Oregon DEQ Division 33 Review Summary Sheet



Application Information

Applicant Name:	Lonny Lee	Application Number:	S-89437	
Basin & Sub-basin:			Proposed as 0.05 cfs,	
	Pagua Unnar Pagua	Requested Water Amount:	further limited to 500	
	Rogue, Upper-Rogue	Requested Water Amount.	gallons per day (GPD), and	
			then reduced to 0.005 cfs	
Nearest Surface	Pogue Piver	Nearest Receiving	Rogue River	
Water:	Rogue River	Waterbody:		
Proposed Use:	Human Consumption one	Degreested Devied of Hear	January 1 through	
	household	Requested Period of Use:	December 31	

Proposed Use:	household	Requested Period o	f Use:	December 31
Division 33 Geographic	Area			
☐ Lower Columbia ☐	Upper Columbia ⊠ Statewide			
completed below, do	umbia Basins only: Based upon the es the proposed use comply with standards or may conditions be a	existing state and	□No	☐ Yes ☐ Insufficient data
Statewide: Will the p cause either "loss" or endangered (ST&E	roposed use result in water qualit "net loss" of essential habitat of s) fish species? (Note: the presence by Oregon Department of Fish ar	sensitive threatened e of ST&E fish	□ No	⊠ Yes □ Insufficient data
Recommended Pre-Pr	oposed Final Order Actions			
diversion under to f such riparian a Policy described i repairs at the poieither a Riparian written declaration iparian area for The permittee is prior to developn	parian area is disturbed in the prohis water use permit, the permitterea in accordance with the Oregon Oregon Administrative Rule OAI ant of diversion, the permittee sha Mitigation Plan approved in writing from ODFW that riparian mitigates the life of the permit and subsequence by directed to contact the located of the point of diversion.	ee shall be responsible in Department of Fish in Department of Fish in Chapter 635-415. Property of the Oregon of the Oregon Department of the Chapter of the Eat Oregon Department is not necessary.	e for resto and Wildlior to dev on Water nent of Fis The perr approve t of Fish a	pration and enhancement life's Habitat Mitigation velopment, modification or Resources Department, sh and Wildlife (ODFW) or a mittee shall maintain the d Riparian Mitigation Plan. and Wildlife Fish Biologist
responsible for el necessary pestici	ations: When herbicide application nsuring that herbicide application de application permits, including to Polluted return flows are not allow	laws are met, and tha the 2300-A Pesticide G	t they ob ieneral Pe	tain from DEQ any ermit or the 2000-J NPDES
3.				
Mitigation Obligation		l H l 21 21		
volume and rate than of diversion or appro interference occurs. [month-month] time to discuss flow mitigations.	Proposed Final Order, the applicant the permitted use. The proposal priation, or the uppermost point of a surface water right is used for period and of similar water qualitation options. Flow mitigation is simposal by DEQ prior to issuance of a	shall include water the on the stream at which mitigation, it shall be ty. The applicant shoute-specific, therefore	at is sour n the pote transferre Id contac DEQ reco	ced upstream of the point ential for surface water ed instream for the t their OWRD caseworker

Racommai	ndad Parmit	Conditions

Water Quality: All water use under this permit shall comply with state and federal water quality laws. The permittee shall not violate any state and federal water quality standards, shall not cause pollution of any waters of the state, and shall not place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means. The use may be restricted if the quality of source stream or downstream waters decrease to the point that those waters no longer meet existing state or federal water quality standards. Permittee is responsible for obtaining any necessary state and federal permits.
 Flow Restrictor: The permittee shall install a flow control valve on the diversion system to limit use to the permitted rate. The valve shall be in place, functional, and verified by the Certified Water Rights Examiner before a certificate is issued. The valve or a suitable replacement shall remain in place for the life of the water right.
 Limit Rate: Water withdrawal shall be limited to 0.005 CFS and 500 gpd

