commission Rule 350-81 establishes a 100-foot buffer for fish-bearing streams and a 50-foot buffer for intermittent, non-fish-bearing streams.

There are two intermittent, non-fish-bearing streams mapped in the project area, identified in the applicant's wildlife survey report and on Commission maps (see the applicant's Existing Conditions map in the approved wildlife mitigation plan). The applicant initially proposed new cultivation of wine grapes with associated structures, new deer fencing, and buried irrigation lines in portions of the stream and stream buffer areas. The applicant no longer proposes new cultivation in stream buffers, but proposes fencing and irrigation lines in limited locations, as indicated in the approved site plan and described in the following findings.

Commission Rule 350-81-570 provides GMA review criteria for development within streams and their buffers:

- (1) *Stream, Pond, and Lake Boundaries and Site Plans for Review Uses in Aquatic and Riparian Areas*
 - (a) *If a proposed use would be in a stream, pond, lake or their buffer zones, the project applicant shall be responsible for determining the exact location of the ordinary high watermark or normal pool elevation.*
 - (b) *In addition to the information required in all site plans, site plans for proposed uses in streams, ponds, lakes, and their buffer zones shall include:*

- (A) a site plan map prepared at a scale of 1 inch equals 100 feet (1:1,200), or a scale providing greater detail;
- (B) the exact boundary of the ordinary high watermark or normal pool elevation and prescribed buffer zone; and
- (C) a description of actions that would alter or destroy the stream, pond, lake, or riparian area.

(c) Determination of potential effects to significant natural resources shall include consideration of cumulative effects of proposed developments within streams, ponds, lakes, riparian areas and their buffer zones.

The applicant worked with staff from the Underwood Conservation Service to map the southwestern portion of the property, indicating where the stream has been diverted north of the existing buildings into Balch Lake. Commission staff obtained LiDAR imagery of the parcel and confirmed that the channel is much more defined where it has been diverted and is difficult to discern south of the diversion. There is existing irrigation and fencing in that area, crossing the stream channel in several places.

The applicant's wildlife plan and mitigation plan include maps and narrative descriptions of the proposed activity and methods of construction. See the Existing Conditions map in the applicant's mitigation plan. The applicant plans to bury the main irrigation line 2 feet deep to prevent freezing. The trench will be the minimum width necessary to accommodate the lines. To minimize impacts, the irrigation is sited in flat areas and just upslope of the existing road or co-located along existing fence lines. Existing vegetation will be retained to the greatest extent possible. All removed material will be backfilled, covered with original vegetation or reseeded and mulched with weed-free native seed mixes and straw. Activities within stream buffers will be carried out during the dry season. These methods are detailed in applicant's mitigation plan.

4. Commission Rule 350-81-570(2) and (3) describe uses that can be allowed within streams or stream buffers. These provisions are not applicable to the proposed development.

5. Commission Rule 350-81-570 states:

(4) Uses not listed in 350-81-074, 350-81-570(2) and (3) may be allowed in streams, ponds, lakes, and riparian areas, when approved pursuant to 350-81-570(6) and reviewed under the applicable provisions of 350-81-520 through 350-81-620.

350-81-074 includes "agricultural uses **except** new cultivation". **A condition of approval** states that no cultivation shall be established within the stream channels or 50-foot intermittent stream buffers identified in the approved mitigation plan.

Conclusion: The proposed irrigation lines and fencing are associated agricultural structures that can be approved pursuant to 350-81-570(6) and must meet the applicable provisions for natural resources protection.

6. 350-81-570(6) states:

Applications for all other Review Uses in streams, ponds, lakes, and riparian areas shall demonstrate that:

(a) The proposed use is water-dependent, or is not water-dependent but has no practicable alternative as determined by 350-81-560(6)(a), substituting the term stream, pond, lake, or riparian area as appropriate.

The proposed development is not water-dependent.

