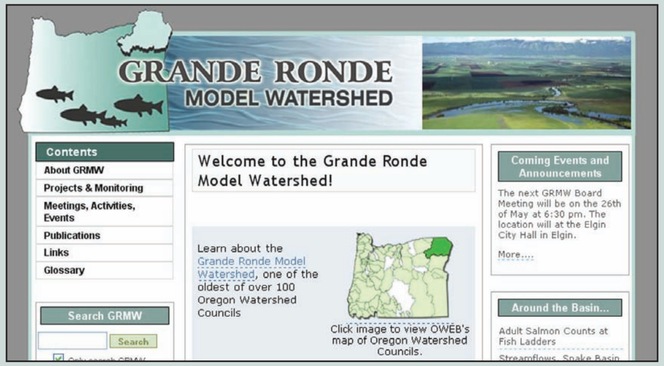


The GRMW website is the place to go when you are looking for updates and information pertaining to the GRMW. You can find out about upcoming events, project updates, and information, including helpful maps, on what the GRMW does for the Grande Ronde Basin. There will also be an exciting update to the webpage coming in early summer that will create a very simple way for everyone to look at the projects with which the GRMW is currently associated. With the update, you will be able to look at pictures of a project and view information on why and how it was done. If you have any questions, can't find something, or you think something should be on the web that is not, please contact the web administrator at webmaster@grmw.org.

This newsletter is funded by the Bonneville Power Administration and the Oregon Watershed Enhancement Board

From the Archives

Historic Towns in Union County

Camp Carson was a well known mining camp on the upper Grande Ronde River in the early 1860s. It is thought that the early gold miners gave Camp Carson its name, possibly naming it after Carson City, Nevada. War Department maps dated 1877 show an abandoned site, implying that it was a military establishment. However, no record of its existence as a military post can be found.

Hilgard, near the junction of the Grande Ronde River and Five Points Creek, was named in honor of Henry Villard. His original name was Hilgard. At one time, Hilgard boomed with the activity of the logging industry and had its own post office.

Grande Ronde River Near Hilgard

Ripples in the Grande Ronde

Spring 2009

RIVERS UNITING NEIGHBORS·QUARTERLY NEWS FROM THE GRANDE RONDE MODEL WATERSHED

From Dream to Reality

How the GRMW Selects Among Prospective Projects to Fund

by Lyle Kuchenbecker, GRMW

Project Proposal Process

The Grande Ronde Model Watershed (GRMW) has developed a structured process to solicit, review, approve, and implement habitat restoration projects with the greatest potential to provide the most benefit to threatened fish populations, predominantly Snake River spring Chinook and summer steelhead. First implemented in 1995, the process has evolved and been refined over the years, including a process revision this year spearheaded by GRMW Board of Directors member Ted Taylor (see "Meet the Board" on page 7). The GRMW Board of Directors has been given latitude by the Bonneville Power Administration (BPA) to consider many aspects of a proposed project in the review and approval process, including technical merit, landowner cost share, cost/benefit, and social issues. Habitat restoration projects must be in keeping with BPA's mitigation responsibilities and the goals and mission of the GRMW.

Starting the Process

The process begins with the distribution of a solicitation notice to prospective project applicants inviting submission of project proposals. Usually, the GRMW has conducted one solicitation during the summer for a fall proposal application deadline. However, due to additional funding availability in 2009 and for the next few years, the GRMW will promote project development by accepting proposals throughout the year. Applicants may be state or federal agencies, Soil and Water Conservation Districts (SWCD), or individual landowners. Various planning documents and assessments have been prepared over the years to identify priority streams, factors limiting fish populations, and possible actions to restore habitat and fish numbers. This information is made available to applicants to help them develop projects in areas that will benefit fish.

First Step: The Project Prospectus

The first step requires a project applicant to prepare a project prospectus and submit it to the GRMW. The prospectus step was added this year so that the program director and staff can review the proposed project to determine its relevance to the mission of the GRMW and its established restoration priorities, saving applicants time and effort by assessing the project's suitability prior to applicants preparing a detailed application.

