



BEER, FISH AND WATER RESTORATION CERTIFICATES: A NEW WAY TO RESTORE RIVERS IN MONTANA

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This fact sheet series highlights innovative ways that ranchers and family forest owners are prospering from protecting and enhancing ecosystem services on their land. Ecosystem services are the benefits people receive from nature such as water quality, wildlife habitat, and carbon sequestration.

In many places around the U.S. West, water is overallocated, harming not only water quality and native fish but also communities that make a living from river recreation and tourism. In Montana, where irrigation withdrawals leave nearly 3,000 miles of trout streams chronically dewatered, a new type of water deal gave the state's biggest brewery, also a big water user, a way to put millions of gallons of water back into a long-dry creek to restore native fish while compensating landowners for water they were able to forgo. The deal was sealed by two non-profit organizations and a new kind of entrepreneur: an "eco-asset broker."

PARTNERS

Big Sky Brewing Company, in Missoula, MT, acts as the "buyer" of water rights in these transactions. The Prickly Pear Water Users Association, comprised of landowners (usually ranchers) who irrigate pasture, act as the "sellers." There are three entities that make this transaction possible: (1) Bonneville Environmental Foundation (BEF), a market-focused environmental nonprofit, purchases ecologically valuable instream flows from water rights holders, converts them to Water Restoration Certificates (WRCs), and sells them to willing buyers. BEF was created by the Bonneville Power Administration and environmental organizations to help offset the impacts of BPA dams on fish and fish habitat; (2) The Clark Fork Coalition, a nonprofit conservation organization focused on the Clark Fork River Basin in western Montana, worked with landowners in this case to secure the instream flows and now ensures compliance as a third party verifier; (3) Lotic LLC, a water rights marketing company, matches buyers and sellers of WRCs and facilitates transactions.



THE PROGRAM

In 2009, BEF launched a water restoration certificate (WRC) program to convert water rights it had acquired into something it could sell on the open market. Each WRC is worth 1,000 gallons of water and costs \$1. The following year, Big Sky Brewing became one of BEF's first customers, signing a three-year contract for WRCs worth 10 million gallons – the same amount of water Big Sky needs to

brew three years' worth of beer. The Clark Fork Coalition and BEF secured the instream leases and converted them to WRCs.

Lotic founder Chris Corbin brokered the deal between BEF and Big Sky. After recruiting Big Sky as a buyer, he helped them understand what they were actually buying.

"We're trying to quantify a complex ecosystem in a product," Corbin says. "Not easy. If you go to a store and buy a six-pack of beer, you know exactly what you're getting." He also "markets" to regulatory agencies and other environmental firms that may have influence over this type of transaction.

All that water is going back into a two-mile stretch of Prickly Pear Creek, a tributary of the Missouri River near Helena; the Creek is important for native fish, but sections had run dry for decades.

OUTCOMES

BEF has sold enough WRCs for its Prickly Pear Creek project (to Big Sky and other buyers) to restore more than 500 million gallons in two critically dewatered miles of the creek. The Creek no longer runs dry during late summer.

CHALLENGES

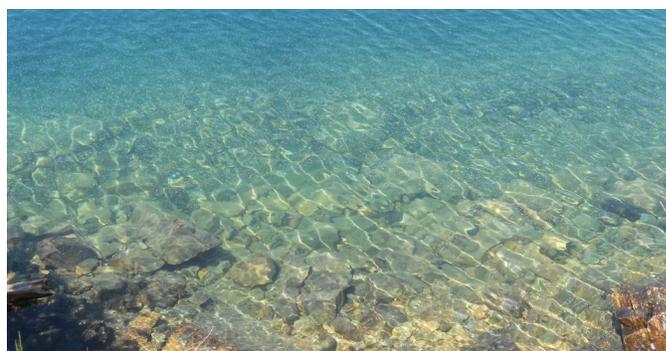
WRC transactions are time-intensive, which adds to their cost. Their complexity can also make WRCs a tough sell for potential buyers. This was the first of Big Sky Brewing's many sustainability initiatives that didn't directly increase the company's profitability. "It's much more challenging to dedicate resources, time and money to a product that's not actually improving your bottom line as a company," Corbin explains. However, a reputation for improving the fishing is smart marketing in Montana, where millions of tourists come to fish. The label on Big Sky's "Trout Slayer Ale" educates consumers about the brewing industry's impact on water use and the WRC program.

Like other ecosystem service markets, the market for WRCs is still fairly localized and fragmented. Aspects of more functional markets – price transparency, many buyers, many sellers, and readily available information about products – are still evolving. Some degree of product standardization will also help, says Corbin, and federal or state governments may have a role to play. "Ecosystems are so incredibly complex, you have to standardize what you're actually trading to some extent."

Finally, not all water rights – or WRCs – will deliver ecosystem value. "It takes a unique opportunity, like critical spawning habitat for salmon or trout," Corbin says. On the other hand, a small amount of water on a small tributary could have a huge ecological effect: "You can buy one water right on a little creek and secure the entire in-stream flow for that creek."

FUTURE PROSPECTS

Corbin is optimistic about innovations like WRCs and other water market instruments. He believes there will be plenty of demand, though the "product" must become less complicated to buy and sell. The price will need to be affordable for buyers, yet high enough to motivate landowners with water rights in ecologically important waterways to participate. The price also has to support the efforts of key intermediaries who put these deals together – from recruiting landowners to brokering transactions and assuring compliance. "There has to be a profit made somewhere along the line for these markets to be sustainable," Corbin says. "Markets are pretty good at becoming efficient whenever opportunities emerge." As this case suggests, river restoration may have allies in beer drinkers: at least six more breweries have signed up with BEF, following Big Sky's lead.



LEARN MORE

BEF on WRCs: <http://www.b-e-f.org/our-solutions/water/water-restoration-certificates/why-wrcs/>

Lotic: <http://loticmarketing.com>

Big Sky Brewing: <http://www.bigskybrew.com/Home>

Clark Fork Coalition: <http://www.clarkfork.org>

For more information about the project and to read the full fact sheet series, go to:

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