350-81-560(6)(a) provides the demonstration criteria:

(a) The proposed use is water-dependent, or is not water-dependent but has no practicable alternative considering all of the following:

- (A) The basic purpose of the use cannot be reasonably accomplished using one or more other sites in the vicinity that would avoid or result in less adverse effects on [streams];*
- (B) The basic purpose of the use cannot be reasonably accomplished by reducing its size, scope, configuration, or density as proposed, or by changing the design of the use in a way that would avoid or result in less adverse effects on [streams]; and*
- (C) Reasonable attempts have been made to remove or accommodate constraints that caused a project applicant to reject alternatives to the use as proposed. Such constraints include inadequate infrastructure, parcel size, and zone designations. If a land designation or recreation intensity class is a constraint, an applicant must request a Management Plan amendment to demonstrate that practicable alternatives do not exist. An alternative site for a proposed use shall be considered practicable if it is available and the proposed use can be undertaken on that site after taking into consideration cost, technology, logistics, and overall project purposes.*

The applicant has provided staff with information to show that existing infrastructure limits the options for irrigation that will support the proposed vineyard use. These materials include a map of the existing spring irrigation system used for the garden. In response to concerns about the irrigation layout, the applicant hired a professional and consulted with Underwood Conservation District to map out an irrigation plan that meets the agricultural need while minimizing stream crossings.

As shown on the Existing Conditions map, the applicant intends to first employ the existing irrigation infrastructure ~~and spring water source~~ in the southwest portion of the property. The landowner is responsible for meeting all state laws and permitting requirements for the use of surface and groundwater resources. Anticipating a greater need in the first few growing seasons, he invested significant financial resources into investigating the best sites for up to two new wells. He was advised by two companies that fault lines effectively isolate portions of the parcel from other groundwater resources. He also chose to site the south well close to the existing barn building. Alternative siting could possibly have eliminated one or more irrigation line stream crossings, however the water pump for the well would have required a new power source that would have been more visible from KVAs. The barn building and proposed solar panel addition is completely screened from Key Viewing Areas, whereas the area to the east is more visible.

The applicant contracted with a professional to produce an irrigation plan siting the buried irrigation lines to avoid the streams and stream buffers to the greatest extent practicable, given the location of the water sources. The Underwood Conservation District staff assisted with siting the lines to minimize impacts to streams and stream functions. Crossing locations were identified as flat areas with little or no riparian vegetation and low stream function, where erosion and adverse impacts could be minimized. The disturbance has been limited to areas that are currently disturbed or developed. Where possible, the line is co-located with existing roads and fence lines.

(b) The proposed use is in the public interest as determined by 350-81-560(6)(b), substituting the term stream, pond, lake, or riparian area as appropriate. [Commission Rule 350-81-560(6)(b) states "The following factors shall be considered when determining if a proposed use is in the public interest: A. The extent of public need for the proposed use. B. The extent and permanence of beneficial or detrimental effects that the proposed use may have on the public and private uses for which the property is suited. C. The functions and size of the (stream) that may be affected. D. The economic value of the proposed use to the general area. E. The ecological value of the (stream) and probable effect on public health and safety, fish, plants, and wildlife."]

The stream segments in question are ephemeral, non-fish-bearing streams that have been highly altered by land uses including utility right-of-way maintenance, a diversion ditch, fencing and irrigation, and cattle grazing (see Figures 1 through 4). The activity proposed within the stream buffers is to install approximately 250 linear feet of new irrigation and 400 linear feet of new vineyard fencing which will exclude cattle from two segments of the stream channel, a total of approximately 500 linear feet of stream. With the revegetation and enhancement strategies outlined in the mitigation plan, the result will be that the two segments of stream channel will be enhanced. The stream resources on this property are functionally connected to important wetland habitats in the area (Balch Lake and others) that support sensitive native wildlife species. These wetlands are protected in the public trust and managed for wildlife resources. Improvements to these upstream channels could benefit those downstream habitats by improving water quality and quantity.

The applicant is committed to developing a Grazing Plan for the entire property, as part of the wildlife habitat mitigation described later in section D of this report. Managing grazing for improved understory condition will benefit stream and riparian resources on the entire property, as well as native plants.

The fencing and irrigation provide an opportunity for the applicant to establish nine vineyard fields which he plans to plant or lease to commercial growers. The landowner's stated intent is to allow for research and specialization of unique local wine grapes with small-scale commercial production. He is a retired professor of agronomy and is engaged worldwide in viticulture science, particularly advancing local adaptation and climate change resiliency in food crops. He was honored recently by his alma mater, Washington State University for career achievements to combat malnutrition in developing countries.

