**Columbia River Zone 6 Delta Assessment Study**

**– Klickitat, White Salmon, and Wind River Deltas**

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Stretching from McNary Dam to Bonneville Dam, the middle Columbia River (Zone 6) provides a critically important corridor for adult and juvenile salmon migration. This 126-mile reach forms the heart of the Columbia River hydrosystem. Modifications to the four large dams in this reach have resulted in incremental increases in survival and reductions in travel times for both adult and juvenile fish.  However, accumulating sediments in these impounded reservoirs has negatively affected aquatic habitats.

Presenters will describe efforts by the Yakama Nation (YN), USACE-Portland District, and Columbia River Intertribal Fish Commission to compile existing information, identify additional data needs, and next steps to address impacts at three deltas (Klickitat, White Salmon and Wind River Deltas). Tributary confluences have the potential to provide feeding and resting areas during migration and much-needed cold-water refuge during warm periods. However, many of these confluences are impacted by flow ramping, obstructed passage across shallow sediments, loss of forested islands, and summer thermal barriers. Recently completed juvenile salmon survival studies through the Klickitat Delta point to significant losses in survival of salmonids through that impaired delta.  The YN have been involved in recent years with assessment and restoration of the White Salmon delta to minimize portions of that delta’s impaired shallow water habitat and to restore a riparian upland. This talk will identify additional partners bringing their expertise to help inform this project. These partners include, NOAA – Office of Coast Survey (mainstem bathymetry), Oregon State University (shallow water bathymetry), Cayuse Native Solutions (LiDAR surveys), and University of Washington’s Future Rivers Program new tool (Thermal History of Regulated Rivers – THORR).