

Winter Lake Phase III Team
Response to Coos County Development
Staff Report on File # ACU-23-074/FP-23-012
Directly in Regard to the Impacts Analysis Findings

Date of Staff Report
Thursday March 21, 2024



Prepared by

Caley Sowers
Coos SWCD Director

Christopher W. Claire
Oregon Department of Fish and Wildlife

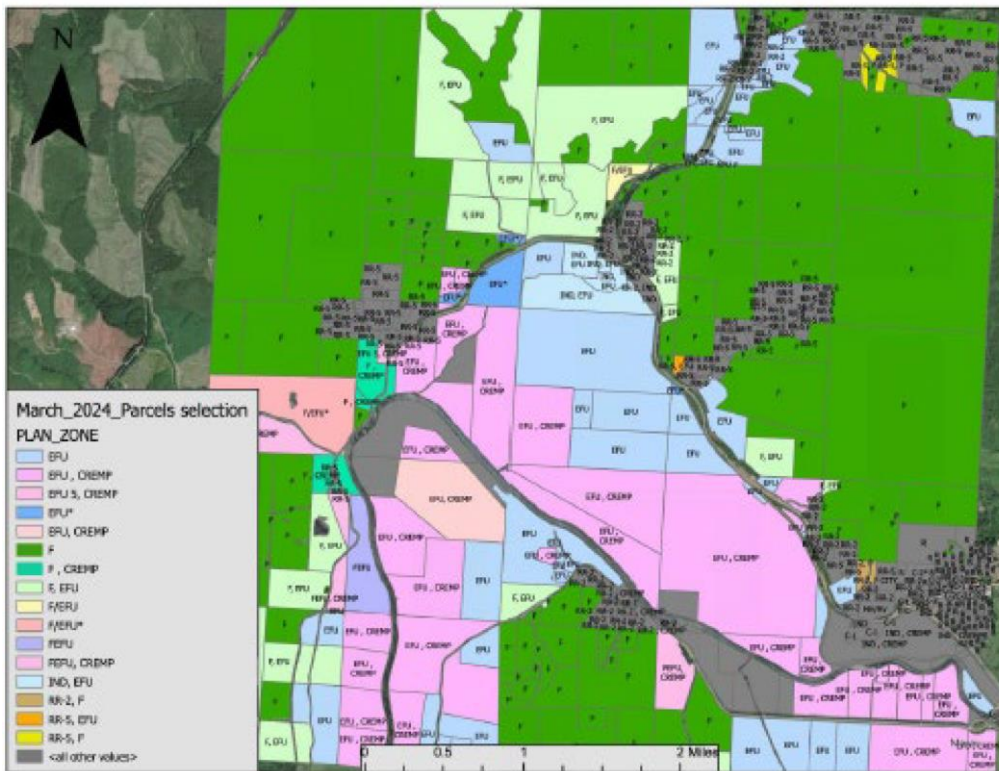
County Planning Finding in 03/21/24 Staff Report

FINDING: The applicant is required to do an impacts analysis showing that the proposed use will not force a significant change in accepted farm or forest practices on surrounding properties zoned and devoted to farm or forest. The applicant shall address how the proposal will not increase the cost of accepted farm or forest practices on lands devoted to farm or forest use. The analysis is required to define the study area, look at current practices within that area and then make a determination if the current proposal will significantly force a change in accepted farm and forest practices and if it would increase the cost of accepted farm or forest practices. The applicant submitted this information on March 19, 2024. The full results of the study are found at Attachment A, Application Submittal.

The methodology used by the applicant is as follows:

The Geographic Scope of this analysis includes all parcels within an approximate 1-mile radius of the project area. For this analysis, only lands zoned for farm and/or forestry practices were considered. Properties with industrial, commercial, rural residential, or other zoning were not evaluated for impacts unless combined with a farm or forest plan zoning. It should be noted here that most of the Garden Valley area parcels are zoned RR-5 and were not analyzed according to the selected evaluation criteria.

The results provided a total of 234 parcels for consideration, 15 of which are already included in the proposed project area. Project Area parcels were evaluated separately (see applicants Appendix A. Winter Lake Phase III Project Area and Surrounding Lands Impacts Analysis Tables 1. And 2.) as well as in combination with surrounding land parcels.



Based on the provided details of this enhancement project within the Beaver Slough Drainage District and the Coaledo Drainage District, here are the anticipated significant changes in accepted farm or forest practices and associated costs for adjacent landowners that have been raised:

- 1. Altered Drainage Patterns and Loss of Water Sources: The replacement and consolidation of pasture culverts, installation of new drainage channels, and repair of failing berms may alter the drainage patterns within the affected areas. This could impact the way adjacent landowners manage water on their properties, potentially requiring adjustments to irrigation systems, drainage infrastructure, water sources or land grading practices. Landowners may need to invest in new equipment or infrastructure to adapt to the changed drainage conditions.**

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The project is specifically designed to establish more natural pathways of drainage in the low-lying elevations. This process incorporated using LiDAR and contracted engineering in the ground surveys. The new and reconstructed channel density will be roughly 2x the existing density per acre over the current and with extended distribution in order to both deliver water during irrigation effectively, however, more importantly to provide for greatly improved drainout in spring and following rainfall or irrigation. These advancements in the channel layout will have strongly positive effects for water management and pasture irrigation on the action area lands. Adjacent lands are not affected by the Phase III actions. The Winter Lake C3P main tidegate controls water delivery to the project area in the Beaver Slough Drainage District (BSDD) and the Coaledo Tidegate serves as the control in the Coaledo Drainage District (CDD). The proposed Phase III work is subservient to the main tidegates and the 39 culverts that will be installed serve internal pastures, not main delivery routes to adjacent properties. The pastures served by the Phase III culverts and tidegates are within pastures with berms. Surrounding lands of pastures within the project area are largely upslope (above elevation 8.0ft) or not directly connected hydrologically in a manner where project actions have potential to cause water delivery effects. Berm repairs are aligned along interior project land parcels. These repairs are not boundary berms between adjacent lands and thus are only control features for irrigation and floodwater controls on the project area.

Through the past 25+yrs no channel cleaning has occurred in the action area. This has resulted in filling of channels through time. The pasture areas have become very difficult to drain in some locations with strong increases in non-palatable pasture plants. Without reestablishing the drainage within the project area EFU pasture operations are economically decreasing in productive capacity. The continued inability to implement Phase III proposed actions will incur an undue forced economic decline on the project area ranchers. All landowners within the project area are ground level advocates for the actions that will provide for improved water management.

The drainage networks that will be reconstructed through Phase III are not directly connected to adjacent lands. The project will install 9 new watering locations for livestock in the project area that has 4 watering locations currently, thus an overall increase. Water delivery to other off-project lands for livestock is not hydrologically connected at the summer elevations and thus unaffected. Irrigation on the project lands are through passive tidal inflow. Neighboring off-project area lands do not irrigate currently or where it does occur are not using either the Coaledo or BSDD C3P tidegate. No new infrastructure will be necessary for off-site landowners related to current and future actions within the Phase III project area.

- 2. Increased Maintenance Responsibilities: The installation of new infrastructure, such as tidegates, drainage channels, and watering site troughs, may require ongoing maintenance by adjacent landowners. This could involve tasks such as cleaning debris from channels, inspecting and repairing tidegates, or managing vegetation around watering sites. Landowners may need to allocate resources for regular maintenance activities and potentially invest in equipment or labor to ensure the proper functioning of the infrastructure.**

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The Phase III project will install advanced culverts with new long-life HDPE materials (as noted in the 404 Fill and Removal permit application). These culverts have a 50yr lifespan, which is 100% longer than any existing steel culverts on site and roughly 40% longer than the ADP culverts in use currently. The new side-hinged aluminum tidegates are aircraft grade aluminum with a 50yr life expectancy. As is shown in the image on the cover sheet of this document, the existing wooden infrastructure is undersized and largely wooden tidegate materials with a lifespan of 10-12yrs maximum. The project is anticipated to result in a greatly reduced maintenance effort on the project area.

The existing channel networks on the project area are largely linear and do not follow the low-lying topography alignment with acuity. This results in areas following rainfall, irrigation, or flooding where fish can become stranded and water stagnate unmoving with potential for mosquito production. Sticklebacks, mosquitofish, and juvenile coho all eat mosquito larvae. However, with the current channel networks largely filled with years of sediment and failing to follow topography, fish instinctively will not leave canals where they reside continuously and travel long distances to interior pasture locations. Additionally, the low-lying areas where water ponds currently, are not connected to main and secondary interior channels with fish present. The deteriorating infrastructure on the project area (channels filled with sediment/vegetation, failing tidegates, degrading berms) are all components that are not providing adequate water management for agricultural actions on the project land area. A notable number of the interior culverts are perched, which does not allow for the current channel networks to be on-grade with the low point at the downstream delivery to main canals. Accordingly, there is greatly reduced ability to provide for both drainout and delivery of irrigation waters. These perched pipes also reduce the time period for fish passage during tidal and flooding cycles. All culverts on site are currently undersized for the hydrology. Without addressing these issues economic output for the landholders will continue to be damaged and in decline. The new/reconstructed channel networks are designed with on-grade slope from interior locations to the main canals. This was not the original construction design in 1908. The on-grade designs will allow for transport of sediment that accumulates to prevent premature clogging of channels.

The project lands are installing internal infrastructure that is within bermed topography. No actions through Phase III will occur at the BSDD C3P main tidegate or the Coaledo tidegate. Winter flooding eliminates all controls as berms are overtopped and thus the 39 culverts/tidegates are irrelevant with flooding above elevation 5.0ft. The infrastructure that will be installed in the project area serves internal pastures of project area lands and these channels do not serve as through pathway infrastructure to other adjacent lands. Thus no costs are maintenance changes are possible for adjacent lands through Phase III actions. There are no tidegates within the Winter Lake Phase III interior pasture network culverts or tidegates that are not being replaced through the project. Few if any tidegates are presently in operation on any adjacent lands. No allocation need for additional maintenance on adjacent lands infrastructure will be incurred by Phase III.