An individual commercial enterprise may not typically be considered in the public interest, however in this case the project is consistent with regional visions for rural agricultural economies and tourism opportunities. In 2008, the Gorge Commission, US Forest Service, along with two states, six counties, Native American tribes, Chambers of Commerce, ports, inter-county entities, private and non-profit businesses, economic development agencies, sponsored a regional visioning process called the Columbia Gorge Future Forum. This broad-based effort, incorporating over 1,500 comments and sixteen public meetings identified six high-level goals, including dynamic local economies. The group envisioned "a thriving farming industry into the future" and that "visitors enjoy ecological, agricultural, and cultural tourism opportunities that highlight our natural environment, orchards and vineyards and local communities." The proposed project is not an agri-tourism venture, however it provides opportunity for study and education related to local agriculture.

The subject parcel is within the Columbia Gorge American Viticulture Area, marketed as a "World of Wine in 40 miles", and known for its diversity of microclimates and varieties. According to the

state of Oregon Employment Department the Columbia Gorge wine industry showed 132% growth in employment from 2010 to 2014. The applicant's intent is to promote learning and economic opportunity for commercial viticulturists seeking to grow unique or locally-adapted grape varietals in the gorge. While we cannot ensure the continued use of the property as a "living laboratory", the development would contribute to a growing regional wine industry.

The impacts to streams and stream buffers are expected to have minor adverse effect in the short-term in four specific stream crossing locations, but to be beneficial in the long-term to stream function and native stream vegetation.

(c) Measures have been applied to ensure that the proposed use results in minimum feasible impacts to water quality, natural drainage, and fish and wildlife habitat of the affected stream, pond, lake, and/or buffer zone. At a minimum, the following mitigation measures shall be considered when new uses are proposed in streams, ponds, lakes, and buffer zones:

(A) Construction shall occur during periods when fish and wildlife are least sensitive to disturbance. Work in streams, ponds, and lakes shall be conducted during the periods specified in "Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources" (Oregon Department of Fish and Wildlife, 2000), unless otherwise coordinated with and approved by the Oregon Department of Fish and Wildlife. In Washington, the Washington Department of Fish and Wildlife shall evaluate specific proposals and specify periods for in-water work.

(B) All natural vegetation shall be retained to the greatest extent practicable, including aquatic and riparian vegetation.

(C) Nonstructural controls and natural processes shall be used to the greatest extent practicable.

(D) Bridges, roads, pipeline and utility corridors, and other water crossings shall be minimized and should serve multiple purposes and properties.

(E) Stream channels should not be placed in culverts unless absolutely necessary for property access. Bridges are preferred for water crossings to reduce disruption to streams, ponds, lakes, and their banks. When culverts are necessary, oversized culverts with open bottoms that maintain the channel's width and grade should be used.

(F) Temporary and permanent control measures should be applied to minimize erosion and sedimentation when riparian areas are disturbed, including slope netting, berms and ditches, tree protection, sediment barriers, infiltration systems, and culverts.

The applicant's approved mitigation plan includes best management practices for minimizing impacts to water quality, natural drainage, and fish and wildlife habitat. These include conducting construction activities during the dry season, retaining and replacing existing vegetation to the greatest extent possible, and replanting disturbed areas with native vegetation.

(d) Groundwater and surface-water quality will not be degraded by the proposed use.

Water quality: The applicant is employing a "fertigation" technique that applies minimal fertilizer directly through the drip irrigation line. This will minimize the amount and spread of any fertilizer used. The Washington Department of Fish and Wildlife raised water quality concerns early on, but after a site visit and discussion with the landowner stated that their concerns for impacts to Balch Lake had been resolved.

The subject parcel is currently used for grazing along with neighboring properties. As part of the approved wildlife habitat mitigation plan (see Finding 6 related to Commission Rule 350-81-580

below), the applicant proposes to develop a grazing plan to improve the operations and benefit rangeland health on the property. This will be an overall benefit to the natural resources and to the sustainability of grazing operations in conjunction with viticulture into the future. A **condition of approval** for the proposed development requires the landowner to develop a Grazing Plan within 5 years of the Director's Decision.

The streams on the property are currently bisected by existing cattle fencing, property line fencing and existing roads in several places. The entire area has been available to cattle that are managed by a third-party lessee. The new vineyard fence will exclude cattle from two degraded segments of stream and the applicant has described methods to enhance those stream segments and stream buffers in his approved mitigation plan. Livestock exclusion is a method of riparian enhancement supported by the Management Plan.

A portion of the original intermittent stream course crosses the BPA power line right-of-way. Through this section, trees have been removed and grazing impacts are readily visible (see Figure 1). The quality of the stream habitat through this section is degraded.



