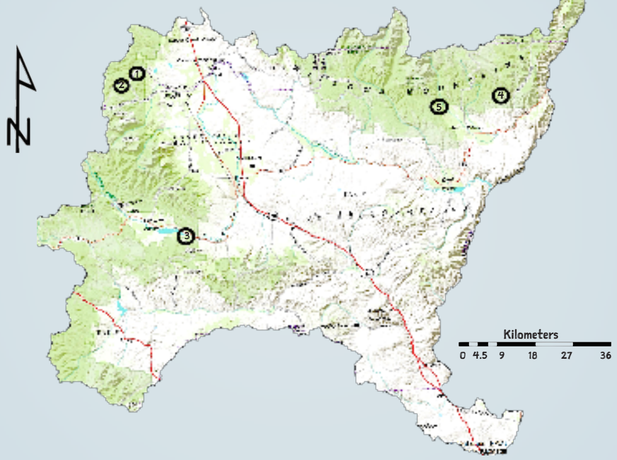
Where is our Watershed?



Things to do

Five Family Friendly Hikes

1. Crawfish Lake Trail- 2.9 miles, easy
easy enough for children, this hike traverses high alpine slopes of wildflowers and forest to a pretty mountain lake suitable for swimming.

2. Anthony Lakes Trail- Hoffer Lake 2.9 miles or Black Lake 2.4 miles, easy
a glacier scoured out Anthony's Lake granite basin from the crest of the Elkhorn Range during the Ice Age. Today subalpine firs and wildflower meadows ring the lake, framing its reflection of peaks.

3. Powder River Interpretive Trail- 0.6 miles accessible, 0.6 miles non-accessible, easy
located below Mason Dam, the trail runs along the Powder River between the lower interpretive area and the small upper picnic site.

4. Clear Creek Sno-Park- 6 cross-country ski trails, easy to most difficult
located near Halfway, these loops are a fun for winter hiking with the family

5. Summit Point Lookout Trail- 2 miles, easy
timberline meadows and wide-ranging views even at the start of this hike, because the trailhead is one of the highest in the Wallowa Mountains.

BIRDS, BURNS & BASINS

Powder Basin Watershed Council Spring Tour

Do you like birds? Are you interested in hearing about post-fire forest management?
Join PBWC, Oregon Department of Forestry, and USFS Wallowa-Whitman
for a guided birding hike on Dooley Mountain!

Wednesday, April 13, 2016
9:00 am -1:00 pm

Pre-registration required (541) 523-7288

Funding for this project was provided by the Oregon Watershed Enhancement Board

Powder Basin Watershed Council

2034 Auburn Avenue
Baker City, Oregon 97814
Phone: (541) 523-7288
Fax: (541) 523-7288

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THE THALWEG

"Living in Harmony"

WINTER EDITION 2016

LIVING IN HARMONY • QUARTERLY NEWS FROM THE POWDER BASIN WATERSHED COUNCIL

Water Quality
In the Powder Basin Watershed

By Anna Morgan, *PBWC Staff*

This is the water quality edition of the Council's quarterly newsletter. The Council serves residents in the Powder Basin watershed including all of Baker County and portions of Union, Malheur, and Wallowa Counties.

When the issue of water quality arises, there are many implications and stakeholders involved. In the state of Oregon, acceptable water quality is crucial to industry, agriculture, recreation, fish and wildlife, and human consumption. For this reason, water is an extremely precious, and well-regulated, resource, especially to those of the Powder Basin watershed. Still, there are many questions surrounding water quality measurements, for instance: What are agencies measuring? How are they measuring it? When? Why? For how long? And finally… What about the Powder Basin's water quality?

