

Ripples

in the

Grande Ronde

DATE: APRIL 2002

MOTO: RIVERS UNITING NEIGHBORS

VOLUME: 1 ISSUE 1

What is a Watershed?

BY: MELISSA COCHRAN
GRANDE RONDE MODEL WATERSHED
PROGRAM

The term watershed describes an area of land that drains down slope to the lowest point. The water moves downhill by a network of drainage pathways that may be underground or on the surface. These pathways converge into larger waterways as they

progress down stream. Watersheds can be large or small. Every stream, tributary, or river has an associated watershed, and small watersheds aggregate together to become larger watersheds.

There is connectivity among all bodies of water. There are physical connections between tributaries and rivers, between surface water and groundwater, and between wetlands and water sources. Watersheds catch and store precipitation, releasing the stored water to the stream channel. These functions are influenced by climate, elevation, the type of soil and vegetation, steepness of the slopes and their orientation to the sun, and size of the watershed. Although climate determines the amount of precipitation entering the watershed, man can significantly influence how well or poorly the watershed functions. When water moves downstream in a watershed, any activity that affects the water quality, quantity or rate of flow at one location can change the entire watershed downstream of the activity.



LOSTINE WATERSHED

PHOTO COURTESY OF THE GRANDE RONDE MODEL WATERSHED PROGRAM

We need to be aware that we live in a watershed and our activities affect the health of our watershed. There are many things we can do in our everyday life that will prevent pollution to our water and could even improve the quality and quantity of water that surrounds our community. Healthy, functioning watersheds provide clean drinking water, diverse plant and animal life, flood control, recreational opportunities and other wonderful resources. This quarterly newsletter will help bring news to our communities about the Grande Ronde watershed. It will highlight the activities that are occurring within the community to help improve our watershed functions. You will find this newsletter contains information that can help you make a change in your daily life and contribute to the efforts of watershed conservation.

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EDITOR'S NOTES

This is the first quarterly issue of the Ripple newsletter published by the Grande Ronde Model Watershed Program. This newsletter is a local education outreach effort dedicated to citizens of Wallowa and Union counties. The Ripple will bring you updates about local restoration projects, urban solutions, educational links, children's activities, student artwork and much more. The Ripple staff looks forward to bringing you a quality publication. Your comments, suggestions, submissions and corrections should be sent to:

Ripple Staff

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**If you would like to be placed on the
electronic distribution list, please
contact us at: ripple@eou.edu**

**Ripple issues are also available on the
GRMWP website:**

**[http://www.fs.fed.us/pnw/
modelwatershed/](http://www.fs.fed.us/pnw/modelwatershed/)**

Letters to the Editor

2nd Annual River Cleanups

BY: MARY ESTES
GRMWP

The Grande Ronde Model Watershed Program would like to invite you, your family or your business to participate in the River Cleanup event held in your area this year.

The Union County River Cleanup is tentatively planned for the end of



2001 Haywire Creek Cleanup

June. The Wallowa County River Cleanup is tentatively planned for the end of August. Last year we were very successful and had a fun time collecting litter along Haywire Creek and the Grande Ronde River in Union County.

We traveled to Troy in Wallowa County and cleaned the Lower Grande Ronde riverbanks and camp areas. We ended both events with a barbeque. Come join the fun and be part of the environmental efforts happening in your community. **If you are interested in lending a helping hand contact Mary Estes at 962-6590 or stop by the Grande Ronde Model Watershed Office located at 10901 Island Avenue, La Grande.**

Announcement

The Grande Ronde Model Watershed Program would like to announce to the educators in the area that the Directory of Natural Resources Specialists for Educators publication will be updated. The manual should be printed and distributed to teachers by October. This directory will help teachers locate natural resource specialists in the area who are willing to come to the schools and talk about a topic or take students into the field for various tasks. Students are encouraged to submit simple drawings to the GRWMP, which would be used to illustrate the manual.