If the project is deemed appropriate, then the applicant will prepare a detailed project proposal in a specified format. The project proposal presents all elements of the project, including objectives, cooperators, tasks, costs, cost share, maps, and expected benefits. Another new step in the process is that the GRMW conducts a review of the proposal for completeness and, if necessary, requests additional information to complete the application.

Technical Review Team

Complete applications are submitted to a Technical Review Team (TRT) that is composed of technical staff from state and federal agencies involved in the work of the GRMW. The TRT conducts a thorough review of the technical merits of the proposal, which includes at least one site visit and additional discussions with the applicant. The TRT prepares a report summarizing the TRT comments to the GRMW Executive Director. The Executive Director reviews the report and, to the extent feasible, resolves the comments. The TRT may review several proposals at the same time and, in the event that the requests exceed the available funds, will prioritize the projects based on their benefits to habitat or target fish species.

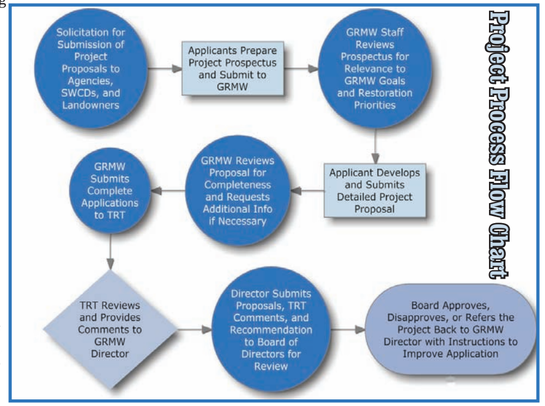
Board of Directors Approval

The Executive Director submits completed proposals, TRT comments, and an action recommendation to the GRMW Board of Directors for review and consideration. The Board may a) approve the project b) disapprove the project or c) refer the project back to the Executive Director with instructions. Projects may be approved with contingencies, which become conditions of approval.

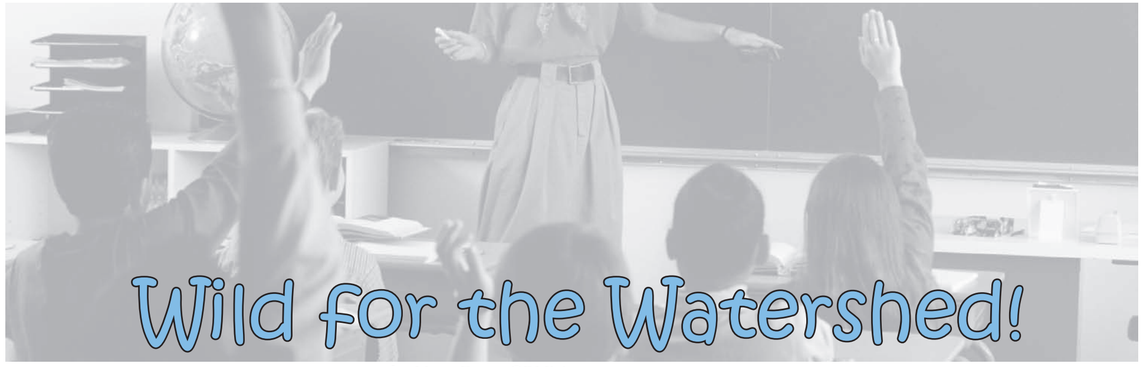
Benefits and Focus of the Current Project Proposal Process

With the additions of the prospectus and completeness review steps, the project development process will gain efficiency by presenting only appropriate and complete project proposals to the Board. Review by specialists on the TRT ensures that sound methods and techniques are applied to the proposed restoration work.

The GRMW's current areas of emphasis are the Upper Grande Ronde and Catherine Creek watersheds, although proposals are encouraged and will be considered for projects anywhere in the Grande Ronde Basin. Projects that improve fish passage, riparian area condition, in-channel habitat diversity, water quality, and stream flow are especially valuable. Please contact me, Executive Director Jeff Oveson, or Monitoring Coordinator Coby Menton at 541-663-0570 to begin an application process for your project.



