

More Work Ahead

Judge orders revision of salmon recovery plan; researchers study juvenile survival rates

By Mike Federman

A federal judge's ruling in August on endangered fish was disappointing for public power utilities in the Northwest, but not an outright rejection of the federal biological opinion—the blueprint for salmon recovery in the Columbia River Basin.

U.S. District Court Judge James Redden accepted the basic structure of the BiOp through 2013, but requested more specific information on salmon habitat restoration for 2014 through 2018.

In a sharply worded opinion, Redden said the BiOp after 2013 “is based on unidentified habitat mitigation measures that are not reasonably certain to occur.” He concluded the plan is “arbitrary and capricious” because federal agencies cannot guarantee “no jeopardy” for salmon under BiOp guidelines.

This is the third time federal agencies will have to reassess their plan for protecting salmon and steelhead under the Endangered Species Act. The working BiOp was first issued by the Bush administration in 2008, then amended by the Obama administration in 2010. Two previous BiOps, in 2000 and 2004, failed to meet Redden's criterion for ESA protection.

By maintaining the status quo at this time, the judge retains control over the issue, and opposing sides remain at odds over salmon recovery along the Federal Columbia River Power System.

“This is an unfortunate step in that the effect of the ruling appears to keep the region held up in the same pattern of litigation that has plagued it for the last decade,” says Scott Corwin, executive



Surgical technicians from the Pacific Northwest National Laboratory perform about 300 acoustic tag implants a day at Bonneville Dam's smolt monitoring facility. Tagged salmon are released above the dam. Researchers track the route of passage past the dam and measure survival to the Columbia River estuary.

Photos by Dennis Schwartz, U.S. Army Corps of Engineers

director of the Public Power Council, a policy and advocacy organization that represents Northwest public power regionally and nationally. “The plan, developed through extensive collaboration among the federal agencies,

Northwest states and tribes, and found by two administrations to be scientifically sound, should to be allowed to work. We will need to evaluate the impacts of this ruling further and determine our next steps.”

One of those steps could be to appeal the decision to the 9th U.S. Circuit Court of Appeals, but Corwin says it is too early in the process to determine whether that would be prudent.

Corwin called the judge's decision an "in between-type ruling" that appears to cross the line between judicial and executive decision making.

"What are the proper limits of legal authority?" he asks.

The decade-old court battle has left many Columbia Basin stakeholders—including public power utilities—frustrated by the lack of stability in long-term planning for the federal hydro system, which is a reliable and affordable source of clean, renewable energy. That stability would cross over into other interests, too, such as commercial irrigation and river transportation.

"Planning for this has gone far beyond any effort anywhere else for endangered species, and the cost has been carried on the backs of ratepayers," Corwin says.

About 30 percent of wholesale power revenue from the sale of hydroelectricity in the Northwest is spent on salmon recovery. That averages out to about \$800 million a year the Bonneville Power Administration spends on habitat restoration, hatchery operations and dam improvements.

Physical alterations to dams have been ongoing for several years. Fish slides at Lower Snake and Lower Columbia river dams, a spill wall at The Dalles Dam and avian deterrents are a few of the changes made in recent years to improve juvenile fish passage through the hydro system.

The construction phase is complete, says Dennis Schwartz, a fisheries biologist with the U.S. Army Corps of Engineers. The job ahead is to determine whether dam improvements achieve performance standards outlined in the BiOp.

"The Corps has been tasked with getting juvenile fish downriver at a certain rate," Schwartz says.

If data shows fish passage survival rates are being met, it will be paramount in establishing part of the guaranteed



A tube inside a juvenile salmon's mouth administers a slow drip anesthetic, while a technician uses suture scissors to sew up the fish after an acoustic tag was placed inside it.

accountability Redden has asked for in post-2013 BiOp planning.

Testing is scheduled for spring and summer. Spring testing for 2011 was completed in June, but higher than normal river flows this year prevented summer testing.

"There is too much water in the river," Schwartz says. "It is not representative of a normal year."

For a "survival matrix," biologists need two years of good spring and summer data, Schwartz says, noting the 2011 spring tests are valid and will give the Corps its first glimpse in October of post-dam improvement survival rates.

During the testing phase, acoustic telemetry equipment is used to monitor the route fish take to pass a dam and how quickly they get through. Tagged fish can be followed downriver to near the Columbia's estuary, Schwartz says.

While testing is on hold for the summer, above-normal river flow bodes well for fish passage.

"Usually in high water events, survival seems very high," Schwartz says. "We expect that to be the same this year." ■

An Upriver Swim

Fish runs of returning adult salmon have been strong in 2011.

Following a record year in 2010, numbers have dipped, but spring chinook and sockeye salmon are healthy, according to statistics from the U.S. Army Corps of Engineers.

For example, the spring chinook preseason forecast of about 198,000 adult fish passing Bonneville Dam was exceeded by a total of about 205,000, making it the second best run in the past seven years.

The 2011 sockeye forecast predicts the fourth-largest run since 1980.

As of July 24, 184,810 sockeye salmon had passed Bonneville Dam. While that is less than half the number of sockeye at the same time last year, it is a marked improvement from a decade ago, when July 24 counts for sockeye were 114,640 in 2001 and 49,302 in 2002.

More sockeye also are swimming past Lower Granite Dam on the Lower Snake River, the last of eight dams the fish must navigate before entering spawning grounds in Snake River tributaries.

Only 34 sockeye had passed Lower Granite by July 24, 2001. On the same day this year, the number was 1,292.

Most returning sockeye remain in the Columbia and its tributaries, swimming north past the confluence of the Snake near Pasco, Washington.

