

# Ripples

## in the Grande Ronde

Fall 2006

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

## Cattle and creeks

### Managing range cattle and riparian areas

by Beth Stewart, Editor



**T**im DelCurto never dreamed he'd be running a research station. The youngest of four boys, he was raised on a cattle ranch in Halfway, a town of barely 300 people in northeast Oregon near the Idaho border. As a young man, he ventured west to Corvallis to earn a degree in agriculture from Oregon State University, always expecting to return to the family ranch. As fate would have it, DelCurto never joined his brothers back in Halfway. He stayed on campus to complete a M.S. degree in animal science, then worked under an internationally renowned grazing animal nutritionist at Kansas State, where he earned his Ph.D.

DelCurto is now superintendent of the OSU Eastern Oregon Agricultural Research Center in Union. He smiles as he tells the story of when he first interviewed in 1989 with Marty Vavra, the superintendent at the time. For a short while, the Union Station was closed and the research staff was housed at the Burns Station in southeastern Oregon. Vavra expressed concern to the new graduate that it's often difficult to get quality researchers to stay in the

small, remote, dusty town of Burns. That's when DelCurto informed Vavra he had been born and raised in Halfway, and that Burns, population 3,000, was considered "big city" to him. The two hit it off immediately and have worked together in various capacities ever since.

Today, DelCurto oversees a staff of 12 range managers, researchers, graduate students, and support staff in Union. Much of his research revolves around the Hall Ranch, a 2,000-acre parcel owned by OSU southeast of Union. The Hall Ranch is located upstream of Catherine Creek State Park and is split in half by State Highway 203 (see map, Page 2). Purchased in 1940, the Hall Ranch is one of four research ranches owned by OSU across the state.

DelCurto calls the Hall Ranch a "living laboratory." His star subjects are 250 mother cows used for research purposes. The ranch is invaluable from a long-term research standpoint because of its extensive network of exclosures, some which were erected as far back as the mid-1970s. DelCurto says some areas have not been grazed for 40 years, and are critical when comparing various grazing strategies and their impacts on riparian areas.

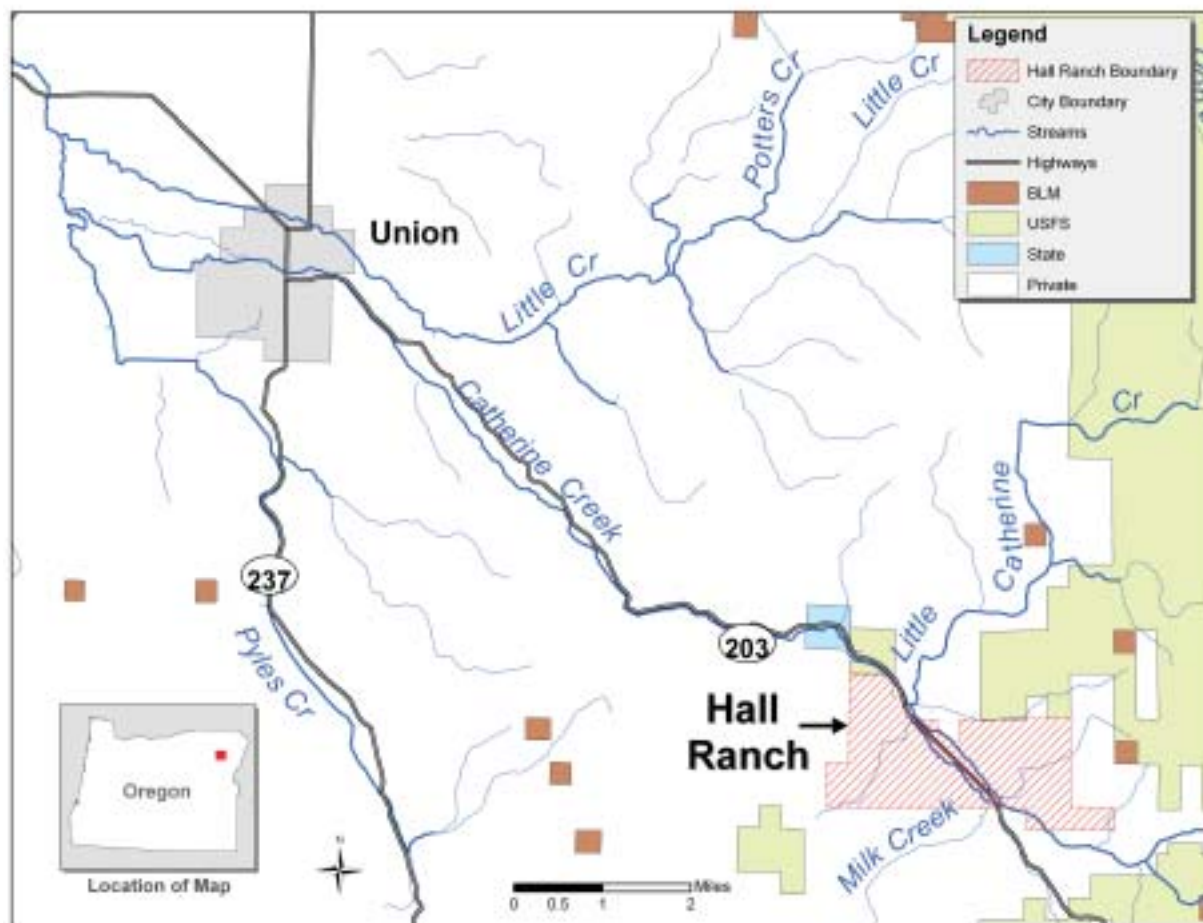
Much of DelCurto's research today focuses on the impacts of grazing on riparian vegetation – the forbs, shrubs and trees that line the banks of streams. Both