Figure 1 Google Earth image of the western stream segment, located within the BPA right-of-way, to be enhanced. This photo demonstrates the alteration of stream course due to historic diversions and cattle trails. The blue arrows indicate the original stream channel under the power line.

Stream segment at eastern property line:



Figure 2 Stream channel segment to be fenced within a vineyard field and enhanced



Figure 3 Close up stream course near eastern property boundary. Cap in stream channel illustrates scale.



Figure 4 Headwaters of eastern stream channel on subject parcel, facing east to the neighboring property. The area is currently grazed by a lessee.

Water quantity: A condition of approval in this Decision states that fences shall be maintained to ensure that stream flows are not obstructed. The proposed development of irrigation lines and fences in stream buffers will not impact water quantity. The applicant is planning to rely primarily on the existing spring surface water right, utilizing the two wells only as needed to irrigate vineyards. He expects the highest water need will be in the first few growing seasons of each field. The applicant contracted a professional geologist who advised that the southern well location is isolated from some neighboring wells by fault lines and is likely deep enough (690 ft.) to be isolated from nearby shallow ground water resources. They advised the applicant that withdrawal is not expected to impact neighboring property owners' water rights because the well is sealed down to 500 feet from water bearing strata above and is in direct conductivity with the Columbia River from strata below. The proposed new well site in the north portion of the property was also evaluated and not expected to impact neighboring groundwater resources. This information is further described in the applicant's mitigation plan. The Washington Department of Ecology spoke several times with staff and also with the applicant and his contracting geologist separately. The Department verified that the applicant has existing surface water rights and had been coordinating for future permitting required by that agency. The Department evaluates several criteria in order to issue a new water right including impacts to neighboring water rights. The applicant provided a well drilling report issued by Department of Ecology in November of 2016.

Neighboring property owners provided written comments expressing concern for impacts to their domestic water. Staff provided copies of all neighbor comments submitted related to water quantity and quality issues to the Department of Ecology staff responsible for permitting water rights use in this region.

(e) Those portions of a proposed use that are not water-dependent or have a practicable alternative will be located outside of stream, pond, and lake buffer zones.

The applicant has taken care to avoid stream courses to the greatest extent practicable, selecting flat and degraded areas for placement of the irrigation line where necessary. To the greatest

extent possible, new fences and irrigation are located along existing developed features, such as roads and boundary fences.

(f) The proposed use complies with all applicable federal, state, and county laws.

Staff is not aware of any violation of applicable law within this proposal. The applicant is responsible for meeting all applicable permitting and regulatory requirements that Department of Ecology or other responsible agencies have related to water development and use.

(g) Unavoidable impacts to aquatic and riparian areas will be offset through rehabilitation and enhancement. Rehabilitation and enhancement shall achieve no net loss of water quality, natural drainage, and fish and wildlife habitat of the affected stream, pond, lake, and/or buffer zone. When a project area has been disturbed in the past, it shall be rehabilitated to its natural condition to the maximum extent practicable. When a project area cannot be completely rehabilitated, such as when a boat launch permanently displaces aquatic and riparian areas, enhancement shall also be required. The following rehabilitation and enhancement guidelines shall apply:

(A) Rehabilitation and enhancement projects shall be conducted in accordance with a rehabilitation and enhancement plan.

(B) Natural hydrologic conditions shall be replicated, including current patterns, circulation, velocity, volume, and normal water fluctuation.

(C) Natural stream channel and shoreline dimensions shall be replicated, including depth, width, length, cross-sectional profile, and gradient.

(D) The bed of the affected aquatic area shall be rehabilitated with identical or similar materials.

(E) Riparian areas shall be rehabilitated to their original configuration, including slope and contour.

(F) Fish and wildlife habitat features shall be replicated, including pool-riffle ratios, substrata, and structures. Structures include large woody debris and boulders.

(G) Stream channels and banks, shorelines, and riparian areas shall be replanted with native plant species that replicate the original vegetation community.

(H) Rehabilitation and enhancement efforts shall be completed no later 90 days after the aquatic area or buffer zone has been altered or destroyed, or as soon thereafter as is practicable.

(I) Three years after an aquatic area or buffer zone is rehabilitated or enhanced, at least 75 percent of the replacement vegetation must survive. The owner shall monitor the replacement vegetation and take corrective measures to satisfy this guideline.

