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**From: JD Fisheries**

**JOHN DAY DAM FISHWAYS PROTECTION FOR UPSTREAM OIL SPILLS**

With the increasing transport of oil by rail along the Columbia River, a concern was raised for the JD Fishways’ protection in the event of a catastrophic oil spill. The current plan is to deploy the temporary absorption booms at the adult fishways’ exits when a spill occurs. However, the absorption booms by themselves won’t be sufficient in case of the massive/ high volume spill from the oil train’s derailment. JD Fisheries is proposing the permanent exclusion booms to be procured and deployed (or be ready for an emergency deployment) on a moment notice at the adult fishways’ exits. This is the same protection method used for Bonneville. JD Project will need to scope the specs and obtain funding for these booms in the near future if this plan is approved.

On a larger scale, oil containment and recovery is preferred. The dam could be considered a barrier for containment. However, various operational changes may be required to achieve the desired oil containment. The following are possible operational changes and considerations for each. These changes are most likely to be made prior to the formation of unified command to protect the fishways from serious and long term contamination. Unified command will make decisions about the oil recovery once formed.

**Adult Fishways** - monitor for oil entrainment’s risk to the fishways; deploy secondary absorbent booms. As the last resort, close the fishways’ exits by installing their closing bulkheads to prevent oil entry and contamination of its channels. This will entail fish salvage operations, which could be difficult to staff properly on short notice/ on weekends. The assumption is that a temporary disruption of fish passage by closing of a fishway is significantly better than its contamination, which could render the fishway unusable (fish rejecting to enter and move upstream) for an extended length of time, creating an even greater impact on fish passage. The contamination would potentially also require specialized cleaning of the fishway, with unknown time and cost expenses. It’s important to point out that the current exit bulkheads consist of sections and require a crane operator and structural crew to deploy. This could delay the closing of the fishways if an incident occurs on the weekends or at night.

**Fishways AWS** – Shut down the AWS turbines or pumps if the oil inflow and contamination of the system is imminent.

**Spillway** –monitor oil entrainment; close TWS in bays 18 & 19 to minimize surface bypass; shut down spillway completely if necessary. Considerations are run timing, oil type, and downstream progression of spill.

**JBS, operational gate wells & SMF**–monitor oil entrainment; close tainter gate and JBS orifices to prevent oil from flowing through the collection channel and further downstream to SMF. Considerations are run timing, oil type, and downstream progression of spill.

**Powerhouse priority** –adjust turbine priority & loading for the maximum oil retention behind the dam.