Upper Salmon Basin Watershed News NEWS ABOUT RESTORING FISH HABITAT IN CENTRAL IDAHO SPRING 2011

BPA Funds Grazing Plan for Carmen Creek Ranch

When local landowners agreed to partner with the Upper Salmon Basin Watershed Program to fence off the creekside portion of their Carmen Creek ranch, they had one condition: that the acreage enclosed by the five-pole jack fence would still be available for fall grazing when their cattle were



This BPA-funded riparian fence was completed on Upper Carmen Creek in the fall of 2010.

moved from the mountains back to their home ranch.

Riparian fences are usually designed to keep livestock out of sensitive stream areas, not fence them in. Project funders like Bonneville Power Administration typically require a generous setback from stream banks and no livestock grazing. The benefits of this protection are well-documented. Properly functioning riparian habitat offers streambank stability, shade to cool water, woody debris to create pools and other habitat enhancements that benefit fish.

But there may also be advantages to including grazing in the landscape. According to Lemhi County Agriculture Educator Shannon Williams, "Good management can help restore riparian areas and allow us to utilize them at the same time." Williams, a member of the Upper Salmon Basin Watershed Program Advisory Committee, emphasized the need for managed grazing during the committee's review of the proposed fencing project. Successful management includes a grazing prescription that addresses the timing of grazing, duration of use, and grazing frequency.

In an effort to better understand the impacts of short-term grazing in the stream corridor, Bonneville Power not only funded the 8,000 foot riparian fence (pictured above) but also provided funds to conduct a five-year grazing monitoring plan for the enclosed area. The grazing plan, which includes the establishment of long-term trend sites, will be developed by Kenneth Sanders, PhD, Professor Emeriti of Rangeland Ecology and Management, University of Idaho. Seth McFarland, a 2010 graduate of the University of Idaho with his major study in Rangeland Ecology and Management, will implement the monitoring plan. This study may provide a template not only for future grazing management designs but may also increase landowner interest in riparian protection projects.

In this issue:

- 2: What's happening in the Upper Salmon Basin Watershed Program?
- 3: Ground Water Recharge Update; People in the News
- 4: Coordinator's Comments

Watershed Calendar:

June 9: Lemhi Soil and Water Conservation District Tour August 24-27: Lemhi County Fair

WWW.MODELWATERSHED.ORG

What's Happening in the Upper Salmon Basin Watershed Program?

The Watershed Program has a busy summer planned with three culvertto-bridge replacements, initiation of a grazing monitoring plan, a ground water study, and a fair booth at the Lemhi County Fair. Look for three of our projects to take place from mid-July to mid-August with the Wallace Creek, Archie and Parmenter culvert-tobridge replacements. The current Wallace Creek culvert on Lower Diamond Creek Road poses a physical fish passage barrier with an 18-inch drop from culvert to creek. The Parmenter and Archie culverts on Carmen Creek are both twin culverts that act as a velocity and debris barrier to upstream fish passage. These will



The 6 mile long L-52 irrigation canal will be abandoned at the completion of the sprinkler project and will enhance flow in the Lemhi River via irrigation efficiency.

be replaced with concrete and steel bridges to provide safe passage to many miles of excellent upstream habitat in Carmen Creek for Chinook salmon and steelhead trout.

There are two projects currently in progress, the L-52 Lateral Removal Project and the Little Springs Diversion Closure and Pivot Sprinkler Installation. A pressurized pivot sprinkler system will replace the gravitational flood irrigation system in L-52, allowing abandonment of six miles of irrigation canal which acted as a fish passage barrier. The Lemhi Little Springs Diversion Closure and Sprinkler Project will close three surface irrigation diversions to improve stream flow, fish migration, and prevent fish entrainment in the unscreened diversions of Lemhi Little Springs Creek.

We're also excited about the grazing monitoring plan taking place on Carmen Creek (front page), and the start of the groundwater monitoring study (read more on page 3). Stop by and see us at the Lemhi County Fair from August 24-27th. We'll have an interactive watershed demonstration table and more information on our projects.



The Wallace Creek culvert is impassable to fish seeking out cold water refugia.



The left culvert on Parmenter Lane on Carmen Creek blocked by debris.

