Stanford considering the fate of century-old dam threatening endangered trout

By AUDREY DILLING • JAN 29, 2015

(http://mediad.publicbroadcasting.net/p/kalw/files/styles/x_large/public/201501/Searsville-Dam-front-view_2013.jpg)

Seasrsville Dam

WIKIMEDIA COMMONS USER GAZEBO

Listen
0:00

The Searsville Dam is causing big trouble on the peninsula. The 122-year-old, 65-foot-tall dam is closed to the public, hidden away on 1,200 acres owned by Stanford University.

“I think that for years Searsville Dam has been Stanford's well kept, dirty little secret,” says attorney Christopher Sproul.

Sproul represents the two environmental organizations suing Stanford (http://www.mercurynews.com/ci_22473798/stanford-university-sued-alleged-endangered-species-act-violations) over the dam. They say it blocks endangered trout from getting to their breeding grounds – and they want Stanford to do something about it. The university has said it will announce its plans soon, but hasn’t done so yet.

Part of the delay is that Stanford is reviewing a lot of environmental issues happening on the land – the Searsville Dam is just one part of that. But when it comes to the trout, Stanford has three choices: take down the dam; build some alternative passage for the fish to get over or around it; or do nothing.

Attorney Sproul doesn’t like option three. When we talk, we’re standing on the side of a rural road in residential Portola Valley, up the hill from Stanford and up above Searsville Dam. We’re peering down into Corte Madera Creek.

“This is historic habitat for steelhead trout,” says Sproul.

Corte Madera Creek flows down to the dam, then merges with the San Francisquito Creek below it. Up here, the creek cuts through a windy, shady ravine.

“If you're a Steelhead, you're trying to get up into these upper little pockets,” Sproul explains.

I can see right through the crystal-clear water to the gravel on the bottom. This is where the trout want to hide their eggs. This spot is one of the last remaining like it in the area, but the trout can’t get here because of Searsville Dam.

The Steelhead trout trying to get up this creek are a federally recognized threatened species (http://www.nmfs.noaa.gov/pr/pdfs/esa_factsheet.pdf). That means they’re likely to become endangered very soon – and they’re protected by the Endangered Species Act, which means you

can't mess with them. The environmental groups suing Stanford say that's exactly what the university is doing – because the Steelhead can't get over the dam. And they see another problem: Stanford sometimes takes water from the creek to irrigate its campus.

The history of Searsville

If you're wondering why Stanford University owns a dam, here's how it happened.

In 1892, a private company built the dam and created the Searsville Reservoir, hoping to make a new source of water for San Francisco. There was a small problem: the water that pooled up in the Reservoir was undrinkable.

The solution: Searsville Lake! For decades, people flocked there to swim and boat. In the meantime, Stanford acquired the 1,200 acres surrounding the dam to study (http://jrbp.stanford.edu/projects.php) things like local plant life, animals, and air quality. To protect that research, in 1975, the university made the land off-limits to the public.

Today, Searsville Lake is more of a marsh, almost completely full of sediment that people wouldn't want to swim in. Steelhead trout, on the other hand, would love to swim in it – if they could get there. And that's what Sproul says the environmental groups want to see. First, they want Stanford to stop taking water out of the creek.

"And we also want them to allow fish passage past Searsville Dam back up to the upper watershed. [There are] various ways they could do that. Taking out the dam would be the best," says Sproul.

So they're suing the university to make that happen. Stanford has been exploring its options for the past few years.

What does it mean to take down a dam?

Taking down a dam is complicated, especially in the middle of Silicon Valley. Stanford officials declined to be interviewed for this story, so I put my questions to Len Materman of the San Francisquito Creek Joint Powers Authority.

Materman and the JPA are in charge of maintaining the creek area below the dam – the one the trout swim up. It flows through Palo Alto, Menlo Park, and East Palo Alto.

The first to consider when taking down a dam in a residential area is "flood protection," Materman says.

In the case of Searsville Dam, it keeps sediment from filling the creek below it, so the banks are less likely to overflow in a storm.

East Palo Alto has a history of flooding (http://www.mercurynews.com/ci_22300606/east-palo-alto-seek-2-7-million-from) in big storms, as it did in rainstorms this past December. One thing Stanford has said is that taking down the dam could make the next big flood worse. But Materman says there are other ways for cities to protect themselves. And other things to consider.

“I've been kind of aware of some of the potential ecosystem benefits of removing the dam and I agree that there are some benefits to that,” Materman says.

There’s one other big issue, which is that the dam has been around for more than a century now. There’s a marsh up there, with a lot of animals that have come to depend on it, like birds, turtles, and frogs.

Some environmentalists want to save those animals. Others, like environmental Attorney Christopher Sproul, say many of them are invasive – they just make things worse.

And then, of course, there’s the cost of dealing with all this. According to a report by a consulting firm working with Stanford, taking down the dam could cost around $6 million. Building alternative passages for trout around or over the dam could cost up to $2 million.

Doing nothing doesn’t cost anything now. But Sproul says, if Stanford picks that option, they’ll keep fighting.

“It's here in California and close to these major metropolitan areas, we have this incredible wildlife. We can see these fish and a steelhead can jump up to fifteen feet in the air,” he says. “I think to wipe out a fish that can jump over a fifteen foot barrier is, I just think, unconscionable.”

In public statements, Stanford officials have said that “good environmental stewardship” is important to them. They’ve also said that they’re trying to balance research, biodiversity, and the university’s own water needs, as well as logistics and cost.

University officials say they will announce their decision in the near future.

RELATED PROGRAM: CROSSCURRENTS (/PROGRAMS/CROSSCURRENTS)

TAGS: SEARSVILLE DAM (/TERM/SEARSVILLE-DAM) STEELHEAD TROUT (/TERM/STEELHEAD-TROUT)