Flow Chart Graphic by Margaret McGladrey, Ripples Editor

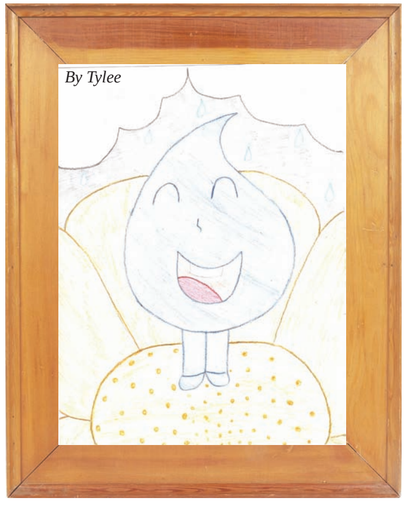


Wild for the Watershed!

by Mary Estes, GRMW

On January 28 and 29, I and fellow GRMW staffer Heather Hall were invited to join Michelle Cregger and her two sixth grade nature studies classes at La Grande Middle School. Heather and I were very excited for the opportunity to speak to the classes about the GRMW and the Grande Ronde Basin watershed. The most exciting part for the students was checking out the portable, topographical table-top watershed model that we brought to class. The model tracks pollution from point sources such as factories, sewage treatment plants, and storm drains as well as from non-point sources such as residential areas, stormwater, forestry areas, transportation, recreation, agriculture, and construction areas. Along with providing an overall conceptual understanding of watersheds, the model demonstrates the combined effect of pollution from many small sources can have a real impact on the quality of our shared water resources.

The students wanted to share the pictures, poems, and stories they created in our classes together in the *Ripples* newsletter for everyone to see. All of the students did exceptional work on their projects, and we wanted to put all of their projects in the newsletter. Unfortunately, we didn't have room to publish 50 different creations. However, all of the pictures, stories, and poems from the students are mounted in the hallway at the GRMW office located at 1114 "J" Avenue in La Grande. All are welcome to stop by and admire the students' work. ■



The stories and poems below are the actual words from the LMS students:

Watersheds

"We all live in a watershed, down from our feet, up to our head. From dirty to clean, that's what it means, 'cause we all live in a watershed. With the snap of your fingers, all the fish linger, down beneath the watershed. Watersheds help with anything from fish to help, all because of you. So pack up your things, get ready to go, 'cause we're gonna help with the watershed." - Courtney

Story

"One time when me and my father went hunting we went by Crystal Springs. I saw three pipes with the clearest water I've ever seen pouring out. My dad told me to take a drink. I did and it was the most amazing water I've ever drank. It was so amazing I got my water bottle and filled it up with water." -Dustin

Water

"Water is free to be as joyful as it wants to be. Ants will dance for the rain. The fall ball will be tall but when the rain will fall it will be muddy." - Lucy

Grande Ronde River

"We all live in a watershed. The Grande Ronde watershed is the model for Oregon. It's called the Grande Ronde watershed because there's a big river called Grande Ronde. It goes all the way up through Canada. They have down about 700 projects in the Grande Ronde watershed." - Taylor

Meet the Board

Ted Taylor

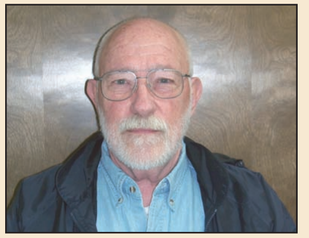
GRANDE RONDE MODEL WATERSHED

Profile and Photo by Margaret McGladrey

Q: How many government workers does it take to change a light bulb?
A: Twenty. Eighteen to stand around, one to change the bulb, and another to supervise.
A: "The Government is well aware of the situation and we are setting up a committee to look into the feasibility of changing it."

If you really want to know the serious answer to this jokingly asked question, then the perfect person to ask is the GRMW Board of Directors' newest member, Ted Taylor. After working for 22 years for the U.S. Department of Energy (DOE) as a project manager in charge of highly controversial projects and environmental documents for sites such as Los Alamos, Ted understands the procedures and politics of the federal government inside and out. Now, as one of the Board's Public Interest Representatives, Ted is sharing his expertise with the federal government to help coordinate the efforts of the agency partners involved with GRMW project work with input from the public. He assumed this position after serving as an alternate Board member for three years.