- 3. Potential Pest and Invasive Plant Management: Wetlands can serve as breeding grounds for mosquitoes and other pests, which may pose a nuisance to adjacent landowners, particularly during certain times of the year. The change the land may also bring in invasive plants and that can spread to adjacent properties. Landowners may need to implement pest and/or invasive plan management strategies to mitigate the impact of increased pest or plant populations on their farming or forestry activities. This could involve measures such as insecticide application, pesticide applications, habitat modification, or the installation of mosquito control devices, which may entail additional costs.**

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Many tidal wetlands inherently do not produce many mosquitoes. This is due to the factors needed to produce mosquitoes. In order for a water feature to provide habitat suitable for mosquito production three factors are necessary:

- a). Water must remain non-moving in a stagnant state during warmer months for the life-cycle of larvae.*
- b). The location where larvae are hatched must remain fishless until pupae transform into adults after stage-5, otherwise they will be predated on as mosquito larvae are a high value food item for fish;*
- c). The water must not dry up or soak into the ground prior to fly-off following stage-5. This is a minimum 7-8 days and at a maximum under cooler conditions 14-20 days;*

If any of the conditions are not met, larvae may hatch, however, then be consumed by fish or the habitat will dry up prior to sufficient time for them to become adults or moving water will reduce algae/food production or egg hatching. The Winter Lake Phase III project will address all three factors linked to mosquito production. The extended and on-grade channel networks will prevent ponding of rainwater/floodwater/irrigation water in locations where currently there are ponding conditions. The new and reconstructed channel networks will provide for movement of water, which will disrupt the life-cycle. The project is also designed to allow for much greater distribution of native three-spined sticklebacks and non-native mosquitofish to potential locations where mosquitoes might hatch and then be consumed. The Winter Lake Phase III project is directly engineered to address mosquito production habitats eliminating the need for direct chemical pest management actions. Overall, the Winter Lake Phase III project will directly improve conditions for pasture grass production, which is benefitted by actions that reduce ponded water areas where mosquitoes are able to be successful.

*It has been noted that other invasive species such as Brazilian Water-Milfoil, a.k.a. parrot feather (*Myriophyllum aquaticum*), may colonize the Winter Lake project area. None of the project actions will enhance the ability for this plant or other non-native invasive plant. Parrot feather has been present in the Coquille Valley since at least 2009 in a lake in the lower Coquille River. Likely released as from a home aquarium. In the Coquille River basin it has been noted as heavily established in Johnson Mill pond. Photos from 2002 identified Milfoil sp. in mid-winter in Johnson Mill pond with stem features typical of parrot feather during winter (Figure 1), however, positive I.D. was not made at the time. Brazilian Water-Milfoil is known to be heavily present in Johnson Mill Pond currently (Figure 2). Brazilian Milfoil is spread only by vegetative reproduction when a portion of stem is broken, such as during floodwaters and transported to a new location where it roots. The population of Brazilian Milfoil in Johnson Mill Pond is located where floodwaters are able to carry broken stems to all lands downstream of that location that are connected to the main Coquille River.*



Figure 1. Milfoil sp. in Johnson Mill Pond, image taken December of 2002.



Figure 2. Brazilian Water-Milfoil in late winter emergent stage. Johnson Mill Pond, March 23, 2024.

- 4. Loss of Agricultural Lands: The project could contribute to the ongoing loss of agricultural lands due to various factors. Firstly, the installation of new infrastructure and drainage systems may require the conversion of agricultural land into construction sites or water management areas, directly reducing the available acreage for farming activities. Additionally, alterations in drainage patterns and the introduction of wetlands as part of the project may render certain portions of agricultural land less suitable for cultivation, further diminishing the overall area available for farming. Furthermore, the potential increase in maintenance responsibilities for adjacent landowners could divert resources and attention away from agricultural activities, leading to reduced productivity or abandonment of agricultural land.**

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The Winter Lake Phase III project has been specifically designed to provide strong economic benefits for agricultural landowners within the project area and with special consideration to eliminate effects/impacts to adjacent landowners. The new channel on-grade design and installation on the landscape will provide for invigorated improvement in pasture grass production without substantive effects to total acreage of grass. Without the new channel networks and cleaning of the remainder, existing sediment filled channels will continue to fail to provide for proper drainage. Pasture grasses are struggling on large areas of the action area due to excessively wet conditions into early summer from poor transport channel capacity and connectivity to main outflow canals. The project will also provide strong access for overwintering juvenile coho into high value rearing habitat. During winter drainout is impossible due to higher river levels and thus use by fish is considered a strong and collaborative “Working Lands” benefit. Recreational fisheries are estimated to generate \$280 per adult salmon caught to the Oregon economy through angler purchase of motels, food, fuel, boats, vehicles, and fishing equipment.

The project will not implement any actions on adjacent non-participating landownerships. The action area construction sites are temporary staging areas, most of which are upland off of North Bank Lane or Highway 42, where there currently is not EFU pasture production. No long-term effects/impacts to pasture production will occur due to staging areas. Troughs installed for livestock watering will provide enhanced livestock health due to higher quality water for their consumption compared to current conditions.

The lands within the Phase III Project area are all currently classified as wetlands under the USFWS National Wetlands Inventory (<https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>) . The wetland pasture grass production from these sites is due to species of grass (bent grass and reed canary grass), predominating, which are facultative wetland plants. The project is unable to and will not create any new wetlands as the project is already wetland.

Channel networks will provide more natural hydrology similar to historical that will enhance the vigor of these wetland adapted pasture grasses. The new/reconstructed channel networks are specifically aligned in a manner different “altered drainage patterns” than existing in some locations to enhance the drainout, which will improve quantifiably the pasture grass production, while protecting ecology of the lands within the CREMP for the specified goals and values. Without this project the lands will continue to decrease in economic viability due to increased retention of water, which yields more unpalatable plant species such as smartweed and Pacific silverweed.

The project action areas are within surrounding berms to elevation 5.0ft. Culverts/tidegates/channels that will be installed are not directly connected to adjacent lands and thus will not be impacting hydrology or productive capacity of those lands. The culverts/tidegates that will be addressed with Phase III are subservient to delivery of water through the main BSDD C3P and Coaledo tidegates. No actions will occur through Phase III at those main tidegate locations.



NOTICE OF LAND USE DECISION BY THE COOS COUNTY PLANNING DIRECTOR

Coos County Planning
60 E. Second St.
Coquille, OR 97423
<http://www.co.coos.or.us/>
Phone: 541-396-7770

Date of this Decision: March 30, 2023

File No: ACU-23-008

RE: Request for approval of replacement of tide gates, bridge and stream enhancements (blackberry removal, fencing, log installation, and native plantings) within the Coquille River Estuary Management 43-Exclusive Farm Use and adjacent Exclusive Farm Use Zone.

Applicant(s): Coaledo Drainage District with Assistance from Coquille Watershed

This decision notice serves as public notice to all participants, adjacent property owners, special districts, agency with interests, or person with interests. If you are an adjacent property owner, this notice is being mailed to you because the applicant has applied for a use or activity on their property that requires that you receive notice pursuant to ORS 197.763. Please read all information carefully as this decision may affect you. (See attached vicinity map for the location of the subject property).

Mailed notices to owners of real property required by ORS 215 shall be deemed given to those owners named in an affidavit of mailing executed by the person designated by the governing body of a county to mail the notices. The failure of a person named in the affidavit to receive the notice shall not invalidate an ordinance. The failure of the governing body of a county to cause a notice to be mailed to an owner of a lot or parcel of property created or that has changed ownership since the last complete tax assessment roll was prepared shall not invalidate an ordinance.

NOTICE TO MORTGAGEE, LIEN HOLDER, VENDOR OR SELLER: ORS CHAPTER 215 (ORS 215.513) REQUIRES THAT IF YOU RECEIVE THIS NOTICE, IT MUST PROMPTLY BE FORWARDED TO THE PURCHASER.”

The requested proposal has been Approved Denied subject to the findings to the criteria found in Exhibit A. The decision is based on findings and facts represented in the staff report.

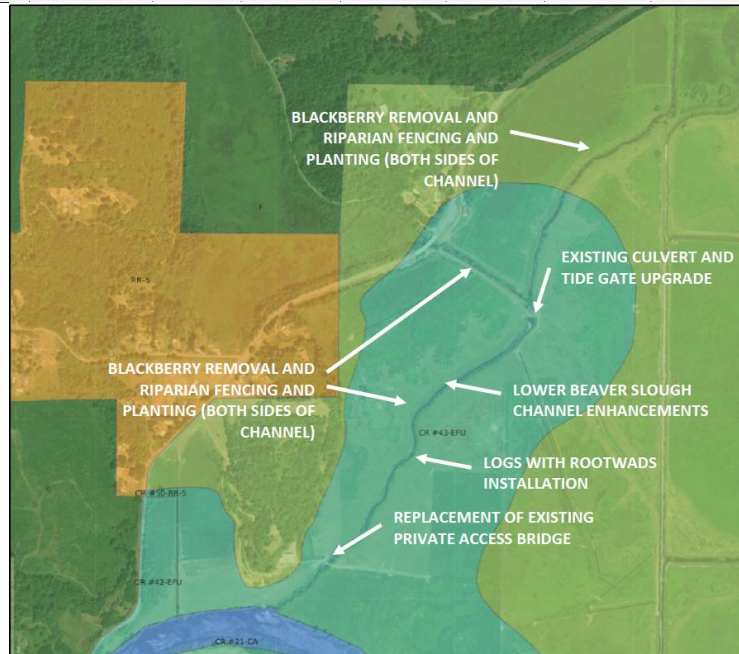
SUBJECT PROPERTY INFORMATION

Location: The majority of the work for this proposal is located within waters of the state (Beaver Slough) with some adjacent upland work and supporting structures.

Taxlot #:	Owner:	Contact:
27S 13W 20 TL 1503	The Bridges Foundation	Luke Fitzpatrick, Conservation Director
27S 13W 29 TL 101,	Account # 99916787	P.O. Box 1123, Turner, OR 97392
103	Account # 99916790	Phone: 503-930-9431
	Account # 717600	
27S 13W 29 TL 200,	Domenighini Family LTD	Rob Domenighini, Manager
201	Partnership	94774 Labrador Ln, Coquille, OR 97423
	Account # 717800	Phone: 541-954-6218
	Account # 718700	

Project Element and Property Ownership

Project Element	Township	Range	Section	1/4 Section	1/16 Section	Taxlot	Account #	Zone
Tide Gate	27S	13W	29	NE	NE	101	717600	CREMP
						103	99916787	CREMP
Channel Enhancement - Downstream	27S	13W	29	NE	-	101		
				NE	-	103		
				NE	-	200	717800	CREMP
				SW/SE	-	201	718700	CREMP
Channel Enhancement - Upstream	27S	13W	20	SE	SE	1503	99916790	EFU
Bridge Replacement	27S	13W	29	SW/SE	NE	201		CREMP
Riparian Fencing	27S	13W	29	SE	-	1503		
				NE	-	101		
				NE	-	103		
				NE	-	200		
				SW/SE	-	201		
Off-channel Watering	27S	13W	29	SW/SE	-	201		
Large Wood Placement	27S	13W	29	NE	SW	200		



Proposal: Request for Planning Director Approval for replacement of tide gate and bridge replacement, streambank enhancements within the Coquille River Estuary Manamgne Plan 43-EFU and upland EFU zoning governed in Sections 3.3.710 and Section 4.6.200. Work in the floodplain also requires a Flood Hazard Application regulated by Section 4.11.200.