Seasonal Limitations

Reason for limitation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TMDL: Critical period				\boxtimes								
WAB: 20% flow threshold exceeded	\boxtimes	\boxtimes	\boxtimes	\boxtimes				\boxtimes	\boxtimes			
Other:												

Additional Reviewer commen	ts 🗆 No 🛛 Yes				
If OWRD issues a permit at the human consumption rate for one household, 0.005 cfs and 500 gpd, and the use is deemed a high public benefit, then DEQ does not recommend mitigation or a period of use limitation as the 0.005 cfs rate is likely an immeasurable impact to water quality.					
Interagency consultation: [Describe any substantial interagency consultation. Who was contacted and what					
was discussed?]					
DEQ review prepared by:	Steve Parrett	Date complete: 1/2/2025			

Antidegradation Policy:

The purpose of DEQ's Antidegradation Policy (OAR 340-041-0004(1)) is to guide decisions that affect water quality to prevent unnecessary further degradation from new or increased point and nonpoint sources of pollution, and to protect, maintain, and enhance existing surface water quality to ensure the full protection of all existing beneficial uses. Oregon's Antidegradation Policy allows exemptions and conditions for new or increased water use.

1. Temporary Use or Net Benefit

Does the applicant propose a temporary use in response to an emergency, a restoration activity that the DEQ has determined provides a net ecological benefit, or a temporary (lasting less than six months) use to protect human health and welfare, for which the applicant has demonstrated that they will minimize adverse effects to threatened and endangered species? \square No \square Yes

If yes, recommend approval of the application and identify conditions necessary to protect water quality for the habitat of ST&E fish species. You may skip to Question 7.

2.	_		· · · · · · · · · · · · · · · · · · ·	_	ce Water with critical habitat Yes		
			ce, the applicant must provid				
3.	downstream r oxygen, pH, et	Water Quality Limit eview to 6th field H		ished flow can a	ater body? Note: limit ffect (temperature, dissolved Yes		
	Assessment	Assessment Unit	Parameter	Status*	Beneficial Uses		
	Unit Name Rogue River	Description Elk Creek to Little Butte Creek	Temperature- year-round, Temperature- spawn	Category 5	Fish And Aquatic Life		
	Category 4A - Clean-up plans (also called TMDLs) that will result in the waterbody meeting water quality standards and supporting its beneficial uses have been approved Category 4B - Other pollution control requirements are expected to address pollutant of concern and will result in attainment of water quality standards Category 4C - The impairment is caused by pollution, not a pollutant. For example, flow, or lack of flow, are not considered pollutants, but may be affecting the waterbody's beneficial uses Category 5 - Data indicate a designated use is not supported or a water quality standard is not attained and a TMDL is needed. This category constitutes the Section 303(d) list that EPA will approve or disapprove under the Clean Water Act						
ı	<u> </u>						
	• -	•	on 3 is yes, then describe how andards, and how the use ma		does not comply with existing sh species habitat.]		
	temperature to sensitive specific River does not temperatures downstream to temperatures flow is lowest.	pased on species an ies and the life history increase as flow de emperature-impair and stressed condition.	d life history stage. Oregon's bry stage of those species at the ar-round or spawning stream creases. Therefore, reducing ed waterbodies, such as the l	temperature lime he location and temperature staflow in waterbo Jpper Rogue Rivarly during the safety and the safety and the safety during	season of concern. The Rogue andards. Generally, water dies that are connected to er, could result in higher stream ummer months when stream		
L							
	Recommende Water Quality		Restrictor, Riparian, Herbicid	e Applications			

Are there TMDLs established for parameters identified as being affected by flow modification? $\ \square$ No $\ \boxtimes$ Yes

4. Total Maximum Daily Load Summary

Analysis: [List TMDL, identify the load allocation, and if flow modification is a contributing factor. Describe how the use does or does not comply with existing state and federal water quality standards and how the use may affect ST&E fish species habitat.]