"Nature is full of surprises, always changing, and we must change with it." - Linda Leonard



Smaller Fish Runs Expected

BY: BRAD SMITH

The large size of recent and expected spring chinook and summer steelhead spawning runs in Northeastern Oregon is a very positive sign. Some areas have seen or expect the largest anadromous runs in recent history. These runs are good enough to suggest to some that our ESA listed populations may be well on the road to recovery. Reaching "recovery," however, implies a sustained upward trend in run size over the course of several generations of fish. We may be on the way, but the road is a long one. Early indicators of change in ocean productivity and recent weather patterns suggest the near-term future for our fish runs may be less promising.

Improved ocean conditions provided one major driving force behind the recent upswing in anadromous fish numbers. But, ocean conditions inevitably change. In fact, indications from this year's expected coho runs suggest that change is already underway. Because of their early age at return, coho serve as one of the first indicators alerting us to shifts in ocean productivity and the subsequent expected changes in adult returns for other species like steelhead and chinook. Projections for this year's coho runs are down dramatically, suggesting substantially lower steelhead and chinook returns in 2003.

Adults returning in 2000-2002 also benefited from favorable freshwater rearing and downstream passage conditions as juveniles. As with ocean conditions, weather patterns and resultant streamflows vary. Last year's drought impacted several year classes of juvenile fish, those rearing in the headwaters and those migrating downstream. Low flow in the Snake

and Columbia Rivers reduces survival of downstream migrating smolts by increasing travel time and complicating dam passage. Low streamflow in rearing areas of the Grande Ronde and Imnaha basins limits available habitat and food production, which can in turn affect growth and survival of juvenile steelhead and chinook. Lower survival for juveniles means fewer adults returning for several years to come.

The larger runs seen in 2001 and those expected in 2002 are good reason for optimism. Salmon and steelhead inhabiting streams of Northeastern Oregon again demonstrated their resilience. The ongoing investment in the health of our watersheds will continue to enhance productivity of local fish populations and their ability to benefit from favorable ocean and freshwater conditions. But, we must keep in mind that watershed restoration and fish population recovery are long-term processes and that fish runs remain subject to ups and downs associated with nature's whims.

History Nook

Dam Daydreaming

BY: MELISSA COCHRAN
GRMWP

As I stumbled through stacks of historical files and articles I found a very interesting piece dated 1964-65 about proposed dams on the Grande Ronde River and Catherine Creek to help control flooding in the Grande Ronde Valley. Many of you may remember this as if it were yesterday, while many more of you may know nothing about it, for you had not yet come to make the Grande Ronde valley your home. Perhaps you weren't even born yet. This article is just to remind us that history is always in the making and changes are a part of our lives. There are always agencies making discoveries and reacting to those discoveries to try and make our environment a better place for us and our surroundings. I am convinced that every time a new idea emerges or develops it is always with the best interests of people and livelihoods in mind.

"These project units would be operated jointly in the interest of flood control, irrigation, municipal water supply, fish and wildlife, water quality control, downstream hydroelectric power generation, and recreation..."

The Bureau of Reclamation report was a very detailed account of where and how the dams would be constructed.

"Lower Grande Ronde Dam would be an embankment structure 185 feet high with a crest length of 2,270 feet at elevation. The spillway would be located in a channel cut in rock in the left abutment..."

There were extensive calculations quoting how much the reservoir would hold.

"The reservoir at maximum pool elevation would store 160,000 acre-feet of water, would be six miles in length and would have an area of about 2,380 acres..."

It outlined details for the "protection of fish resources".

"Provisions for protection of fish resources would include storage and temperature regulating facilities for release in the inter-

est of fish resource preservation, and upstream-passage facilities for trapping and transporting the fish in buckets to the pool..."

There were plans for two recreation sites. "Development plans include two recreation sites on opposite shores of the central portion of the reservoir. The south bank site would be developed for daytime use with facilities for swimming, picnicking, boating, fishing, water skiing, horseback riding, and hiking. Development of the site on the north bank would provide overnight camping grounds, cabins and associated facilities."