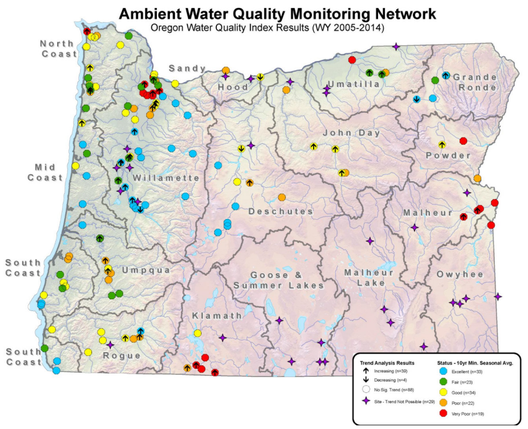
The Oregon Department of Environmental Quality(ODEQ) acknowledged this very long and complicated process by developing the Oregon Water Quality Index or OWQI. Curtis Cude of ODEQ Laboratory Division explains the OWQI as a number that incorporates measurements of eight different parameters (temperature, dissolved oxygen, biochemical oxygen demand, pH, ammonia+nitrate nitrogen, total phosphates, total solids, fecal coliform). In other words, the OWQI is a "simple, concise and valid method for expressing significance… to aid in the assessment of water quality." ODEQ uses this number to assign a grade for specific water bodies for general recreation purposes. This does not determine the quality of water for all uses, such as agriculture or drinking, but instead "provides a basis to evaluate the effectiveness of water quality improvement programs and assist in establishing priorities for management purposes."

In the Powder Basin Watershed, three sites are measured to determine their OWQI. One site is located on the Powder River at Highway 7 in Baker City, another on the Powder River between Keating and Richland, and the last, on the Burnt River in Huntington. Water quality varies throughout seasons and locations, so measurements are reflected as a score of measurements along a ten-year trend from 2005-14. Additionally, they are listed as a condition: excellent, good, fair, poor, or very poor.

Under this premise, the basin water quality ranges from good to very poor across the three sites. In Baker City, the Powder River OWQI score is 86 with a condition listing of "good" and "increasing", the lower Powder between Keating and Richland is reflecting a OWQI of 45 and a condition of "very poor" with a neither increasing nor decreasing trend, and the Burnt River in Huntington is reporting an OWQI of 70 and a condition of "poor" with a neither increasing nor decreasing trend.

Although one of the grades fairs well, the others are less than ideal, but what does this mean and what can we do to improve it? First, it's important to note that all the sites in the Powder Basin are listed as "range" where typically there is less riparian vegetation and higher nutrient runoff- which can greatly influence water quality in terms of temperature, dissolved oxygen and nutrient concentrations. Also, the basin has

ODEQ Full Report 2005-14



experienced drought, low snowpack, and high temperatures for several consecutive years, which again has the ability to greatly impact water quality. There are many contributing factors to water quality, some of which are entirely up to nature, but others which can be addressed on an individual level.

This brings us to what you can do about it. Ecohealth, an Oregon Foundation committed to understanding and promoting river health offers three tips. First, you can start by getting to know the rivers near you. There are an abundance of recreation opportunities along the many rivers in the basin, including hiking, biking, boating, fishing, hunting, and more. The more you are familiar with your rivers, the more you can advocate for their health. Water is a resource we all share, and there is no better way of protecting it than learning as much as you can about it.

The next important way you can affect water quality is by making a change. Start small and make changes in your daily routine like cleaning up your garbage after an afternoon at the

"Water Quality" *Continued on page 7*

Meet the Board Member

Nancy Rorick

2014-16 Council Chair, Powder Basin Watershed Council Board of Directors

By Anna Morgan, *PBWC Staff*

Nancy Rorick and Meghan Rorick at Baker Community Night Out 2015

If anyone loves Eastern Oregon, it's Nancy Rorick. After residing in many places across the Country- Arizona, Nevada, Illinois, and Oregon- she chose to make her home here in the heart of the Powder Basin- Baker City. She speaks fondly of the scenic Oregon desert and big open spaces, her love of the culture of the intermountain West, and how she feels the most comfortable when she can see for miles… but most of all she says, "Eastern Oregon has always been the place I call home." For Nancy, this feeling runs much deeper than open spaces; home- has been here in Eastern Oregon for more than six generations. In fact, just outside of Hereford, her great-great-great grandmother, Hannah Diven, is buried on a small ranch and many of her other pioneer relatives can be found in the Malheur Cemetery.

