

Powder Basin Watershed Council
2034 Auburn Avenue, Suite B
Baker City, Oregon 97814



Our Watershed, Our Home



CONTACT ^{THE} POWDER BASIN
WATERSHED COUNCIL

STAFF

Christo Morris, Executive Director
pbwced@qwestoffice.net

Anna Hayes, Outreach & Water Quality
Monitoring Coordinator
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PHONE & WEBSITE

(541) 523-7288
www.PowderBasinWatershedCouncil.org

JOIN US AT A MONTHLY
BOARD MEETING

Board meetings are always open to the public and take place
the first Wednesday of every month at:

Powder Basin Watershed Council
2034 Auburn Avenue, Suite B
Baker City, OR 97814
3:30-5:00pm

For information about speakers and events find us on:
Facebook.com/PowderBasinWatershedCouncil



POWDER BASIN WATERSHED COUNCIL
2018 Annual Report | Monitoring, Assessment, Restoration & Education



FROM THE EXECUTIVE DIRECTOR

My job requires a lot of computer and office work, such as writing funding proposals, tracking expenses, maintaining records and attending meetings. I try to get out of the office as often as possible to meet landowners or help collect data and over the last three years I've managed to visit many areas within the 2 million acres that the Powder Basin Watershed Council services. However, there is still so much to see and learn about the Powder Basin and while I wait for more opportunities to explore our watersheds, I am continually inspired by the original intent of the watershed councils. They were created in the mid-1990's to serve a very specific purpose, which is still relevant to this day. The role of a watershed council is to facilitate the management of water resources through a cooperative and collaborative approach, rather than through the enforcement of rules. It gives the local community the opportunity to help define what the issues of concern are and develop the solutions that work best for the local community, rather than trying to apply a one-size-fits-all solution developed by someone who has never even visited our watersheds. This process can be messy, time consuming and involve discussions with people you may not agree with, but if it functions as intended it can actually help bring communities together, rather than dividing them as many natural resource issues do. The more people learn about the needs of other people in their watersheds, the more they understand the perspective of others. In the best of cases, you can see people start to advocate for other interests in the community, which is what helps to bring the community together. What sets watershed councils apart from other organizations is that they aren't founded on a particular agenda; their agenda changes depending on the needs of the community and who participates. The role of the watershed council is to find out what the community expects out of their watersheds and work to address those concerns.



Christo Morris
Executive Director



FUNDERS, SUPPORTERS, & VOLUNTEERS...



BOARD OF DIRECTORS

Dorothy Mason, President,
Ben Titus, Treasurer
Jana Peterson, Director at Large
Lyle Upmleby, Director at Large
Mark Jackson, Director at Large

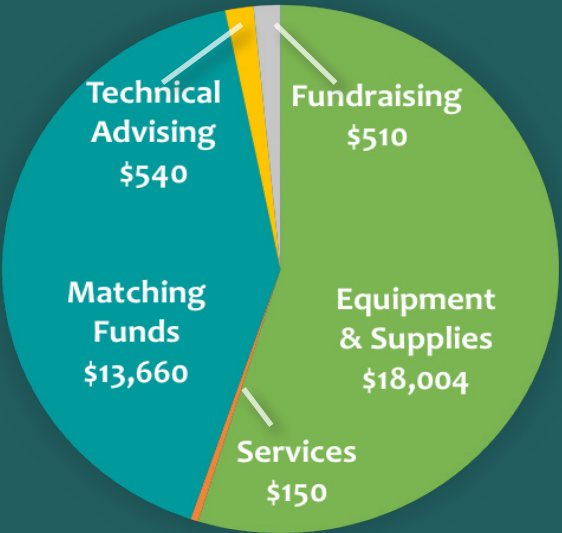
STAFF

Christo Morris, Executive Director
Anna Hayes, Monitoring Outreach Coordinator
Faith Nickerson, Monitoring Intern