*Right: Tim DelCurto speaks with local ranchers during a field day in Wallowa County. Top right: A reach of Mill Creek, which runs through the Hall Ranch, is shown here prior to grazing. Far right: A portion of Mill Creek during a grazing study. This access point, where cattle come regularly to drink, shows signs of concern. OSU Agricultural Research Center photos.*







Whether it be on private land or U.S. Forest Service allotments, cattle often come in contact with streams. DelCurto and fellow researchers have discovered that early in the summer, cattle come to streams to drink, but typically move back into the uplands where grass is plentiful and palatable. In August and early September in eastern Oregon, however, when temperatures rise and upland grasses are less appetizing to bovines, cattle often congregate near streams where green vegetation, shade and cooler temperatures are more appealing. This heavy use often results in soil compaction, stream bank erosion, and overgrazing of the riparian vegetation – all of which ultimately degrade conditions for fish and other aquatic life.

Now that researchers have identified the problem – primarily the distribution of cattle during late sum-

.....Continued on Page 8, **CATTLE**

Catherine Creek and Mill Creek run through the Hall Ranch. This reach of Catherine Creek boasts one of the highest densities of spring chinook salmon, currently listed as “threatened” under the Endangered Species Act. The streams are also habitat for steelhead trout and bull trout, also threatened species.

**H**ealthy, lush riparian vegetation provides stream bank stability, shade, and large woody debris, which in turn help provide good water quality and habitat for fish. DelCurto’s goal is to maintain healthy riparian areas while still operating successful cattle grazing operations. To that end, DelCurto and his associates are looking at all sorts of management strategies to optimize both riparian production and cattle production. The Hall Ranch acts not only as a living laboratory, but a demonstration site to show researchers and ranchers that both are indeed possible.

“We are looking at all the tools a rancher can put in his toolbox,” says DelCurto, who stresses that management techniques must be realistic options for producers. “If ranchers can’t be economically viable, it’s hard to get them to be ecologically viable.”

*Right: Cattle graze on the 2,000-acre Hall Ranch, where researchers conduct studies to evaluate impacts of grazing on riparian areas. Top: Research cattle come to drink on Catherine Creek in August on the Hall Ranch. Top right: Lush riparian vegetation lines this healthy stretch of Mill Creek. OSU Agricultural Research Center photos.*



# Fish Online!

It's new and improved, and ready for action!

Take a look at the updated Grande Ronde Model

Watershed website. We think you will find it

[www.grmw.org](http://www.grmw.org).

informative and easy to use. Some of the new additions are improved website navigation tools, announcements for upcoming events, and examples of GRMW-funded watershed restoration projects.

Database Manager Cecilia Noyes has spearheaded the effort to bring you pages of information and photographs. We invite you to take our new website for a test drive! Feel free to use the "Webmaster" link at the bottom right corner of the website to notify us about problems you may have using the website.



