

Irrigators use plentiful water year to push for storage

By SEAN ELLIS
Capital Press

BOISE — Treasure Valley irrigators are using this year's extraordinary water supply as an example of how additional storage capacity could benefit the Boise Valley.

"Additional storage is not a new topic and one that really needs more than just a study on; it needs to happen," Treasure Valley Water Users Association President Clinton Pline said in an opinion piece released to the media this week.

TVWUA represents about 320,000 acres of irrigated land in southwestern Idaho.

Total precipitation in the Boise River Basin set a record this year and runoff into the system's three reservoirs is expected to total 2.5 million acre-feet in 2017, well above the average of 1.3 million acre-feet.

The Boise River system's Arrowrock, Anderson Ranch and Lucky Peak reservoirs have the combined capacity to hold 950,000 acre-feet of water.

Pline pointed out that 600,000 acre-feet of water has already been released from the reservoir system this year to prevent flooding and an additional 2 million acre-feet of expected runoff has yet to reach the reservoirs.

"The bottom line (is that) flooding could get a lot worse for Treasure Valley residents as warmer temperatures emerge," he said.

According to Brandon Hobbs, project manager for the U.S. Army Corps of Engineers' Boise field office, the Boise River is running at 8,500 cubic feet per second at Glenwood Bridge, an official measuring site.

That has caused minor flooding in some areas.

Hobbs said there is a 10 percent chance the river could exceed 10,000 cubic feet per second this year, which would best the previous record of 9,800 cfs and cause more significant flooding.

During a 100-year flood event, the river would reach 16,600 cubic feet per second.

Additional storage capacity would help prevent flooding in the Treasure Valley "since we would be able to capture more water and allow less to pass through or be released downriver for flood control," Pline said.

It would also provide more water for urban and rural irrigation uses, he added. "As our population expands in the valley, there will be more of a demand for irrigation water from all interests."

The Treasure Valley's population of 646,000 is projected to reach more than 1 million by 2040.

Idaho Water Resource Board Chairman Roger Chase agreed that this year's plentiful water supply demonstrates the possible benefits of additional storage capacity in the Boise basin.

"We certainly recognize the need for more places to store more water in the Treasure Valley and we are supportive of efforts to do that," he said.

A Corps study released last year determined the benefits of raising Arrowrock Dam by up to 70 feet, which would create 100,000 acre-feet of storage, did not equal the cost.

Chase said the study was focused heavily on flood control, and he believes it didn't put enough emphasis on the economic benefits of having that much more water.

"I was disappointed that the Corps wasn't able to move forward with that project," he said. "But we are still looking at ways to (increase capacity)."

Biologists: Too soon to know whether killing barred owls helps spotted owls

By ERIC MORTENSON
Capital Press

Federal wildlife researchers killed 737 invasive barred owls in 2015-16 in an ongoing experiment to determine if removing them will aid the recovery of Northern spotted owls, the bird whose threatened status was at the center of the Pacific Northwest timber wars.

Spotted owl populations have continued to decline rapidly despite environmental lawsuits, protection under the Endangered Species Act and logging restrictions in the old growth timber habitat they favor. Barred owls, which are larger, more aggressive and feed on a wider variety of prey, have taken over spotted owl territory throughout their range in Oregon, Washington and Northern California.

Scientists with the U.S. Fish and Wildlife Service and U.S. Geological Survey, partnering with the Forest Service and Bureau of Land Management, agreed to an experiment: Kill hundreds of barred owls in the Cle Elum area of Washington, the Oregon Coast Range and Klamath-Union-Myrtle areas of Oregon and on Hoopa Valley tribal land in Northern California.

In Oregon and Washington, field crews shot 642 barred owls using 12 gauge shotguns and captured one owl alive, turning it over to the Oregon High Desert Museum in Bend. In Northern California, where early research by the late Lowell Diller of Humboldt State University documented that spotted owls reclaimed nesting areas after barred owls were removed, researchers killed 95 of the competitors.