PARTNER CONTRIBUTIONS

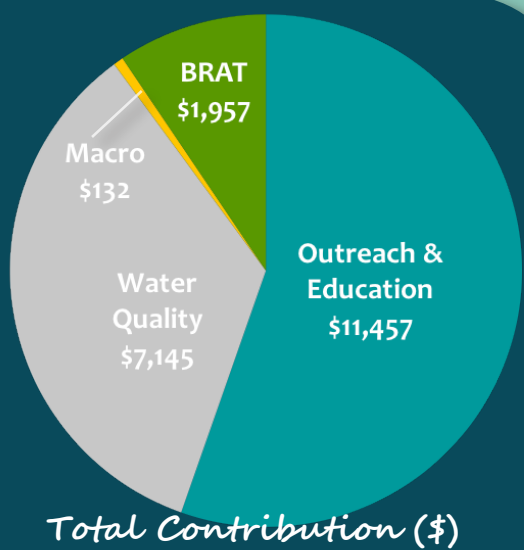
TOTAL
Matching funds in
equipment, supplies,
technical advising,
services, and
fundraising

\$32,864



A SPECIAL THANK YOU TO ALL OUR PARTNERS,

VOLUNTEER HOURS DONATED
1,158 TOTAL HOURS



Total Contribution (\$)

OUR MISSION

The mission of the Powder Basin Watershed Council is to facilitate community-supported maintenance and restoration of the streams, rivers, and lakes within our watersheds.

PARTNERS, FUNDERS, & VOLUNTEERS

Water Quality Monitoring

- Andy Rorick
- Ben Titus
- Karen Riener
- Joseph Hayes
- Nancy Rorick
- Pete Martin
- Troy Tubbs - Pine Eagle HS
- Tonia Humbert - Burnt River HS

Foundations

- The Autzen Foundation
- Charlotte Martin Foundation
- Juan Young Trust
- Oregon Community Foundation
- SOLVE Oregon
- Union Pacific

Institutions

- Oregon State University
- Utah State University

Local Partners

- Baker Technical Institute
- Baker School District 5J
- Burnt River High School
- Guyer & Associates, CPA
- Pine Eagle High School
- Go Wild-American Adventures
- Carnegie Arts Center
- Trout Unlimited

Local Agencies

- Baker County Soil & Water Conservation District
- Malheur Watershed Council

State Agencies

- Oregon Department of Environmental Quality
- Oregon Department of Fish & Wildlife
- Oregon Water Resources Department
- Oregon Watershed Enhancement Board

Federal Agencies

- Bureau of Land Management Vale District
- Wallowa Whitman National Forest

Guest Speakers

- Dr. Philip Mote, Oregon State University
- Sam Bernard, Tri-County CWMA
- Whit Deschner, Artist/Photographer
- Burke Smejkal, BTI
- Megan Alameda, BTI

Technical Advisors

- Tim Bailey, ODFW
- John Dadoly, ODEQ
- Dr. Suzanne Fouty, FS (ret.)
- Phillip Marcy, OWRD
- Jason McClaughry, DOGAMI
- Dave Salo, FS (ret.)



Outreach & Events Volunteers/Donors

- | | | |
|--------------------|----------------------|------------------|
| Abby Baker | Jayme Ramos | Lupita Macias |
| Anne Macon | Jazmin Labonte | Mack Kerns |
| Anthony Cowan | Jessica Keys | Marisa Fuzi |
| Barbara Meyer | Jessica Mason | Megan McGinness |
| Barbara O'Neal | Jim Young | Michael Blank |
| Becky Snyder | Joanie Tracy | Mike Chase |
| Ben Titus | John Hurley | Mike Meyer |
| Beth Quinn | John Quintela | Mike Quinn |
| Bob Mason | Joyce Bornsteadt | Morgan Stone |
| Brian Ratliff | Julia Kellogg | Racheal Dixon |
| Briana Stadler | Justin Rowell | Randolph Tracy |
| Burke Smejkal | Karen Macon | Ryan Bernards |
| Cecilia Villagomez | Kata Bulinski | Sam McCauley |
| Clair Button | Katie Ridder | Sharon Freeman |
| Codi Eby | Katrina Rudolph-Wise | Shenae Berglund |
| Dan Sizer | Kay Young | Steve Stadler |
| Daniel Buck | Keegan Mastersen | Sydney Younger |
| Dave Densley | Koedi Birmingham | Tania Dias |
| Dick Dombrowski | Laura Illingsworth | Tanya Dombrowski |
| Donna Helman | Lesley Morris | Tristen Tritt |
| Dotti Duby | Levi Old | Trevor Norman |
| Gregory Rawlins | Linda Snyder | Ty Duby |
| Jake Edgren | Liz Morgan | Viet Hoang |
| Jamie Ratliff | Lorrie Tritt | Ya-Wen Ott |
| | Lucas Stearns | Zarchary Wise |