*The Grande Ronde Model Watershed's new website, [www.grmw.org](http://www.grmw.org). A hierarchical navigation bar is shown at the top of the page's left column; the search box is located below the navigation bar. Pictures underlined with a blue dashed line may be clicked for an enlarged view or to link to another topic or webpage.*



# Road Map *to* Recovery

*Salmon and steelhead recovery planning in the Grande Ronde, Wallowa and Imnaha River basins*

by Jeff Blackwood & Randy Tweten, NOAA-Fisheries

In 1993, Snake River chinook salmon were listed as “threatened” under the Endangered Species Act (ESA). Snake River steelhead followed with a similar listing in 1998. These listings brought new emphasis to these species and their habitats, along with expectations for species recovery to the point they would no longer need protection under the ESA.

Part of the recovery process is the development and implementation of species recovery plans that provide guidance for recovery and ultimately the delisting of the species. NOAA-Fisheries (short for the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service) is the federal agency charged with preparing the recovery plans for salmon and steelhead under the ESA. Several other agencies and organizations are contributing to that process as well.

Union and Wallowa counties have a long history of riparian and aquatic conservation work. Many improvements in habitat on both private and public lands have occurred since the initial listings under the ESA. With this as a background, recovery planning is intended to support such local efforts and gain from these experiences.

## **What is a recovery plan?**

Under the ESA, recovery plans specifically require (1) objective, measurable criteria for delisting the species; (2) site-specific actions; and (3) estimates of time and cost for implementing the recovery plan.

The ESA requires the development of recovery plans and envisions them as road maps for species recovery. Recovery plans are guidance documents, not regulatory instruments. They are intended to be grounded on existing conservation efforts and utilize local expertise and related planning efforts. Completed recovery plans should be one of the most important tools to support sound scientific and logistical decision-making throughout the recovery process. Local public input, support, and involvement are essential to developing effective recovery plans. Participation by local, state, and federal agencies and Native American tribes is desired as well.

## **What has occurred to date?**

NOAA-Fisheries initiated a stakeholder involvement process to aid in salmon and steelhead recovery planning in the Grande Ronde, Wallowa, and Imnaha River basins in July of 2005. At that time, NOAA-Fisheries asked the directors of the Grande Ronde Model Watershed if they would consider playing a primary role in public review and feedback, especially as policy issues arose. Other key players in this process are the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and local, state, and federal agencies and entities affected by the listings. Since July 2005, NOAA-Fisheries staff in La Grande have met periodically with the GRMW directors and staff, along with other interested parties, as the recovery plans are being drafted. These meetings are open to anyone interested in the process. Prior to this past summer, most of the work in recovery planning has been developed by technical teams, laying the scientific background for policy decisions and strategies. We are now addressing policy questions essential to moving forward with plan development.

## **Key Players in the Recovery Planning Process**

Bureau of Land Management  
Confederated Tribes of the Umatilla Indian Reservation  
Grande Ronde Model Watershed  
Nez Perce Tribe  
NOAA-Fisheries  
Oregon Department of Agriculture  
Oregon Department of Fish and Wildlife  
Oregon Department of Forestry  
Private landowners  
U.S. Fish and Wildlife Service  
U.S. Forest Service

### Where are we in the process?

Draft recovery plans for the Oregon portion of the Snake River for chinook salmon and steelhead are being developed now. The background for listing; desired status, including viability criteria and recovery goals; and current status and gaps are basically developed. Teams are currently identifying limiting factors and threats, along with potential management actions necessary to address these issues.

The most recent public workshop for Snake River recovery planning was held October 23 at the Wallowa Community Center in Wallowa. It focused on the populations of spring/summer chinook salmon and steelhead of northeast Oregon, and their limiting factors, threats, and associated management actions for the tributary habitats. It is important and necessary to have good public review and involvement in developing potential management actions. The next public workshop is scheduled for early December. In future workshops, topics of discussion will include limiting factors, threats, and potential management actions for tributary hydroelectric dam operations, hatcheries, and harvest. Other future topics will include cost and logistics review, research needs, and monitoring and evaluation plans.

NOAA-Fisheries intends to publish the draft recovery plans for Snake River steelhead and chinook salmon this winter, which will provide for broader public review and involvement. Final recovery plans are estimated to be published later in 2007, after

### Basic Outline of a Recovery Plan

- Background/overview. Why were species listed?
- Population and major population group structure. How are they identified?
- Desired status, including viability criteria, recovery goals, and recovery scenarios.
- Current status and gaps. Current population conditions, and what changes in populations would be necessary to move to desired status.
- Limiting factors and threats. What are the challenges to get to desired status?
- Management actions. Based on limiting factors and threats, what management actions could be implemented to move to desired conditions?
- Cost analysis and effectiveness of management actions.
- Preferred management actions.
- Implementation schedule, research needs, and monitoring and evaluation needs.

