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May 2, 2024

Coos County Board of Commissioners  
250 N. Baxter Street  
Coquille, Oregon 97423

Re: ACU-23-074/FP-23-012 Rebuttal

All the rhetoric aside, the discussion breaks down to the following factors which are quite simple.

- Denial of the application provides absolutely no viable path to reduce mosquito populations or rearing habitat that may exist now or in the future in a timely manner.
- Without approval of ACU 23-074/FP-23-012, issuance of necessary State and Federal permits is not possible. Permitting provides a pathway to bringing outside funding resources for agriculture and fisheries improvements to Coos County.
- **NO PERMITS MEANS NO IMPLEMENTATION. IMPLEMENTATION = IMPROVED AGRICULTURAL PRODUCTIVITY ON BSDD & CDD LANDS, INCREASED COHO HABITAT, REDUCED MOSQUITO IMPACTS AND HABITAT.**
- Unmanaged tidal wetlands with hydro-modified channels that do not provide for drainage are a primary source of mosquitoes. Managed wetlands are not a source of mosquitos. The phase 3 project is not a "wetlands creation" project. The lands are already classified as wetland under the Coos County Planning Code. The project's purpose is to manage water effectively on project agricultural lands.
- The CCZLDO is quite clear that the requested project actions are appropriate for agricultural and habitat restoration enterprises which are all permitted uses under the ordinance.
- The agriculture vs habitat restoration debate is not relevant to this application. Both land uses are fully compatible for this project. The working lands model we are pioneering should be supported so the debate becomes outdated.
- Time and money are relevant factors. Delaying project implementation will see additional degradation of agricultural productivity with increased costs to remedy. Additionally, an appeals process will require time and resources that would more appropriately be dedicated to implementation and resolution to mosquito issues. Coos County and the applicant can both ill afford the time and expense of a LUBA appeal.

- The BSDD, and others, have submitted record evidence and testimony that the project activities to be approved reduce mosquito habitat and mosquito production potential in the project area. There is no reliable evidence in the record that has rebutted this information regarding mosquitos. There is no evidence that permitted activities will have any impact on existing farm/forest uses and cause significant expense to such existing uses.
- BSDD, and others, have submitted record evidence and testimony that the CCZLDO does not authorize affixing conditions on this permit because it meets all applicable CCZLDO criteria and standards without conditions. Because conditions are not necessary to meet the applicable standards and criteria, and further, because the conditions cannot be tailored to be proportional to potential impacts that “may or may not” be realized as required by the CCZLDO, BSDD’s position is that conditions may not be involuntarily imposed.
- The CCPD has recommended that the Board impose conditions of approval for the ACU-23-074/FP-23-012 application. The CCPD recommendation is reflected in the April 17, 2024 Staff Report at page 26-27, points 1 -7.
- However, without waiving, contradicting, or revoking these and other elements of testimony and evidence provided by BSDD and parties supporting issuance of the permit for purposes of any appeal proceeding in any forum, in the interest of a timely resolution of this matter, and to avoid costly appeals and litigation for all parties, BSDD proposes the following:
  1. A project-area mosquito monitoring and treatment plan be developed.
  2. Plan development will be led by a designated representative of BSDD and a designated representative of Coos Health and Wellness (CHW).
  3. The designated representatives of BSDD and CHW will enlist the volunteer assistance of a mutually agreed upon third representative with mosquito mitigation experience and training that is not formally associated with the project, the BSDD, or Coos County government.
  4. The representatives from BSDD, CHW, and an independent third party will develop a mosquito monitoring plan that:
    - a. Considers and is informed by any and all relevant information included in the BSDD application, and the record materials developed in the Board of Commissioner’s review process.
    - b. The CCPD suggestions in the April 10, 2024 staff report includes off-project monitoring area(s) for comparative purposes over time.

- c. Is not unduly burdensome in its implementation activities or costs for BSDD and/or CHW.
  - d. Is completed and mutually agreed upon by BSDD and CHW within 1-year of the date of issuance of ACU-23-074/FP-23-012 approval.
- BSDD will not object to or appeal issuance of ACU-23-074/FP-23-012 approval that includes the proposal stated in 1-4 above. BSDD reserves its right to revoke the proposal and reserves all its appeal rights and options should different or additional conditions of any nature be included or if the permit is denied.