Decision: This request meets the criteria subject to conditions of approval found at Exhibit A. Approval is based on findings and facts represented in the staff report.

This notice is to serve as public notice and decision notice and if you have received this notice by mail it is because you are a participant, adjacent property owner, special district, agency with interest, or person with interest in regard to the following land use application. Please read all information carefully as this decision may affect you. (See attached vicinity map for the location of the subject property).

The purpose of this notice is to inform you about the proposal and decision, where you may receive more information, and the requirements if you wish to appeal the decision by the Director to the Coos County Hearings Body. Any person who is adversely affected or aggrieved or who is entitled to written notice may appeal the decision by filing a written appeal in the manner and within the time period as provided by the Coos County Zoning and Land Development Ordinance (CCZLDO) Article 5.8. If you are mailing any documents to the Coos County Planning Department the address is 250 N. Baxter, Coquille OR 97423, but if an appeal is not received in the office by the time and date noted in this decision it will not be accepted. An appeal shall not be directly filed with the Land Use Board of Appeals until all local appeals have been exhausted. If appealed, failure of an issue to be raised in a hearing, in person or in writing, or failure to provide statements of evidence sufficient to afford the Approval Authority an opportunity to respond to the issue precludes raising the issue in an appeal to the Land Use Board of Appeals.

The application and all documents and evidence contained in the record, including the staff report and the applicable criteria, are available for inspection, at no cost, in the Planning Department located at 60 East Second Street, Coquille, Oregon. Copies may be purchased at a cost of 50 cents per page or if available may be viewed at <https://www.co.coos.or.us/community-dev/page/land-use-applications-submitted>. Staff makes every effort to place all noticeable decisions on the webpage but it is not a legal requirement. The decision is based on the application submittal and information on record. The name of the Coos County Planning Department representative to contact is the person that prepared the report and the telephone number where more information can be obtained is (541) 396-7770.

This decision will become final at 4:30 p.m. on April 11, 2023 unless before this time a completed **APPLICATION FOR AN APPEAL OF A DECISION BY THE PLANNING DIRECTOR** form is submitted to and received by the Coos County Planning Department.

Authorized by: Jill Rolfe

Date: March 30, 2023

Jill Rolfe, Planning Director

EXHIBITS

Exhibit A: Conditions of Approval

Exhibit B: Vicinity Map

Exhibit C: Staff Report (only provided to the applicant, PC and BOC)

The Exhibits below are mailed to the Applicant and Planning Commission and Board of Commissioners only. Copies are available upon request (planning@co.coos.or.us) or may be found on the website or by visiting the Coos County Community Development page on www.co.coos.or.us, or by visiting the office at 60 East Second St, Coquille OR 97423. If you have any questions, please contact staff at (541) 396-7770.

EXHIBIT "A"

The applicant shall comply with the following conditions of approval with the understanding that all costs associated with complying with the conditions are the responsibility of the applicant(s) and that the applicant(s) are not acting as an agent of the county. If the applicant fails to comply or maintain compliance with the conditions of approval the permit may be revoked as allowed by the Coos County Zoning and Land Development Ordinance. Please read the following conditions of approval and if you have any questions contact planning staff.

CONDITIONS OF APPROVAL

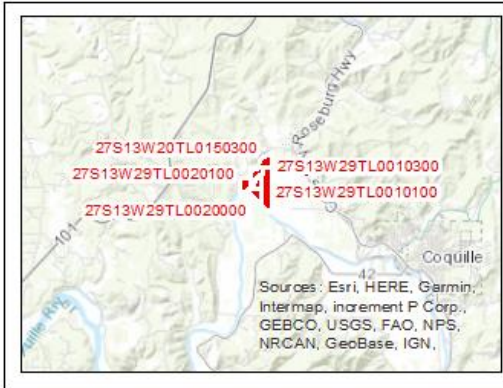
1. All applicable federal, state, and local permits shall be obtained prior to the commencement of any development activity. If there were comments from any other agency were provided as part of this review, it is the responsibility of the property owner to comply.
2. Erosion control methods shall be used when working on banks to control any sediment into the river.
3. Any staging area shall be removed at the end of the project and the land returned to the condition it was prior to use.

**EXHIBIT B
Vicinity Map**



COOS COUNTY PLANNING DEPARTMENT

Mailing Address: 225 N. Adams, Coquille, Oregon 97423
 Physical Address: 60 E. Second, Coquille Oregon
 Phone: (541) 396-7770
 TDD (800) 735-2900



File: ACU-23-008
 Applicant/ Owner: Coaledo Drainage District
 Various
 Date: March 29, 2023
 Location: Township 27S Range 13W
 Section 20/29 TL 1503/101,103,200,201
 Proposal: Administrative Conditional Use

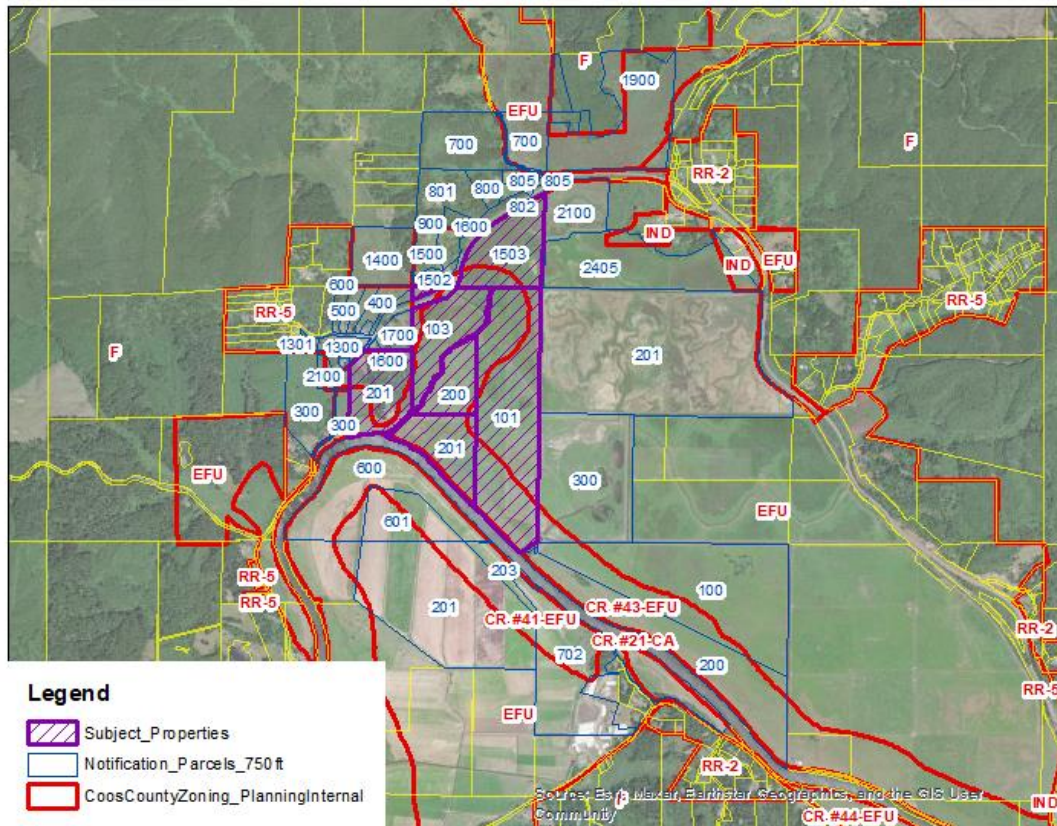


EXHIBIT "C"

Staff Report

Reviewing Staff: Jill Rolfe, Coos County Community Development Director
Date of Report: March 27, 2023

I. PROPERTY DESCRIPTION AND PROPOSAL

Project Elements

- Upgrade the existing culverts and tide gates with infrastructure that maximizes fish passage while balancing the needs of working lands. This will include replacing the failing tide gates with a three-bay concrete box culvert with each bay fitted with a 10-ft wide by 8-ft tall side hinged aluminum tide gate, Muted Tidal Regulator (MTR), and an adjustable aperture (slide) gate for independent water control. – *Structure Owned by Coaledo Drainage District (CDD) on property owned by The Bridges Foundation. Zone CR #43-EFU*
 - Implement a Water Management Plan (WMP) that balances winter fish use and summer land management. The WMP was based on existing conditions, known fish use, and the objective of improved ecological function while not negatively impacting upstream landowners.
- Perform channel enhancements on Lower Beaver Slough to maximize the tidal prism and hydrologic connection to the Coquille River. This includes removing grade control humps and excavation of a new flowline for 3,700’ below the tide gate. Excavated sediments to be “thinly” spread over adjacent farmland at a depth of ~3-in to allow for natural vegetation growth through the material. Material placement to blend with natural ground contouring, thus not significantly altering the drainage or shape of existing ground. – *Properties owned by The Bridges Foundation and Domenighini Family LTD Partnership. Zone CR #43-EFU*
- Replace an existing private access bridge downstream of the tide gate infrastructure to accommodate the restored hydrologic connectivity. – *Structure and Property owned by Domenighini Family LTD Partnership. Zone CR #43-EFU*
- Restore 3 miles of riparian habitat to create a thermal corridor for cold water from the Coquille Valley Wildlife Area to reach the Coquille River. This includes planting 13 acres of riparian forest, building 16,000’ of livestock exclusion fencing, and installing 5 off-channel watering areas. – *Fencing on both The Bridges Foundation and Domenighini Family LTD Partnership properties. Off-channel livestock watering on Domenighini Family LTD property only. Zone EFU & CR #43-EFU*
- Install logs with rootwads for bank stabilization at a critical stress point in the lower Beaver Slough channel. - *Property owned by The Bridges Foundation. Zone CR #43-EFU*

II. BACKGROUND INFORMATION

According to the application the Coaledo Tide Gate Replacement and Fish Passage Project will restore fish passage in the 9,800 acre Beaver Slough sub-basin to a level more similar to historical condition. This project is in partnership with the Coaledo Drainage District (CDD), who owns the Coaledo tide gates and represents 30+ landowners upstream. Project implementation is planned for Summer 2023 during the ODFW In-water work window.

