## **Good Work in Local Streams**

## By Bruce Rieman

There's been a flurry of work in and around the streams in the Clearwater Valley recently. Most of it is good news for those interested in native fish and the other natural resources tied to our streams and lakes. Here's a brief rundown.

In addition to two terrestrial species (grizzly bear and Canada lynx), we have one aquatic species in the Clearwater basin that is officially listed under the Endangered Species Act, the bull trout. We also have a species that is considered "sensitive" or "of special concern" (depending on who you ask), the westslope cutthroat trout. Both have supported important fisheries in the past, but both have been having a tough time in many places in recent years, particularly when we have limited snow pack, hot weather and low summer flows like 2007. Both species are hampered by barriers to upstream migration from the lakes to their spawning areas in headwater streams. Road culverts and small dams are problems around here. Irrigation diversions that can shunt downstream migrating juveniles into fields and pastures (that obviously are not very good habitat for young fish) are also troublesome. But recent efforts by Montana Fish Wildlife and Parks (FWP), the Forest Service, and some of their partners are helping change the balance in favor of the fish.

FWP recently teamed up with the Big Blackfoot Chapter of Trout Unlimited (BBCTU), some local contractors, and irrigators to to complete improvements on two irrigation diversions on Morrell Creek. One of these projects is clearly visible below the bridge where Whitetail Drive crosses the creek. The new diversion has a trash rack and more natural rock check structure that allows fish and stream bedload to move naturally, while allowing irrigators to get water. The site also will include a "fish screen" that will allow a controlled flow of water into the ditch, but will sift small fish out of that flow and shunt them back down to the mainstream and on their way to Clearwater River and the lakes. Some will return to the tributaries as spawning adults several years down the road. Because, under even ideal conditions, only a small percentage of juvenile fish ever survive to maturity and then return to the creeks to spawn, every effort to reduce unnatural losses can be important to the long term survival of a population or the number of fish available to fishermen.

Similar recent projects led by the Forest Service include the replacement of old road culverts that were barriers to some of the upstream migrations of bull trout, cutthroat, and other species. Often stream crossings for older roads or highways were constructed to pass water, but not necessarily fish, at least not upstream. They weren't intended to be barriers to migrating fish, it just wasn't an issue that was very well understood. As a result, many culverts are small (to save costs), steep, and relatively smooth (to pass water quickly) and the mouths are rip- rapped with large rocks to minimize erosion and make sure high flows don't tear it all out. The problem is that those high velocities and smooth pipes can stop fish headed in the other direction and as a result the success of adults headed back to spawn, or juveniles not yet large enough to risk the trip to the lake, can be poor. The Forest Service got some helpful funding in recent years and you can see some of the results on the Clearwater Loop, and Placid

Creekroads where old culverts have been replaced with a new bridge or "bottomless arch" that returns the streams to more normal flows and bottom characteristics friendly to migrating fish.

There are other projects on the drawing board. All the permits and paperwork are in place to provide fish passage structures at several small dams on the Clearwater River, and biologists continue to search for funding and other help to work through the priority of migration barriers across the Clearwater watershed.

Fishery biologists with the Forest Service, FWP, BBCTU, and other partners have been replacing culverts that are migration barriers and restoring habitat in and along streams for years. It's an expensive process, and so progress can be slow. Sometimes it's hard to know whether it's paying off. Many native fish populations are only remnants of what they used to be. But recent results from ongoing monitoring suggest that maybe progress is being made. Cutthroat populations in the larger Blackfoot River basin have shown positive trends in recent years, and bull trout recently showed up in at least one stream in the Clearwater where they had been missing in the not too distant past. That's good news, and it shows that with a little help in the right places these populations still have the potential to rebuild.

Support for restoration of migration barriers and habitat is often limited, and biologists are constantly searching for funding in bits and pieces to continue the work. The Blackfoot Clearwater Stewardship Project and Senator Tester's proposed legislation known as the Forest Jobs and Recreation Act (http://tester.senate.gov/forest) include support for forest and stream restoration that could help create more work for local contractors and natural resource benefits linked to both forests and streams. Restoration of fish passage barriers would be an important part of that effort, and the current work indicates it would be a good investment.

Conserving natural resources like fish and wildlife while pursuing the social and economic benefits from timber harvest, the irrigation of lands for agriculture, or the development of new highways, homes and businesses is often a challenging and contentious process. We've learned a lot along the way and we've done it better in some places than others. It's encouraging to see the progress in the Clearwater and to know a lot of folks are working hard to get us further down that road...or up that stream.

The Clearwater Resource Council works in the community and with the natural resource agencies to further the discussion of resource issues in the Clearwater Valley, to support sustainable natural resource development, and to conserve the unique values and lifestyle in the Valley. You can learn more at www.crcmt.org.

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