Rogue Basin

The Rogue Basin has an approved TMDL for stream temperature (DEQ, 2008). DEQ is currently under court order to replace the Rogue River Basin temperature TMDL. The current temperature TMDL is in effect until the new one is approved.

The Rogue River Basin temperature TMDL applies to all perennial and intermittent streams within the Rogue Basin that are not already addressed by an existing TMDL. The TMDL addresses human-caused temperature increases from (1) warm water discharge to surface waters (2) increased solar radiation loading, and (3) flow modification that affects natural thermal regimes. Water quality data and modeling has shown that withdrawals decrease the capacity of streams to assimilate pollutant loads. Therefore, additional withdrawals may warm stream temperatures. Peak temperatures typically occur in mid-July through mid-August. On the Rogue River, the period of exceedance of the water quality standard and applicability of allocations is from April 1- October 31 but anthropogenic heat loads are of concern throughout the year.

In the Rogue Basin, anthropogenic heat loads are of concern throughout the year. Winter withdrawals can reduce floodplain recharge from high flow events, thus reducing the volume of cool water released from floodplain storage into the stream throughout the year. This will result in the diminution of habitat of sensitive, threatened, or endangered fish species. According to OWRD Water Availability analysis, existing wintertime withdrawals already exceed DEQ's protective use threshold of 20% natural flow.

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Water Quality, Limit Rate, Flow Restrictor, Riparian, Herbicide Applications

5. Cumulative Withdrawals Effects

Is it likely that the proposed activity, together with existing withdrawals in the OWRD's Water Availability Basin (WAB), will lower water quality and impair aquatic life? \square No \boxtimes Yes

Water Availability and Cumulative Impacts Summary Table

Percent of natural flow = (consumptive use/natural stream flow)*100. See Appendix for additional instructions.

ROGUE R > PACIFIC OCEAN - AB HOG CR

Watershed ID	Exceedance Level	Month	Natural Stream Flow	Consumptive Use	Expected Stream Flow	Reserved Stream Flows	Instream Requirement	Net Water Available	Percent of Flow
31530708	50	JAN	3040	913	2130	0	0	2130	30.03289
31530708	50	FEB	3200	1790	1410	0	0	1410	55.9375
31530708	50	MAR	2930	1600	1330	0	0	1330	54.60751
31530708	50	APR	3290	1040	2250	0	0	2250	31.61094
31530708	50	MAY	3400	369	3030	0	0	3030	10.85294
31530708	50	JUN	2330	291	2040	0	0	2040	12.48927
31530708	50	JUL	1470	280	1190	0	0	1190	19.04762
31530708	50	AUG	1190	266	924	0	0	924	22.35294
31530708	50	SEP	1110	245	865	0	0	865	22.07207
31530708	50	OCT	1230	227	1000	0	0	1000	18.45528
31530708	50	NOV	1600	266	1330	0	0	1330	16.625
31530708	50	DEC	2490	405	2080	0	0	2080	16.26506

Monthly flow in Cubic Feet per Second (CFS). Annual flow in Acre Feet (AF)). Highlight months that exceed 20% of percent of flow

6.	Flow Modification Compliance with State and Federal Water Quality Standards Based on responses to questions 3, 4, and 5, is the use in compliance with state and federal water quality standards or can compliance with state and federal water quality standards be assured, and ST&E habitat loss prevented through flow mitigation and/or by imposing permit condition(s)? □ No □ Yes
	Recommended Conditions: Limit Rate, Flow Restrictor
7.	Compliance with other State and Federal Water Quality Standards ORS 468B.025 prohibits pollution of waters of the state. Are there additional water quality impairments that would result from this proposed used by degrading surface water or groundwater quality? ☑ No ☐ Yes
	If water quality can be protected by applying permit conditions, then select all appropriate conditions from the standardized menu of conditions.
	Recommended conditions: [List conditions]

PRE-PROPOSED FINAL ORDER ACTIONS

DEQ recommends that the applicant provide suitable replacement water as mitigation for anticipated impacts to water quality and more specifically the habitat of sensitive, threatened, and endangered fish species. Additional mitigation may be required from other Interagency Review Team members (for example: OWRD may require mitigation for periods when water is not available). Surface water flow mitigation is unlikely to provide the same benefit that groundwater can provide to gaining stream reaches. However, if groundwater mitigation is unavailable within the same aquifer, surface water mitigation may provide suitable mitigation.