Nancy grew up in Nyssa, Oregon, a small town south of Ontario. After completing her undergraduate degree at the University of Arizona and graduate school at Southern Illinois University, she went on to lead a long career in the environmental field. Finally returning to Eastern Oregon, she felt it was time to give back to her community.

In the spirit of giving back, Nancy joined the Powder Basin Watershed Council in 2014, and served as the Council Chair for two years until the most recent reelection in February 2016. As the Council Chair, she oversaw the nonprofit's administration and staff, providing guidance for Council projects and restoration opportunities. Her technical expertise and wisdom of the local ecosystem make her a unique and much appreciated asset to the Council.

"Nancy is one of the hardest working and smartest people I know, but also, she is genuinely nice and good at what she does, so people respect her" Meghan Rorick, Council Monitoring Coordinator, reflects on Nancy's contributions to the Council.

Under her hard work and guidance, the Council has completed several projects including her contributions to the Brownlee Subbasin Watershed Assessment, where she acted as a contractor and lead author on the assessment. The assessment has allowed PBWC to make decisions about the type and scope of projects to develop in the Brownlee subbasin. She has watched the Council grow over the years, noting that "we now have established successful programs for water quality monitoring, education and outreach, and have completed several restoration projects," but as a goal for the organization she desires "to see more community involvement in the form of increased membership and interest."

When asked why she joined the Council, she says "I feel that the Watershed Council's approach to solving problems with local community involvement outside of the regulatory framework is really the only way to improve watershed health." During this very unique time in history, with regard to local land management, Nancy is not alone. Many basin residents and ranchers wish to approach watershed issues outside of government regulatory agencies, and using the Council as a neutral forum may be the way to accomplish this.

"I feel that the Watershed Council's approach to solving problems with local community involvement outside of the regulatory framework is really the only way to improve watershed health."

The Council diverged from the County, becoming a non-profit in 2008, which, as Nancy explains, "makes the organization in a position to really start benefiting the community…. the one thing I have learned as Chair, is that the Council makes better decisions when we have a diversity of opinions and backgrounds involved in the decision-making. The more people who are involved, the greater our potential to benefit our watershed health and our local economy."

Her goals mirror the Council mission: to

"Community" *continued from page 6...*

a lot of work, but Shelly says "its not work everyday because we are with our family doing what we enjoy… we ride horses, we see our family, we don't necessarily need time off because we have each other."

Being a part of the ranching community has its perks, especially for a tight knit community like Baker/Powder Valley. Jerry explains that "the most rewarding part of being a part of the ranching community has been the comradery amongst us, we pull together for the same cause, we all pitch in and help each other." This reminds Shelly of a time when a neighbor suffered a head injury and all the surrounding neighbors kept the the water going and the lights on. Jerry explains that ranching is still very much a "handshake atmosphere." This community trust within an industry is unique to agriculture and embraced in the face of public misconceptions. "Agriculture is personal, ranching is personal" Jerry recounts speaking with a natural resource professional about the fact that when someone calls his office a phone rings in the living room, the kitchen and in the bedroom. The nature of this business is rooted deep in family values, and so changing policies and management requirements can be difficult to adjust to time and time again.

"Agriculture is personal, ranching is personal."

In fact, the Grays explain that a big challenge in the ranching community has been the public perception of ranchers, or that all ranchers harm the environment. Jerry says that "We've run cattle continuously for forty years and the range has improved… we do care about natural resources, natural resources are everything to us." Both Shelly and Jerry feel that that there is a fundamental distrust between the ranching community and outsiders because oftentimes agencies impose fines instead of providing incentives to work with them. This is a really important point that could be addressed with the use of community-based planning and locally organized non-profits. Oregon noted the difficulty for locals to connect to state and federal agencies by setting up the Oregon Watershed Enhancement Board. This instigated the creation of local, community-based watershed councils to help citizens restore healthy watersheds and natural habitats that support thriving communities and strong economies.