2018 HIGHLIGHTS

MONITORING & RESTORATION

- Monitored water quality at **48** sites across Powder Basin
- **14** volunteers, including students from 2 Baker County high schools, collected water quality samples
- Completed macroinvertebrate monitoring for **27** sites
- Began engineering designs for the Upper Pine Creek Restoration Project
- Secured funding for the Powder River Irrigation Efficiency Project near North Powder

OUTREACH & EDUCATION

- **85** volunteers participated in Outreach programs and events for a total of **521** volunteer hours
- Engaged **56** community members in 2 river cleanup events
- Provided watershed education for approximately **140** students of Baker 5J School District at 6th Grade Outdoor School Event
- Facilitated to **147** 5th and 6th grade students from Haines, Keating & South Baker schools at the Council's 5th Field Day Event
- Distributed one issue of our newsletter, *The Thalweg*, to **3,700** basin residents
- Hosted **2** hikes to the Wild and Scenic sections of the North Powder and Powder Rivers
- Completed one Fall Tour discussing groundwater issues



ESTIMATED CONTRIBUTIONS TO THE LOCAL ECONOMY

2 Full-time Staff Positions
+
1 Paid Internship
+
Services, Equipment, &
Supplies purchased locally
for a total of

\$159,920

FINANCIAL STATEMENTS

For Fiscal year ending June 30, 2018

Total Grants
Receivable as
of June 30, 2018
not presented
on Statement
of Financial
Position

\$278,567

Statement of Financial Position

ASSETS	(\$)
Checking/Savings	84,927
Fixed Assets	11,671
Total Assets	96,598
LIABILITIES & EQUITY	
LIABILITIES	
Employer Leave Liability	1,970
Worker Compensation Payable	482
Unearned or Deferred Revenue	39,173
Total Liabilities	41,625
EQUITY	
Unrestricted Net Assets	54,973
Total Equity	54,973
Total Liabilities & Equity	\$96,598

Statement of Activities

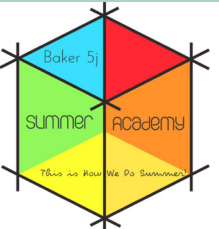
SUPPORT & REVENUE	(\$)
Corporate Grants	7,473
Foundation Grants	2,011
Government Grant	147,854
Public Donations	770
Corporate Contributions	129
Miscellaneous Revenues	625
Total Support & Renenue	\$158,862
EXPENSES	
Accounting Fees	
Advertising	386
Business & Registration Fees	246
Contracted Services	15,060
Depreciation	4,082
Equipment Rental	1,685
Liability Insurance	1,281
Payroll Expenses	93,368
Postage, Mailing Service	159
Printing & Copying	822
Rent	7,570
Software	168
Supplies	4,455
Telecommunications	1,676
Travel, Meetings & Meals	3,860
Total Expense	\$134,968
Increase in Net Assets	23,894
Net Assets at Beginning of Year	31,079
Net Assets at End of Year	\$54,973

*Financial statements are preliminary and may change after review is complete

Outreach & Education cont...

Wild & Scenic Rivers 50th Anniversary Hikes

A new addition to PBWC events, the Wild & Scenic Rivers trips were a hit! Celebrating the 50th year of the Wild & Scenic Rivers Act, the Council partnered with Go Wild of Baker City to bus participants up to the North Powder River. On the location, participants explored the scenic forest of the Elkhorn Mountains while chatting about their experiences of the North Powder River. Hike was followed by lunch, provided by Go Wild. The second Wild & Scenic Hike took place along the Powder River near its confluence with Big Creek. Both events were a success and will find a more permanent place on the Council’ schedule.



Summer Academy Field Trips “An Historic Summer”

Summer Academy 2018 was historic, with approximately 212 students (grades 1st through 6th). This Baker 5J program’s goal is to eliminate summer slide with a plethora of learning opportunities and a theme of integrating local history into lessons. Council staff lead the Dean Creek Experience, a learning laboratory field trip to public land near Philips Reservoir. During their trip groups went on a short nature hike to discuss mycology, discover other watershed-related riddles, and continued aspen counting along the streamside. This experiential learning opportunity is important in achieving Outreach and Education goals as well as strengthening the Council’s partnerships with the school community.