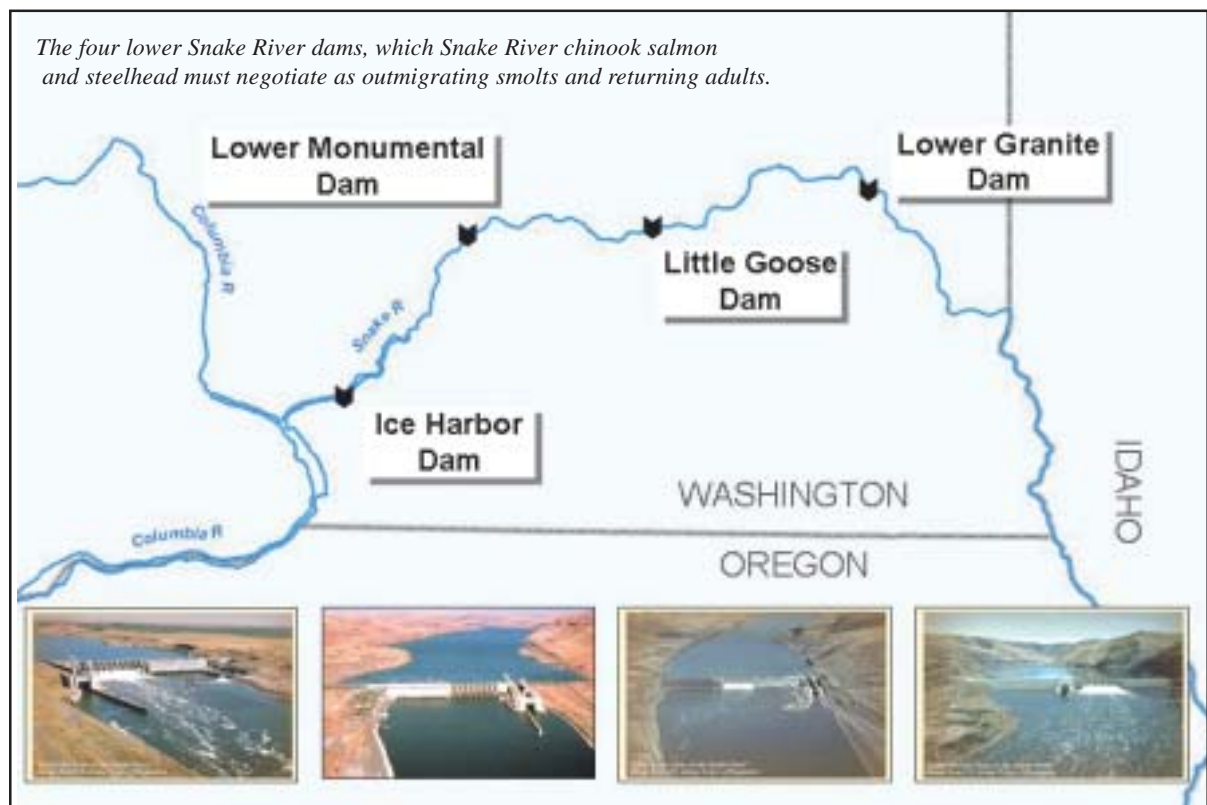
thorough review and evaluation of comments received on the draft plans. The current work with the GRMW and others is intended to help develop useful and supportable draft plans to make the transition from drafts to final plans more efficient.

### Who should I call for information?

Randy Tweten of NOAA-Fisheries in La Grande is the lead person in development of these plans and may be contacted at 541-975-1835, ext 229, or [randy\\_tweten@noaa.gov](mailto:randy_tweten@noaa.gov). Jeff Blackwood, former Forest Supervisor of the Umatilla National Forest, is facilitating the public involvement process and may be reached at 541-276-4240 or [bwood@wtechlink.com](mailto:bwood@wtechlink.com). ■



The four lower Snake River dams, which Snake River chinook salmon and steelhead must negotiate as outmigrating smolts and returning adults.





# Leading them to water

by Coby Menton, GRMW

**R**anchers use numerous livestock management methods to encourage disbursement of cattle across the range. Distribution of animals is important to the landscape for several reasons, including even utilization of forage and reduced impact to riparian areas. Livestock frequently remain close to water sources – be it a creek, spring or pond – and consequently overgraze that area, resulting in damaged vegetation, reduced water quality, and altered soil conditions. Management options used to draw livestock out of riparian areas include salt licks, mineral supplements, upland shade, forage fertilization, herding, fencing and off-site water development. While

combinations of these techniques are typically employed to achieve improved livestock distribution, off-site water development is key.