Flow Mitigation Obligation:

Prior to issuance of a Proposed Final Order, the applicant shall submit a mitigation proposal that is of no less volume and rate than the permitted use. The proposal shall include water that is sourced upstream of the point of diversion or appropriation, or the uppermost point on the stream at which the potential for surface water interference occurs. If a surface water right is used for mitigation, it shall be instream for the *month - month time* period and of similar water quality. The applicant should contact their OWRD caseworker to discuss flow mitigation options.

Riparian: If the riparian area is disturbed in the process of developing, modifying or repairing a point of diversion under this water use permit, the permittee shall be responsible for restoration and enhancement of such riparian area in accordance with the Oregon Department of Fish and Wildlife's Habitat Mitigation Policy described in Oregon Administrative Rule OAR Chapter 635-415. Prior to development, modification or repairs at the point of diversion, the permittee shall submit, to the Oregon Water Resources Department, either a Riparian Mitigation Plan approved in writing by Oregon Department of Fish and Wildlife (ODFW) or a written declaration from ODFW that riparian mitigation is not necessary. The permittee shall maintain the riparian area for the life of the permit and subsequent certificate per the approved Riparian Mitigation Plan. The permittee is hereby directed to contact the local Oregon Department of Fish and Wildlife Fish Biologist prior to development of the point of diversion.

Water Storage Construction: The applicant shall locate the reservoir outside of the stream's natural channel. identify waterbody and set back to prevent stream capture and justification for distance selected.

(Note to reviewer: The 1200C permit requires a 50-foot setback, which is cited from the National General Construction Permit OAR-660-023-0090(5). Requiring the storage reservoir to be outside of the mapped 100 year floodway may also be a protective buffer.)

Construction Activities: 1200-C NPDES Stormwater Construction permit coverage is required from DEQ or Agent for construction activities (clearing, grading, excavation, grubbing, stumping, demolition, staging, stockpiling and other land disturbing activities) that will disturb one or more acres, or that will disturb less than one acre of land but is part of a common plan of development or sale that will ultimately disturb one or more acres of land and have the potential to discharge to surface waters or to a conveyance system that leads to surface waters of the state.

In-Water or Riparian Construction: For in-water or riparian construction, permittee may be required to obtain additional permits from the Oregon Department of State Lands, the U.S. Army Corps of Engineers, and the DEQ Section 401 certification program prior to construction. The applicant must contact these agencies to confirm requirements.

Herbicide Applications: When herbicide application is within three feet of water, the permittee is responsible for ensuring that herbicide application laws are met, and that they obtain from DEQ any necessary pesticide application permits, including the 2300-A Pesticide General Permit or the 2000-J NPDES General Permit. Polluted return flows are not allowed to enter waters of the state per ORS 468B.025(1).

STANDARIZED MENU OF CONDITIONS

Water Quality: All water use under this permit shall comply with state and federal water quality laws. The permittee shall not violate any state and federal water quality standards, shall not cause pollution of any waters of the state, and shall not place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means. The use may be restricted if the quality of source stream or downstream waters decrease to the point that those waters no longer meet existing state or federal water quality standards. Permittee is responsible for obtaining any necessary state and federal permits.

Agricultural Water Quality Management Area Rules: The permittee shall comply with basin-specific Agricultural Water Quality Management Area Rules described in Oregon Administrative Rule Chapter 603-095. The permittee shall protect riparian areas, including through irrigation practices and the management of any livestock, allowing site capable vegetation to establish and grow along streams, while providing the following functions: shade (on perennial and some intermittent streams), bank stability, and infiltration or filtration of overland runoff.