Ted grew up in Kansas, attending public schools in Wichita before enrolling in Wichita State University for his Bachelor's degree and then earning an M.A. degree in political science and constitutional law and a Ph.D. in economics from the University of Kansas. After serving as a professor at Texas Tech University for 14 years, Ted began his career with the government, working mostly with the DOE, as a project manager for complex radioactive waste repository projects in Los Alamos, New Mexico, Amarillo, Texas, and Columbus, Ohio, with annual budgets of $15 to $100 million that involved coordinating the interactions of regulatory agencies, interest groups, and the public. Some of his more than 50 awards include a commission as an Admiral in the Texas Navy by Gov. Ann Richards, having the American flag flown over the U.S. Capitol in honor of his retirement by Sen. Pete Domenici, and receiving the Distinguished Career Service Award from the DOE. Of his work with the DOE, Ted cites "staying focused and staying determined, remaining persistent and pleasant in the face of hostile audiences and the government saying 'no' to requests" as his most important insight relative to the GRMW's work.



Ted is now bringing this experience to bear for the GRMW by developing the new project proposal process described in Lyle Kuchenbecker's article in this issue. As a Public Interest Representative, Ted sees his role on the Board as the public's ombudsman with no specific interests or constituency, taking the other Board members' technical expertise into context with a broader view of budgetary and regulatory considerations. "For me," Ted said, "it's not just about the watershed, it's everything: animals, soil, air quality. But here in the Northwest, it's about fish and salmon in terms of mitigating the effects of humans on the environment," a goal that drew him to serve on the Board. Additionally, Ted enjoys working with the dedicated members of the Board and the wonderful GRMW staff.

After retiring to La Grande in August 2005 with his wife Denise, Ted quickly began to act on his belief that citizens need to give back to their communities, especially when they retire. Besides serving on the GRMW Board, Ted is a member of the La Grande Community Landscape and Forestry Commission, a volunteer bird census observer for the ODFW's Ladd Marsh Wildlife Management Area, an AARP Driver Safety Program instructor, and a certified first responder with the Public Health Division (PHD). He is currently in training as an Emergency Medical Technician with the PHD. Ted has six children and eight grandchildren and enjoys bird spotting, playing tennis, studying American Indian cultures, and hiking and camping in the Lostine Corridor, Eagle Creek, and other Eastern Oregon locales.

Fish Online!

www.grmw.org

- Adult salmon counts at the dams
- Snake River Basin stream flows
- Snow and precipitation reports
- Habitat enhancement projects
- Meetings, activities, and events
- Past issues of *Ripples* and more!

Grande Ronde Model Watershed

Upcoming Board Meetings

The public is welcome to attend

- Tuesday, May 26, 6:30 p.m.
  Elgin City Community Center, 10th Street, Elgin
- Tuesday, July 28, 6:30 p.m.
  Wallowa Community Center, 2nd St, Wallowa
- Tuesday, September 22, 6:30 p.m.
  Elgin City Hall, 8th St, Elgin

Meeting dates are subject to change.
Please call 541-663-0570 to confirm. Thank you!

Special Arbor Day Event: Douglas Fir and Ponderosa Pine Seedlings and Trees Available

- Friday, April 17, 9:00 a.m. to 1:00 p.m.
  PLFN Tree Cooler, 20th Street, La Grande
  Between Bi-Mart and the Oregon Department of Forestry

Swimming Upstream

How the Deer Creek Culvert Replacement Project Restored Fish Access to Critical Habitat

By R. Coby Menton, GRMW, and Dana Nave, USFS Zone Hydrologist, Wallowa-Whitman National Forest
Photos by Dana Nave

In his article in the Winter 2009 issue of the *Ripples* newsletter, "Water Under Troubled Bridges," Lyle Kuchenbecker detailed the GRMW's rationale and approach to immediately increasing access to fish habitat through the installation of culvert replacement projects. A multitude of stream-crossing culverts installed on road systems during the past 100 years have reduced aquatic organism usage of habitat upstream of each culvert, specifically juvenile fish that are unable to negotiate the large jumps and increased water velocities often imposed by past culvert installations. In cooperation with many road management partners in the Grande Ronde Basin, the GRMW is committed to supporting projects that eliminate these fish passage barriers and provide access for all aquatic organisms to the critical habitat upstream of these road crossings.