Off-site water development is simply providing water away from sensitive riparian areas. Installations typically include a water source, watering trough, and plumbing between the two. The water source is often a spring, but can also be a well, creek, or pond. Commonly water is supplied to troughs by gravity, but solar or alternating current pumps can also be used. Plumbing is usually steel pipe with fittings, and a float valve to keep the trough from overflowing or return plumbing to the water source. Because troughs are often positioned close to the water source, fencing is often installed around the creek, pond, or spring to protect it from livestock impacts.

Since 1992 the Grande Ronde Model Watershed has participated in the installation of over 400 off-site water developments in the Grande Ronde Basin. The developments have been on both public and private ground. Partners include local, state and federal agencies and private landowners. In 2006, 25 off-site water developments were either maintained or replaced in the upper Joseph Creek watershed in Wallowa County. This project was a joint effort between Wallowa Resources and the U.S. Forest Service Wallowa Valley Ranger District with funding provided by the Grande Ronde Model Watershed, Forest Service, and Wallowa Resources. Benefits of off-site water development include (1) improved

habitat for fish and wildlife, (2) decreased sediment input to streams, (3) improved water quality, and (4) improved livestock distribution.

Not only do off-site water projects provide benefit to the landscape through improved riparian vegetation, soil stability and water quality, benefit is also realized by the producer. In supplying clean water to livestock, animal health is improved, reducing health maintenance costs and increasing weight gain. The even distribution of animals, which contributes to the improved utilization of available forage, results in a conservation practice with benefit to both natural resources and producers. ■



*Above, top: This water trough in the Marr allotment is in poor condition with a rusted tank and non-functioning plumbing, 2002. USFS photo. Bottom: Three years after project completion, this off-site water development is now in proper functioning condition. The steel tank was replaced with one of aluminum and all plumbing was replaced. Trough, buck and rail fence, spring, and grounds are in great condition. Photo by Dana Orrick, USFS. Right: This trough has a float valve that turns off flow to the tank when it's full. The float valve eliminates overflowing and the need for return plumbing to the water source. Oveson Ranch in Wallowa, Ore. Photo by Jeff Oveson.*



*Above, top: Prior to maintenance in 2002, this trough in Elk Creek in Wallowa County was non-functioning. Middle: Post-maintenance in 2002, this trough is now in functioning condition. The trough was moved, repositioned, and re-plumbed in combination with new stream protection fence. USFS photos. Bottom: Trough, plumbing and fence are still functioning as intended in 2005. Photo by Dana Orrick, USFS.*

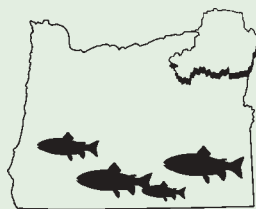


## Meet the Board

### Mike Hayward

Mike Hayward, 52, was appointed to the board of directors for the Grande Ronde Model Watershed seven years ago. He has served as chairman for the past four. "I have appreciated the opportunity to work with the folks on the Grande Ronde Model Watershed and the various entities who are involved," says Mike.

Mike is also a Wallowa County Commissioner and has served in that capacity for 10 years. As commissioner, he deals with all sorts of issues, including human resource and economic development issues. When it comes to fishery issues in the watershed, Mike says he especially appreciates how much he has learned from biologists and managers who work in the field every day. Mike admits that his role on the board has been rewarding as well as challenging and frustrating. "I feel like we have made a difference, but I can't point to hard numbers to prove it."



**GRANDE  
RONDE  
MODEL  
WATERSHED**

Mike was not always a resident of Wallowa County. Born and raised in Pullman, Wash., he attended Washington State University, graduating with a degree in forestry. Mike got his first taste of Wallowa County while working a summer internship at Wallowa Lake State Park between his junior and senior years at WSU. After graduation, Mike came back to the state park, working as a park aid for the Oregon State Parks Department. He was soon promoted to park ranger and transferred to Cove Palisades State Park in Madras.

While working in the Bend area, he met and married a Wallowa County girl. Ready to come home, the two moved back to Wallowa County in the spring of 1981. Over the years, Mike has worked as a ranch hand, various roles in the tire business, and later as owner of the Eagle Cap Chalets at Wallowa Lake. Mike was elected to the County Commission in late 1996 and took office in January of 1997.