We look forward to prompt approval of the ACU-23-074/FP-23-012 application which will allow moving forward with project implementation and resolution of mosquito issues in the mid-Coquille Valley area.

Regards,



A handwritten signature in blue ink that reads "Fred R. Messerle".

Fred R. Messerle, District Manager

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# Winter Lake Phase III Team Response to Coos County Development Staff Report on File # ACU-23-074/FP-23-012

## Feedback/Rebuttal of Information from the Phase III Project Application Hearing April 17<sup>th</sup> and New Items Uploaded by County Staff on 04/25/24

- “Working Lands” restoration projects are denoted by common ground benefits for traditional use (pasture grazing in this case) and beneficial actions for environmental components. Winter Lake Phase III is designed to increase channel capacity to provide better drainage for increasing pasture grass production. No aspect of the project is designed to decrease or have negative effects on pasture grass production. The restoration aspect of the project is twofold; 1). Restoration of pasture inflow/outflow capacity for agriculture pasture grass production and 2). Provide access for native coho salmon to enter floodplain areas, feed during winter (November through April 15<sup>th</sup>), and exit safely as waters recede. During this period, pasture grasses are dormant and Winter Lake landscapes are largely flooded irrespective of this project. The missing component for fish is that the flooding during many of those months is often only a couple inches of water and coho need access channels to the floodplain to overcome fear of stranding. Without proper channel networks, they will fail to leave deeper canals until major flooding inundates the entire landscape to greater than 2ft in depth. This only occurs intermittently.
- The Oregon Land Conservation and Development (DLCD) has established, under Oregon law, pathways for restoration in Coastal Community County Zoning Code. The Winter Lake Phase III project Conditional Use Application for both the CREMP and EFU lands has been deemed by County Planning staff as providing more than adequate information and denoting the project is in compliance with applicable Coos County Plan Policies:
  - Policy #14 – General Policy Uses within the Rural Coastal Shorelands
  - Policy #18 – Protection of Historic, Cultural, and Archaeological Sites
  - Policy #19 – Management of “Wet-Meadow” wetlands within Coastal Shorelands
  - Policy #22 – Mitigation Sites: Protection against Pre-emptory Uses
  - Policy #23 – Riparian Vegetation/Streambank Protection
  - Policy #27 – Floodplain Protection within Coastal Shorelands
- Winter Lake Phase I actions were isolated to installation of a large new tidegate array that meets compliance with fish passage criteria for the State of Oregon and National Marine Fisheries Service. The Phase I project installed seven new 8ft (h) x 10ft (w) concrete box culverts with both vertical slide tidegates and side-hinged aluminum tidegates. The culverts in place prior to the project were failing (rusting) and leaking badly. Without Phase I, there would have been total failure of the berm and daily inundation of 1,200 acres in Winter Lake by tidal influence.
- Water on pastures in the summer does not inherently allow for mosquito production. The water must be in a location where it ponds, does not drain, and fish are not present. Ponded water that does not drain restricts/inhibits grass growth. Winter Lake Phase III project:

1). Incorporates on-grade channels to facilitate drain out on low tides following delivery by flood flows or irrigation; 2). The channel network density and distribution on the land area will be greatly increased. This expansion has been designed to eliminate locations where water ponds and stagnates; 3). The new channel networks will provide access and livable space for fish. The project area has juvenile coho present in the winter and many other species, including those that are present in the summer (mosquitofish, three-spined sticklebacks), to access areas where larva might be produced.

Oregon has a population as of 2022 of just over 4.2 million. Increased wise use of land areas to serve the collaborative needs of the state citizens is paramount. Agricultural production in Oregon is 13% of the total economic output. Production of fish and wildlife and the use of these resources is also substantial, contributing over \$2.5 billion to Oregon's economy annually (Runyan 2009). Production of fish/wildlife in western Oregon is largely on private lands. Projects such as Winter Lake Phase III are critical for recovery of Oregon's salmon fisheries. Wild produced fish or hatchery salmonid fry released into the Coquille Basin upstream of the project area, critically utilize off-channel rearing areas for bolstered growth before migrating to the ocean.

