Day of the Week_ Session#_Time_First initial and last name.ppt (or .pdf)

Wednesday_ SCI-013**_400_KTurner**

Session Title: Emerging Science and Restoration Practices in Pacific Northwest Estuaries

Session Type: Oral

Session Co-chair: Steven Rumrill
Session Co-chair: Ronald Thom
Session Chair: Catherine Corbett

Location: B113-114

Start time: Wed, Nov 04 - 8:00 AM

Restoring the Nisqually Delta: A coordinated science approach for adaptive management
K. Turner[1]; I. Woo[1]; J. Takekawa[1]; C. Ellings[2]; F. Leischner[2]; E. Grossman[4]; J. Barham[3]; J. Takekawa[3]
1. USGS Western Ecological Research Center, Vallejo, CA, USA.
2. Nisqually Indian Tribe, Lacey, WA, USA.
3. Nisqually National Wildlife Refuge, Olympia, CA, USA.
4. USGS Pacific Science Center, Santa Cruz, CA, USA.

Nisqually National Wildlife Refuge, working cooperatively with the Nisqually Indian Tribe (Tribe), Ducks Unlimited, and Washington Department of Fish and Wildlife (WDFW) are restoring the Nisqually River Delta for the benefit of native resources including salmon (www.nisquallydeltarestoration.org). Restoration of the Delta is critical for recovery of threatened Nisqually Fall Chinook salmon (Oncorhynchus tshawytscha). Delta restoration has included 60 ha of tribal lands on the east Delta, and an additional 283 ha on the west Delta comprising the largest tidal marsh restoration in the Pacific Northwest. After >12 years of planning, the Nisqually Delta will be restored to full tidal inundation in September 2009. Restoration of the Nisqually Delta is expected to have regionally significant effects on populations of fish and wildlife in the entire Puget Sound. Chinook salmon rear extensively in estuaries, and while most wire-tagged Chinook captured on the Delta were from Nisqually hatcheries, >25% were non-natal from outside the Nisqually Basin. Also, the Delta is essential habitat for winter chum (O. keta) for feeding and growth, supporting one of the largest wild runs in Washington. The Delta also supports 275 species of birds, one of the most diverse communities in western Washington. The USGS Western Ecological Research Center will implement the Refuge monitoring plan and conduct applied studies. Several collaborations have been established to accomplish the work, including cooperative studies with the USGS Washington Water Science Center (hydrology), USGS Pacific Science Center (geomorphology), USGS Patuxent Wildlife Research Center (biological assessments), USGS Western Fisheries Research Center (salmonid otoliths), Tribe (fish communities), and WDFW (amphibian surveys).