The report discussed the likely impacts the dams and reservoirs would bring upon the anadromous fish populations in the Lower Grande Ronde and Catherine Creek. "Anadromous fish would be affected during migration, spawning, egg incubation and rearing. Stoppage or reduction of flows below minimum needs, excessive fluctuations of flows, release of water with above-

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Approximately 25 people from the State, Nez Perce Tribe, Wallowa County Natural Resource Advisory Committee, Wallowa County Government, Grande Ronde Model Watershed Program (GRMWP), Forest Service, Hells Canyon Preservation Council and Wallowa Resources attended a three-day workshop in February to discuss ways to integrate our land stewardship goals and improve upon the ways we work together. Results from the session included the development of a draft of restoration principles and a list of top priority issues for collaboration in Wallowa County. The group also refined their approach to the Upper Joseph Community Planning Process, an on-going community-based watershed assessment.

Understanding and having a collective sense of the highest priorities for working together helps to identify the areas to concentrate maximum restoration effort with the greatest potential for results. The group identified four opportunities for collaboration in natural resources:

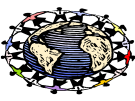
- Access and travel management
- Noxious weed control
- Watershed health issues and restoration
- Measuring and defining community economic health

Other areas the group decided had good potential included:

- Winter recreation
- Use of the Wallowa County's Salmon Plan as a vehicle for greater cooperation and identification of priorities
- Shifts in land designations (land exchanges)
- Geographic Information System mapping and data management

For approximately one year, Wallowa County Natural Resource Advisory Committee and Wallowa Resources have been facilitating a community-wide, Upper Joseph watershed assessment. Two sub-groups were formed that include a number of citizens and representatives from various groups and agencies. The sub-groups have been gathering information and meeting about forest and rangeland conditions. At the collaboration workshop, the group identified the need to initiate the access management and watershed/stream health portions of this assessment. The County, GRMWP and the Forest Service will work together to complete these, in concert with the forest and range sub-groups. By the end of the summer, the community planning process will have identified the top priority areas and projects needed to restore or manage resources within the Upper Joseph watershed. Local, Tribal, State and Federal governments will use this information to help initiate joint projects or assist landowners developing projects on their lands.

April 2002

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4 Basic Forestry Short course: Marketing Tim- ber Products, Logging and Access, State Taxes	5 Wind Energy Basics	6
7 Arbor Week	8	9	10	11 Basic Forestry Short course: Forest Protection, and DEQ Fish & Wildlife hearing Snake River TMDL	12	13
14	15	16	17	18	19 Watershed Stewardship Education Pro- gram	20
21 Earth Day 	22	23	24 EOU Earth Day Cele- bration	25 Forests and Drinking Water in Oregon	26 Forests and Drinking Wa- ter in Oregon	27
28	29	30				

VISIT THE GRANDE RONDE MODEL WATERSHED WEB SITE FOR AN UPDATED MONTHLY CALENDAR OF EDUCATION OUTREACH EVENTS HAPPENING IN WALLOWA AND UNION COUNTIES.

[HTTP://WWW.FS.FED.US/PNW/MODELWATERSHED/](http://www.fs.fed.us/pnw/modelwatershed/)

In the future, the Ripple staff would like to dedicate this section of the newsletter to students. We hope to have children submit artwork, stories, and poems to be published in this section of the newsletter to help students express how they feel about their environment, nature, water, air, recycling, plants, trees etc... If your child, class or school would like more information about submitting items to the newsletter please contact the Ripple staff at: ripple@eou.edu

"Old and new put their stamp on everything in nature." -Ralph Waldo Emerson

Word Search

Water is one of our most valuable resources which can easily become polluted. There are many ways you can prevent pollution at home. If we each do a little, it can add up to a lot. Here are just a few ideas you can try at home. Don't forget to share this information with your parents.

- Use non-toxic glue and water-based markers for your arts and crafts projects.
- Turn the water off when you brush your teeth.
- Turn off the lights when you leave the room to save energy and money.
- Use the Sunday Comics for gift wrap.
- Pass the pollution prevention message along and let your parents and friends know what they can do to prevent pollution.