Although the Grays have acknowledged the distrust on behalf of private landowners towards agencies, they have found success by working closely with agencies throughout the past decade. In one instance, the Gray Ranch, Inc. received a grant by working with the Soil and Water Conservation District (SWCD) and using the Powder Basin Watershed Council (PBWC) as a fiscal agent, to replace a wheel line with a center pivot. Jerry states that "we put the most emphasis on water conservation methods; the pivots cost about $1000 an acre but it needs to be looked as a long-term investment." The Grays were able to save costs by buying used pivots online from other states. In their family fashion of resourcefulness, Lukus can completely assemble and maintain the pivots, so this helps them cut costs. When asked whether or not they would recommend this for other ranchers, they explain that this is a case by case basis decision for ranchers; rather, a place by place basis. In the process of switching from flood irrigation to center pivots, you remove a lot of artificial wetland area, nesting sites, and bird habitat. Although, pivot sprinklers are more efficient, especially when facing another year of drought in an ongoing water crisis and wildfire climate, not everyone has suitable land for this.

Unfortunately for the Grays, and many agricultural families, the basin is predicted by climatologists to face another dry year. Upon asking how they will prepare for this, they responded "Each year, around this time we write out a crop plan and consider two things: we predict what the outlook for our markets are, and the weather…. The weather is the easier to predict." Jerry and Shelly decide how they will make the money they need to care for the four families the Ranch provides for and saying they are "resourceful" may be an understatement.

Jerry and Shelly, have been recently featured by the NRCS for the East Face Project where the focus was on reducing fuels for forest fire by performing pre-commercial thinning. By working with NRCS in partnership with the Oregon Department of Forestry (ODF), and Lane Parry, a private forest consultant, they created a management goal which included fuel reduction, enhancing silviculture and maintaining aesthetic. Basically, they sought to reduce the amount of available fuel, but hand selected the healthiest stands for establishment and composition, ensuring a lasting and healthy forest. The Grays feel more than satisfied with this partnership noting that their interactions with Parry and ODF were beneficial and helpful.

In addition to being a family man, Jerry also is a community man, serving on the board for the Water Control District and being a former board member for PBWC. Shelly serves on the Cemetery Board and Lukus has recently been voted onto the board of the PBWC. Jerry comments on his work with Council, stating, "I don't want to take credit for the success of the Council, but I was there when there was a tremendous amount of improvement, Lukus approached me about being on the board and I encouraged him. I told him there are two things in this area you should invest in: your family and children, and water." The Council serves as a platform for community conversation about natural resources and when asked about why he wanted to be apart of PBWC, he explained that

"In order to make changes you must be on the inside of the solution."

For more about the East Face Partnership:

NRCS Oregon. 2015. Northeast Oregon East Face of the Elkhorn Mountains Partnership: Producer Profile: Shelly Gray, Union County, Oregon. United States Department of Agriculture. Or online: www.fs.usda.gov/goto/EastFace

"Water Quality" *continued from page 1...*

river or using less water at home. For example, if your property is along a stream or river you can clean up after your pets and plant native shrubs in riparian areas. Shrubs will act as a buffer between the river and toxic substances as well as bring shade to lower water temperatures. Lastly, you can take action and join an organization that has an interest in protecting water quality. The Powder Basin Watershed Council is a community-based, non-profit that offers many volunteer opportunities related to water quality and monthly meetings to voice your concerns for the watershed.

If you would like to get involved in making a change in your community watershed, please contact the Council at pbwcoutreach@qwestoffice.net or call (541)523-7288.

