



InStreamConservation News

Restoring Washington's Endangered Fish & Watersheds

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Heavy erosion and log jamb just below Pioneer Park 1/10/16.

Reduce Sediment Loads Save Millions!

Sixty-five years ago, the Deschutes River Estuary was dammed in an effort in part, to create a lake and extend 5th Avenue across the river. The dam was supposed to cover sediment in the estuary with water. Ironically, it filled the Deschutes Basin with even more sediment and turned the Basin into a freshwater marsh.

About 1/3 of the watershed is part of a huge privately owned tree farm. The basin is already prone to heavy runoff and slides during winter storms.

Building roads and logging on the upper watershed made the problem worse.

While environmental laws have brought improvements since the 1970's, there are still problems. Fine sediment smothers salmon redds.

Over the years, roads, sand and gravel operations, livestock and many other activities along the river, contributed to the problem.

The dam forced the Deschutes Basin to "choke" even more, on the extra sediment.

Consistently during winter floods, the Deschutes River deposits an average of 35,000 cubic yards of sediment a year. Since 1951, the dam was built under the present 5th Avenue Bridge. Over the last 65 years the volume of sediment could fill a football stadium the height of 1,300 feet, the river has deposited well over 2 million cubic yards of sediment. Two dredges, in 1978 and 1986, moved about 16% of this, 314,000 cubic yards, to build parklands and wetlands. Any future dredging would have to be completely removed from the Basin and sent to landfills.

Salmonids need brackish water to adjust to differences between fresh and saltwater zones. Without an estuary, there is no transition time causing salmon smolts to become stressed, and possibly die. During warm summer months, the Capitol Lake basin does not meet Federal water quality standards.

That is because of high levels of phosphorus, fecal coliform, algae blooms and high water temperatures.



Heavy erosion at Pioneer Park 1/10/16.

This deadly brew causes a very deadly low oxygen environment.

All of these combined impacts negatively stress departing and returning salmon, steelhead and cutthroat trout. The low oxygen, high temperature and toxin in a dammed, non-flushing basin calls for all of us to find a solution. The solution: a free flowing (dam-free) river and a recovered natural estuary.

Over the years, the Squaxin Island Tribe, Thurston County Conservation District, South Puget Sound Salmon Enhancement Group, Stream Team, Thurston Regional Planning Council, Wild Fish Conservancy, Capitol Lake Partners, Cities of Olympia and Tumwater, State Department of Ecology, Dept. of Natural Resources, Washington Department of Fish & Wildlife and the Dept. of Information Services, have actively researched degrading fish and bird habitat in the Capitol Lake Basin. Collectively, these public and private groups have yet to formally determine the right steps to regain health for an estuarial Deschutes River basin.

So far, community consensus is to create a healthy Capitol Lake by removing the dam on the 5th Avenue Bridge and letting the Deschutes Estuary heal itself.



Deschutes Falls 1/7/16.

According to a study of management alternatives, keeping the dam to maintain Capitol Lake could cost up to \$97 million more than restoring the estuary, and that was before the invasion of the New Zealand mudsnail raised dredging costs even more.

What's been continually missed is reducing sediment loads on the Deschutes River to the volumes of the 1850's, when oysters thrived in a healthy estuary.

How? Ask the real experts, leaders in the field, who have evaluated thousands of miles of river habitat at successfully completed hundreds of river restorations, across the U.S.

Who? Stream and Fluvial Geomorphologists and Hydrologists who live and work in the Pacific Northwest. Their unparalleled experience is needed. NOW!

Here are 4:

Dr. Barry Southerland PhD.

CPESC#514WNTSC,NRCS

Fluvial Geomorphologist..

Part of the team evaluating the devastating OSO slide on the North Fork Stillaguamish River that killed 43 people.

Phone:(503) 273-2436

Email: barry.southerland@por.usda.gov

Dr. Frank Reckendorf PhD. Private consultant/

retired NRCS, WNTC, Fluvial Geomorphologist

Phone: (503) 451-2130 Email: frecken@mac.com

Russ Lawrence, P.El, M.Sc. Fluvial

Geomorphologist

Streamfix Phone: (503) 631-8184

Email:russ@streamfix.com

Richard Dyrland Ms—Supervisory Hydrologist

Phone: 360-887-0866 Email:toppacific2@msn.com

FLUVIAL MORPHOLOGY is a science devoted to understanding rivers both in their natural setting as well as how they respond to human induced changes in a watershed, in the process, restoring the watersheds to health.



InStream Conservation

Restoring Endangered Fish & Watersheds

Ben Dennis

(360) 819-4307

flyrodbranch@comcast.net

www.instreamconservation.org

Puget Sound Fly Fishers Co-Conservation

Director