Nature

Drink

Toxic

Batterie

Paint

Safe

Contaminate

Recycle

Pesticide

Oil

Pollute

Protect

Clean

Treatment

Wells

Tap

Water Source

Gasoline

Hazardous



Wetland Restoration Continues at Ladd Marsh

BY: DAVE LARSON, MANAGER
ODFW'S LADD MARSH WILDLIFE AREA

Prior to human settlement, wetlands covered a large part of the Grande Ronde Valley. Located at the confluence of Catherine and Ladd creeks, the historic Tule Lake spread across 4,000 to 5,000 acres between La Grande and Union. Efforts to restore roughly 1,500 acres of the old Tule Lake marsh is now underway through a cooperative project involving the Oregon Department of Fish and Wildlife, the U.S. Department of Agriculture (Natural Resource Conservation Service), Ducks Unlimited, U.S. Fish and Wildlife Service, the Oregon Watershed Enhancement Board, Bonneville Power Administration, The Nature Conservancy, the City of La Grande and the Confederated Tribes of the Umatilla Indian Reservation.



AVOCET

PHOTO COURTESY OF ODFW

Restoration began in 1999 with the construction of 200 acres of wetlands near Hot Lake. The wetlands began filling in the spring of 2000, attracting waterfowl and other aquatic birds quickly. Numbers of shorebirds including American avocets and Black-necked stilts were the highest on record for the area. These numbers should continue to rise as more wetland habitat is completed as part of this project.

Several components of the project were started in 2001. The City of La Grande started an estimated ten million-dollar project to upgrade the wastewater treatment facilities near Ladd Marsh. Approximately 3 1/2 miles of 36-inch pipe was installed to carry treated water from the treatment facility to city-controlled wetlands adjacent to the Tule Lake wetlands. The wastewater treatment facility improvements will insure a reliable source of water for managing these newly restored wetlands.

In 2001, ODFW and other partners continued the restoration of the Tule

Lake wetlands. Phase II of the project is nearly completed including the restoration of an additional 550 acres of



PHOTO COURTESY OF ODFW

wetlands and relocation of more than three miles of Ladd Creek to its historical channel. Construction of a small section of dike, installation of water controls and fish ladders and the planting of riparian vegetation along the new stream channel are all that remain to complete this part of the project. Construction will begin this fall on the final phase of the wetland project. Several miles of dikes will be constructed to create wetlands on nearly 600 acres of property owned by the City of La Grande and ODFW. Informational booths and an informative auto tour are planned for this area.

This project has both environmental and economical benefits for the Grande Ronde Valley. Environmental benefits include; (1) doubling the wetland area on Ladd Marsh; (2) numbers of waterfowl, shorebirds and other wetland species will increase as habitat develops; (3) upland wildlife habitat will be improved through the planting of native grasses, trees and shrubs; (4) habitat for steelhead, rainbow trout and other indigenous fish species will be improved with the new channel design and riparian habitat restoration; (5) the elimination of wastewater discharges into the Grande Ronde River will benefit fish including endangered steelhead and Chinook salmon; and, (6) expanding the floodplain will reduce downstream flooding and recharge ground water. Economic benefits will include a cost-efficient way for the City of La Grande to treat and discharge wastewater and the creation of new recreational opportunities such as hunting, wildlife viewing, hiking and photography for out-of-town visitors and local residents.

Community Members make Ripples in the Grande Ronde

Creating Models

BY: MELISSA COCHRAN
GRMWP

Pat Wortman, currently a board member of the Grande Ronde Model Watershed Program, proudly stated that he has lived in Wallowa County all but two years of his life. Pat has been a rancher all of his life, even his two years of absence from Wallowa County were spent managing a Hereford Ranch in Washington.

Pat is also the owner and operator of a small logging business. He spent his first 20 years harvesting salvage logs from federal forestlands. He explained that salvage is the harvesting of dead, dying, high-risk trees due to disease, fire and insects. However, as the salvage became less and less available on US Forest Service lands he began to salvage Boise Cascade and other private lands and continues to do so today.

fisheries director, Silas Whitman, and they discussed that salmon and steelhead were soon going to be listed as endangered species. Pat, at the time, was Wallowa



SMILE WHILE YOU WORK!

County Commissioner and he was aware that the Endangered Species Act (ESA) and National Environmental Policy Act (NEPA) gave them the opportunity to work government to tribal government and formulate their own salmon habitat recovery plan. The tribe and tribal council were supportive of the idea. A diverse group of interested

brought the two counties together to form a watershed council." He and John Howard, serving as Union County Commissioner, knew the idea had to be embedded in local government. Because of the research Pat had done with the tribes and the salmon recovery plan he knew that there did not need to be Federal Advisory Committee Act (FACA) involvement to have agreements or Memorandums of Understanding (MOU) with tribal entities, state and federal governments and that is the way they wanted to work.