New fencing is proposed in four locations along the two stream channels. These areas have been heavily grazed and do not have mid- or over-story plant cover. Fencing will exclude cattle from these sensitive areas and allow vegetation to recover. The applicant describes additional rehabilitation in the approved mitigation plan to ensure that the impacts are limited in duration and that the long-term result is a more natural stream channel condition and native plant cover. Stream function is expected to be improved. **A condition of approval** is to follow the best management practices described in the mitigation plan. This includes annual monitoring and maintenance of at least 75% native plant cover in the replanted areas by the third year of monitoring. The applicant shall ensure that fences are maintained so that stream flow does not become obstructed.

7. Wildlife Habitat

Commission Rule 350-81-580 contains provisions for the protection of sensitive wildlife areas and sites within 1,000 feet of the proposed development. Resource inventories indicate western pond turtle sites, Oregon white oak, and deer and elk winter range within 1,000 feet of the subject parcel. The original narrative proposed to remove more than 80 oak trees from the proposed vineyard fields. Staff visited the parcel with a Washington Fish & Wildlife (WDFW) biologist, US Forest Service ecologist, and the applicant in October 2016. During that visit we noted that many of the oaks were large, likely several hundred years old, “umbrella” acorn-producers. We urged the applicant to protect and avoid these trees and to alter his proposed site plan.

The applicant revised the proposed site plan and provided a wildlife survey report, which was conducted by a professional biologist with assistance from WDFW specialists. Pursuant to Commission Rule 350-81-580(4), Commission staff provided the site plan and final wildlife report to the Washington Department of Fish and Wildlife for review. No potential habitat for western pond turtle was found, however additional sensitive wildlife sites, including western gray squirrel nests, were located. The applicant’s wildlife report and additional site visits confirmed that the revised site plan, which identified fewer than 30 trees to be removed, would have adverse effects to Oregon white oak and winter range habitats on this parcel that could be significant. The Department, as well as the USFS, advised that the proposal would require additional modifications and mitigation measures.

Commission Rule 350-81-580(4) states:

(d) If the Executive Director, in consultation with the state wildlife agency, determines that the proposed use would have only minor effects on the wildlife area or site that could be eliminated through mitigation measures recommended by the state wildlife biologist, or by simply modifying the site plan or regulating the timing of new uses, a letter shall be sent to the applicant that describes the effects and measures needed to eliminate them. If the project applicant accepts these recommendations, the Executive Director will incorporate them into the development review order and the wildlife protection process may conclude.

(e) The project applicant shall prepare a wildlife management plan if the Executive Director, in consultation with the state wildlife agency, determines that the proposed use would adversely affect a sensitive wildlife area or site and the effects of the proposed use cannot be eliminated through site plan modifications or project timing.

(f) The Executive Director shall submit a copy of all field surveys and wildlife management plans to Oregon Department of Fish and Wildlife or Washington Department of Fish and Wildlife. The state wildlife agency will have 20 days from the date that a field survey or management plan is mailed to submit written comments to the Executive Director. The Executive Director shall record and address any written comments submitted by the state wildlife agency in the land use review order. Based on the comments from the state wildlife agency, the Executive Director will make a final decision on whether the proposed use would be consistent with the wildlife policies and guidelines. If the final decision contradicts the comments submitted by the state wildlife agency, the Executive Director shall justify how the opposing conclusion was reached. The Executive Director shall require the applicant to revise the wildlife management plan as necessary to ensure that the proposed use would not adversely affect a sensitive wildlife area or site.

Consultation with the Washington Department of Fish and Wildlife began with an initial review of the proposal and site plan, phone calls, and a site visit.

Each identified western gray squirrel nest is protected with a 50-foot development buffer. A **condition of approval** states that all trees within these 50-foot buffers shall be retained. Any future development proposed for these buffers shall require a demonstration that the nest site is no longer occupied and is not likely to become occupied in the future. Staff worked with WDFW to evaluate the proposed mitigation for the loss of Oregon white oak habitat and winter range on this particular site.