- In 1908 when the original Winter Lake drainage canals/channels were constructed, little or no design was focused on the micro-topography of the landscape. Channels in 1908 were installed in a shortest distance, linear construct. This resulted in entrapment of water in hundreds of small swales. These swales prior to Euro-human settlement drained on low tides by a dendritic and natural channel layout. Fish can become stranded in these swales, and these are the locations where water now stagnates following rain events or irrigation. Phase III has been designed using land elevation measurements of the project area to install new channel into these swales to provide for active inflow/outflow. This will prevent fish stranding and eliminate any substantive mosquito production where it currently exists.
- Winter Lake Phase II in Unit 2 was designed with channels that penetrate most major swale areas that had been disconnected in 1908 when Winter Lake was initially drained. These new channels have reduced the potential for fish stranding and mosquito production. Water is managed in summer within Unit 2 to only channel bank height. There are a few low areas where water can enter pastures in summer, however, overall, this area is minimal (<10 acres). All other pasture locations in Unit 2 remain dry in summer, with water confined to channels, where fish are present. ODFW monitoring over the 2019-2023 period since construction has shown that few mosquitoes are being produced within the restored lands on the China Camp Gun Club or ODFW lands, (both within Unit 2). This limited production of mosquitoes is largely related to the new channel network layout as is proposed for Winter Lake Phase III.
- The Winter Lake Phase III project design/engineering was initiated in the late fall of 2017. At that time, Nate Chisholm owned the lands that are now properties of the Bridges Foundation. Phase III development/engineering continued for three years prior to ownership transfer of the Chisholm lands to a willing seller/buyer agreement with the Bridges Foundation. Winter Lake Phase III project development predates the acquisition by the Bridges Foundation of properties within the Phase III area and is unrelated to the proposed land acquisition of Bridges Foundation properties by ODFW.
- Winter Lake Phase III project is designed to reestablish a greater level of financial production from primarily EFU lands and a small portion of CREMP/EFU. Nearly 30yrs of restrictions on the ability of landowners to obtain permitting to excavate the tidal drainage ditches has resulted in severe economic effects on pasture performance and their livestock operations. This project seeks to work collaboratively to improve pasture performance fully within environmental compliance framework of the Coos County Planning Policies, Oregon agencies--DSL, DEQ, DLCD, and the federal government

USACE, NMFS. It is the hope of the BSDD that Coos County will support appropriate measures for agricultural landowners within the County to conduct land management actions to maintain economic viability.

- Winter Lake lands within the Phase III project area are all classified as wetland pastures currently (<https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>). The Winter Lake Phase III project is not designed or allowed under state and federal law to change project area lands to upland from their current wetland status. Excavation that will provide for improved inflow/outflow of water in the new channel networks will establish deeper networks in some locations, with some residual water in the channels, however, drainout benefits to pastures production will offset channels.
- Winter Lake Phase I and II have no elements that developed mosquito habitat. The Phase III application and supporting materials do not infer or directly indicate that mosquito habitat was or might have been created with Phase I or Phase II efforts. Phase I was construction of a seven bay concrete box culvert tidegate system. Phase II was construction of 6.3 miles of new tidal channel in Unit 2, specifically to provide hydrologic connection into floodplain pastures including the connection of swales where fish could be stranded. Those locations also were addressed to eliminate or greatly reduce inherent mosquito production potential. Dan Markowski with the American Mosquito Control Association was on site with ODFW as an advisor in 2015. His feedback was incorporated into final designs prior to implementation.
- Unit 2 channels were specifically oriented in locations where they would enter low swales where fish would strand, which are also the locations where there can be potential to produce mosquitoes. Mosquito sampling has been implemented by ODFW since 2019. Larval dipping methodology sampling has documented that this channel network layout is effective at restricting suitability of the habitats for mosquito production. Data to date indicates that few mosquitoes have been produced in Unit 2. The Winter Lake Phase III project will implement similar channel layout/design in Units 1 and 3 to address ponded water. Currently, those locations are potential stranding areas for juvenile coho in spring and retain water that can become disconnected, without fish, stagnant, and produce mosquitoes.
- Non-native fish such as largemouth bass, perch, crappie, and bluegill are present in all major floodplain canal networks in the Coquille Valley (e.g. Fat Elk, Foster Dairy, etc) and have been for the past 40+yrs. Smallmouth bass were illegally introduced into the Coquille River basin in 2008, 2009, or 2010. To date, smallmouth bass have not been detected in Winter Lake habitats. Juvenile coho that overwinter are using the wetland habitats heavily from December through early April, with a few fish remaining until May. During winter/spring months, warmwater fishes are largely dormant due to cold water temperatures and feed only moderately. To date, over 100 largemouth bass have been stomach sampled in the Winter Lake floodplain in locations where juvenile coho have been captured. No salmonid fish have been found in stomach samples during December through April. Water temperatures are lethally warm in summer and salmonids are not present for predatory fish to consume.
- To date, the Winter Lake Phase III project has obtained only a modest amount of engineering money. There was discussion of including the project in a larger NOAA grant with multiple projects in other areas of the state over the past year, however, it was dropped from that grant. At this time, there is no implementation grant application submitted or pending for the project. Commissioner Main asked about grant monies (PFA, OWEB) he had located on his phone referencing a tidal restoration project. The names of those grants indicated they are related to the Coaledo Tidegate Fish Passage Restoration Project. Grant monies are dedicated to and needed for the Coaledo Tidegate Fish Passage Restoration