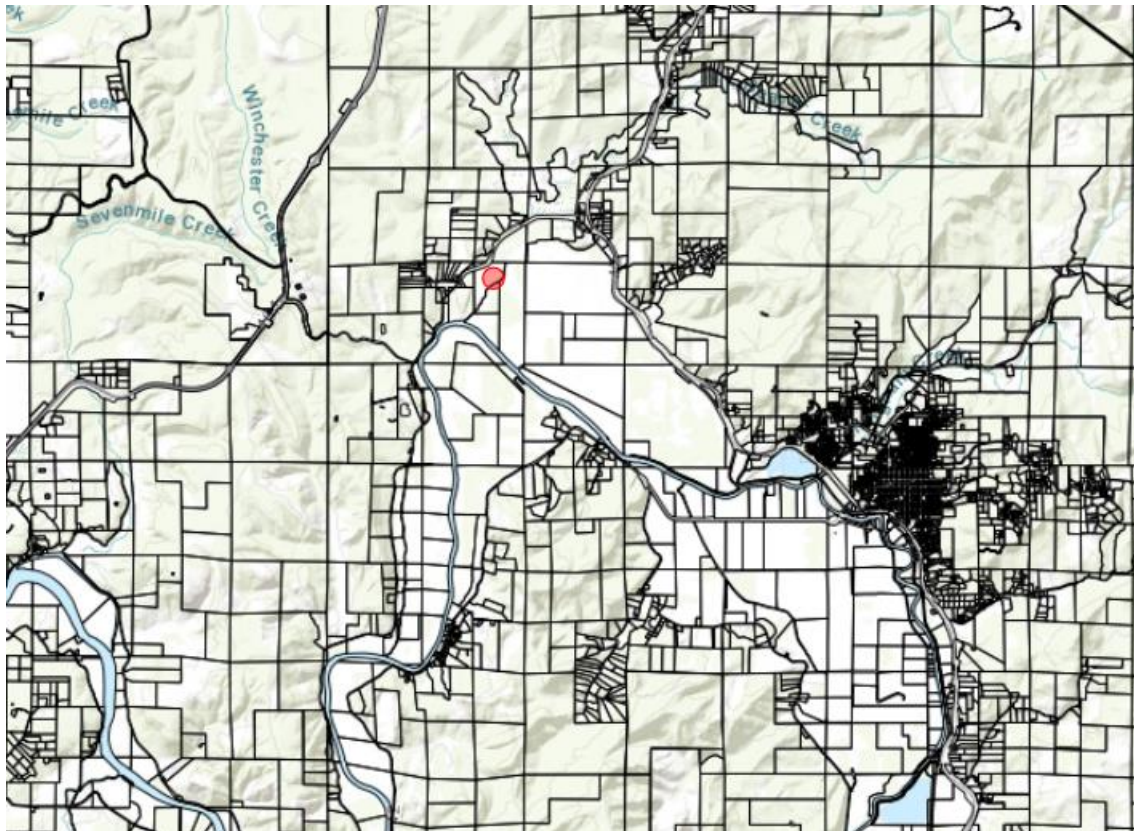
The CDD agricultural tide gate infrastructure is located on Beaver Creek to the south of North Bank Lane within the freshwater tidally influenced floodplain of the Coquille River near river mile 20. The tide gate structure, owned by CDD, is located on private property, owned by the Bridges Foundation.

The area around the tide gate consists primarily of agricultural pasture grazing lowlands and forested hill upslope.

The existing tide structure is an earthen embankment across the Beaver Creek channel with three ± 50 ft long metal culverts through the embankment. The site is located 3,600 ft (0.7 miles) upstream from the confluence of Beaver Slough with the Coquille River. Two of the culverts have a diameter of 6-ft and the third culvert diameter is 5-ft. The corrugated metal culverts are nearing the end of their serviceable lifespan and replacement is required, without which flooding of the pasturelands and some road infrastructure would occur on a near daily basis. The existing Coaledo tide gates mounted to engage the downstream end of the culvert barrels consist of three top-hinged wooden “dungeon door” style tide gates that open at $<20\%$ by upstream water head pressure during outgoing tide. This obstruction has restricted passage of salmonids, primarily juveniles, seeking overwinter refuge habitats and summer thermally tolerant locations upstream of the tide gate structure.

One of the largest factors suppressing juvenile fish use of the tidal channels and adjacent floodplains upstream of the tide gate has been the elimination of the normal signal of tidal inflow and access onto low lying floodplains that would have comprised a portion of extensive tidally influenced wetlands historically. The Coaledo tide gates are severely restricting fish access to high quality wetland habitat and are creating water quality issues by not allowing more tidal exchange. The selected tide gate infrastructure improvement and Water Management Plan (WMP) aim to be compliant with ODFW Fish Passage and National Marine Fisheries Service (NMFS) Anadromous Salmonid Passage Facility Design guidelines while meeting the needs of drainage district landowners. The purpose of this document is to provide the justification necessary for obtaining Coos County Planning approval.

LOCATION: This project is located Northwest of the city of Coquille parallel to North Bank Lane.



IV. APPROVAL CRITERIA & FINDINGS OF FACT

- **Exclusive Farm Use Shoreland Segments: 27 (27-EFUS), 28 (28-EFUS), 31(31-EFUS), 32(32-EFUS), 33 (33-EFUS), 34 (34-EFUS), 36 (36-EFUS), 37 (37-EFUS), 41 (41-EFUS), 42 (42-EFUS), 43 (43-EFUS), 44 (44-EFUS), 47(47-EFUS), 53(53-EFUS), 55 (55-EFUS), 56 (56-EFUS), 60 (60-EFUS), 62 (62-EFUS), 73 (73-EFUS), 75 (75-EFUS)** shall be managed for the continuation of farm use as defined in ORS 215.203 (2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.

SECTION 3.3.700 DEVELOPMENT AND USE PERMITTED:

*The following uses and activities are permitted outright in the in the CREMP-EFU. ****

5. *Non-structural shoreland stabilization.*

SECTION 3.3.710 ADMINISTRATIVE CONDITIONAL DEVELOPMENT AND USE:

The following uses and their accessory uses may be allowed as administrative conditional uses in the "CREMP-EFU" zone subject to applicable requirements in Sections 3.3.730 and 3.3.740.

1. *Diking (construction and maintenance).The applicable review criteria are CREMP Policies #14, #18, #19, #22, #23, and #27.*
2. *Drainage and tide-gating. The applicable review criteria are CREMP Policies #14, #18, #19, #22, #23, and #27.*
3. *Fill. The applicable review criteria are listed in CREMP Policies #14, #18, #19, #22, #23, and #27 may be applicable. The use is not permitted in Segment 26.*
4. *Mitigation. The applicable review criteria are found in CREMP Policies #14, #18, #19, #22, #23 and #27. Although mitigation may be permitted, voluntary restoration not required as mitigation would require an exception. This condition does not apply to Segment 53. This use is not permitted in Segment 47. ****
13. *Shoreland structural stabilization is subject to Natural hazards Policy 5.11 as explained in this subsection. Coos County shall promote protection of valued property from risks associated with critical stream bank and ocean front erosion through necessary erosion-control stabilization measures, preferring nonstructural solutions where practical. Coos County shall implement this strategy by making "Consistency Statements" required for State and Federal permits (necessary for structural stream bank protection measures) that support structural protection measures when the applicant establishes that non-structure measures either are not feasible or inadequate to provide the necessary degree of protection. This strategy recognizes the risks and loss of property from unabated critical stream bank erosion, and also, that state and federal agencies regulate structural solutions. A flood elevation certificate is required for a stabilization which will occur in the identified flood hazard area. In addition CREMP Policies #9, #14, #23, #27, #18, #19, and #22 may be applicable. The use is not permitted in Segment 47.*

FINDING: Policies: 9, 14, 18, 19, 22, 23 and 27 are required to be addressed for the proposed activities.

#9 Solutions to Erosion and Flooding Problems

Local government shall prefer nonstructural solutions to problems of erosion and flooding to structural solutions. Where shown to be necessary, water and erosion control structures such as jetties, bulkheads, seawalls and similar protective structures and fill whether located in the waterways or on shorelands

above ordinary high water mark shall be designed to minimize adverse impacts on water currents, erosion and accretion patterns.

- I. Further, where listed as an "allowable" activity within the respective management units, riprap may be allowed in Development Management Units upon findings that:
 - a. Land use management practices and nonstructural solutions are inadequate; and
 - b. Adverse impacts on water currents, erosion and accretion patterns are minimized; and
 - c. It is consistent with the Development management unit requirements of the Estuarine Resources Goal.***

Implementation of this strategy shall occur through local review of and comment on state and federal permit applications for such projects.

This strategy is based on the recognition that nonstructural solutions are often more cost-effective as corrective measures, but that carefully designed structural solutions are occasionally necessary. The strategy also recognizes LCDC Goal #16 and #17 requirements and the Oregon Administrative Rule classifying Oregon estuaries (OAR 660-17-000 as amended June, 1981).

FINDING: The applicant states that the existing tide structure is an earthen embankment across the Beaver Creek channel with three ±50 ft long metal culverts through the embankment. The site is located 3,600 ft (0.7 miles) upstream from the confluence of Beaver Slough with the Coquille River. Two of the culverts have a diameter of 6-ft and the third culvert diameter is 5-ft. The corrugated metal culverts are nearing the end of their serviceable lifespan and replacement is required, without which flooding of the pasturelands and some road infrastructure would occur on a near daily basis. The existing Coaledo tide gates mounted to engage the downstream end of the culvert barrels consist of three top-hinged wooden "dungeon door" style tide gates that open at <20% by upstream water head pressure during outgoing tide. This obstruction has restricted passage of salmonids, primarily juveniles, seeking overwinter refuge habitats and summer thermally tolerant locations upstream of the tide gate structure.

Log with rootward installation for bank stabilization at critical stress point in the lower Beaver Slough channel (Structural Shoreline Stabilization) – Large wood placement is intended to provide bankline roughness to address existing spots of erosion along the lower Beaver Slough channel. Wood is proposed as a natural structural means of addressing erosion while providing aquatic habitat.

Bankline riprap placement associated with reconstructed agricultural structures, tide gate and bridge (Structural Shoreline Stabilization) – Riprap is proposed to be placed adjacent to both structures along the Beaver Slough channel banklines to resist potential increased velocities and shear stress associated with the replacement of the tide gate structure and to provide abutment scour protection at the bridge location. Riprap is proposed as the most commensurate with the scope of the project means of providing post channel bankline armoring. The project did evaluate both nonstructural and structural solutions; however, due to the fact that this is a replacement of the existing infrastructure there was no way to create a nonstructural solution.

The proposal will protect both the Exclusive Farm Land and the waterway for aquaculture habitat. Therefore, Policy # 9 has adequately been addressed.