Flow Restrictor: The permittee shall install a flow control valve on the diversion system to limit use to the permitted rate. The valve shall be in place, functional, and verified by the Certified Water Rights Examiner before a certificate is issued. The valve or a suitable replacement shall remain in place for the life of the water right.

Limit Rate: Water withdrawal shall be limited to *Enter CFS or AF for the defined period, or a month by month rate or volume*.

Limit Period of Use: Water use shall be limited to the period: *start date through end date*.

(Note to reviewer: Do not split the irrigation season. Require mitigation if water is not available during the requested time period.)

Limit Diversion: The permittee shall not divert water under this water use permit unless streamflow in the waterbody name is at or above CFS cubic foot per second, as determined at Gaging Station ID .

Off-Channel Stored Water Releases: The permittee shall not release polluted water from this off-channel reservoir into waters of the state except when the release is directed by the State Engineer to prevent dam failure.

On-Channel Reservoir: The permittee shall design and operate the water storage facility such that all waters within and below the reservoir meet water quality criteria. The permittee shall develop a reservoir operations plan that details how water quality criteria and standards will be met. A Certified Water Rights Examiner shall verify that the reservoir operations are consistent with the plan before a certificate is issued. The reservoir operator shall maintain a copy of the plan and make it available for review upon request.

Restrict Reservoir Release: To prevent pollution downstream, the permittee shall not release water from the reservoir when the flow at Gaging Station ID (gage name) is below the Mean Daily Discharge of *CFS* (discharge which was equaled or exceeded for 90% percent of the time) except when the release is directed by the State Engineer to prevent dam failure.

Live Flow: Once the allocated volume has been stored, permittee shall pass all live flow downstream at a rate equal to inflow, using methods that protect instream water quality.

Lining: The permittee shall line the reservoir with *include material or allowable infiltration rate* to minimize seepage and protect groundwater quality per Oregon Administrative Rule 340-040. The liner is to be in place,

inspected, and approved by the Certified Water Rights examiner prior to storage of water. *If the liner fails, the water user shall replace it within one calendar year. **Site-Specific Condition**: The permittee shall

^{*} OAR 690-410-0010(2)(a), OAR 690-310-0120, OAR 690-310-0140

Appendix: General Overview, Instructions for Water Availability Analysis, and Process Flow Chart

General Overview

The purpose of OAR Chapter 690, Division 33 is to aid the Oregon Water Resources Department (OWRD) in determining whether a proposed use will impair or be detrimental to the public interest with regard to listed sensitive, threatened, or endangered (ST&E) fish species. Oregon's stream temperature, dissolved oxygen (DO), pH and several other water quality standards are based on the life cycle needs of salmonids and other resident fish and aquatic life. Exceeding the standards can disrupt the life cycle of a ST&E fish species and may cause death. In addition, OWRD must consider water quality impacts as part of a public interest review, OAR 690-310-0120. Water quality impacts and conditions unrelated to ST&E species should be noted as "Division 310" in the recommendations to OWRD. The DEQ's Water Right Application Review Procedures document contains a full description of the review process.

The two main categories of Division 33 reviews are based on the geographic distribution of ST&E fish species:

- o **For Proposed Uses in the Columbia River Basin,** reviews must determine whether a proposed use complies with existing state and federal water quality standards. Upper Columbia applications specifically require applicants to provide evidence that the proposed use complies with existing state and federal water quality standards. <u>Geographic scope</u>: Columbia River Basin (includes all waters that ultimately drain into the Columbia River).
- o **For Proposed Uses Statewide**, review is conducted under the "Statewide review" procedure. Statewide reviews must determine whether a proposed use may affect ST&E fish species habitat. The statewide review procedure is intended to identify permit conditions that can prevent the "loss" or "net loss" of essential habitat of ST&E fish species. When permit conditions cannot be identified that meet this standard, then the DEQ recommends denial of the permit. <u>Geographic scope</u>: all areas outside the Columbia River Basin where OWRD determines ST&E fish species are present.

