

Steelhead runs hit lowest number in almost 40 years

Summer fish returns drastically low

By **GEORGE PLAVERN**
EO Media Group

Summer steelhead returns are off to a dismal start in 2017, with 75 percent fewer fish than usual crossing Bonneville Dam so far this season.

The latest research suggests a big part of the recent population decline may be tied to factors soon after juvenile steelhead enter the ocean, such as predation, parasites and industrial contamination.

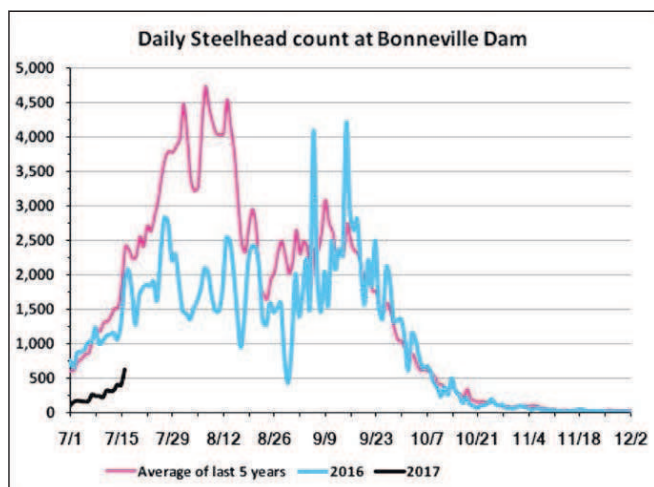
A study published in June in the Canadian Journal of Fisheries and Aquatic Sciences takes a closer look at Pacific Northwest steelhead runs from the Lower Columbia River and Puget Sound, tracking the survival of smolts early in their ocean life.

Neala Kendall, research scientist and project leader with the Washington Department of Fish and Wildlife in Olympia, Washington, said the study did not specifically examine upper Columbia steelhead, though ocean conditions apply to all fish runs.

"This is important for interior Columbia River steelhead," Kendall said. "They are experiencing the same ocean as Lower Columbia River steelhead, certainly."

The publication comes at a time when fisheries managers across the Columbia Basin are projecting the lowest steelhead returns in 37 years. According to data, just 4,075 steelhead have passed Bonneville Dam since July 1, compared to 16,996 at the same time last year. The five-year average to date is 19,272.

Fisheries managers in Oregon and Washington state have approved steelhead restrictions on the Columbia River, closing steelhead retention below



Idaho Department of Fish and Game

The Dalles Dam for the entire month of August. Steelhead retention is closed between The Dalles and John Day dams during the month of September, and from John Day Dam to the Oregon-Washington border during October and November.

Juvenile steelhead already face an arduous journey migrating from the upper Columbia and lower Snake rivers. Once they finally reach the ocean, Kendall said conditions right away play a significant role in determining total marine survival.

The study was launched in 2013 as part of the Salish Sea Marine Survival Project, a collaboration of both U.S. and Canadian scientists. Kendall said the team analyzed 35 coastal steelhead runs dating back to the late 1970s, primarily from Puget Sound and Lower Columbia River.

"From our research, it's conditions in the early ocean life of steelhead, shortly after they hit saltwater, that influence their total marine survival," Kendall said. "They all go to the same place in the ocean. That doesn't seem to matter."

In particular, Kendall said harbor seals, harbor porpoises and birds seem to be preying more on juvenile steelhead due to a reduction in populations of

