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Beaver Slough Drainage District
Coquille, OR

Dear Beaver Slough Drainage District,

I have reviewed the Winter Lake Phase III project design information. I am writing to you with my review noting the strong attributes of the proposed plan with the extensive excavation of new and reconstructed channels to eliminate mosquito breeding habitats within the Winter Lake area. As a program manager for a mosquito control district at Vector Disease Control, I have thoroughly reviewed the plan and believe it offers an effective solution to address the persistent issue of mosquito infestation in the units of Winter Lake. Having worked with mosquito control districts for the last ten years, across multiple states in the Northwest, I have had the opportunity to be involved in projects that have utilized similar processes as proposed in this plan.

Mosquitoes pose significant health risks to both humans and livestock, as they are vectors for numerous diseases such as malaria, dengue fever, and West Nile virus. Agricultural lands, with their abundance of standing water sources like irrigation ditches, ponds, and puddles, often become prime breeding grounds for mosquitoes. Therefore, implementing strategic measures to eliminate these breeding habitats is crucial for safeguarding public health and maintaining agricultural productivity.

The proposed plan outlines the excavation of channels strategically designed to drain stagnant water and disrupt mosquito breeding sites. By carefully mapping out the areas prone to water accumulation and implementing a systematic approach to dig channels, we can effectively reduce the mosquito population while minimizing disruption to agricultural activities. This plan focuses on reconstructing channels to grade and sizing culverts appropriately to fully allow for the inflow and drainage of water.

Furthermore, the plan emphasizes environmentally sustainable practices, ensuring minimal disturbance to the surrounding ecosystem. It takes into consideration factors such as soil erosion, wildlife habitats, and water conservation, demonstrating a commitment to responsible land management practices. Focusing on preventing

erosion on the sides of the channels and properly using the tidal flows will allow the constructed channels to last and continue to maintain a healthy operating condition preventing the stagnant pools of water that contribute to mosquito populations. This would also assist in preventing the stranding of juvenile coho during the warmer months and increase tidal exchange during the winter months leading to a healthier habitat.

If best water practices are followed in this unit, the addition of these channels at the proper grade will allow for water to exchange with high tides. This influx of new tidal water, combined with a better ability to drain would lead to less mosquito habitat. It appears that this would repair the current hydrologic discontinuity that is present in Units 1 and 3. The resolution of hydrologic discontinuity, for agricultural purposes, would potentially benefit juvenile coho as well which would also benefit mosquito management, as they are great predators for mosquito larvae.

In addition to its immediate benefits in controlling mosquito populations, this plan offers long-term advantages for agricultural productivity and community well-being. By reducing the prevalence of mosquitoes and mosquito-borne diseases, farmers can experience higher yields, lower healthcare costs, and improved quality of life for residents in rural areas.

It is worth noting that nature doesn't always work perfectly with these plans. The expansive area that these channels are encompassing could lead to some situations that should be monitored. It is best practice to monitor after the creations of these channels to watch for areas that may not drain properly. Sediment wash out may build up in the channels before there is a good flow process.

I am confident that implementing this plan will yield positive results and contribute to the overall health and prosperity of the community. After spending so much time combatting the mosquito population on the Ni'les'tun Unit of the Bandon Marsh, it is great to see the agencies and local Soil and Water District putting in so much time and thought to this process. With the designs that are in Phase III and surveillance after the implementation of the project, this should greatly reduce the mosquito habitat that is present on the Winter Lake Phase III project area.

Thank you for the ability to comment on the proposed project. Should you have any further questions or require additional information, please do not hesitate to contact me.

Sincerely,



Nikki Harris
Contract Manager
Vector Disease Control International