#14 General Policy on Uses within Rural Coastal Shorelands

- I. *Coos County shall manage its rural areas within the "Coos Bay Coastal Shorelands Boundary" by allowing only the following uses in rural shoreland areas, as prescribed in the management units of this Plan, except for areas where mandatory protection is prescribed by LCDC Goal #17 and CBEMP Policies #17 and #18:*
 - a. *Farm uses as provided in ORS 215.203;*
 - b. *Propagation and harvesting of forest products;*
 - c. *Private and public water-dependent recreation developments;*
 - d. *Aquaculture;*
 - e. *Water-dependent commercial and industrial uses, water-related uses, and other uses only upon a finding by the Board of Commissioners or its designee that such uses satisfy a need which cannot be accommodated on uplands or shorelands in urban and urbanizable areas or in rural areas built upon or irrevocably committed to non-resource use.*
 - f. *Single-family residences on lots, parcels, or units of land existing on January 1, 1977, when it is established that:*
 1. *The dwelling is in conjunction with a permitted farm or forest use, or*
 2. *The dwelling is in a documented "committed" area, or*
 3. *The dwelling has been justified through a goal exception; and*
 4. *Such uses do not conflict with the resource preservation and protection policies established elsewhere in this Plan;*
 - g. *Any other uses, including non-farm uses and non-forest uses, provided that the Board of Commissioners or its designee determines that such uses satisfy a need which cannot be accommodated at other upland locations or in urban or urbanizable areas. In addition, the above uses shall only be permitted upon a finding that such uses do not otherwise conflict with the resource preservation and protection policies established elsewhere in this Plan.*

This strategy recognizes (1) that Coos County's rural shorelands are a valuable resource and accordingly merit special consideration, and (2) that LCDC Goal #17 places strict limitations on land divisions within coastal shorelands. This strategy further recognizes that rural uses "a through "g" above, are allowed because of need and consistency findings documented in the "factual base" that supports this Plan.

FINDING: This project will enhance farm use and aquaculture. Therefore, the proposal is consistent with Policy #14.

#18 Protection of Historical, Cultural and Archaeological Sites

Local government shall provide protection to historical, cultural and archaeological sites and shall continue to refrain from widespread dissemination of site-specific information about identified archaeological sites.

- I. *This strategy shall be implemented by requiring review of all development proposals involving a cultural, archaeological or historical site, to determine whether the project as proposed would protect the cultural, archaeological and historical values of the site.*
- II. *The development proposal, when submitted shall include a Plot Plan Application, showing, at a minimum, all areas proposed for excavation, clearing and construction.*

Within three (3) working days of receipt of the development proposal, the local government shall notify the Coquille Indian Tribe and Coos, Siuslaw, Lower Umpqua Tribe(s) in writing, together with a copy of the Plot Plan Application. The Tribe(s) shall have the right to submit a written statement to the local government within thirty (30) days of receipt of such notification, stating whether the project as proposed would protect the cultural, historical and archaeological values of the site, or if not, whether the project could be modified by appropriate measures to protect those values.

"Appropriate measures" may include, but shall not be limited to the following:

- a. Retaining the prehistoric and/or historic structure in site or moving it intact to another site; or*
- b. Paving over the site without disturbance of any human remains or cultural objects upon the written consent of the Tribe(s); or*
- c. Clustering development so as to avoid disturbing the site; or*
- d. Setting the site aside for non-impacting activities, such as storage; or*
- e. If permitted pursuant to the substantive and procedural requirements of ORS 97.750, contracting with a qualified archaeologist to excavate the site and remove any cultural objects and human remains, reintering the human remains at the developer's expense; or*
- f. Using civil means to ensure adequate protection of the resources, such as acquisition of easements, public dedications, or transfer of title.*

If a previously unknown or unrecorded archaeological site is encountered in the development process, the above measures shall still apply. Land development activities, which violate the intent of this strategy shall be subject to penalties prescribed in ORS 97.990.

III. Upon receipt of the statement by the Tribe(s), or upon expiration of the Tribe(s) thirty day response period, the local government shall conduct an administrative review of the Plot Plan Application and shall:

- a. Approve the development proposal if no adverse impacts have been identified, as long as consistent with other portions of this plan, or*
- b. Approve the development proposal subject to appropriate measures agreed upon by the landowner and the Tribe(s), as well as any additional measures deemed necessary by the local government to protect the cultural, historical and archaeological values of the site. If the property owner and the Tribe(s) cannot agree on the appropriate measures, then the governing body shall hold a quasi-judicial hearing to resolve the dispute. The hearing shall be a public hearing at which the governing body shall determine by preponderance of evidence whether the development project may be allowed to proceed, subject to any modifications deemed necessary by the governing body to protect the cultural, historical and archaeological values of the site.*

IV. Through the "overlay concept" of this policy and the Special Considerations Map, unless an exception has been taken, no uses other than propagation and selective harvesting of forest products consistent with the Oregon Forest Practices Act, grazing, harvesting wild crops, and low intensity water-dependent recreation shall be allowed unless such uses are consistent with the protection of the cultural, historical and archaeological values, or unless appropriate measures have been taken to protect the historic and archaeological values of the site.

This strategy recognizes that protection of cultural, historical and archaeological sites is not only a community's social responsibility; it is also legally required by ORS 97.745. It also recognizes that cultural, historical and archaeological sites are non-renewable cultural resources.

FINDING: The applicant is working closely with the tribes to ensure that any potential cultural, historical or archaeological sites are not affect by this project. The proposal in a mapped inventoried historical, archeological or scientific area of importance. Therefore, this has been addressed.

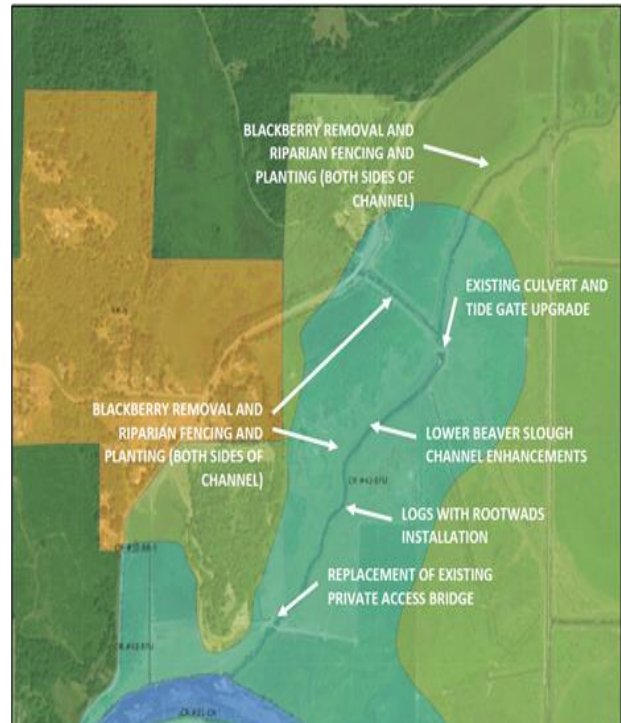
#19 Management of "Wet-Meadow" Wetlands within Coastal Shorelands

- I. Coos County shall protect for agricultural purposes those rural areas defined as "wet-meadow" wetlands by the U.S. Fish and Wildlife Service but currently in agricultural use or with agricultural soils and not otherwise designated as "significant wildlife habitats" or major marshes", unless an Exception allows otherwise. Permitted uses and activities in these areas shall include farm use and any drainage activities which are necessary to improve agricultural production. Filling of these areas, however, shall not be permitted so as to retain these areas as wildlife habitats during periods of seasonal flooding and high water tables, with the following exceptions:*
- a. For transportation corridors where an exception has been taken to Goal #3 (Agricultural Lands); or*
 - b. For agricultural buildings, where no alternative sites exist on the applicant's property; or*
 - c. Minor improvements for which there is no practical alternative; or*
 - d. Where no fill permit is required under Section 404 of the Water Pollution Control Act; or*
 - e. For priority dredged material disposal sites designated by this Plan for protection from pre-emptory uses.*

Any activity or use requires notification of Division of State Lands, with their comments received prior to the issuance of any permits.

- II. This policy shall be implemented by designating these lands as "Agricultural Lands" on the Special Considerations Map and by making findings in response to a request for comment by the Division of State Lands (DSL), which show whether the proposed action is consistent with the Comprehensive Plan:*
- a. That protection of these areas for agricultural use is necessary to ensure the continuation of the local agricultural economy;*
 - b. That improved drainage is necessary to maintain or enhance productivity by establishing preferred forage types;*
 - c. That the present system of agricultural use in the Coos Bay area is compatible with wildlife habitat values, because the land is used for agriculture during the season when the land is dry and therefore not suitable as wetland habitat, and provides habitat areas for wildfowl during the flooding season when the land is unsuitable for most agricultural uses; and*
 - d. That these habitat values will be maintained provided filling is not permitted.*

FINDING: The proposed project will not take place in a mapped meadow wetland area. The inventory map is shown below. Therefore, this has been addressed.



#22 Mitigation Sites: Protection Against Pre-emptory Uses

Consistent with permitted uses and activities:

- ~ *"High Priority" designated mitigation sites shall be protected from any new uses or activities which could pre-empt their ultimate use for this purpose.*
- ~ *"Medium Priority" designated mitigation sites shall also be protected from uses which would pre-empt their ultimate use for this purpose.*

However, repair of existing dikes or tidegates and improvement of existing drainage ditches is permitted, with the understanding that the permitting authority (Division of State Lands) overrides the provisions of Policy #38. Wetland restoration actions designed to answer specific research questions about wetland mitigation and/or restoration processes and techniques, may be permitted upon approval by Division of States Lands, and as prescribed by the uses and activities table in this Plan.

- ~ *"Low Priority" designated mitigation sites are not permanently protected by the Plan. They are intended to be a supplementary inventory of potential sites that could be used at the initiative of the landowner. Pre-emptory uses shall be allowed on these sites, otherwise consistent with uses and activities permitted by the Plan. Any change in priority rating shall require a Plan Amendment.*

Except as provided above for research of wetland restoration and mitigation processes and techniques, repair of existing dikes, tidegates and improvement of existing drainage ditches, "high" and "medium" priority mitigation sites shall be protected from uses and activities which would pre-empt their ultimate use for mitigation.

- I. *This policy shall be implemented by:*
 - a. *Designating "high" and "medium" priority mitigation sites on the Special Considerations Map; and*

- b. *Implementing an administrative review process that allows uses otherwise permitted by this Plan but proposed within an area designated as a "high" or "medium" priority mitigation site only upon satisfying the following criteria:*
1. *The proposed use must not entail substantial structural or capital improvements (such as roads, permanent buildings or nontemporary water and sewer connections); and*
 2. *The proposed use must not require any major alteration of the site that would affect drainage or reduce the usable volume of the site (such as extensive site grading/excavation or elevation from fill); and*
 3. *The proposed use must not require site changes that would prevent the expeditious conversion of the site to estuarine habitat; or*
 4. *For proposed wetland restoration research projects in "medium" priority mitigation sites the following must be submitted:*
 - i. *A written approval of the project, from Division of States Lands, and*
 - ii. *A description of the proposed research, resource enhancement and benefits expected to result from the restoration research project.*
- c. *Local government's review and comment on state and federal waterway permit applications for dike/tidegate and drainage ditch actions.*

This policy recognizes that potential mitigation sites must be protected from pre-emptory uses. However, "low priority" sites are not necessarily appropriate for mitigation use and are furthermore in plentiful supply. It further recognizes, that future availability of "medium priority" sites will not be pre-empted by repair of existing dikes, tidegates and drainage ditches or otherwise allowed by this policy. This insures the continuation of agricultural production until such time as sites may be required for mitigation. This policy also recognizes that research activities designed to gain further understanding of wetland, restoration and mitigation processes and techniques are needed. The consideration of "medium priority" mitigation sites for this purpose will facilitate future identification and successful use of mitigation sites (OR 95-11-010PL 1/24/96).