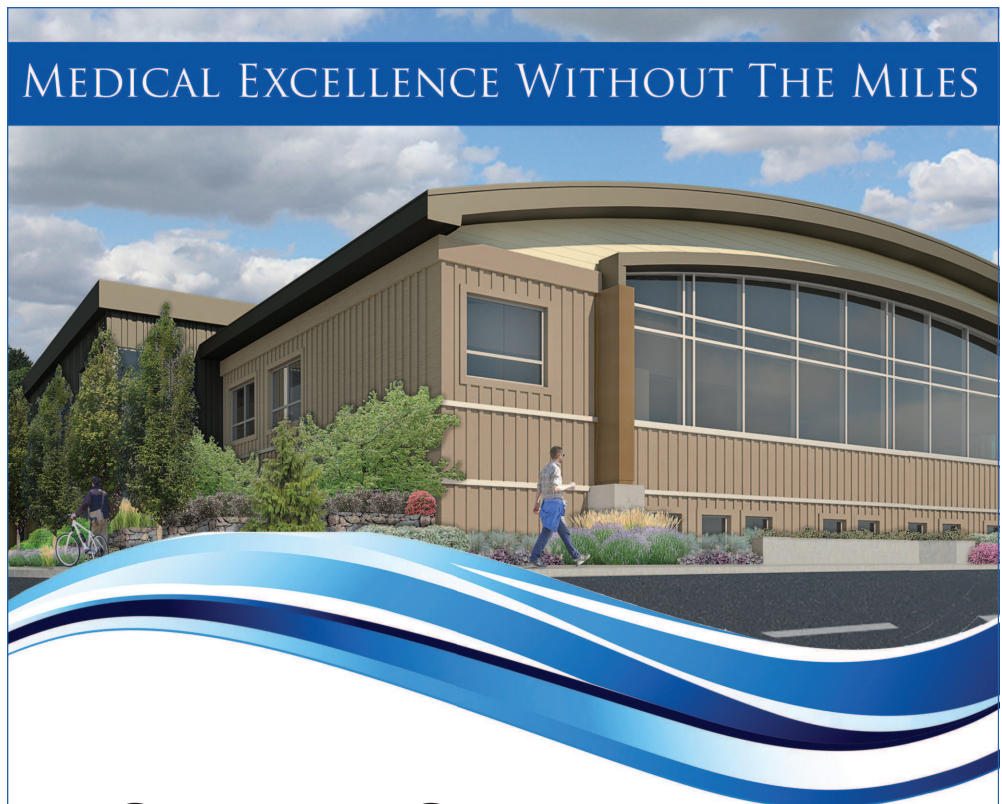
forage fish, like herring, anchovies and eulachon.

Every year since the project began, Kendall said researchers have released between 100-200 tagged steelhead smolts into the Green and Nisqually rivers — which flow into Washington's Puget Sound — to measure predation by seals. One year, just 6 percent of the tagged fish made it out of the Sound. Another year, the total was 40 percent, which just so happened to coincide with a huge anchovy boom.

"I think this research looking at predation is going to be important," she said. "The same predation is taking place down in the Columbia River on both juveniles and adult (fish)."

Other parts of the study focus on migrating fish that have been infected by nanophyetus, a parasite that burrows into juvenile salmon and steelhead and attacks their muscle tissue.

Kendall said nanophyetus has been documented much more heavily in the southern Puget Sound, though there is concern that the parasite could spread as waters continue to warm. During the 2015 drought, Kendall said the team documented nearly 100 percent of steelhead with nanophyetus in the Nisqually River.



MEDICAL EXCELLENCE WITHOUT THE MILES

Coming Soon...

The CMH-OHSU Knight Cancer Collaborative is bringing advanced cancer care to the coast. People throughout the Columbia-Pacific region will soon have access to the latest technologies and treatments for cancer.

Patients can expect to receive personalized, advanced care from OHSU specialists in a warm, comforting, hassle-free environment.

columbiamemorial.org/cancer-care/

COLUMBIA MEMORIAL HOSPITAL

KNIGHT CANCER Institute
OHSU

2111 Exchange St., Astoria, Oregon • 503-325-4321
www.columbiamemorial.org • A Planetree-Designated Hospital

HEALTH NOTIFICATION

Are You Hard of Hearing?



A major name brand hearing aid provider wishes to field test a remarkable new digital hearing instrument in the area. This offer is free of charge and you are under no obligation.

These revolutionary 100% Digital instruments use the latest technology to comfortably and almost invisibly help you hear more clearly. This technology solves the "stopped up ears" and "head in a barrel" sensation some people experience.

If you wish to participate, you will be required to have your hearing tested in our office **FREE OF CHARGE** to determine candidacy and review your results with

the hearing instruments with our hearing care specialist.

At the end of this evaluation, you may keep your instrument, if you so desire, at a tremendous savings for participating in this field test. Special testing will be done to determine the increased benefits of this technology.

Benefits of hearing aids vary by type and degree of hearing loss, noise environment, accuracy of hearing test, and proper fit.

This is a wonderful opportunity to determine if hearing help is available for your hearing loss and get hearing help at a very affordable price.

Call Now and Make a Reservation if you wish to be Included!

THIS WEEK ONLY!

Expires July 28th

**Come Join Our OPEN HOUSE
in Warrenton - July 24th - 28th**

Call 503-836-7921 to Schedule an Appointment!



Miracle-Ear Center
Youngs Bay Plaza

173 S. Hwy 101, Warrenton, OR 97146
(503) 836-7921 • www.miracle-ear-warrenton.com

Special Notice State Employees

You may qualify for a hearing aid benefit up to \$4,000 every 4 years. Call for eligibility status.

Miracle-Ear Center

2505 Main Ave N, Suite C, Tillamook, OR 97141
(503) 836-7926 • www.miracle-ear-tillamook.com