This is how the Grande Ronde Model Watershed Program was created, by two creative men who wanted to get projects on the ground to implement the salmon recovery plan before regulations removed them away from their streams, water sources, irrigation and livelihoods. Pat simply summed it up as, "...If you are not part of the solution you may be part of the problem..." Pat was determined to be part of the solution and get others involved.

In addition to this work he served as Wallowa County Commissioner for ten years. He is currently a non-voting member of the Wallowa Soil and Water Conservation District and the Natural Resources Advisory Committee in Wallowa County. On a state level, he has chaired the Eastside Forestry Advisory Panel and is in his 2nd term on the State Board of Agriculture. He represents the State Board of Agriculture and the Department of Agriculture on the Oregon Watershed Enhancement Board.

It is only natural that someone who works so closely with the land would become so involved in the management of the natural resources in Wallowa and Union Counties.

All through the 70's and 80's there was growing concern about water quality and quantity. Around 1991 his involvement in natural resources management began to develop into what is now the Grande Ronde Model Watershed Program. He stated, "Natural resources were being held up as the PROBLEM, rather than the solution to water quality as well as quantity."

His very first informal "water quality" meeting was with former Nez Perce Tribe

citizens was appointed by Wallowa county commissioners to develop the Wallowa county Nez Perce Tribe Salmon Habitat Recovery Plan. This plan was completed in August 1993.

During this time, Governor Roberts became interested in watershed health and developed the Oregon Watershed Health Program. The governor wanted to invest lottery dollars into an incentive program where there would be little bureaucracy or strings

"...If you are not part of the solution you may be part of the problem...."

attached in order to utilize the lottery funds. This is when the whole idea of a Model Watershed Program began to come together. Pat commented with the hint of a giggle, "...we said, hey, we will be a model watershed. We don't know what it is, but, we'll be 'it' for the Eastside of Oregon. We had no idea what we were doing but we

When John Kitzhaber became governor he created the Healthy Streams Partnership. At that time, Pat was chair of the Natural Resource, Public Lands, and Agriculture Committee for Oregon's Association of Counties. Kitzhaber had asked Pat if he would participate in the Healthy Streams Partnership monthly meetings. Pat would advise how to offer incentive processes like the Grande Ronde Model Watershed Program had done, to avoid creating more regulation. It became quite apparent that regulation wasn't going to accomplish healthy streams and healthy environments; it was going to be accomplished through the incentives process. Pat explained how regulation was going to make private landowners "draw back" and refuse to change. Implementation without willing and experienced private landowners would lead to inappropriate techniques that would not be nearly as successful. The alternative to regulations would be to have a technical group advise landowners of their options and help them with any necessary change. This idea of working with landowners instead of against them is probably why the Grande Ronde Model Watershed Program has been such a success.

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URBAN UPDATE

Urban Living and Household Hints

By: MELISSA COCHRAN

Did you know that the most common substance found on Earth is water but ONLY 1% of the world's water is suitable for drinking? Do you want to know what you can do to preserve that 1% of precious water?

Avoid overuse of fertilizers, herbicides and pesticides. When these products are used in excess they often runoff into streams and sewers where they significantly impact the health of our watersheds. Fertilizers can stimulate the growth of harmful blooms of aquatic algae and plants, while herbicides and

pesticides can poison both plants and animals.

Consider trying an organic, homemade formula for fertilizing and pest control. Organic recipes can work as well as chemical at less cost to you and to the environment.

Fertilizer: Use natural amendments that release nutrients slowly over a longer period of time than chemical fertilizers. Such as: blood meal, fish meal, fish emulsion, seed meals, bone meal, rock phosphate, greensand, kelp meal, manure and compost. The Oregon State University (OSU) County Extension office can provide more information. Union Extension office: 963-1010 Wallowa Extension office: 426-3143

Pest Control: Mix 1-tablespoon castile or liquid vegetable oil based soap (detergent can burn plants) with 1-tablespoon vegetable oil and 1 gallon of water. Test the mixture on a small area of the infested plant to be sure that the mixture is not too potent. If the plant is

unaffected treat the remaining infested areas. If the plant was affected reduce the amount of soap content and test again. Soap is the active ingredient. Soap kills soft bodied insects by damaging their cuticle.