FINDING: The project will not be located in a mapped mitigation site. See map below. Therefore, these criteria has been addressed.



#23 Riparian Vegetation and Streambank Protection

- I. *Local government shall strive to maintain riparian vegetation within the shorelands of the estuary, and when appropriate, restore or enhance it, as consistent with water-dependent uses. Local government shall also encourage use of tax incentives to encourage maintenance of riparian vegetation, pursuant to ORS 308.792 - 308.803.*

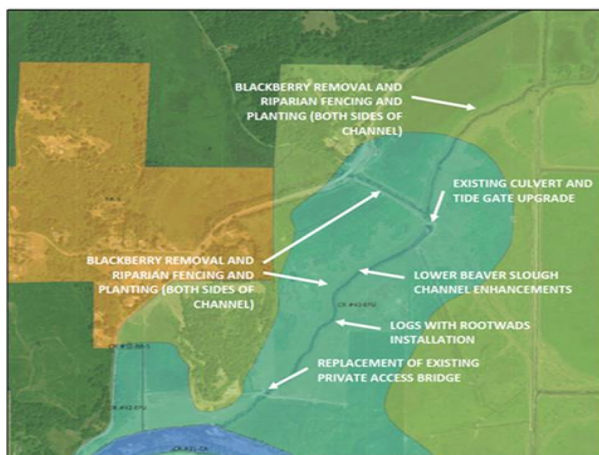
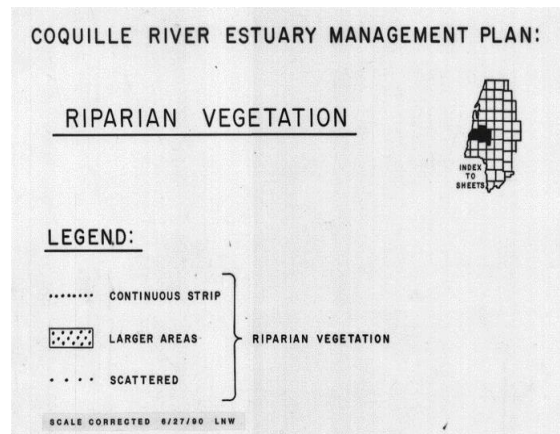
Appropriate provisions for riparian vegetation are set forth in the CCZLDO Section 3.2.180 (OR 92-05-009PL).

- II. *Local government shall encourage streambank stabilization for the purpose of controlling streambank erosion along the estuary, subject to other policies concerning structural and non-structural stabilization measures.*

This strategy shall be implemented by Oregon Department of Transportation (ODOT) and local government where erosion threatens roads. Otherwise, individual landowners in cooperation with the Oregon International Port of Coos Bay, and Coos Soil and Water Conservation District, Watershed Councils, Division of State Lands and Oregon Department of Fish & Wildlife shall be responsible for bank protection.

This strategy recognizes that the banks of the estuary, particularly the Coos and Millicoma Rivers are susceptible to erosion and have threatened valuable farm land, roads and other structures.

FINDING: As part of the project there will be riparian vegetation enhancements and replanting in area of development. Below is the riparian mapped inventory. The project will be out of the mapped vegetation resource area.



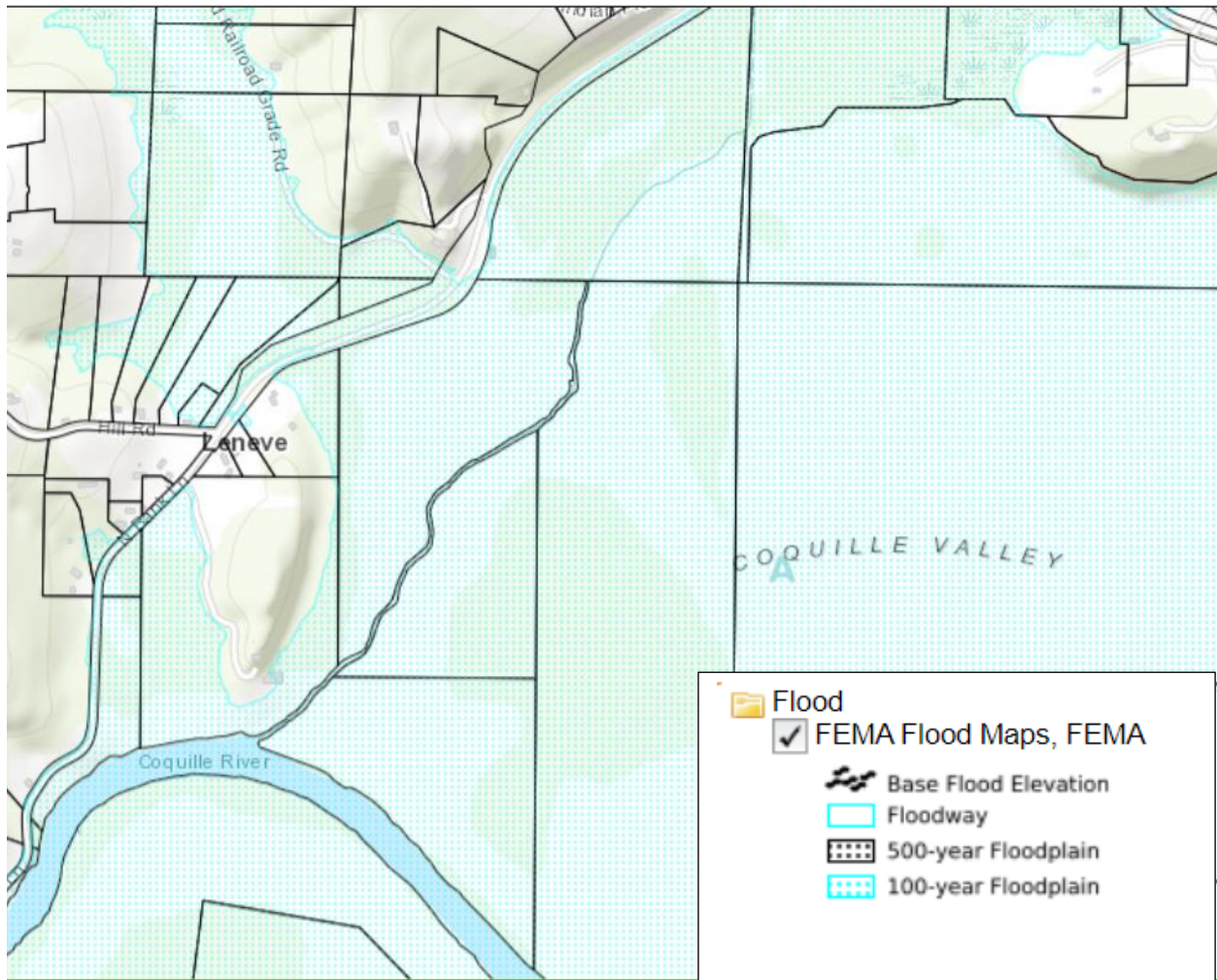
Therefore, the project is consistent with policy #23.

#27 Floodplain Protection within Coastal Shorelands

The respective flood regulations of local government set forth requirements for uses and activities in identified flood areas; these shall be recognized as implementing ordinances of this Plan.

This strategy recognizes the potential for property damage that could result from flooding of the estuary.

FINDING: This policy will be address through the flood hazard provisions set out in Section 4.11. The project will be in the floodplain Zone A



“AREA OF SPECIAL FLOOD HAZARD” is the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHB. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, AI-30, AE, A99, AR, AR/AI-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or VI-30, VE, or V. For purposes of these regulations,

the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.

When base flood elevation data has not been provided (A and V Zones) in accordance with Section 4.11.232, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the local administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Sections 4.11.252, SPECIFIC STANDARDS, and 4.11.254 FLOODWAYS.

The application submitted a floodplain application (File Number FP-23-002) to address this policy and Section 4.11.

River Design Group, Inc. (RDG) was retained by the Coquille Watershed Association (CoqWA) to provide professional services for the Coaledo Drainage District fish passage project (Project). The Project site is located within an unincorporated portion of Coos County near Coquille, Oregon. The Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) for Beaver Slough at the project site is contained in Community Number 410042 (Coos County, Unincorporated Areas) and on the Flood Insurance Rate Map (FIRM) 41011C0510F which has an effective date December 7, 2018.

The Beaver Slough/Coquille River floodplain is mapped FEMA Zone A (Figure 1) within the vicinity of the Project site. This mapping designation identifies Special Flood Hazard Areas (SFHA) with a one-percent chance of being inundated by the 100-year base flood with mapping determined by approximate methods with no base flood elevations (BFEs) or floodway delineation. Project elements are proposed to be compliant with Coos County Zoning Code Section 4.11.251(7)(b) for “other development” within the floodplain by showing no cumulative increase greater than 1.0 ft during the occurrence of the base flood discharge. This is shown by zero-net rise in the base flood elevation resultant of Project actions.

The Project aims to develop a tide gate design and Water Management Plan (WMP) to enhance natural stream processes, improve ecological function, and maximize potential working lands within the 490 acres located upstream of the Coaledo Drainage District’s (CDD) main tide gate. The Project includes replacing the existing main tide gate infrastructure, slough channel enhancements, replacement of an existing agricultural stream crossing, cattle exclusion fencing, and site revegetation.