Project Location

Deer Creek is a 20-mile-long creek that is a tributary to the Wallowa River and joins the Wallowa at the Minam Fish Hatchery, which is operated by the Oregon Department of Fish and Wildlife (ODFW) at a location one mile upstream of the town of Minam. Deer Creek contains spawning and rearing habitat for Snake River steelhead trout and bull trout, both of which are listed as threatened under the Endangered Species Act. From its confluence with the Wallowa River to approximately river mile 10, Deer Creek is on private land. The upper 10 miles are under U.S. Forest Service (USFS) management, and the uppermost 6 miles are located in the Eagle Cap Wilderness. The roads and all associated transportation infrastructure for the Deer Creek area are managed by the USFS, and access to the Bear Wallow and Standley trailheads is provided by this transportation system.

Project Summary

The Deer Creek culvert replacement project site is located at river mile 11.7, where the route to the Standley trailhead crosses Deer Creek. The project's scope consisted of replacing an undersized arch with an appropriately sized concrete bottomless box structure, removing a log weir downstream, and installing a simulated streambed throughout the project area. The log weir downstream of the former arch created a 3-foot waterfall and a passage barrier to juvenile fish and other aquatic organisms. One of the key limiting factors to bull trout and steelhead distribution in the Lower Wallowa River watershed is fish passage barriers such as the former arch in Deer Creek. Replacement of this arch, removal of the log weir, and creation of the new streambed throughout the project area developed a stable streambed environment and provided access to 2.5 miles of juvenile steelhead habitat and 5 miles of juvenile and sub-adult bull trout habitat.

Problems with the Existing Stream Crossing Structure

Prior to these efforts to enable fish species to access upstream habitat, the existing crossing consisted of a 8.5-foot-wide by 5-foot-tall open bottom arch outfitted with a trash rack on the upstream end and a log weir on the downstream end. Originally, three log weirs were installed downstream to help secure the crossing and prevent head-cutting (undermining) up to and under the arch. They may have also been installed to provide for fish passage through the arch. The bottom two weirs, however, had washed out prior to 2005, and the remaining weir created a 3-foot-high waterfall located 15 feet downstream of the culvert outlet, beyond which point only large fish could pass. The trash rack upstream, originally installed to keep debris out of the culvert, collected logs and other material floating downstream. The trash rack, in combination with the undersized arch, tended to back up and dam water and streambed material, creating a steep gradient just upstream of the culvert and placing the crossing at a greater risk of failure.

The Project's Solution

The Deer Creek culvert replacement project solved these fish passage and structural stability problems with the creek crossing. Implementation included replacing the arch with a 23-foot-wide by 7-foot-tall by 40-foot-long precast concrete bottomless box structure. The channel grade was stabilized by removing the log weir and installing a series of 13 rock steps approximately 20 feet apart, similar in size to what is found upstream and downstream of the project area. The steps start below, extend through, and end above the new crossing and are surrounded by stream-simulating rock to mimic natural channel conditions and improve aquatic organism passage.

Pre-Project Photos

Photo 1: Pre-project photograph showing the trash rack at upstream end of crossing that is intended to keep debris out of the arch. While debris is mostly kept out, the stacked material on the trash rack dams the creek's flow and puts the structure at risk of plugging and washing out.

Photo 2: Pre-project photograph showing log weir in foreground and arch in background. The weir presents a 3-foot jump height that precludes many juvenile fish from swimming upstream. During high flows, streamflow through the arch is fast enough to reduce passage for smaller, less able aquatic organisms.

Post-Project Photos

Photo 3: Looking down at the new crossing. Fish passage conditions have been greatly improved, and the placement of logs and other woody material enhances habitat conditions in the construction area.

Photo 4: Standing on top of the new crossing looking downstream. Vegetation has been planted, logs have been placed to improve habitat, artificial barriers have been removed, and the risk of the crossing to fail has been greatly reduced.

