JOINT COMMITTEE ON FISHERIES ENGINEERING AND SCIENCE



2018 Webinar Series





PRESENTER BIOGRAPHIES

Garth Wyatt (left) and Nick Ackerman (right) both joined PGE in 2007. Garth is a native Oregonian and received his BS in Fisheries Science at Oregon State University. He specializes in developing innovative fish passage solutions around hydro-projects. Prior to joining PGE Garth worked for the Confederated Tribes of Warm Springs, the Oregon Department of Fish and Wildlife, and the Oregon Department of Environmental Quality. Garth enjoys playing with his kids and all things that have a hooked nose. Nick, a mid-west transplant spent most of his previous career in consulting with brief stints working for USGS and the Oregon Department of Fish and Wildlife. Since joining PGE, Nick has focused on planning and implementing passage evaluations on the Clackamas Project. When not at work, shuttling kids to various activities, or working on his property, Nick enjoys taking camping trips with his family and fly fishing.

WEBINAR INFORMATION

Date: Thursday, December 6, 2018 Time: 12:00p ET | 9:00a PT Duration: 60 Minutes Webinar Platform: Microsoft Lync (call in number will be provided to registrants)

Please RSVP and direct questions or comments to Erin McCombs at <u>fisheriesengineeringscience@gmail.com</u>

NORTH FORK HYDROELECTRIC PROJECT PASSAGE IMPROVEMENTS

Garth Wyatt and Nick Ackerman Portland General Electric Estacada, Oregon

The Clackamas River Hydroelectric Project in northwest Oregon is a three-dam complex operated as a run-of-river project, with dam heights ranging from 80 to 206 feet. A fish ladder at Faraday Dam was destroyed by floods in 1917, and it was not rebuilt until 1939, extirpating the upper river fish runs. Winter steelhead, spring Chinook salmon, and coho salmon began recolonizing the upper basin in 1940. The last and largest dam, North Fork Dam, was built in 1958, and included a fish ladder and downstream migrant collector. Over the ensuing decades salmon and steelhead populations in the upper Clackamas were sustained but failed to thrive.

As part of its new License PGE made significant investments in passage improvements to recover ESA listed salmon and steelhead in the basin. These improvements included two new downstream migrant collectors, a spillway exclusion net, a new fish ladder, increased minimum flows, and a new adult sorting facility. In the years since implementation of these improvements, PGE has seen significant increases in collection of juvenile salmonids. These improvements have resulted in Project-wide smolt passage survival rates in excess of 90% for each species. In addition, since commissioning the new juvenile collectors, fry and parr collections have increased significantly. Adult returns of have outperformed regional cohorts relative to pre-passage improvement years. This presentation will provide an overview of improvements made to downstream passage infrastructure, performance of those facilities, and perspective on the effects these improvements and management changes have had on adult returns.

The Joint Committee on Fisheries Engineering and Science is hosting a free webinar series as part of its mission to engage scientists and engineers on topics related to fish passage. The Committee consists of members of the American Fisheries Society Bioengineering Section (AFS-BES) and the American Society of Civil Engineers Environmental and Water Resources Institute (ASCE-EWRI). It was established in January 2011 to foster communication between the two groups, provide opportunities for engineers and biologists to share relevant knowledge and learn from one another, and to collaborate on projects related to fish passage.