Project. Grant funds approved for the Coaledo Tidegate Project would not be available for the Winter Lake Phase III Project.

- Coos Health and Wellness Mosquito Questionnaire: The Winter Lake Phase III Team applauds the efforts of the CHW to obtain information on public sentiment relating to vector control issues in the County. The CHW distributed a questionnaire to residents in the greater Coquille area asking four questions.
  - 1). Were mosquitoes a nuisance at this address this summer?
  - 2). Were there times when you stayed indoors because of the mosquitoes?
  - 3). Would you allow a mosquito specialist to check mosquito conditions on your property?
  - 4). Would you consider financially supporting a mosquito control plan in the Coquille Area?

The Winter Lake Project Team provides the following feedback on critical weaknesses of the CHW questionnaire effort:

Overall, the questionnaire served to obtain information from only the Coquille area. This fails to address noted known mosquito issues in several locations across the County (Prosper, Empire Lakes in spring months, Catching Slough Coos Bay). Obtaining information from only the Coquille Area does not provide a perspective reflecting County wide conditions and inserts a bias towards readership assumption that elsewhere in the County there are not mosquito concerns.

**Direct Team Response to questions:**

Response to County Survey Question #1: Asking if mosquitoes were a nuisance is highly subjective and without specificity as to what “nuisance” reflects. Does a response of “yes” reflect detection of a single mosquito or many?

Response to County Question #2: The Winter Lake Phase III Team does not have feedback on this question.

Response to County Question #3: Responding “yes” on an anonymous questionnaire does not necessarily reflect that landowners will allow access.

Response to Question #4: CHW has previously sampled several other locations in Coos County where there have been mosquito complaints. In 2020 ODFW worked to assist CHW staff to set CO<sup>2</sup> light traps on the Coos River near the Chandler bridge, due to a high number of mosquito complaints. It is difficult to ascertain from the questionnaire the voracity of citizens to fund a mosquito control plan unless the costs were demarcated (e.g. \$10 per year) specifically and spread fairly among all locations with mosquito issues.

- **Addressing the letter from Sharon Waterman on 04/23/24, uploaded by County Staff 04/25/26:** Juvenile coho are primarily present at Winter Lake from December through April. After late May, the water is warmer than preferable during early summer and lethal during mid-summer, thus they cannot live in the project area from June through September. The Winter Lake Phase III project is designed to improve drainage for agricultural landowners and overwinter habitat for juvenile coho.

**Mrs Waterman:** Last summer, Caley Sowers (SWCD) and Christopher Claire (ODFW) noted that the Bridges Foundation had errata on their webpage indicating that the Phase III project will provide for

summer habitat for juvenile coho in hydrologic bulbs. Sharon Waterman suggested that there would be concern with introduction of water into hydrologic bulbs during summer. The Team appreciates Sharon bringing up this question.

The hydrologic bulbs are designed on grade (thus with a base elevation that is higher than the outflow channel) into the receiving channel, which then delivers to the main canals. The bulbs are not designed to retain water. To produce mosquitoes; they would need to:

- 1) Retain water that does not drain, thus becomes stagnant.
- 2) The hydrologic bulbs would need to be without fish present; and
- 3) The water would need to remain in place stagnant for 8-14 days.