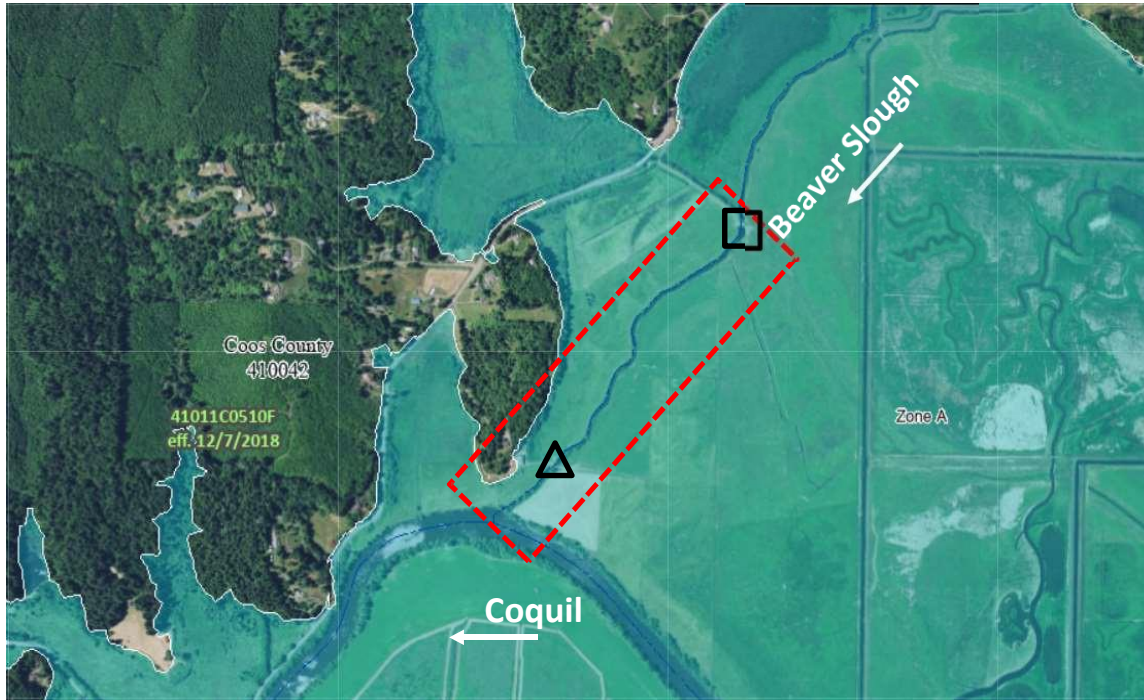


Figure 1. FEMA NFHL Viewer (June 2, 2022) showing location of Project area in red polygon. Figure is oriented with North to the top and water flow from right to left on figure. Tide gate location noted with square and agricultural bridge noted with triangle.

- **SECTION 4.11.235 ESTABLISHMENT OF DEVELOPMENT PERMIT**

- 1. Floodplain Application Required

A floodplain application shall be submitted and approved before construction or regulated development begins within any area of special flood hazard established in Section 4.11.232. The permit shall be for all structures including manufactured homes, as set forth in the “DEFINITIONS,” and for all development including fill and other activities, also as set forth in the “DEFINITIONS.”

- 2. Application

An application shall be made on the forms furnished by the Planning Department and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

- a. *Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures which may be submitted by a registered surveyor;*
- b. *Elevation in relation to mean sea level of floodproofing in any structure;*
- c. *Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 4.11.252; and*
- d. *Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.*
- e. *Plot plan drawn to scale showing the nature, location and dimensions and elevation referenced to mean sea level, or NAVD 88, whichever is applicable, of the area in question including existing and proposed structures, fill, storage of materials, and drainage facilities. Applicants shall submit certification by an Oregon registered professional engineer or land surveyor of the site's ground elevation and whether or not*

the development is located in a flood hazard area. If so, the certification shall include which flood hazard area applies, the location of the floodway at the site, and the 100 year flood elevation at the site. A reference mark shall be set at the elevation of the 100 year flood at the site. The location, description, and elevation of the reference mark shall be included in the certification; and

- f. Any other information required to show compliance.*
- g. Applications for variance, water course changes or staff determinations will be noticed with an opportunity to appeal in the same manner as a conditional use (see Chapter V). Non-discretionary determination of compliance with the standards will be processed in the same manner as a Compliance Determination (see Article 5.10)*

- **SECTION 4.11.251 GENERAL STANDARDS**

*In all areas of special flood hazards, the following standards are required:****

- 7. *Other Development.* *Includes mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of a special flood hazard, but does not include such uses as normal agricultural operations, fill less than 12 cubic yards, fences, road and driveway maintenance, landscaping, gardening and similar uses which are excluded from definition because it is the County's determination that such uses are not of the type and magnitude to affect potential water surface elevations or increase the level of insurable damages.*

Review and authorization of a floodplain application must be obtained from the Coos County Planning Department before "other development" may occur. Such authorization by the Planning Department shall not be issued unless it is established, based on a licensed engineer's certification that the "other development" shall not:

- a. Result in any increase in flood levels during the occurrence of the base flood discharge if the development will occur within a designated floodway; or,*
- b. Result in a cumulative increase of more than one foot during the occurrence of the base flood discharge if the development will occur within a designated flood plain outside of a designated floodway.*

FINDING: While the applicant did not complete the application form with the information, a report was provided by Russell Bartlett, PE River Design Group, Inc. to address the relevant criteria.

The methodology used was a one-dimensional, steady-state HEC-RAS models, this was used to analyze existing and post-project floodplain conditions. The Effective Approximate Hydraulic Analysis conducted by STARR in 2016 was obtained from the FEMA Engineering Library and their model was used as the basis for the net-rise analysis. A segment of the STARR model domain was recreated for the Beaver Slough analysis with duplicated existing STARR cross sections transecting the Project site and unaltered portions of the Beaver Slough floodplain upstream of Project. HEC-RAS input data obtained from the STARR 2016 analysis included an estimate for the 100-year peak flow, roughness estimates, and the reach boundary condition.



Figure 2. Plan view of hydraulic model layout showing cross-section locations. Figure is oriented with North to the top and water flow from right to left on figure.

STARR notes that no survey was used in their analysis and no hydraulic structures (bridges) were included in their model geometry. Thus, for the net-rise analysis, existing condition (EG) model geometry updates were made to include the existing agricultural bridge and tide gate structures and provide additional detail along the Beaver Slough channel within the Project extents (Figure 2). The EG terrain was developed from ground geometry comprised of 2009 DOGAMI LiDAR and topographic/bathymetric survey data collected by RDG between 2019 and 2021.

Typical Manning’s roughness “n” values were obtained from the Effective STARR model as applicable. An in-channel “n” of 0.04 was noted within the Effective Model, which is typical of stream channels and was used in the EG model. Floodplain roughness “n” values were found to vary, but typically in the range of 0.1 to 0.12 dependent on the location within the floodplain. A standard floodplain “n” value of 0.1 was used in the EG model.

A with-project/finished ground (FG) hydraulic model was developed by editing the section geometry as appropriate to depict proposed site improvements. This included the proposed modification to the “blocked obstruction” at the tide gate location to represent proposed changes to the embankment associated with the structure, updating the bridge bottom chord and top curb elevations, updated channel geometry along Beaver Slough between the confluence with the Coquille River and the tide gate to represent proposed channel enhancements, and modification to floodplain elevations to depicted native fill disposal. The FG model represents the as-designed topography throughout the Project and represents unaltered portions of ground adjacent to, upstream, and downstream from proposed Project actions. The FG model was run using the same flow, roughness, and boundary conditions as the existing conditions model. Results from the models were used to evaluate water surface elevation changes.

Base flood water surface elevations (WSELs) from the with-project model were compared to WSELs from the existing conditions model to isolate rise impacts to base flood water surface elevations attributable to the Project. A comparison of WSELs is summarized in Table 1 showing no rise, thus the proposed Project actions are compliant with Coos County Zoning Code Section 4.11.251(7)(b).

Table 1. Base flood WSEL HEC-RAS model output comparing existing (EG) to with-project (FG) conditions.

HEC-RAS Station (ft)	WSELs Existing (EG) (Existing Conditions)	WSELs Proposed (FG) (With-Project)	WSEL Difference (FG-EG) ¹	Placemark
6521	23.83	23.83	0.00	
5538	23.83	23.83	0.00	
4864	23.83	23.83	0.00	
3871	23.83	23.83	0.00	
3423	23.83	23.83	0.00	End of Project
2860	23.83	23.83	0.00	
2237	23.83	23.83	0.00	
1872	23.83	23.83	0.00	
1578	23.83	23.83	0.00	
1318	23.83	23.83	0.00	
805	23.83	23.83	0.00	
713	23.83	23.83	0.00	
698	23.83	23.83	0.00	
671	23.83	23.83	0.00	
645	23.83	23.83	0.00	
514	23.83	23.83	0.00	
360	23.83	23.83	0.00	
233	23.83	23.83	0.00	Start of Project

¹negative number denotes post-project water surface lowering

Based on the hydraulic analysis of existing and with-project conditions, the letter conveys

assurance the proposed Project as analyzed by RDG will not produce a rise in the base flood. Hence, the Project meets the intent of Coos County Zoning Code Section 4.11.251(7)(b) for “other development” within the floodplain. All materials proposed for the Project that will become permanent features in the floodplain are designed to be resistant to flood damage.

Staff agrees with the study and information provided. Therefore, the project satisfies both the Policy #27 as well as Section 4.11.251(7)(b) for other development in the floodplain.

- EXCLUSIVE FARM USE (EFU)

SECTION 4.6.200 EXCLUSIVE FARM USE – USE TABLES

Table II identifies the uses and activities in the Exclusive Farm Use (EFU) zone. The tables describe the use, type of review, applicable review standards and Section 4.6.210 Development and Siting Standards. Properties that are located in a Special Development Consideration and/or overlays shall comply with the applicable review process identified by that Special Development Consideration and/or overlay located in Article 4.11.

Table II identifies the uses and activities in the Exclusive Farm Use (EFU) zone

As used in this section, “farm use” means the current employment of land for the primary purpose of obtaining a profit in money by raising, harvesting and selling crops or the feeding, breeding, management and sale of, or the produce of, livestock, poultry, fur-bearing animals or honeybees or for dairying and the sale of dairy products or any other agricultural or horticultural use or animal husbandry or any combination thereof. “Farm use” includes the preparation, storage and disposal by marketing or otherwise of the products or by-products raised on such land for human or animal use. “Farm use” also includes the current employment of land for the primary purpose of obtaining a profit in money by stabling or training equines including but not limited to providing riding lessons, training clinics and schooling shows. “Farm use” also includes the propagation, cultivation, maintenance and harvesting of aquatic, bird and animal species that are under the jurisdiction of the State Fish and Wildlife Commission, to the extent allowed by the rules adopted by the commission. “Farm use” includes the on-site construction and maintenance of equipment and facilities used for the activities described in this subsection. “Farm use” does not include the use of land subject to the provisions of ORS chapter 321, except land used exclusively for growing cultured Christmas trees as defined in subsection (3) of this section or land described in ORS 321.267 (3) or 321.824 (3). Agricultural Land does not include land within acknowledged urban growth boundaries or land within acknowledged exception areas for Goal 3 or 4.

