

Full stream ahead for Lower Owens

Man-made flood should flush a century's worth of debris from rejuvenated river.

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LONE PINE, CALIF. — As blizzards whipped across nearby High Sierra peaks, ecologist William Platts lifted off in a helicopter here and headed north, about 1,000 feet above a river that looked as if it were throwing a tantrum.

Beneath him, the squiggle of green was overflowing its banks, inundating a patchwork of oxbows, marshlands, forests and sagebrush. Culverts were nearly filled to capacity, and mats of dislodged tules and muck hurtled down the river.

"I really like what I see down there," the 80-year-old Platts told the chopper pilot through the headphone radio. "But we'll need three or four more seasonal pulses to kick-start this ecosystem into gear."

The Lower Owens River has flooded for millennia, but this flood was man-made, part of the most ambitious river restoration project in the West. The river mostly disappeared when the Los Angeles Aqueduct opened in 1913, but 15 months ago engineers began redirecting some aqueduct water into the channel.

The flood should flush the recently revived river of a century's worth of cattle waste and debris, add topsoil to its flood plain and spur an awakening of riparian rhythms without harming fish populations. Eventually, a canopy forest will grow along the 62-mile river, and Inyo County officials hope the waterway will support a thriving recreation industry.

But whether the project achieves that potential will depend on three river bosses who rarely agree: the Los Angeles Department of Water and Power, Inyo County and environmentalists whose lawsuit led to a judicial order that launched the 77,657-acre project as mediation for environmental damage from DWP pumps sucking out groundwater.

Some suggest that the effort also might be affected by drought conditions, which could reduce interest in the project that runs on 55,000 cubic feet of Sierra snowmelt a year.



Photo: Brian Vander Brug / Los Angeles Times

Los Angeles Mayor Antonio Villaraigosa takes a canoe tour of the river with ecologist Mark Hill from Ecosystem Sciences.

"If there was not enough water to go around and people were suffering, this project would be the first thing to go," said project consultant Mark Hill, who helped develop the plan along with Platts. "It's sacrosanct now and under a court order. But no one should think it's set in stone. It's not."

Early signs, however, are hopeful. With Los Angeles Mayor Antonio Villaraigosa's support, the DWP has pledged stewardship of the river that until December 2006 existed as a nearly dry riverbed. A few spring-fed ponds sustained fish and beavers, but the channel was mostly choked by weeds and trampled by cattle.

Now, after a year of steady flows, it has become a sinuous oasis fringed with tules, wild rose, grass and sage. By last June, groundwater had recharged and risen faster than scientists had anticipated, and some desert shrubs had died off, making way for stream-side species. Fish -- liberated from their ponds -- were already spreading throughout the river.

Beginning next year, the Lower Owens will be flooded each spring to carry cottonwood and willow seeds along for the ride. The seeds will lodge in sandbars and terraces enriched by decomposing tules and tree leaves. By late next year, ecologists expect to see foot-tall saplings along the river's edge.

In the meantime, wildlife is moving back into the river more quickly than expected. Bobcats are its top predators, and rough-legged hawks patrol the sky. Elk and deer drink from the stream amid the din of croaking tree frogs.

On a recent weekday, biologists watched a great blue heron take flight with a brown trout in its beak. Nearby, wood ducks and rare swans glided over a patch of coffee-colored water.

Still, the rehabilitated Lower Owens ecosystem is far from balanced. It could take 15 to 20 years before the \$39-million project can be declared a success -- or a failure.

The work of gathering data on wildlife, foliage and water flows has barely begun, and one of the best ways to monitor the river's progress is by kayak.

Digging deep with his paddle at a bend in the river on a recent weekday, Hill said: "We have to be patient and work on ecological time, not political time. Some people expect to see significant change overnight. That's not going to happen.

"Our biggest obstacles," the consultant added, "are lawyers and amateurs."

Flood and flush

A year after water began to flow in the Lower Owens River, a controlled flood was used to flush the channel of cattle waste and debris.