For more information about Ecohealth, visit http://ecoreportcard.org/report-cards/willamette-river/

For the full Oregon DEQ Water Quality Index Summary Report: Water Years 2005-2014, visit http://www.deq.state.or.us/lab/wqm/docs/wqiAnnualRep2014.pdf

Cude, Curtis. 2015. Interpretation and Communication of Water Quality Data Using the Oregon Water Quality Index. Oregon Department of Environmental Quality Laboratory Division. Found at http://www.deq.state.or.us/lab/wqm/wqindex.htm

Featured Classroom

Science Skills for Troy Tubbs's Environmental Science Class: Pine Eagle Charter High School

By Anna Morgan, *PBWC Staff*

Many high schools in the basin are turning their attention to the development of technical skills for students in order to enhance their future employability, and Pine Eagle Charter High School is no different. Pine Eagle science and math teacher, Troy Tubbs has found a way to contribute to student employability while also teaching students a valuable lesson about water quality.

In Halfway, Oregon everybody knows that Mr.Tubbs goes above and beyond his duties as an educator at Pine Eagle Charter High School. He is a teacher who approaches his students with enthusiasm and respect to which his students respond mutually. Being a father, husband, coach and educator, he has had the opportunity to positively influence the lives of many of the region's students. In his Environmental Science classroom, he carefully structures science curriculum in ways that he feels will not only resonate with students, but also provide them with more meaningful connections to course material; connections that he hopes students will take with them after graduation.

As Tubbs explains it, "Because the focus of this class is on the interaction of humans with their environment I am always looking for ways to get out of the classroom and make the science more meaningful to the students. Too often the classroom consists of worksheet and book work with little practical application. By working with PBWC and other professional entities the students get a better idea of why science is important and how it applies to everyone on a daily basis."

Students performing water quality testing

"By working with PBWC and other professional entities the students get a better idea of why science is important and how it applies to everyone on a daily basis."

The work he is referring to is the Powder Basin Watershed Council's Volunteer Water Quality Monitoring Program. Tubbs and his environmental science students have been participating in the program for the past three years and have been able to provide valuable data on the Pine Creek subbasin each year. Specifically, the students monitor three sites along Pine Creek; one at the north end of Pine Valley, one in the middle, and the last at the mouth of the river, just before it enters the Snake River at Oxbow.

The monitoring process consists of students using professional monitoring equipment to measure dissolved oxygen, pH levels, temperature, conductivity and turbidity. During this process they practice scientific and mathematical skills which help them interpret and record data used for the monitoring program. Students take turns using a multimeter and probes to collect data and record results and work together to compile the information. The results are then discussed more fully in class where students can think critically and develop conclusions about the water quality in their home town.

Understanding water quality on a personal level allows students to develop a sense of place and take ownership of their most valuable resource. Christine Cook, a student in Tubbs Environmental Science class, describes her understanding, explaining that "water quality is important because water is the most important thing we need to survive. Without clean water, humans and animals would cease to exist. Water-based organisms, fish, frogs, insects, and water birds, all need clean water to survive". Students' ability to connect, not only to their town environment and its resources on a very basic level, but also be supported in developing scientific and technological skills is at the very heart of an unspoken community desire. How do we increase education and employability within the watershed without outside recruitment? In other words, how do we make our own kids successful and bring their successes back into our community?

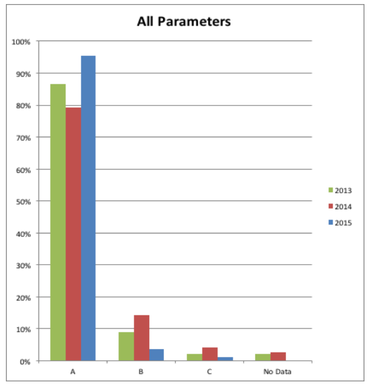
Science and technical skills are valuable core requirements for a future in a natural resource-related career. In fact, these skills have translated to actual employment for one student in particular, PBWC Water Monitoring Intern and former student of Tubbs, Carlie Powell. Powell, along with two other interns, joined PBWC over the summer months to work on projects in the Powder Basin, including a flow project on Pine Creek. Recently, Powell has transferred to Arizona State to study Communications but has been offered rehire upon her return-a testament to the success of the goals Tubbs has set for his students. Powell reflects on her experience with the Council, "Working

"Classroom" *continued from page 4...*

with the Watershed Council has given me experiences that I would've otherwise never had and has taken me to some amazing places that I would not have encountered on my own. Overall, I am thankful to have had this opportunity and would strongly recommend that others pursue this outlet as well; whether as an employee, volunteer, or simply as someone who holds a deep respect for water and conservation."