Instructions for Populating the Water Availability Summary Table using data from OWRD's WAB (Section 5)

- Open OWRD's Water Availability Reporting System.
- Search for the water availability basin of interest. Select 50% exceedance. The 50% exceedance stream flow is the stream flow that occurs at least half of the time.
- The water availability analysis will display a nested list of watersheds that contain the POD. Select the highest nesting order WAB that contains the POD.
- Download to an Excel spreadsheet. Percent of flow is calculated using this equation:

$$Percent of Flow = \frac{Consumptive Use}{Natural Stream Flow} * 100$$

You may choose to add the proposed rate (or storage amount) to the consumptive use.

Instructions for Water Availability Analysis

To complete Section 6, review and consider the cumulative impact of consumptive withdrawals using the OWRD WAB. All water withdrawals and the following factors should be considered when conducting a water availability analysis.

- Instream Flow: Consider the percent of natural flow removed from the stream in each month (see right-most column in Water Availability and Cumulative Impacts Summary Table). Based on best professional judgment, evaluate if the cumulative withdrawal is likely to cause impairment to aquatic life or water quality. Water quality standards are established to protect aquatic life. In scientific literature, researchers have identified ecological harm occurring when flows are reduced by >6-35% of daily flow¹. Consider the seasonality of any listings and season of withdrawal to determine impact for each month of the year.
- Antidegradation: Rule 340-041-0004 applies: withdrawals cannot cumulatively increase a waterbody's temperature by more than 0.5 degrees Fahrenheit or cause a 0.1 mg/l decrease in dissolved oxygen from the upstream end of a stream reach to the downstream end of the reach so long as it has no adverse effects on threatened and endangered species. See OAR 340-041-0004(3)-(5) for a description in rule of activities that do not result in lowering of water quality.
- Flow modification: Consider if cumulative withdrawals are contributing to flow modification and a likely limiting factor in the waterbody at certain times of the year. Temperature and dissolved oxygen are flow-related parameters. When streamflow is reduced, assimilative capacity is reduced. As a waterbody heats up, dissolved oxygen concentrations decline. Reduced stream flows (including groundwater inputs to streamflow), exacerbate temperature and/or dissolved oxygen impairments.
- **Temperature**: Increases in temperature or a reduction in dissolved oxygen adversely impacts ST&E fish. Fish require different temperature and concentrations of dissolved oxygen based on species and life history stage. Oregon's temperature and dissolved oxygen limits are based on the most sensitive species and the life history stage of those species at the location and season of concern. Additional heat or reduction in dissolved oxygen concentrations will further impact these species habitat. Reduced flows can also increase the concentrations of phosphorous, bacteria, pesticides and metals.

Instructions for Calculating "Limit Diversion" Rate

This condition is selected to limit withdrawals once the cumulative withdrawals in the watershed have exceeded the protective threshold of 20 percent and/or the ISWR is not fully protective of aquatic life. A different value can be selected, but the reviewer should state why a particular percent was selected.

"Natural stream flow" is obtained from OWRD's Water Availability Reporting System. The condition is applied on a monthly timeframe based on OWRD's data.

"Natural stream flow" - (percent of flow * "natural stream flow") = Expected Stream Flow

The applicant would have to stop using when instream flows drop below the Expected Stream Flow.

Example:

Natural stream flow for a particular month = 1200 CFS

1200 CFS - (.2 * 1200 CFS) = 960 CFS

¹ Richter BD, Davis MM, Apse C, Konrad C. 2011. Short Communication, A Presumptive Standard For Environmental Flow Protection. River Research and Applications. Published online in Wiley Online Library (wileyonlinelibrary.com), DOI: 10.002/rra.1551

DEQ Water Right Review Flow Chart