Photo 5: Post-project photograph taken from same location as photo 2. The crossing has been replaced with a concrete structure, and the log weir has been removed. Thirteen steps have been installed and are mostly subsurface features to maintain channel grade and elevation. This structure is much wider than the previous arch and is able to pass debris as it flows downstream, eliminating the need for a trash rack.

The Project Team

In order to implement this project, the GRMW forged a partnership with the USFS Eagle Cap Ranger District to complete planning, design, funding acquisition, and construction of the culvert replacement. The USFS completed the planning, design, permitting, and contractor solicitation work for the project, in addition to securing a minority of the necessary funding. The GRMW contracted and provided the majority of project funding through the BPA and separately purchased the precast concrete crossing materials.

Project Construction

After the USFS solicited for prospective construction contractors, Henderson Logging of Wallowa, Oregon, was awarded the contract. Henderson performed all of the construction work, which included streamflow diversion, arch and streambed excavation, concrete pouring, rock step installation, natural channel simulation, installation of precast crossing parts, backfill and road work over the new crossing, and vegetation plantings, in a professional and efficient manner. Project construction began in July 2008 and was completed by the end of August.

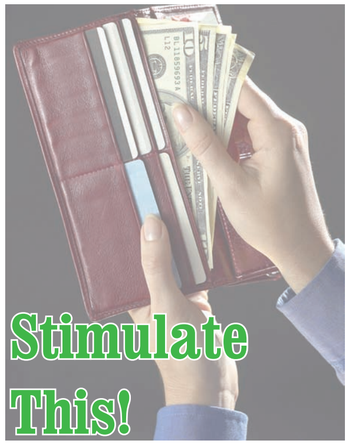
Project Benefits

In addition to the improved stream crossing stability and enhanced fish passage benefits it provides, the Deer Creek culvert replacement project demonstrates the value of partnership between the USFS and GRMW. The Deer Creek project was designed, permitted, and constructed on schedule thanks to the understanding of each partners' capabilities and the appropriate division of responsibilities between them, resulting in a more expedient and efficient project process. ■

Construction Photos

Photo 6: Excavator placing one of the precast concrete sections on previously poured footings. A total of 8 of these sections was placed to complete the crossing.

Photo 7: Deer Creek has been diverted around the work site, the arch has been removed, and the footings have been excavated and are in the process of being formed and poured on-site. When re-routed, Deer Creek will flow between the two footings in the photo.



by Jeff Oveson, GRMW

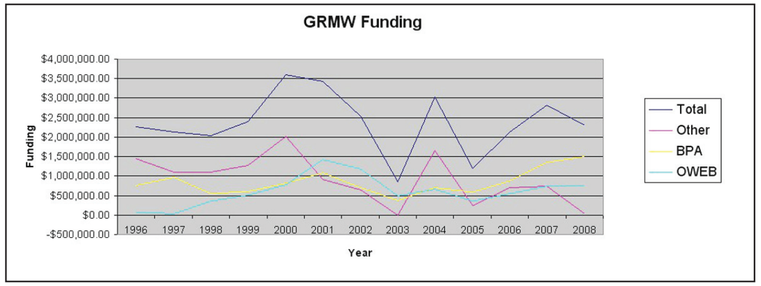
So, like a lot of people, you might be wondering if the socio-political word of the year – "stimulus" – really means what you think it does and if the attempts by our elected leaders to provide "stimulus" to the American economy will be wildly successful, moderately productive, or disastrous failures. You might wonder if the money you contribute to the stimulus funding package will end up in Eastern Oregon, Portland, or Boston. While I can't answer those questions, one thing is for certain: a lot of money is going to go somewhere, and in one way or another, you are going to be asked to foot the bill, whether any real "stimulus" is derived or not.

Contrast that scenario with something else you have already been paying for – watershed restoration. Since the early 1990s, Oregon has been at the forefront of states that decided to sponsor local place-based organizations whose objectives include healthier watersheds, cleaner water, and resilient populations of fish. If you pay taxes or buy lottery tickets, then you have been helping to support these organizations, which are loosely and by statute called "watershed councils," as they seek to engage local citizens in the enhancement of watershed health. The "Mother Ship" in Salem that administers Oregon's program is called the Oregon Watershed Enhancement Board (OWEB). The GRMW is designated by the State of Oregon and OWEB as the watershed council for the Grande Ronde and Imnaha sub-basins and is roughly the same geographic area as Union and Wallowa Counties combined.