Pine Creek Student Monitoring

Pine Creek, known for its ability to move large boulders down from the Wallowa Mountains, serves an integral function within the community. Many rely on it for agricultural and stock water and so economic success hinges on the quality and quantity of its waters. So far, data gathered from the sites for 2015 has been rated 95.4% A, 3.6% B, and 1% C which is up from the previous two years. Meghan Rorick, Council Monitoring Coordinator, explains "The sampling procedures incorporate steps to ensure that the data collected is accurate and precise. These steps include: 1) verifying that all the equipment is reading accurately by testing it against known solutions (this is done both before and after each sampling event), and 2) taking two samples at each site during every sampling event (the differences between the two samples must remain within a certain range). The equipment is recalibrated when needed and all the equipment is NIST recertified annually. In addition, a split sample is conducted for every person who volunteers. Two complete sets of equipment are used and the PBWC monitoring coordinator samples alongside each volunteer. The ODEQ Volunteer Monitoring Coordinator split samples with the PBWC monitoring coordinator. This ensures that the volunteers (and the PBWC monitoring coordinator) are following the correct procedures and that the equipment readings are similar.



Grade ratings for Mr.Tubbs Classroom 2013-2015, *PBWC*

At the end of the sampling season, the monitoring coordinator analyzes all the pre- and post-verification and duplicate data. Each sample is given a grade (A, B, or C) based on the accuracy ranges for each parameter (pH, temperature, turbidity, DO, conductivity). Only A and B quality data is used for further analysis."

Rorick asserts that the change in grades from the previous years can be attributed to several factors, "First, Mr.Tubbs is able to identify problems and fix them as they arise, and second, this was the third year Mr.Tubbs has participated in the WQ program, and he's worked out how to get to all the sites and sample quickly with his students, while making sure that the data collected is as accurate as possible." This data is sent to Oregon Department of Environmental Quality where it can remain public and be used to "generate baseline water quality datasets for various sites across the Powder Basin. Specifically, Troy's class will help the Watershed Council identify needs in the basin, to plan strategically for future projects and identify landowners who wish to participate, and to monitor the effects of projects that are implemented. It will aslo help the Council determine how much funding will be needed to support landowners and partners implementing projects. Additionally, this data will support the Total Maximum Daily Loads process in the Powder Basin."

Somewhat anecdotally, an observation made by students and Tubbs has been the varying degree of quality between the sites. Tubbs remarks "At the north end of the valley the water is much colder and flows more freely but by the time it reaches Oxbow, the water warmed signficantly and thus the dissolved oxygen is dramatically different." Dissolved oxygen monitoring allows students to measure the amount of gaseous oxygen dissolved in the water. Oxygen gets into the water through diffusion from surrounding air and rapid movement, or as a product of photosynthesis. This process is important to fish and invertebrate life, as both require oxygen to live. Too much oxygen equates to disease in fish and too little can result in large fish kills.

Pine Eagle Charter School students at a monitoring site

When streams have little water and higher temperatures, oxygen levels are low, resulting in an unhealthy environment for aquatic life. In this way, the amount of dissolved oxygen in water directly contributes to the quality of water. As student Kelsey Whybark puts it, "If the water is not clean enough, the fish can actually suffocate and that can lead to a decrease in population of that species of fish." Being that recreation is an important regional economic driver, having healthy populations of fish is important to contribute to a diverse biological population and a diverse economy.