Ground Water Monitoring Study Begins Phase 1

This March, a team consisting of Taylor Dixon, a Hydrologist with the Idaho Department of Water Resources, Rick Sager, Watermaster for Water District 74, and Upper Salmon Basin Watershed Program (USBWP) personnel began implementation of the ground water monitoring study highlighted in our Winter 2011 newsletter. Phase 1 began with periodic measurements of ground water levels in 12 wells, and installation of water level measurement instruments in four additional wells across the Lemhi River Basin. This information will be used to investigate the correlation between ground water recharge and irrigation versus natural runoff processes. Further hydrologic tests, such as tracer tests and seepage runs, will begin in late May and continue throughout the 2011 irrigation season. These tests will help characterize ground water recharge and discharge locations, and the travel times of subsurface water. Data will be used to determine the flow rates, locations, and magnitudes of return flows from irrigation waters. As Phase 1 progresses and a better understanding of the hydrologic processes connecting the ground and surface waters in the Basin is gained, plans for Phases 2 and 3 will be refined to ensure the data collected through this study is both descriptive of the Basin's hydrology and is useful for landowners and natural resource managers.

The goal of the study is to help balance agricultural needs with water resources in the Basin, such as where flood irrigation benefits stream flows and downstream water users and where it is more appropriate to conserve stream flows by utilizing sprinkler irrigation. Data collected will help the USBWP Technical Team and local landowners make water management decisions that result in the successful enhancement of stream flows in the Lemhi Basin.

Landowners get tunnel vision sometimes, like biologists do. We can't see anything but cows, and biologists can't see anything but fish. In this relationship, we've had to teach one another. Bruce Mulkey, USBWP Advisory Committee member and Lemhi rancher



Glenn Elzinga (pictured above), a Pahsimeroi rancher, was featured in the new book *Steak: One Man's Search for the World's Tastiest Piece of Beef* by Mark Schatzker. An article from the book recently debuted in the Boise Weekly and on 'Edible Idaho' on Boise State Public Radio. The full story can be read or listened to at

www.nwfoodnews.com/2011/03/18/making-beef-better-thesearch-for-great-steak/. Elzinga's conservation story can be seen at our website: www.modelwatershed.org.

Upper Salmon Basin Watershed Program

Homegrown, Common-sense Conservation

Phone 208-756-6322/FAX 208-756-6376 E-mail: Hans.Koenig@osc.idaho.gov Web site: www.species.idaho.gov

Staff

| Hans Koenig | Project Coordinator |
|-----------------|---------------------|
| Allen Bradbury | Project Planner |
| Breann Westfall | Project Planner |
| Abbie Gongloff | Ťechnician 4 |

<u>Coordinated by</u> Idaho Governor's Office of Species Conservation Nathan Fisher, Administrator Mike Edmondson, Program Manager

> USBWP Advisory Committee V. Don Olson, Chairman Sarah Baker Tom Curet Mark Davidson Trish Dowton Kevin Hoffman Bruce Mulkey Mark Olson Jude Trapani Kristin Troy Shannon Williams



To:



Our Mission: Protect and restore the region's significant fish habitats through a partnership approach that respects agriculture and improves our way of life.

Coordinators Comments By Hans Koenig

After what seemed to be the longest winter on record, we felt the first hint of spring in March. But old man winter hasn't released his grip on the dark season without a struggle and as I write, the snows are still falling.

Single digit temperatures and snow bound trucks didn't stop the good work. Taylor Dixon from the Idaho Department of Water Resources, District 74 Watermaster Rick Sager and USBWP Staff ignored the weather and went about the tasks of preparing for the groundwater recharge study slated to start in late May. An update on this research project appears on page 3.

Please join me in welcoming Breann Westfall as our new Project Planner in the watershed office. Breann is a native of Salmon and received her undergraduate degree from the University of Idaho. She received her Master's Degree in Hydrology from the University of Nevada. Breann most recently served as the Stewardship Coordinator for the Lemhi Regional Land Trust. She fills the position vacated by Douglass Fitting, who left us in February to take

a job with the U.S. Forest Service in California.

The Office of Species Conservation in cooperation with the U.S. Bureau of Reclamation (BOR), Custer Soil and Water Conservation District (SWCD) and the Salmon Office of the Idaho Department of Fish and Game sponsored a workshop on April 19th titled Rain and Sediment Management and Working in the Dry. The workshop was presented by the engineering firm CH2MHill and was designed to provide local road departments and private contractors with up to date information on instream construction. It was well attended with over 50 people participating. Our thanks to Jim Lukens, IDFG, Karma Bragg, Custer SWCD, Brian Hamilton, BOR and Mike Edmondson from OSC for providing the funding and coordination to make this training a success.

In between storms, our first projects of the season have broken ground. We start the summer construction season with a complete staff and a full slate of projects. It looks to be another successful year in the Upper Salmon Basin.