High stakes

Ranchers and farmers in the Pacific Northwest have a stake in Endangered Species Act and wildlife restoration projects undertaken by gov-

Northern spotted owl study areas*

(Results for March 2015-Dec. 2016.)

Study area and treatment type	Area (acres)	Spotted owl sites	Barred owl sites
1. Cle Elum			
Treatment	149,250	46	113
Control	165,560	31	110
2. Coast Ranges			
Treatment	149,990	45	106
Control	268,105	58	176
3. Klamath/Union/Myrtle			
Treatment	193,480	84	144
Control	172,475	78	124

*A fourth study area is in Northern California where barred owls are being removed from Hoopa Valley tribal land.



The spotted owl was listed as threatened under the Endangered Species act in 1990. The two main threats to this owl are habitat loss and competition from the barred owl, a non-native species.

Sources: U.S. Geological Survey, U.S. Fish & Wildlife Service
Alan Kenaga/Capital Press



ernment agencies. They often referred to the potential rangeland restrictions that might accompany an ESA listing for greater sage grouse as "the spotted owl on steroids." They've also dealt with wolves spreading into the four states and attacking livestock.

Northern spotted owls were listed as threatened under the ESA in 1990, which greatly reduced logging in the Pacific Northwest, especially on federal land. Their continued decline could result in their being listed as endangered, which might bring even more restrictions on human activities in the woods.

So far, nothing has worked. The Northwest Forest Plan set

aside 18.5 million acres of the older forests that spotted owls prefer. "But then the barred owl emerged as a threat capable of sweeping through the entire range of the Northern spotted owl," researcher Diller wrote in a 2013 article.

Barred owls are from the East Coast and appear to have moved west over the decades, following development. They are 15 to 20 percent larger than spotted owls, which Diller called "the human equivalent of a heavyweight going up against a middleweight."

Working on forest land owned by Green Diamond Resource Co., and with federal permission, Diller and fellow researchers killed dozens of

barred owls over five years and documented the return of spotted owls. The work had startling results. Spotted owls "rapidly re-occupied" areas where barred owls were removed, Diller wrote. In one case, a female spotted owl returned to a nesting site seven years after she'd been last seen.

Overall, Diller's work showed "removal of barred owls in combination with habitat conservation could slow or even reverse population declines at a local scale."

'Sophie's Choice'

Researchers don't know if that success will be repeated. "It's way too early to say,"

Online

The owl removal progress report: <http://bit.ly/2nMGOKY>

The late Lowell Diller's 2013 article about the ethical dilemma facing wildlife biologists taking part in the barred owl removal project. <http://bit.ly/2pLE4Kh>

said Davie Wiens, a raptor ecologist with USGS. Diller's work was "definitive evidence" that spotted owls' decline was reversed on Green Diamond Resource land, but conditions elsewhere are much different, Wiens said. The Oregon Coast Range, for example, has a much higher density of barred owls, he said.

Even if it does work, land managers might be required to revisit areas and shoot more barred owls to keep them at bay.

Lingering in the background is whether wildlife biologists should be killing barred owls at all.

"It is gut-wrenching," said Wiens, the USGS raptor ecologist. "It is for all of us."

He said barred owls are an apex predator that has "completely taken over" spotted owl habitat. "This experiment is a way to get a handle on that."

Lowell Diller, who died in March, once called it a "Sophie's Choice" dilemma.

"Shooting a beautiful raptor that is remarkably adaptable and fit for its new environment seems unpalatable and ethically wrong," he wrote in Wildlife Professional magazine in 2013. "But the choice to do nothing is also unpalatable, and I believe also ethically wrong."

If human action such as logging caused major alterations to spotted owl habitat, and development paved the way for barred owls to move west, "Don't we have a societal responsibility to at least give them a fighting chance to survive?" Diller asked.

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