The bulbs are designed to drain on the outgoing tide. No water will be retained. The channel networks that provide outflow are designed to serve as routes for mosquitofish and three-spined sticklebacks to enter the hydrologic bulbs. If water is delivered to the bulbs for any reason, including irrigation, they are designed to not provide for production of mosquitoes at any time or month of the year including summer.

**Mrs. Waterman:** Sharon Waterman noted in her 04/23/24 letter that the project plans to install Large Woody Debris (LWD) in channels. This wood will be installed along channel margins and does not restrict inflow or outflow. It in no way increases water retention in pastures or affects pasture grass growth. These features will provide cover for juvenile coho and reduce predation on those fish by mink, otter, other predatory fish, and fish eating birds.

**Mrs. Waterman:** The letter by Mrs. Waterman indicates that they sold the old Waterman Ranch properties within Winter Lake in 2016-2017 due to the Phase I tidegate project. Without the installation of the new culverts and tidegates, the existing infrastructure would have totally failed, and the Waterman property would have been no longer able to be used for pasture production. The Phase III Team finds this statement as incongruous with the former Waterman Ranch needs. Nate Chisholm purchased the property and was a strong supporter of the Phase III project designs during his ownership of 2016-2020. The Team worked closely with Nate on channel layout. The Team does acknowledge that salable property values for the Waterman lands increased by over 200% between 2010 and 2016 when they sold to Nate Chisholm.

- Currently, Winter Lake Phase III has no implementation monies. Beaver Slough Drainage District staff have input a large quantity of in-kind, non-cash effort with the Winter Lake Phase III designs and project development; however, no monetary expense to date has been incurred to individual BSDD landowners. Once the project is permitted, BSDD and landowners will be able to contribute to expenses and provide in-kind services. There is a modest amount of engineering money that has been obtained from the Business Oregon Grant fund. The primary funding to date for project development and permitting has been SWCD and ODFW In-kind non-cash effort.
- A few statements at the hearing related to grant monies and how they are from income tax or property tax dollars. Of the larger grant funds such as OWEB, many of these large funds are derived from non-tax dollar fund sources. OWEB monies for example are generated from the Oregon Lottery. Fifteen percent of Oregon lottery dollars are earmarked for Oregon State Parks and watershed restoration projects.

The USFWS National Coastal Program is another large fund, which at times assists with funding these style of projects. *"The National Coastal Wetlands Conservation Grant Program annually provides grants of up to \$1 million to coastal and Great Lakes states, as well as U.S. territories, to protect, restore and enhance coastal wetland ecosystems and associated uplands. The grants are funded through the Sport*



*Fish Restoration and Boating Trust Fund, which is supported by excise taxes on fishing equipment and motorboat fuel."*

The Pittman-Robertson Act of 1937 is another large funding source at times for wildlife projects. **Note:** *Winter Lake serves as overwinter habitat for waterfowl where upwards of 60% of waterfowl on the Oregon Coast flight route spend some time in Winter Lake annually. This grant is now called the Federal Aid in Wildlife Restoration Act; "Funding for Pittman- Robertson programs come from federal excise taxes on firearms, ammunition, and archery equipment. All 50 states and the five major, permanently inhabited U.S. territories receive Pittman-Robertson funds."*

While some grants may have tax dollars infused into them, the Phase III Project Team believes the expenditure of existing committed grant monies to assist "Working Lands" projects that help agriculture, expend monies to local contractors and business during implementation, and restore fish/wildlife recreational opportunity to Coos County is money well spent.

### **Water Management Issues at Winter Lake**

Phase II installed 6.3 miles of new channels, providing connectivity to low-lying swales to facilitate drainage and prevent ponding. Figure 1. Shows the water levels in Units 1, 2, and 3 on 04/18/24 demonstrating that drain out in the restoration Unit 2 has been strongly facilitated by the new channel networks. Unit 1 and 3 water levels reflect increasing refill following low tide drainout. This is directly due to the poor connectivity of existing channels to the locations in pastures where water is present and ponded. Following a low tide the tide gates close for all Units, however, due to strong and connected drain out in Unit 2 there are no interior ponded water areas refilling the main channel. In Units 1 and 3, there is restricted drainout that through time during the high tide cycle, refills the main canals. This drain out restriction from interior pasture locations in Units 1 and 3 results in delay by many days or weeks of the ability to remove standing water from the pastures. The delayed drainage results in stagnate water without fish present, that is ponded, and has potential for mosquito production in Units 1 and 3. Figures 2, 3, 4, and 5 denote drain out conditions on 04/18/24 for pasture locations in Units 2 and 1.