Mike and his wife, Bev, reside in Joseph. Their daughter, Jessica, 22, is a business major at Albertson College in Caldwell, Idaho. Their son, Clayton, 20, lives in Boise and is a marine mechanic specializing in jet boats.



## "Ripples" newsletter recognized by Oregon DEQ

On October 12, Grande Ronde Model Watershed Executive Director Jeff Oveson accepted a certificate of appreciation from the Oregon Department of Environmental Quality for the watershed's outreach efforts in Union and Wallowa counties through its newsletter, *Ripples in the Grande Ronde*.



Environmental Quality Commission Chair Lynn Hampton presented the certificate, which reads "In recognition of your education and outreach efforts to improve coordination, integration and implementation of existing programs that protect, enhance, and restore an important watershed."

"*Ripples in the Grande Ronde* is a valuable source of information for other natural resource agencies, an effective communications tool in the Grande Ronde Basin, and a successful means of providing water-related information for both adults and children."

The newsletter is published quarterly and appears in *The Observer* and the *Wallowa Chieftain*. The Grande Ronde Model Watershed is the primary entity coordinating habitat restoration on both private and public lands within the Grande Ronde and Imnaha subbasins. As a model watershed for Oregon, it establishes watershed management partnerships among local residents, state and federal agencies, and public interest groups.



State of Oregon  
**Department of  
Environmental  
Quality**

**CATTLE**, continued from Page 2.....

mer – DelCurto and his crew are experimenting with ways to lure cattle from streams and back into the uplands, relieving pressure on riparian areas. Other than adjusting stocking rates and grazing schedules or fencing miles of stream, which can be cost prohibitive, some strategies include providing alternate water sources such as water tanks in the upland areas. Another involves the strategic placement of protein supplements, such as tubs, in the upland areas to draw animals away from natural waterways and assist in weight gain. Another tool is the age-old practice of herding, only this time it means herding animals on horseback or four-wheelers during a strategic time of day.

## “We are looking at all the tools a rancher can put in his toolbox”

DelCurto has also experimented with electronic ear tags and radio frequencies, which work much like an invisible fence works for dogs. As the cow nears a stream, she hears an annoying beep that doesn’t stop until she turns away and gets so many feet from the stream. While the Union Station’s cows have demonstrated that they are quick learners, the device is yet to be economically feasible for producers.

DelCurto also points to the simple concept of breed choice. Tarentaise cattle from France or Coriente cattle from Spain, for instance, are known to range better than some of the traditional breeds used in the West.

**T**he second half of DelCurto’s job is to transfer what he has learned through research to the local producer on the ground. DelCurto publishes his findings in various animal science journals, and teaches courses at Eastern Oregon University in La Grande through the OSU Agricultural Program. He and his crew work with local ranchers and sponsor field days throughout the year to share ideas and management techniques. Local producers also serve on DelCurto’s advisory group for the Union Station.

“Our ranching community is steeped in tradition,” says DelCurto, adding that most producers are in the cattle business for the way of life, not for the slim profit margin it generates. It is not realistic to expect them to fence miles of stream for the sake of fish. Nonetheless, most want to be good stewards, says DelCurto, and most look at things from a long-term perspective.

DelCurto’s mission is to promulgate the idea of a sustainable agricultural system, both from an ecological and economic perspective. “We want to show people that we *can* have healthy forested rangelands,” says DelCurto with conviction. OSU’s Hall Ranch is testimony to such talk.

DelCurto is optimistic about the future. He is happy with the relationships he and his associates have with local producers, the Forest Service, and the Pacific Northwest Forest and Range Experiment Laboratory in La Grande. “We want to have a positive impact on these rural communities,” adds DelCurto, “and our effectiveness only increases with time.” ■

*For more information about research on the Hall Ranch, feel free to contact Tim DelCurto at the Union Station, 541-562-5129.*



## Grande Ronde Model Watershed

### Upcoming Board Meetings

*The public is welcome to attend*

- Tuesday, November 21, 6:30 p.m.  
Community Connection, Enterprise
- Tuesday, December 5, 9 a.m. - 3 p.m.  
Annual Planning Session  
Ascension Conference Center, Cove
- Tuesday, January 23, 6:30 p.m.  
St Mary’s Catholic Church, 12th Street, Elgin
- Tuesday, February 27, 6:30 p.m.  
Wallowa Community Center, Wallowa
- Tuesday, March 27, 6:30 p.m.  
St Mary’s Catholic Church, 12th Street, Elgin

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

## Grande Ronde Model Watershed

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Joe McCormack, Nez Perce Tribe

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