Connecting the Drops

Transcript: Stream Management Intersects with Flood Recovery on the St. Vrain

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Colorado’s water law is almost as old as the state itself, and since its inception, it has centered on the idea that water is most valuable when it’s put to use out of the river.

Back in the 1970s people began to recognize the need to create water rights that would allow water to remain in the river to help protect ecology. Fast forward to today when the environmental movement and a multi-billion-dollar recreation industry based around rivers in the state, are pushing an even greater recognition of the need to keep water in the rivers.

In 2015, The Colorado Water Plan set forth a road map to protect and enhance stream flows through stream management planning. As Maeve Conran reports for Connecting the Drops, for the St. Vrain River on Colorado’s Northern Front Range, stream management is intersecting with stream restoration from the floods of 2013.

On a sunny June afternoon, a crowd of people gather by the banks of the South St. Vrain Creek outside of the town Lyons. LaVern Johnson has the honor of cutting the ribbon on a new bridge being unveiled today. The previous one was destroyed five years ago in the floods that devastated much of Boulder County.

LaVern Johnson has lived in Lyons all her life—that’s 91 years. She has a lifelong relationship to the river ... in fact the park in town that is a favorite spot for white water enthusiasts and tubers is named after her.

“I used to come down and swim in the river and wade and we’d have a picnic there by the park, I’d just hate to be without it.”

She’s been evacuated several times over those 9 decades due to various floods, but the one that happened in 2013 was the worst she’d lived through.

“It was pretty scary; it’s hard to believe that water could do so much damage.”

The damage to this part of Colorado was extensive. More than 17 inches of rain fell in 8 days, causing streams and rivers like the St. Vrain to burst their banks, destroying homes and infrastructure in their wake.

The unveiling of this new bridge is an opportunity to showcase much of the flood restoration work that has been done on the St. Vrain river itself, and to contrast that with damage that still remains.

Looking upstream from the bridge, you can still see much of the debris from the flood ... large piles of wood and sand and rock. The river is confined to one channel, without much opportunity for it to expand beyond the floodplain.
Looking downstream it’s a different story says Eric Lane, Director of Boulder County Parks and Open Space.

“If you follow the water down and you think about rising water levels, there’s an opportunity for water to slip out of the main channel and into side channels, which is important, not just from a resiliency standpoint and a flood protection standpoint, but it creates a lot of variable habitat in the full width of the floodplain in a relatively narrow canyon-constrained environment.”

This type of flood recovery work not only repaired damage done by the flood, but it is part of long-term planning for the river.

Sean Cronin is the Executive Director of the St. Vrain and Left Hand Water Conservancy District, that’s the organization that is spearheading the stream management plan for this river. Cronin says the type of river reconstruction that is happening on the St. Vrain is at the nexus of flood recovery and stream management planning.

“If we had done a stream management plan initially, that more than likely would have been identified as something that would be helpful to the overall environment, and quite frankly helpful to be more resilient during natural disasters.”

A goal of the Colorado Water Plan is to develop stream management plans on 80 percent of locally prioritized rivers in the state. The planning is done through conservancy districts like the one for the St. Vrain, or through basin roundtables. Either way, this is an opportunity to find collaborations to improve the health of the rivers says Sean Cronin.

“Stream management plans can be best described as part social science, part science, so the social science is a big piece of it, getting stakeholders together and saying, what is it that you need, what is it that you see, what is it that you envision for this river then allowing the scientists to also do their work and saying the hydrograph has this particular curve to it, but in order to have a healthy stream system, you need a different hydrograph, and then getting back to the community saying what are we collectively going to do about this?”

Under more ideal circumstances, a stream management plan would have been completed before the 2013 flood, but that choice wasn’t available says Cronin.

“Mother nature didn’t cooperate with us and gave us the flood prior to doing the stream management plan, so now we’re pivoting from stream recovery to long-term thinking.”

And the long-term thinking is, how can the stream meet the various needs of all stakeholders, both those who need to extract the water from the river, like growing towns, agriculture and industry, and those who want to see it stay in the stream like environmentalists and the recreation industry. And asking the question, ‘does management of the river need to change to accommodate all those different needs?’
Cronin says they’ll invite community participation throughout the entire process. But engaging the wider community in often complex water issues is notoriously difficult. But Cronin says he sees the 2013 flood as a time of awakening for many on the need to understand the river.

“So we want to capitalize on that awakening and engage those members of the public. So we’ve seen people in the community be more involved in stream planning ideas, more than we did pre flood.”

The stream management plan for the St. Vrain is just in its early stages and in the coming weeks the conservancy district will be considering proposals from consultants. Once a consultant is chosen, they will work with the District for the next year using their scientific and technical expertise to determine the environmental, recreational and other needs of the basin.

Further upstream, as he surveys the portion of the South St. Vrain Creek that has been restored, Eric Lane of Boulder County Parks and Open Space echoes Cronin’s hopes that all stakeholders will come together to find solutions for the river in the face of climate change, certain drought, population growth and the likelihood of another flood.

“What remains to be done from a stream management standpoint are more robust conversations with various stakeholders throughout the community, not just about the landscape, but about how we use water as individual entities, but collectively how we can work together to better use the limited water resources we have to meet various needs we have like wildlife, municipal needs, industrial needs, agricultural needs.”

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