GRMW Funding Partners

If you use electricity, then you're helping to pay for the actions of the BPA Fish and Wildlife Program, which is designed to mitigate for the loss of habitat due to the operation of dams on the Snake and Columbia Rivers. Mandated by the 1980 Northwest Power Act, this mitigation is implemented by numerous parties, including the Columbia River Tribes (Confederated Tribes of the Umatilla Indian Reservation and Nez Perce Tribe in this region of the Northwest), the ODFW, the U.S. Army Corps of Engineers, the Bureau of Reclamation, and the Northwest Power and Conservation Council. GRMW is the designated implementation partner for completing much of this mitigation work in the Grande Ronde and Imnaha sub-basins. The tribes and ODFW also have contracted mitigation responsibilities with BPA in these two sub-basins.

BELOW: Graph of GRMW funding from BPA, OWEB, and other sources from 1996 to 2008, compiled by GRMW.



Habitat Restoration "Metrics"

In evaluating the success of mitigation efforts through habitat restoration, the GRMW and its partners use all kinds of metrics, such as measurements of how many miles of stream have been restored or protected, how many acres of wetlands have been created, how many miles of habitat have been opened up, how many acres of riparian zone have been restored or protected, and how many in-stream structures to provide habitat have been installed. One metric that is not commonly associated with watershed restoration or species recovery is "stimulus" capability. How much does this work contribute locally in terms of employment? How much material is bought locally? How do BPA funds that pass through GRMW impact the local economy?

Local Economic Impact of Restoration Work

The Institute for Policy Research and Innovation (IPRI) at the University of Oregon conducted a study in 2005 to analyze the local economic impact that resulted from restoration work undertaken by watershed councils, usually in concert with partners such as private landowners, tribal, state, and federal agencies. Among the findings were the following conclusions:

- Eighty-five percent of watershed restoration work contracted out by watershed councils like GRMW went to local contractors in the county where the work was being performed. This figure is called "local capture." Additional previous studies conducted by IPRI suggested that the local capture for "hard dollar funding" is between 80 and 85 percent.
- The IPRI also concluded that a conservative estimate of the multiplier effect of these dollars within local communities is 1.7. In other words, each dollar would create $1.70 in local economic activities.

Benefits to the Local Economy

The average annual investment in watershed restoration entrusted to GRMW between the years 1996 and 2008 is approximately $2.7 million, for a total of $35.1 million. Using the conclusions reached by IPRI, the "local capture" of outside funds over this same period of time would be $28.08 million ($35.1 million multiplied by 80 percent), and the local multiplier effect would be $47.74 million ($28.08 million multiplied by 1.7).

Those figures might seem small when you hear the people in Washington, D.C., throwing around a billion here and a trillion there, but $47.74 million distributed through the approximately 31,500 residents of Union and Wallowa Counties means an economic impact of $1,515 per person.

Thank You From the Kids!

Jett: Thanks for coming to our school, it was a cool presentation. I thought it was interesting.

Caitie: Thank you GRMW for keeping our Oregon beautiful and thank you also for teaching us about watersheds!

Marisa: Thank you for the wonderful announcement and presentation that was so kool. I like your job a lot.

Samantha: Thank you for coming and showing me the watershed. And make sure that you take care of the trees.

Harley: Thank you for coming to our school and showing us what a watershed looks like. I learned a lot.

Elle: Thank you for coming to our school and presenting the watershed to us. And showing us about the pollution and how our water is dirty.

Alex: Thank you for coming and teaching us about watersheds. It was very nice that you came. I wish you could come again and show the model. I learned so much.

Brittany: Thank you Mary and Heather for showing us the watershed model and how watersheds work. I really appreciated you coming. I learned a lot from you.

Kurt: Thank you for showing us the awesome model of the Grande Ronde watershed. I like seeing awesome models of things.

Zachary: Thanks for teaching me the diagram of how dirt gets in the river.

By Andrew

By Trevor

By Priscilla