Source: Los Angeles Department of Water and Power
Los Angeles Times

Things were particularly tense a week before the DWP began increasing river flows Feb. 14 to rates as high as 220 cubic feet per second.

Warnings that rising water could flood local roads -- including all-important U.S. 395 -- and destroy cattle forage triggered unease among ranchers and elected officials in financially strapped rural Inyo County. Some vowed to seek financial compensation from the DWP.

The fears were understandable because the river has offered up surprises. Normally, the water flows at 40 cubic feet per second -- about the speed of an easy stroll -- and scientists predicted it would run 2 to 4 feet deep. Instead, the current began digging out portions of riverbed 6 to 10 feet deep.

But the pulses of water pushed through the thirsty sprawl of high desert 200 miles north of Los Angeles without incident.

"Looks like it's going to work," third-generation cattle rancher Mark Johns, 57, said as a nearby team of ecologists recorded the depth, temperature and oxygen levels of a stretch flowing through acreage he has leased from the DWP since 1967.

"If my grandfather was still around, he'd stomp on his hat and run everyone out of here," Johns said. "Personally, I think it's a good project. Probably."

Ranchers and DWP officials warily watched the man-made flooding, and separately, Sierra Club and Audubon Society activists chronicled the flood with flyovers in airplanes and stream-side inspections.

During his recent helicopter flight over the Lower Owens, ecologist Platts surveyed the miles of glistening flood plain below with a satisfied smile.

"It will be some time before the river can sustain commercial enterprises like fishing, hiking, kayaking and bird-watching concessions," he said from the cockpit. "But average Joes like us can still have a wonderful time just as it is."

About a week after Platts' flight, DWP officials began slowing the flow to its usual speed, and the river has started returning to its banks. The Lower Owens River is again a collection of lazy loops and squishy meadows, flanked by the High Sierra on the west and the White and Inyo mountains on the east.



Photo: Brian Vander Brug / Los Angeles Times

Scientist David Varner of Ecosystems Sciences paddles a canoe on the Lower Owens River, taking in the riparian and wetland ecology. The riverbed was very nearly dry until more than a year ago when aqueduct water began being redirected into the channel in an ambitious restoration project.



Photo: Brian Vander Brug / Los Angeles Times

Wispy shore grass bends in the breeze along the banks of the Owens River near Lone Pine. Man-made flooding has helped kick-start the ecosystem and scientists are hoping that seasonal flooding will create a lush forest along the 62-mile-long river.



Photo: Brian Vander Brug / Los Angeles Times

The 77,657-acre restoration project runs on 55,000 cubic feet of Sierra snowmelt a year.



Photo: Brian Vander Brug / Los Angeles Times

Inyo County officials hope that eventually the Lower Owens River will support a thriving recreational industry.



Photo: Brian Vander Brug / Los Angeles Times
Architect/Ecologist Zach Hill of Ecosystem Sciences uses a laser range-finder to help map water levels along the Owens River near Big Pine.



Photo: Brian Vander Brug / Los Angeles Times
Shorebirds fly along the Owens River delta. Although wildlife is moving into the area more quickly than expected, the ecosystem is far from being balanced.



Photo: Brian Vander Brug / Los Angeles Times

Nells Rotchstein Jr. sits atop his horse on a bluff overlooking a grazing area on the Owens River in Lone Pine, where he runs cattle. The recent flooding had some ranchers on guard because high waters could potentially destroy cattle forage, but the event passed without incident.



Photo: Brian Vander Brug / Los Angeles Times

Fisherman Alex Ortiz of West Covina tries his luck along the banks of the Owens River in Lone Pine. Ortiz finished his work as a contractor for AT&T and spent the evening fishing with a co-worker.



Photo: Brian Vander Brug / Los Angeles Times

It's almost sunset in the Lower Owens, where the work of gathering data on the burgeoning wildlife, foliage and water flows has only just begun.