Our everyday household cleaners often require that we wear gloves when using the product. Did we ever stop and think just how hazardous these products are to our environment and us? Many of the products we use to clean our homes are so concentrated that they cause corrosion in our plumbing; imagine what they do to our water supply and the creatures that live there. Here are a few alternatives for household cleaners that are less hazardous.

Toilet Bowl Cleaner: Put ½ cup borax into toilet, swirl scrub and let sit overnight. Be sure to close lid if you have pets that enjoy drinking from the toilet bowl. Scrub the toilet bowl in the morning. You will be amazed that the iron rings have disappeared.

It's everyone's job to make sure our water stays clean!

TEACHER TOPICS and LEARNING LINKS

LIQUID LINKS

By: MELISSA COCHRAN

Teachers are always looking for new ideas, projects, programs, activities and curricula. The following 10 links are for teacher types that are looking for water related educational resources. The links will take teachers to government, private, and non-profit agencies web pages. These web pages are loaded with valuable information about water quality, salmon, rivers, watersheds, natural resources, recycling and many more links. It can be intimidating to "surf the WEB" and find what you are looking for. The Liquid Links section has narrowed the search down to just a few links that you can visit and bookmark on your personal computer for easy reference.

FOR THE SAKE OF SALMON
http://www.4sos.org/teach_mat/teachers.html

GREEN TEACHER

<http://www.greenteacher.com/index.html>

United States Geological Survey (USGS)

<http://water.usgs.gov/education.html>

USGS Water Science for Schools

<http://ga.water.usgs.gov/edu/>

ENVIRONMENTAL EDUCATION for KIDS

<http://www.dnr.state.wi.us/org/caer/ce/ee/cool/rainyday.htm>

ENVIRONMENTAL PROTECTION AGENCY (EPA) Student Center

<http://www.epa.gov/students/>

EPA Kid's Stuff

<http://www.epa.gov/water/kids.html>

Bonneville Power Administration

<http://www.bpa.gov/corporate/kr/ed/kidsinthecreek/homepage.htm>

PROJECT (WET) Water Education for Teachers

<http://www.montana.edu/wwwwet/>

GLOBE Global Learning and Observations to Benefit the Environment

<http://www.globe.gov/fsl/welcome.html>

These links are also available on the electronic Ripple newsletter found at: <http://www.fs.fed.us/pnw/modelwatershed>.

If you have a topic that you would like to see featured in the Liquid Links section or you have an educational link to share please email or write The Ripple at:
ripple@eou.edu





McIntyre Road Relocation Project

BY: PAUL BOEHNE, USFS
AND MELISSA COCHRAN,
GRMWP

Popular recreational spots remain accessible from the re-constructed County Road 1. However, those seeking recreation may have to hike further to their favorite spot but as the years pass they will be able to watch the rehabilitation process of McIntyre Creek.

The relocation of McIntyre Creek Road also known as route 2137 became a priority in 1993 after the completion of the Upper Grande Ronde Watershed Plan. The US Forest Service began assessing their road system within the Upper Grande Ronde watershed to determine if there were roads that could be relocated to help improve the overall water quality and quantity in the watershed. New roads, if needed, would be constructed away from the riparian areas. Old roads could be closed and rehabilitated.

The water quality and quantity of McIntyre Creek has slowly degraded since the early 1950's when route 2137 was first constructed for timber haul. Over the course of many years the material used to surface route 2137

washed into the stream increasing the sediment deposits in McIntyre Creek. The amount of sediment proved to be more than the creek could export. In order to construct a useable road, riparian vegetation, such as conifers and hardwood shrubs, were removed and the creek was forced out of its natural channel. Removal of vegetation de-stabilized the stream banks creating additional sediment, decreased shade causing the water temperatures to increase, and eventually degraded the quality of fish habitat. McIntyre Creek was historically used by steelhead throughout the year. However, with the increased sediment from the road and stream banks the creek now runs dry in the summer and the steelhead only use the stream for spawning and as rearing habitat in the early spring. The steelhead that survive through the spring move to more favorable streams for the remainder of the summer.