It is through the unique opportunities afforded to Tubbs class, that students are able to gain a better understanding of the watershed. Learning science and technical skills makes them valuable in the workforce and competitive after college. But most importantly, as a result of their participation in the water quality monitoring program, they are able to find meaningful relationships with the environment and their role in protecting it. They have come to understand how water quality affects people and animals on a watershed scale, all the way down to the individual, and how protecting our most precious resource will also protect their futures.

Meet the Community

Gray Ranch, Inc*:. Water and Family*

By Anna Morgan, *PBWC Staff*
Contributions by Cody Bingham, *PBWC Volunteer Outreach Intern*

Recently recognized by the Baker Valley SWCD as Conservationists of the Year, Jerry and Shelly Gray sat down with Powder Basin Watershed Council to discuss life in the basin, ranching, the agricultural community, water, and family.

Jerry and Shelly Gray outside their home in North Powder, Oregon

Like many ranching families, the Gray's have been running cattle in the Powder River Basin for decades. Jerry Gray, born in Elgin in 1961, has lived on their property in North Powder since his father bought it in 1963. Originally from Arizona, Shelly Gray joined him in 2001 after they met while she was attending to his father in a hospital in Idaho. Together, with Jerry's two sons, Justice and Lukus and their families, they work together, successfully managing a beef cattle operation while also growing alfalfa, grass and wheat.

Shelly attributes their success to the diverse roles each family member plays and their overall resourcefulness. For the Grays, choosing to run a family operation is a lifestyle and not meant for everyone, but they make it work. Although all family members contribute equally, each individual has their own niche which they fell into organically over time. Shelly does the books and researches livestock needs (vaccines, nutrition, etc.), Lukus has a degree from OSU in Crop and Soil Sciences, Justice focuses on the livestock, and Jerry oversees the entire operation and handles the daily crises.

This works for them mainly because, as Jerry puts it "the basis of a family operation is family." As a family unit they are able to address their unique personalities and needs and work together. Seeing his children return to ranching after having left in their early adulthood gives Jerry "joy and fulfillment." He smiles when he talks about taking "pride in knowing what my sons aspire to do is what I do." Shelly explains how Lukus and Jerry both understand the mechanics of the equipment they use and are knowledgeable about the family land and the animals they work with so they are each able to contibute their unique sets of skills to work together towards a mutual goal.

As you would expect, working as a family has its challenges too. As their family expands

> ***"The basis of a family operation is family..."***

to include spouses and six grandchildren, integrating the extended family into a ranching lifestyle can prove to be difficult given the highly variable work day and seasonality of work involved. Each day can be a different set of obstacles to overcome, and each obstacle fluctuates with the weather. For some, working nine to five is preferable, but for the rancher, this simply cannot be. The Gray family explains this in the midst of having spent most of their day calving and knowing they will be up at 3 am to check on the calves early the next morning. On another day, they may be mending fences for hours because of the heavy elk pressure the ranch faces. As Shelly puts it "it's not necessarily a bad thing... just a challenge." It is a challenge the Gray family willingly accepts.

Jerry explains a day in the life of a rancher, "Really, the lifestyle of a rancher is seasonal, you get up in the morning, you problem-solve, and task." The husband and wife speak about waking in the morning, having coffee, plans for the day. In their kitchen, the spirit of their family unity is palpable even in the early morning hours of planning and decision-making, however the discussions do change depending on the season. In the summer, the discussion is focused on water, Jerry elucidates, "water is our life… what is important is fully utilizing our water to its fullest potential." By this he means he will need to make sure the ranch is using the water in a way that is most efficient. This concept of water conservation transcends almost every part of the family's decision-making.

The Gray Ranch, Inc. utilizes off-channel watering methods when available because, as Jerry puts it, "[cattle] need clean water as much as humans do." This, along with the use of center pivots, and wheel-line irrigating provide water for up to 1200 acres.

