



*Calvin Hickey and Bill Lillibridge, reviewing options.*

## IDAHO CONSERVATION PARTNERS WORK TO FIX WEISER RIVER LEVEES



*Flooding persisted for months after the initial event.*

By Steve Stuebner

In early February 2017, it warmed up after 2 months of severe winter weather in Weiser, Idaho.

Deep snow covered the ground everywhere. The river was frozen with thick ice. When the weather warmed up rapidly, things began to melt, fast!

The Weiser River rapidly rose to flood stage, and the ice-covered river spread out, flooded farm fields and low-lying areas around the city of Weiser.

Rain falling on deep snow caused roofs to collapse. It was a difficult time.

Farmer Calvin Hickey, chairman of Flood

District #3, worried about the damage and erosion that the ice flows would cause to the river banks and levees.

“When it’s moving, it scours the banks,” he said. “Where it gets plugged up, that’s where it causes the damage, but when it’s moving, it’s an awesome thing to see. It’s rumbling, crunching, moving, there’s trees flowing by, and ice ... it’s just a solid flush of ice.”

Vicki Lukehart, district administrator for the Weiser River Soil Conservation District, worried about the damage as well.

“It was heart-breaking when we first saw this,” she said. “This whole area was covered with ice, it looked like a foreign

planet, it was indescribable. But it was heartbreaking because it was a beautiful structure ... we just look forward to repairing it and getting it going again.”

Several years ago, the Weiser River Soil Conservation District created a large wetlands area to filter out sediment from an irrigation canal as part of a \$456,000 Section 319 water quality project funded by the Idaho Department of Environmental Quality and the Environmental Protection Agency.

“The whole dike in here has been damaged in several areas,” she said. “The trees have been shaved off, as if they never existed, you’ve never been able to see through here.”



**LEVEES cont. from Page 1**

The Weiser River spiked two more times in the spring of 2017, causing more damage, and then the river flow finally started to recede. At this point, it was time for Calvin Hickey to take stock of the damage to the river banks and the levees that protect lands from flooding. Starting at the Galloway Diversion, Hickey surveyed the damage.

Snake River Horizons, a drone video company with digital marketing services, documented the damage with aerial drone video footage to help Hickey get a fix on how much damage had occurred.

Through the survey, Hickey found numerous levees that had been damaged or breached in a 10-mile reach of the river. At a site upstream of the Unity Bridge, the river had cut away the levee like a knife.

“Well this used to be complete roadway, and the river has cut in during the ice and flood,” Hickey says. “It’s eroded this levee away, and it’s kind of typical of what’s happened in several places where it’s done that.”

Closer to Weiser, aerial footage showed the damage to the sediment-retention ponds and the levees by Twin Bridges.

“We are very proud of this project,” Lukehart said. “It was a beautiful project before the flood hit and it will be again. The Payette Ditch Co. will get it back to the original beauty that it was. Everything is fixable.”

In May, Hickey and Lukehart reached out to multiple state and federal agencies for help with funding and technical assistance to repair the damage. “It takes money.



Flood waters washed away a levee road on the Weiser River. Photo credit Snake River Horizons, 2017.



Several years earlier the Weiser River SCD created a sediment-capturing wetlands project that was inundated by flooding in 2017.

That’s why we’re all here, and I’ve been out here with NRCS, and just about any agency I can think of to come out and take a look, get involved, and help us get the money. The flood district is on a pretty short, limited budget,” Hickey said.

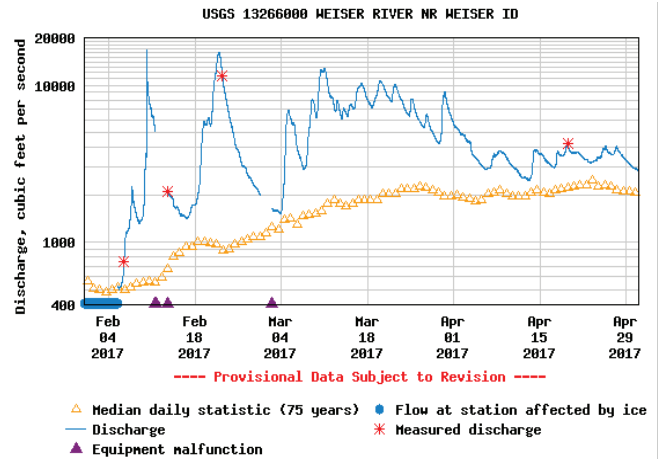
Washington County had been designated a disaster area by Gov. Otter during the winter to assist with getting federal funding to repair damaged infrastructure from the ice flows and floods.

They hoped to get funding from the Federal Emergency Management Agency (FEMA), and possibly the U.S. Army Corps of Engineers, which had built the Weiser River levees in the 1960s.

On a sunny day in May, Lukehart invited the Idaho Soil and Water Conservation Commission and the Natural Resources Conservation Service to tour the levee damage to see what resources they could provide.

The Conservation Commission frequently assists local soil and water conservation districts with projects statewide. They were eager to help. Commission administrator Teri Murrison and Delwyne Trefz, district support services specialist, attended the tour and were concerned about the damage.

“I think with the amount of damage we’ve seen here today, it speaks to the scope of the work that needs to be done,” Trefz said. “It’s a very broad scope. It’s going to take a partnership, going to need some financial assistance, need some pots of money.



“They recognize that we can’t just in slapstick fashion go out and throw band-aids on these problem areas out here. We need good, sound engineer science-based solutions. We can offer that.”

Understanding the urgent need, the Conservation Commission immediately offered 200 hours of technical assistance via staff engineer Bill Lillibrige. He could draw up engineering plans for repairs and handle the permitting with multiple agencies.