The USFS realized that the relocation of route 2137 to County Road 1 and the obliteration and re-contouring of McIntyre Creek road was going to be a long-term project lasting up to six years. It would require a significant amount of funding and cooperation among agencies and landowners. Funding and assistance was received from the Confederated Tribes of the Umatilla for the pre-engineering work. The Grande Ronde Model Watershed Program funded phase one of the project. The Blue Mountain Demonstration Area also contributed funds to help with phase one of the project. The Oregon Department of

Forestry (ODF) became involved and helped with the restoration planning process for McIntyre Creek. ODF served as the liaisons between the involved landowners and the USFS. Union County Public Works Department developed the easement terms required for access to County Road 1 through the private landowner's property. The Department of Environmental Quality's Clean Water Act funds were utilized toward the obliteration of route 2137.

Last year, County Road 1 was completed and opened for travel. Route 2137 was permanently closed. Six and a half miles of route 2137 will be obliterated and re-contoured this summer, sculpting the draw bottom back to its most natural shape. Obliteration and re-contouring will occur on two additional miles of tributary roads from the east and west side of route 2137. The lower three miles of McIntyre Creek will undergo channel relocation utilizing the entire flood plain. Lastly, large woody debris will be placed in the stream along bends where natural accumulation would occur. Conifers and native species will be planted along the riparian area, which will help stabilize the re-contoured stream banks.

The success of this project over many years will improve water quality and quantity, riparian conditions and in-stream habitat in McIntyre Creek. It will also contribute to improved conditions downstream and the overall basin-wide efforts to restore endangered Snake River summer steelhead.

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optimum temperatures or insufficient oxygen content would all be detrimental to some degree. Losses would result from any one of these adverse conditions, and combinations of several of these would result in severe losses to the fishery resources...."

The report continued to go into depth about wildlife resources and vegetation and how the dams may affect such resources. "All vegetation within the proposed reservoir areas would be destroyed..." "Proposed downstream development of agricultural lands as a result of the project would increase food supplies for pheasants, Hungarian partridges, quail and cotton-tails."

This report contained many letters of transmittal, which expressed concern about funding and repayment of the funds. I was unable to determine why the dams were never constructed. However, as I sifted through all of these reports, letters and studies I found myself daydreaming about the valley and how it may look or operate now, had those dams gone into place. Some would cite the social and economic benefits resulting from enhanced agriculture and

tourism, while others would bemoan the demise of remnant populations of anadromous fish. Without question, we would today be addressing problems of a different nature. As a community, we are bound together by the water that runs through the valley. These rivers bind together the communities that exist along them. The citizens of those communities will be affected both in the short and long terms by the decisions that have been and will be made about "managing" the rivers. Grant us the wisdom, foresight, and fortitude to use all the tools we have to make decisions with the future of the rivers, communities, and people in mind.

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When asked how the Grande Ronde Model Watershed Program has been a MODEL, Pat responded that:

- The GRMWP was one of the very first programs to be acknowledged by Bonneville Power Administration as a successful program to help distribute their dollars to improve habitat for endangered species.
- The GRWMP has been successful in consistently dedicating 70% or more

of its the funding into "on-the-ground" projects.

- The GRMWP became a model for other watershed councils to build upon.
- The GRMWP is also a model in the fact that the Board of Directors is one of the largest and most diverse in the entire United States, which were appointed by local governments in each county.

In closing, Pat expressed that the GRMWP has become the entity that the state, federal and private enterprises look to as a coordinator for funding and technical advice for natural resource restoration projects. In the future, Pat hopes that the GRMWP will continue to be interactive rather than reactive to change that is constantly occurring. He hopes that the GRMWP continues to utilize available dollars to deliver incentives to people wanting to make improvements not only on agricultural land and other private lands.

Pat attributes the success of the GRMWP to the "...good folks that have dedicated their time, expertise and sincere beliefs in natural resources management."