During the months of April through September the family is required to check on the cattle daily because of wildlife pressure on fences. This means at least one person must ride out to the pastures and make sure the cattle are where they are supposed to be. There is a large amount of fence maintenance, and as much as water is welcomed with open arms, Jerry jokes that "a good snow year, means it's a bad fence year". This may all seem like

"Member" *continued from page 2...*

promote, restore, and enhance the health of the watersheds through the cooperation of all stakeholders. "The Council now consists of ranchers, state, and federal employees from land management agencies, and urban residents," she said. In fact, the Council contributes an estimated $250,000 annually to the local economy, funding three full-time positions, and three summer internship positions.

Nancy suggests that in order to "continue this work, we need community involvement." Because the Council is a non-profit, it relies on the many volunteers and commitments from community members all over the basin to complete water quality monitoring, outreach, and restoration projects. In 2015 alone, approximately 716.75 volunteer hours were logged across various programs, totaling $17,080.90 in added value for the Council.

> ***"In order to continue this work, we need community involvement."***

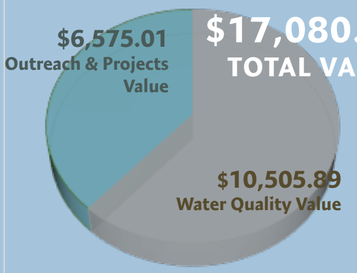
As for the future of the Council, Nancy notes that the Council "has collected data and prepared watershed assessments showing where on the ground projects are needed," and further she "would like to see the Council going forward on these projects with broad community support including the agricultural community, urban residents, and the land management agencies." Most importantly, the Council needs people like Nancy who wish to see the region thrive and prosper, both in terms of environmental health and economic health. As our Council slogan reminds us, change in the community can occur when we are working as part of the solution and in order to do so we need the whole community to work together.

VOLUNTEER HOURS DONATED

Water Quality Monitoring
416.75

Outreach & Other Projects
299

TOTAL HOURS: 716.75



Calendar of Events

March 2016

- March 2, 2016, Wednesday- Monthly Council Meeting
  5J School District Building, 6:00pm
  Guest Speaker, Troy Lindquist, Senior Service Hydrologist of the National Weather Service to discuss climate conditions for the watershed basin

April 2016

- April 6, 2016, Wednesday- Monthty Council Meeting
  5J School District Building, 6:00pm
  Join us for our monthly Council meeting, coffee and snacks provided

- April 13, 2016, Wednesday- "Birds, Burns, and Basins" PBWC Spring Tour
  Meeting place TBD, 9:00am- 1:00pm
  Partnering with USFS and ODF, the Council invites members and the public to join us on a guided hike in the recently burned area of Dooley Mountain. Here we will discuss post-fire forest management with ODF's Jana Peterson, bird habitat with USFS Wallowa-Whitman wildlife biologist, Jamie Ratliff, and erosion with PBWC's Executive Director, Christo Morris. Pre-registration required, call (541) 523-7288

- April 23, 2016, Saturday- PBWC Annual Spring River Cleanup
  Geiser-Pollman Park, 10:00am-1:00pm
  Do you love the Powder River? Help us give it a good spring cleaning. Please join the PBWC and SOLVE Oregon, for our annual river cleanup along the Leo Adler Memorial Pathway. Supplies, water and snacks provided. Please pre-register, call (541) 523-7288

May 2016

- May 4, 2016, Wednesday- Monthly Council Meeting
  5J School District Building, 6:00pm
  Join us for our monthly Council meeting, coffee and snacks provided

All community members are welcome to attend our meetings, for more information please contact the Council at pbwcoutreach@qwestoffice.net or call 541-523-7288

We want to hear from you!

Would you like to be a part of the strategic planning process? How about helping the Council determine how we can better help meet our community needs? You can help us by taking a quick survey online at:

www.powderbasinwatershedcouncil.org

SPRING RIVER CLEANUP 2016

@GEISER-POLLMAN PARK
10:00-1:00PM

Join PBWC and SOLVE Oregon for an annual spring cleaning of the Powder River, snacks and water provided.

Register at pbwcoutreach@qwestoffice.net