

# Model Watershed News

*“To Protect, Restore and Enhance Fish Habitat”*

NEWS ABOUT RESTORING FISH IN CENTRAL IDAHO

FALL 1998

## What's Going On ??

What is happening at the Model Watershed Office this Year? A lot! When I mention the Model Watershed on the street, I am often met with a blank stare. Efforts are made to spotlight most of our projects with tours and articles in the newspaper, but unless you are directly involved, we may be perceived as just another State agency. So, I thought the best kick-off for this newsletter would be a summary of some of the projects underway in our area.

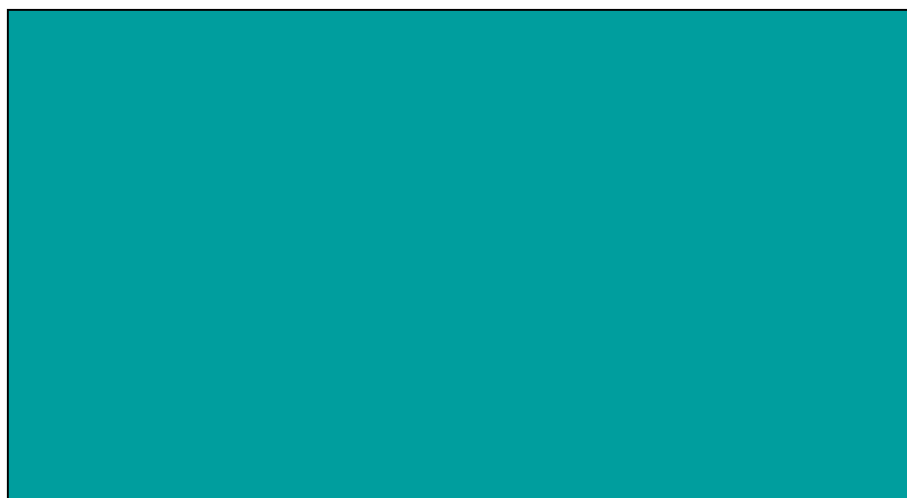
In the Pahsimeroi Watershed, things have been rather quiet. The Custer and Lemhi Soil and Water Conservation Districts held their Spring Tour there in June, and looked at some of the accomplishments for the past several years. Current projects include improvements on the P-9 irrigation diversion. This will provide a crossing for foot traffic and fish passage. Another proposal is underway to create a riparian pasture near May.

On the East Fork of the Salmon River, a proposal is underway to fence 2.5 miles of riparian habitat near Lake Creek. There is also a fish passage / minimum low flow project which will provide adequate irrigation water while allowing for a minimum low flow and summer reconnection of Pine Creek. These are both good projects and should be implemented by Fall.

The Lemhi River Watershed continues to make improvements on diversion structures and fish passage. On Agency Creek a siphon is being planned at L-32. This is similar to the one installed on Carmen Creek back in 1994. The objective is to restore the connection between Agency Creek and the Lemhi River.

A rock vortex wier has been installed at L-8a to improve irrigation water delivery and address adult fish passage problems on this critical stretch.

If you know of a project that would fit our objectives, there is a “Project Proposal Form” included in this newsletter that should be completed and returned to our office for review by the Technical and Advisory Committees. If the project is approved, our staff will proceed with agreements, cost-share, and work with other agencies to provide technical assistance for designs. Contact our office for a full description of guidelines.



All projects are accomplished by voluntary cooperation by private landowners. Cost-share money is available for most of the materials and a portion of the labor, but the work that the local ranchers put into the projects is immeasurable. This is what makes these projects successful. It isn't a hand-out by a government agency. The landowner has to buy-into the project to secure its success.

Allen Bradbury continues to be the “Project Planner” and makes initial contacts and follow-up visits with landowners for potential projects. He recently attended a workshop sponsored by N.R.C.S. on rangeland inventory and “Intensive Grazing of Irrigated Pastures” workshop. Contact him for technical assistance with grazing issues.

# Project Proposal Form

1. Project Name: .....
2. Applicant: .....
3. Parties Involved (Landowner & Agencies): .....  
.....
4. Project Location: .....
5. Project Objectives: .....
6. Project Description: (Introduction, conditions, actions, benefits) .....  
.....  
.....
7. Technical Assistance: Engineering \_\_\_\_, Wildlife \_\_\_\_, Grazing \_\_\_\_, Fisheries \_\_\_\_, Hydrology \_\_\_\_, Bank Stabilization \_\_\_\_, Permits \_\_\_\_, Other \_\_\_\_\_.
8. Attachments: (Map, designs) .....

Return form to Model Watershed Office at 201 Van Dreff, Ste A in Salmon.



## East Fork Restoration Project

The East Fork of the Salmon River runs through steep mountainous terrain with a slight meander through the narrow valley bottom. The valley is characterized by cottonwood trees and willows along with hayland and pastures grazed by a variety of cattle.

