



March, 2016

To the reader:



The Bateman Island Causeway Modification Conceptual Design Report represents the results of more than five years of work to understand the temperature and flow dynamics in the Yakima River Delta area around Bateman Island. The work presented in this report has been reviewed by our Technical Advisory Group, which has met regularly since 2011. Details in the report illustrate the relative contributions of inflow temperatures, flow volumes, bathymetry and landforms in determining water temperatures and flow velocities in the Delta area. The report clearly indicates that modifying the causeway would make a meaningful improvement in conditions for salmon and steelhead.



Conditions in the lower Yakima River affect the health of populations of salmon and steelhead throughout the basin. For decades, biologists have understood that excessive water temperatures in the lower river have major negative impacts to native fishes and benefit the survival of introduced exotic species that prey on those native fish. High water temperatures impact native fish for long stretches of time in every year. Conditions are worse and last longer during years with low flows and/or high temperatures. The causeway harms four steelhead populations that are protected by the Endangered Species Act, and puts at risk millions of dollars of investment in salmon recovery including re-introduction of coho, summer Chinook, and sockeye salmon in the Yakima River. The existing causeway has diminished salmon populations that are important to local fishermen and their communities, and are an integral part of the culture, religion and economy of the Yakama Nation.



The design report indicates that the excessively hot, low-oxygen waters in the Delta that are harming salmon and steelhead could be significantly improved by creating an opening of at least 260 feet of the causeway, partially or fully restoring natural historic flow pathways. Creating an opening in the Bateman Island Causeway would allow flow around the west and south sides of Bateman Island, lowering spring and summer water temperatures. A restoration project on this scale would improve salmon and steelhead runs by:



- Improving survival of juvenile salmon and steelhead migrating through the delta,
- Improving rearing habitat for juvenile salmon and steelhead,
- Reducing opportunities for invasive species to prey on juvenile salmon and steelhead,
- Reducing delays in migration for adult salmon and steelhead, and
- Increasing numbers of adult salmon that make it safely upstream to spawn.



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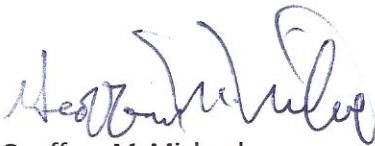
In addition to these substantial benefits for salmon and steelhead, flowing water around Bateman Island would improve water quality and reduce the suitability of the area for mosquito breeding.

The reduced streamflows and high temperatures of 2015 resulted in delays of adult salmon migration through the lower river and very high rates of Chinook salmon dying before spawning. Major sockeye salmon die-offs occurred throughout the Columbia Basin associated with high water temperatures. Opening part or all of the Bateman Island Causeway is one of a very limited set of options to improve temperatures and partially alleviate these conditions in the Yakima Delta.

We recognize that flowing water around Bateman Island would likely change conditions for boaters and the operation of the Columbia Park Marina, and that recreational access to Bateman Island is valued by community members. We expect the decision on any future modifications to this area to carefully consider all of the impacted resources.

Sincerely,

Members of the Yakima Delta Technical Advisory Group (TAG)



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