In August 2017, WDFW, USFS, and Commission staff evaluated oaks proposed to be removed in fields 4 and 9 as a first step to assigning mitigation. The evaluation indicated that all of the trees are in a large size class and that several of the trees planned for removal have very high habitat value. Staff provided specific guidance to the applicant to further reduce the proposed impacts to oak and winter range resources, working with the Underwood Conservation District to create a mitigation plan. Staff, with WDFW and USFS input, approved the attached Conservation Plan describing how the applicant will minimize and mitigate impacts to these resources. No more than seven trees shall be removed. The trees evaluated by WDFW and USFS biologists in the field to have highest habitat value shall be retained, according to the Plan. Washington Fish and Wildlife also recommended limiting grazing to the late season (late summer to fall), allowing more understory to grow up and go to seed before bringing cattle on. The applicant will develop a grazing management plan for the property. These actions are considered mitigation for the proposed development.

In addition, the applicant has demonstrated a commitment to long-term stewardship of the property with a focus on grape production and research, as well as improving the existing cattle grazing operations that are leased on the property. Since November of 2017, he has been working closely with the Underwood Conservation District and intends to complete additional stewardship plans in the future.

A condition of approval requires the applicant to follow the final approved mitigation plan (Conservation Plan, Underwood Conservation District, 2018). Included in the plan are mitigation measures:

- Within 5 years, develop a Grazing Management Plan or Stewardship Plan for the subject parcel, consulting with local Conservation Districts, University Extensions, or other qualified resources.
- All trees within a 50-foot buffer of all known squirrel nest sites shall be retained.
- No more than the seven oak trees identified on the approved site plan shall be removed as part of this development
- Replacement oaks shall be planted at a ratio of 8:1 in the area identified on the site plan, or other suitable sites as determined by a qualified arborist or ecologist. Replacement trees shall be at least 2 feet tall upon planting and shall be monitored for success for at least 10 years. Any trees that do not survive shall be replaced.
- Additional existing saplings on the property shall be caged from grazing and browsing to improve survival. Cage fencing shall be maintained for at least 3 years from the time of installation.
- Wherever possible, existing cattle fencing shall be removed from the property to facilitate deer movement. All new boundary and cattle fencing shall be upgraded to wildlife-friendly guidelines described in the plan.
- Three sites are identified on the approved site plan for native browse restoration. These sites are currently dominated by non-native grasses and Himalayan blackberry. The applicant is working closely with the Underwood Conservation District on methods to reduce the blackberry and plant/promote native shrub and forb cover in these three sites.

At a minimum, 100 native shrubs shall be planted and monitored for three years. At least 75% survival must be demonstrated to satisfy this mitigation requirement.

- Annual monitoring reports shall be submitted for the first 3 growing seasons (beginning at the time of planting) for all replanting mitigation, including oak trees, browse exclusion fencing (cages), native shrubs, and stream vegetation. Reports shall include photographs and measures to demonstrate success. If monitoring indicates the standards described in this plan are not being met, the applicant will report strategies to improve the results. This might include adding plantings, watering, or weed management.

8. The subject parcel is almost entirely within identified winter range for black-tailed deer. Commission Rule 350-81-580(6) specifies that new fencing in Deer and Elk Winter Range is subject to the following approval criteria:

(a) New fences in deer and elk winter range shall be allowed only when necessary to control livestock or exclude wildlife from specified areas, such as gardens or sensitive wildlife sites. The areas fenced shall be the minimum necessary to meet the immediate needs of the project applicant.

(b) New and replacement fences that are allowed in winter range shall comply with the guidelines in Specifications for Structural Range Improvements (Sanderson et al. 1990), as summarized below, unless the project applicant demonstrates the need for an alternative design:

(A) To make it easier for deer to jump over the fence, the top wire shall not be more than 42 inches high.

(B) The distance between the top two wires is critical for adult deer because their hind legs often become entangled between these wires. A gap of at least 10 inches shall be maintained between the top two wires to make it easier for deer to free themselves if they become entangled.

(C) The bottom wire shall be at least 16 inches above the ground to allow fawns to crawl under the fence. It shall consist of smooth wire because barbs often injure animals as they crawl under fences.

(D) Stays, or braces placed between strands of wire, shall be positioned between fence posts where deer are most likely to cross. Stays create a more rigid fence, which allows deer a better chance to wiggle free if their hind legs become caught between the top two wires.

(c) Woven wire fences may be authorized only when it is clearly demonstrated that such a fence is required to meet specific and immediate needs, such as controlling hogs and sheep.