8.	Diking, drainage, tide-gating, fill, mitigation, non-shoreland stabilization, dredge material disposal and restoration	CD	CD
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FINDING: This is permitted in the Exclusive Farm Use zoning district subject to development standards. There are no applicable development standards to address. The applicant did go through and address the applicable criteria. Therefore, this criterion has been addressed.

SECTION 5.0.150 APPLICATION REQUIREMENTS:

Applications for development or land use action shall be filed on forms prescribed by the County and shall include sufficient information and evidence necessary to demonstrate compliance with the applicable criteria and standards of this Ordinance and be accompanied by the appropriate fee.

An application shall not be considered to have been filed until all application fees have been paid. All applications shall include the following:

- 1. Applications shall be submitted by the property owner or a purchaser under a recorded land sale contract. "Property owner" means the owner of record, including a contract purchaser. The application shall include the signature of all owners of the property. A legal representative may sign on behalf of an owner upon providing evidence of formal legal authority to sign.*
- 2. An application for a variance to the requirements of the Airport Surfaces Overlay zone may not be considered unless a copy of the application has been furnished to the airport owner for advice as to the aeronautical effects of the variance. If the airport owner does not respond to the application within twenty (20) days after receipt, the Planning Director may act to grant or deny said application.*
- 3. One original and one exact unbound copy of the application or an electronic copy shall be provided at the time of submittal for all applications.*

An application may be deemed incomplete for failure to comply with this section.

The burden of proof in showing that an application complies with all applicable criteria and standards lies with the applicant.

FINDING: The application was provided on the appropriate forms and the information was addressed. Staff did reach out on some clarification question but overall the application was found to be complete. The applicant has addressed some additional criteria that was not relevant to the request but staff appreciates more information.

SECTION 5.0.175 APPLICATION MADE BY TRANSPORTATION AGENCIES, UTILITIES OR ENTITIES:

- 1. A transportation agency, utility company or entity with the private right of property acquisition pursuant to ORS Chapter 35 may submit an application to the Planning Department for a permit or zoning authorization required for a project without landowner consent otherwise required by this ordinance.*
- 2. For any new applications submitted after the effective date of this section, such transportation agency, utility, or entity must mail certified notice to the Planning Department and any owner of land upon which the proposed project would be constructed at least ten (10) days before submitting an application to the Planning Department. Said notice shall state the transportation agency, utility, or entity's intent to file the application and must include a map, brief description of the proposed project, and a name and telephone number of an official or representative of the available to discuss the proposed project.*
- 3. Such transportation agency, utility or entity (applicant) must comply with all other applicable requirements of this ordinance including property owners that were provided with notice of any hearing on any hearing on the application pursuant to ORS 197.76.*
- 4. Notwithstanding any other requirement of this ordinance, approvals granted to such transportation agency, utility or entity shall not become effective for construction on a property under the approval until the transportation agency, utility or entity obtains either the written consent of the property owner or the property rights necessary for construction on that property.*

5. *Any permit subject to this section will be valid for two (2) years unless a request for renewal for another two (2) years is received from the transportation, utility or entity agency within 2 years after the date of approval, in which case renewal will be automatic to a maximum of 5 renewals. The date of approval is the date the appeal period has expired and no appeals have been filed, or all appeals have been exhausted and final judgments are effective.[OR-92-07-012PL]*

SECTION 5.0.200 APPLICATION COMPLETENESS (ORS 215.427):

1. *An application will not be acted upon until it has been deemed complete by the Planning Department. In order to be deemed complete, the application must comply with the requirements of Section 5.0.150, and all applicable criteria or standards must be adequately addressed in the application. If the County Road Department recommends traffic impact analysis (TIA) the application will not be deemed complete until it is submitted.*
2. *For land within an urban growth boundary and applications for mineral aggregate extraction, the governing body of a county or its designee shall take final action on an application for a permit, limited land use decision, including resolution of all appeals under ORS 215.422 (Review of decision of hearings officer or other authority), within 120 days after the application is deemed complete unless an application has been deemed incomplete, voided or extended as discussed in this section. The governing body of a county or its designee shall take final action on all other applications for a permit, limited land use decision or zone change, including resolution of all appeals under ORS 215.422 (Review of decision of hearings officer or other authority), within 150 days after the application is deemed complete, unless an application has been deemed incomplete, voided or extended as provided for in this section.*
3. *If an application for a permit or limited land use decision is incomplete, the governing body or its designee shall notify the applicant in writing of exactly what information is missing within 30 days of receipt of the application and allow the applicant to submit the missing information. The application shall be deemed complete for the purpose of subsection 2 upon receipt by the governing body or its designee of:*
 - a. *All of the missing information;*
 - b. *Some of the missing information and written notice from the applicant that no other information will be provided; or*
 - c. *Written notice from the applicant that none of the missing information will be provided.*
4. *If the application was complete when first submitted or the applicant submits additional information, as described in Subsection 3, within 180 days of the date the application was first submitted and the county has a comprehensive plan and land use regulations acknowledged under ORS 197.251 (Compliance acknowledgment), approval or denial of the application shall be based upon the standards and criteria that were applicable at the time the application was first submitted.*
5. *If the application is for industrial or traded sector development of a site identified under Section 11 below, chapter 800, Oregon Laws 2003, and proposes an amendment to the comprehensive plan, approval or denial of the application must be based upon the standards and criteria that were applicable at the time the application was first submitted, provided the application complies with Section 4 above.*
6. *On the 181st day after first being submitted, the application is void if the applicant has been notified of the missing information as required under subsection (3) of this section and has not submitted:*

- a. *All of the missing information;*
 - b. *Some of the missing information and written notice that no other information will be provided; or*
 - c. *Written notice that none of the missing information will be provided.*
7. *The period set in Subsection 2 of this section may be extended for a specified period of time at the written request of the applicant. The total of all extensions, except as provided in Section 12 of this section for mediation, may not exceed 215 days.*
 8. *The period set in Section 2 of this section applies:*
 - a. *Only to decisions wholly within the authority and control of the governing body of the county; and*
 - b. *Unless the parties have agreed to mediation as described in Section 11 of this section or ORS 197.319(2)(b) (Procedures prior to request of an enforcement order)*
 9. *Timelines as described in this section do not apply to a decision of the county making a change to an acknowledged comprehensive plan or dependent on the approval of a comprehensive plan amendment.*
 10. *Except when an applicant requests an extension of the timelines, if the governing body of the county or its designee does not take final action on an application for a permit, limited land use decision or zone change within 120 days or 150 days, as applicable, after the application is deemed complete, the county shall refund to the applicant either the unexpended portion of any application fees or deposits previously paid or 50 percent of the total amount of such fees or deposits, whichever is greater. The applicant is not liable for additional governmental fees incurred subsequent to the payment of such fees or deposits. However, the applicant is responsible for the costs of providing sufficient additional information to address relevant issues identified in the consideration of the application.*
 11. *A county may not compel an applicant to waive the period set in ORS 215.429 (Mandamus proceeding when county fails to take final action on land use application within specified time) as a condition for taking any action on an application for a permit, limited land use decision or zone change except when such applications are filed concurrently and considered jointly with a plan amendment.*
 12. *The periods set forth in this section may be extended by up to 90 additional days, if the applicant and the county agree that a dispute concerning the application will be mediated. [1997 c.414 §2; 1999 c.393 §§3,3a; enacted in lieu of 215.428 in 1999; 2003 c.800 §30; 2007 c.232 §1; 2009 c.873 §15; 2011 c.280 §10]*

FINDING: The application was found to be complete and staff has reviewed the merits of the project.

SECTION 5.0.250 TIMETABLE FOR FINAL DECISIONS (ORS 215.427):

(Legislative decisions are not subject to the time frames in this section)

1. *For lands located within an urban growth boundary, and all applications for mineral or aggregate extraction, the County will take final action within 120 days after the application is*

deemed complete. For land divisions within the urban growth boundary or lands designated as Regionally Significant Industrial Areas (RSIA) see Article 5.12 for processing and time tables.

2. *For all other applications, the County will take final action within 150 days after the application is deemed complete.*
3. *These time frames may be extended upon written request by the applicant.*
4. *Time periods specified in this Section shall be computed by excluding the first day and including the last day. If the last day is a Saturday, Sunday, legal holiday or any day on which the County is not open for business, the time deadline is the next working day. [OAR 661-010-0075]*
5. *The period for expiration of a permit begins when the appeal period for the final decision approving the permit has expired and no appeals have been filed, or all appeals have been exhausted and final judgments are effective.*

FINDING: The formal application was submitted and then the fee was paid. The review time for this project was just over thirty days.

SECTION 5.0.300 FINDINGS REQUIRED [ORS 215.416(9)-(10)]:

Approval or denial of an application shall be in writing, based upon compliance with the criteria and standards relevant to the decision, and include a statement of the findings of fact and conclusions related to the criteria relied upon in rendering the decision.

FINDING: The decision is to approve the application and the findings of staff have been reduced to a written investigative report (staff report) to analyze the criteria and response provided by the applicant. The staff report provides findings of the facts in the matter to support the decision.

SECTION 5.0.350 CONDITIONS OF APPROVAL:

1. *Conditions of approval may be imposed on any land use decision when deemed necessary to ensure compliance with the applicable provisions of this Ordinance, Comprehensive Plan, or other requirements of law. Any conditions attached to approvals shall be directly related to the impacts of the proposed use or development and shall be roughly proportional in both the extent and amount to the anticipated impacts of the proposed use or development.*
2. *An applicant who has received development approval is responsible for complying with all conditions of approval. Failure to comply with such conditions is a violation of this ordinance, and may result in revocation of the approval in accordance with the provisions of Section 1.3.300.*
3. *At an applicant's request, the County may modify or amend one or more conditions of approval for an application previously approved and final. Decisions to modify or amend final conditions of approval will be made by the review authority with the initial jurisdiction over the original application using the same type of review procedure in the original review.*

FINDING: Staff has listed some conditions of approval to ensure this proposal will comply with CCZLDO.

SECTION 5.0.400 CONSOLIDATED APPLICATIONS:

1. *Applications for more than one land use decision on the same property may be submitted together for concurrent review. If the applications involve different review processes, they will be heard or decided under the higher review procedure. For example, combined applications involving an administrative review and hearings body reviews, will be subject to a public hearing.*
2. *Applications that are paired with a Plan Amendment and/or Rezone application shall be contingent upon final approval of the amendment by the Board of Commissioners. If the Board denies the amendment, then any other application submitted concurrently and dependent upon it shall also be denied.*

FINDING: This is a consolidated application with Administrative Conditional Use and Floodplain.

VI. DECISION:

There is evidence to support the replacement of tide gates, bridge and stream enhancements (blackberry removal, fencing, log installation, and native plantings) within the Coquille River Estuary Management 43-Exclusive Farm Use and adjacent Exclusive Farm Use Zone. There are conditions that apply to this use that can be found at Exhibit "A".