The two men met on the river bank to plan the next steps. “So where do we start? What do I need to do?” Hickey asked.

## LEVEES, cont. from Page 2

“Well, the first thing is to figure out where we want to do work, and what needs to be done,” Lillibridge said. “We need to prioritize where our money goes and where we want to do the work. We can’t do it all in a year. And we might not have the funding to do it all like we’d like to do it, so it’s back to prioritizing.”

“I think I’m looking at repairing the levees that either breached or had severe damage, I think that’s what the landowners are looking for, and getting it done before the next season comes and the flooding comes again,” Hickey said.

And that’s what they set out to do. In the summer, Lillibridge did the engineering drawings and permitting to repair about 10 damaged levees and the sediment ponds area. They worked on getting funds from FEMA, but as time went on, the Hurricanes in Texas and Florida diverted the agency’s attention. They would have to wait.

In the meantime, in October, Hickey was ready to get to work on the repairs. The permits only allowed a short window of time to work in the river to rebuild the levees and river banks.

He started on shoring up a tall river bank that’s been eroded by high water and ice flows. The Sunnyside Canal runs on top of the bank. “We’re trying to repair that bank. Our canal system is located right on top of there. If we lose any more of that bank, we’ll lose the canal,” he pointed out.

Hickey has been working with a contractor to install rock barbs along this section of the river. The rock barbs protect the bank, and slow the river down as it passes through the rocks and willows. “It makes a dead pool, when the water comes down and hits it, and then it slows down until it hits another one, and the sediment drops out,” he said.

The flood district has installed a whole series of rock barbs in this area to protect the vital river bank next to the Sunnyside Canal.



*Aerial footage captured by Snake River Horizons shows the flooding, damaged sediment-retention ponds, and levees by Twin Bridges.*

Above the Unity Bridge, Hickey worked with a contractor to restore the levee along the Weiser River and integrate a series of rock barbs in the riverbank to slow down the water and protect the bank from the strong river current and future ice flows. Willows will quickly grow back on the river bank and help anchor the levee.

An aerial view shows how the contractor followed the engineering design provided by Bill Lillibridge. The river current hits the toe of the rock barbs, slows down, and forms an eddy behind it the rocks, thereby reducing streambank erosion overall.

By the Twin Bridges area, Hickey worked with a contractor to restore the levee on both sides of the river, following the Commission’s engineering designs.

“He took all the material in the ponds, came in with a cat and cleaned it back up, filled the hole, had 19 loads of this big rock and put some gravel on top to keep a nice road bed and bring it back up to grade,” he said.

Lillibridge designed the river bank repairs so that the new levees would meet Army

Corps of Engineers standards, an important consideration for any future damage that might occur. An official with the

*LEVEES, cont. on Page 4*

## LOW INTEREST CONSERVATION LOANS

Sprinkler Irrigation  
No-Till Drills  
Livestock Feeding Operations  
Fences  
Solar Stock Water  
Pump Systems

INTEREST RATES AS LOW  
AS 2.5%

TERMS 7 TO 15 YEARS



[www.swc.idaho.gov](http://www.swc.idaho.gov) • 208-332-1790



*LEVEES, cont. from Page 3*

Corps liked the project, Hickey said.

“Well, the lady from the Corps came and inspected it, and she thought it looked really good,” he said. “In fact, she said it exceeded Army Corps standards. She was tickled to death to see this big armored type rock here. I felt good about it, real good.”

The Payette Ditch Company also helped clean up the sediment ponds adjacent to the levee, so the water quality project will function correctly.

“This wetland was put in to reduce the sediment and the phosphorous and the nitrogen before it dumped into the Weiser River. And clean up the Weiser River for the TMDL established by EPA,” Lukehart explains. “The integrity of the pond is fine. It’s fixable ... definitely fixable.”

Both Lukehart and Hickey appreciated the engineering assistance provided Bill Lillibridge and the Conservation Commission.

“It was a huge help for him to do all the

engineering,” Hickey said. “He came down and looked at all the sites. He did all the paperwork and technical work, got the permits, that was huge. He’s been here and given me personal advice a couple of times, that was big, too, you know, it’s nice to have that professional opinion. I’ve done a lot of this and I’ve learned a lot ... but it’s nice to have that professional opinion.”

Hickey managed to pay for the highest priority projects with Flood District funds and landowner cost-share funds. He got more than five areas repaired.



*Hickey directs a contractor installing rock bars to protect against future floods.*

“Thank God that the flood district actually had some money,” Lukehart said. “Because if we had waited for money from FEMA it wouldn’t have come because they had quite a few things to address because of the hurricanes and stuff in Florida, and that put us on hold. Then, here we are in December, and we’ve gotten a lot of things repaired we couldn’t wait. The flood district got a lot of work done when they had to get it done.”

Adds Hickey, “Oh yeah, I feel real good about what we got done for the money we’ve spent. These two sites here, any flooding that happens here goes into the town of Weiser, both sides, so I’m tickled to death to have these repaired.” □

*Steve Stuebner is a regular contributor to Conservation the Idaho Way.*



**COMMISSION**

- H. Norman Wright, Chairman
- Jerry Trebesch, Vice Chairman
- Leon Slichter, Secretary
- Dave Radford, Commissioner
- Cathy Roemer, Commissioner
- Teri Murrison, Administrator



SOIL & WATER  
CONSERVATION COMMISSION

322 East Front Street, Suite 560 • Boise Idaho 83702 • P: 208-332-1790  
F: 208-332-1799 • [info@swc.idaho.gov](mailto:info@swc.idaho.gov) • [www.swc.idaho.gov](http://www.swc.idaho.gov)

*Conservation the Idaho Way: Sowing Seeds of Stewardship*