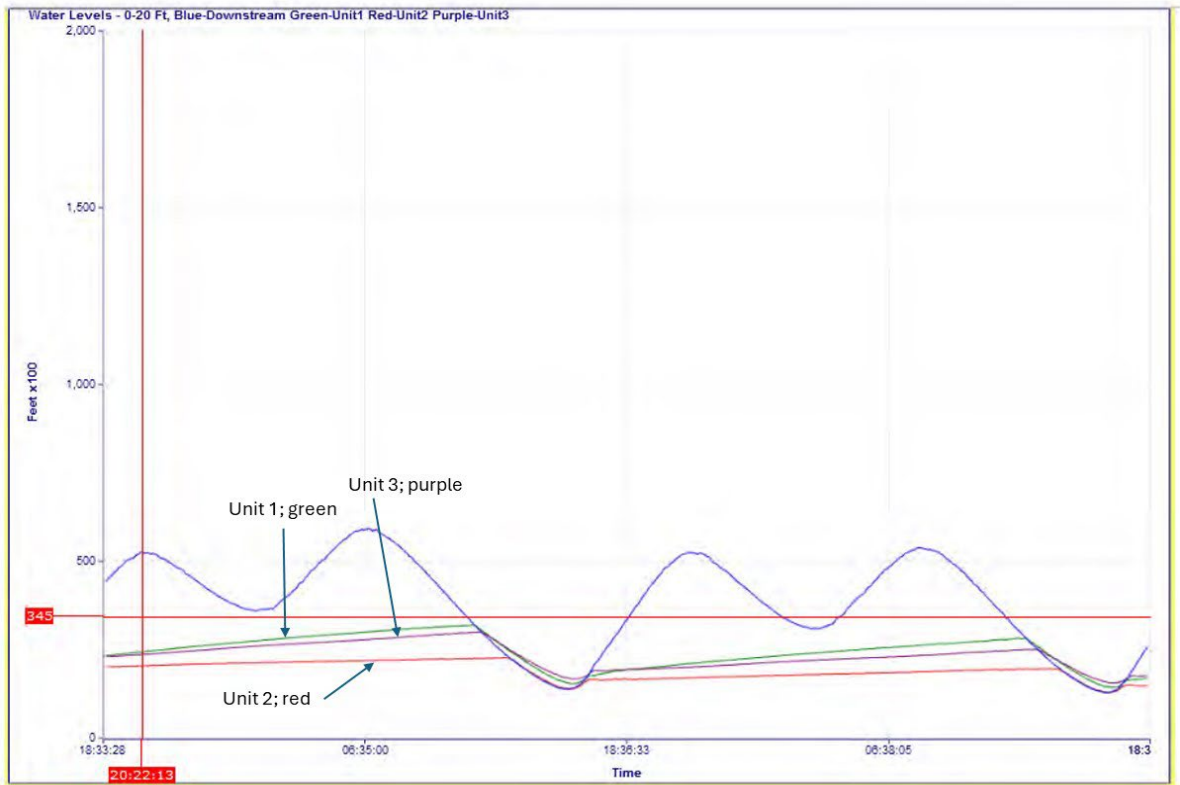


Figure 1. Water levels as measured at the C3P main tidegates for Units 1, 2, and 3 on 04/18/24.



Figure 2. Image of Unit 2 from the C3P tide gate on 04/18/24; note! no standing water, grass growing, and cattle grazing.



Figure 3. Image of Unit 1 pasture 04/18/24 east side, looking southwest; note! extensive water on pastures.



Figure 4, Image of Unit 1 pasture 04/18/24 looking south; note! extensive water on pastures.



Figure 5. Image of Unit 1 pasture 04/18/24 looking to southwest; note! extensive water on pastures.