Staff from the CRGC, USFS, and WDFW agreed that the scale and configuration of vineyard plots spread out across this large parcel requires mitigation for the loss of winter range habitat. The Grazing Management Plan should improve native forage for deer and other wildlife in the long-term. The mitigation plan also describes restoration at three sites on the property to re-establish native shrubs and existing livestock fencing to be retrofitted to wildlife-friendly standards. Additional details for winter range mitigation are described in the applicant's mitigation plan and a condition of approval in response to finding D.7 above already requires completion and on-going compliance with the requirements of that mitigation plan.

9. Commission Rule 350-81-590 contains provisions for the protection of sensitive plants within 1,000 feet of the proposed development.

According to the Gorge Commission's resource inventory, there are no known sensitive plant locations within 1,000 feet of the proposed development. There are historical observations of Townsend's broad-leafed lupine on the subject parcel and the applicant's wildlife survey report indicated potential habitat for rare plants. Staff provided the wildlife survey report with its notice

to the Washington State Natural Heritage Program. On July 7, 2017, Jasa Holt, data specialist at Washington Department of Natural Resources, responded that the Heritage Program database does not show any sensitive plant locations on this parcel. Staff consulted USFS and determined that the above described habitat enhancements and mitigations, particularly managing grazing, would result in an overall benefit to native plants on the property.

Conclusion: With the conditions of approval discussed in the findings and conclusions above, the proposed development is consistent with the applicable guidelines in Commission 350-81-560 through 350-81-590 that protect natural resources from adverse effects.

E. RECREATION RESOURCES

1. Commission Rule 350-81-610 contains provisions for recreation.

This application does not include any recreation development and the subject parcel is not adjacent to any parks or recreation sites.

Conclusion: The proposed development is consistent with applicable recreation resource guidelines and Commission Rule 350-81-610 does not apply.

F. TRIBAL TREATY RIGHTS

1. Commission Rule 350-81-084(1) provides protection of tribal treaty rights from new development in the National Scenic Area. Commission Rule 350-81-084(1)(a) lists additional notice materials for projects in or providing access to the Columbia River or its fish bearing tributaries or for projects that may affect Indian treaty rights and provides 20 days for tribal governments to submit comments.

The subject property has no access to the Columbia River, but pursuant to previously described noticing requirements, notice of the proposal was mailed or emailed to the four tribal governments on April 7, 2017.

2. Commission Rule 350-81-084(1)(b) lists guidelines for tribal government consultation when those governments submit substantive written comments. No substantive comments were received. Given this information, the proposed development is consistent with Commission Rule 350-81-084(1)(b).

Commission Rule 350-81-084(1)(c)(B) states:

The treaty rights protection process may conclude if the Executive Director determines that the proposed uses would not affect or modify treaty or other rights of any Indian tribe. Uses that would affect or modify such rights shall be prohibited.

The subject property does not provide access to the Columbia River or its fish bearing tributaries. The final cultural survey report describes areas on and adjacent to the subject parcel where camas roots have been harvested in the past and are likely present today. Camas roots are an important first foods plant. The survey report was provided to the four treaty tribes with a 30-day comment period. The tribal governments have not submitted any comments and no other treaty rights concerns have been raised. Because the proposed use would not affect or modify treaty or other

rights of any Indian tribe, the treaty rights protection process may conclude pursuant to Commission Rule 350-81-084(1)(c)(B).

Conclusion: The proposed development is consistent with the guidelines in Commission Rule 350-81-084, which provides protection for treaties and any other rights of any Indian tribe.

DATE THIS REPORT WAS PREPARED: ~~March 29, 2018~~ April 19, 2018

PREPARED BY: *Jessica Gist, Natural Resources & Land Use Planner, Columbia River Gorge Commission*

cc: Confederated Tribes and Bands of the Yakama Indian Nation
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of Warm Springs Reservation
Chris Donnermeyer, United States Forest Service National Scenic Area
Nez Perce Tribe
Klickitat County Planning
Klickitat County Building
Friends of the Columbia Gorge
Amber Johnson, Washington Department of Fish and Wildlife
Washington Natural Heritage Program
Barbara Sexton
Cathy Wood
David Ripma
Frank Slavens
Robert McCormick

ATTACHMENTS:

1. Letter from Chris Donnermeyer, Heritage Program Manager, CRGNSA, requesting protection plan for segment of Balch School to Grange Hall Road, dated September 21, 2017
2. Conservation Plan, prepared by Underwood Conservation District, dated March 2018
3. Memorandum from Jessica Gist, Sr. Natural Resources & Land Use Planner, dated March 28, 2018

END OF STAFF REPORT