Chinook salmon and steelhead spawn and rear in gravels and pools along this stretch of river. Torrential spring runoffs thunder down the steep river grade eroding banks, toppling cottonwoods, and enlarging gravel bars. The problems of streambank instability were identified by the habitat inventory team in April of 1994. Three years ago, the unpredictable hydrologic forces of this destabilized river led agency fish managers and ranchers to develop a 10 mile river plan.

The Natural Resource Conservation Service (NRCS) and the Idaho Fish and Game (IDFG) helped to develop the plan in order to stabilize eroding banks on private agricultural land. The first phase of this project was undertaken as a cooperative effort between landowners along a six mile stretch of the East Fork, the NRCS and the IDFG. The Model Watershed Project (MWP) coordinated the process and obtained Bonneville Power Administration Funding which is administered through the Custer Soil and Water Conservation District.

Two important objectives were to reduce sediment levels which negatively impact spawning and establish riparian vegetation to provide cover for resident and anadromous fish and reduce water temperatures through shading.

With the technical assistance of NRCS hydrologists and engineers, a plan was drawn up to place 29 rock bank barbs along with willow plantings at eight different sites along the stretch of river, between Herd Creek and Jimmy Smith Lake Creek.

Just before the breezes of spring could thaw the ground, dump trucks were hauling large angular rocks to the banks of the East Fork of the Salmon River. Later in February, an excavator with a thumb was used to place the rocks in the river. Rock bank barbs, small jetties which point upstream, were constructed to redirect the current and decrease the force of the water along the riverbank. Willow plantings were made on the barb and bank.

Ten chinook salmon redds were found in 1996 and eight were found in 1997 along the entire mainstem East Fork. The long term goal is the return of a naturally stabilized river system with benefits for ranchers and fish. Cooperative effort and shared goals made this project a success.

*"I think we're probably all working for the same goals and that is to improve the fish habitat, the water quality and just the aesthetics of the river system."*  
*Betty Baker.*

## COORDINATOR COMMENTS

*By Glenn Seaberg*

It has been over a year since our last newsletter came out. In that edition, Ralph Swift gave us his parting advise and Jude Trapani set an agenda for his role as the coordinator of the Model Watershed Project.

Jude has since returned to his duties with the BLM, Ralph is now in Pinedale, Wyoming, and I've been in the coordinators chair for about six months.

I feel very fortunate to have stepped into a situation so well established by my predecessors and coupled with the abilities of the office coordinator, Katie Slavin and project planner, Allen Bradbury.

The Model Watershed process runs like clockwork. Our technical committee has realigned itself into smaller work teams, one for each watershed, hoping to become more effective in project planning.

With the TMDL process (303d lists) and ESA issues continuing to broaden (listing of the bull trout), general interest in watershed analysis and management is growing throughout the west. This was emphasized recently when we hosted a Model Watershed Summit here in Salmon for all the coordinators from the Pacific Northwest. As part of the meeting, a field tour was conducted highlighting some of our projects. All of the coordinators were extremely impressed with our work and how these projects not only met our main objective of restoring habitat, but how well they will position ourselves to meet the new demands from water quality and additional ESA situations.

We have a lot to be proud of with our past accomplishments, but I'm also confident that we will be successful in meeting these new challenges as the Model Watershed Project continues.

## HATCHBOX PROJECT STILL GOING STRONG

What started as a demo project back in 1994 has developed into a credible incubation experiment that has increased public awareness of factors that contribute to anadromous fish runs in the Salmon River and its tributaries.

The hatchbox consists of a modified old refrigerator turned on it's back. Acrylic dividers and rocks are placed in the bottom and a 2 inch PVC pipe provides a constant flow of fresh water. Eggs are placed in mesh plastic boxes to hatch out naturally. This protects the eggs and fry from predators, then the fry can escape through the mesh and feed in pools and riffles of the stream. Unlike hatcheries, the hatchbox allows the eggs to survive in an almost natural environment.

This year ½ million eggs were placed in 12 boxes in the area. Many are tended by volunteers on their own lands, and Scott Turner, Model Watershed Advisory Committee, spearheads the effort. Bruce Smith, USFS, has been the shaker and mover to keep the project alive and Idaho Fish and Game provides steelhead eggs for the boxes.

Scott and Bruce were joined by student intern Jeff Halverson. Jeff was housed at the Leadore Ranger District and supervised the boxes in the Hayden Creek, Agency Creek, and upper Lemhi area. Jeff is a graduate of Mackay High School and attends Idaho State University majoring in biological sciences. He also is a member of the U.S. Navy Reserve where he serves as a hospital corpsman.

How do we measure the success of the project? We hope to measure it with increased returns of steelhead to the hatchbox sites, but reaching the home stream is a difficult journey. Dams, land use and other factors have lessened the chances of the fish returning to their birth places to spawn. Fish moving downstream are often killed in dam's turbines or loose their way in slack-water pools. At the present time we measure it with the number of eggs that hatch and swim unaided into the streams. In 1998 the success of egg to fry was 92%.