COUNCIL ADMINISTRATION

The 5-Year Strategic Plan was completed in March 2018 with the much appreciated help of volunteers and advisers. This plan will serve as the guiding document for future Council projects. Additionally, the motto and mission statement were refined this year. The Council adopted its new motto **Our Watershed, Our Home** submitted by volunteer, Barbara O’Neal in a new-motto contest. New board member, Jana Peterson joined the Council, as well has returning members, Dorothy Mason, Ben Titus, Mark Jackson and Lyle Umpleby. The Council seeks to expand diversity in membership and continually welcomes interest in leadership positions.



A LOOK BACK...

At Accomplishments from 2018

WATER QUALITY MONITORING



It has been through the hard work and dedication of volunteers, partnership with Oregon Department of Environmental Quality, and numerous technical advisers, that this program will be extended into 2020. Having completed five years of comprehensive monitoring throughout the entire watershed basin, OWEB approved the Council’s initiative to complete long-term monitoring on a condensed number of sites for three more years! The new monitoring program focuses on water quality locations in portions of the Powder River, Burnt River, Eagle Creek, and Pine Creek as well as their tributaries. Sampling takes place over the spring to fall months and includes two high school classes as well as many other volunteers. Volunteers monitor pH, dissolved oxygen, turbidity, conductivity, and stream/air temperatures. Monitoring these parameters allows staff to make important decisions about which rivers and streams are meeting Oregon standards for water quality. Further, this helps the Council prioritize future restoration and monitoring areas.

Ending the 2017 sampling season resulted in five years of water quality data from eighteen of the original twenty monitoring sites, and four years of monitoring data from fifty-four additional sites. As the Council sought to establish long-term monitoring, the Oregon Watershed Enhancement Board provided funding for a condensed twenty-two sites for three years. Many of these sites are located on public/private interface areas as well as downstream portions of Powder River, Eagle Creek, Pine Creek, Burnt River and their tributaries. Due to the enthusiasm and availability of fourteen volunteers and 258.5 hours of service, approximately forty-eight sites were sampled for water quality. Notably, the 2018 sampling year ended up being the most precise year yet, with approximately 96% data being graded as “A” quality and 3.5% as “B” quality. Data quality grades are used to determine how accurate data collection was, and whether or not the data can be used. All “A” and “B” quality data will be used. This information will help support Oregon Department of Environmental Quality’s development of TMDL’s as well as help the Council in watershed-wide planning. Continuing monitoring in streams will help the Council identify how yearly variations in stream temperature can be affected by climate and streamflow, as well as establish important baseline data for future projects. Staff would like to give special thanks to Suzanne Fouty, Dave Salo, and John Dadoly for their careful guidance and review throughout the process.

Macroinvertebrate Monitoring

A new monitoring program was completed in the 2018 year. This program also focused on water quality, but monitored macroinvertebrates instead! Simply put, macroinvertebrates are organisms that lack a backbone and can be seen with a naked eye. Certain types of macroinvertebrates are highly sensitive to pollutants; therefore, collecting them allows us to determine what types of pollutants are occurring in basin water bodies. Over the months of August-October, staff collected these bugs at twenty-two water quality sites. After preserving

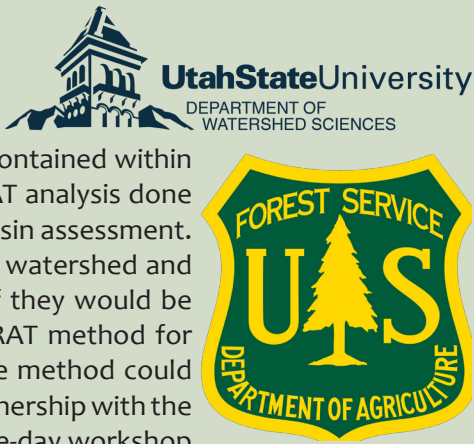


Monitoring Continued...

them in ethanol, they were sent to Cole Ecological in Portland for identification. Once ID is completed, the Oregon Department of Environmental Quality will complete an analysis of the information. Final reporting for this project is scheduled to be completed early 2019.

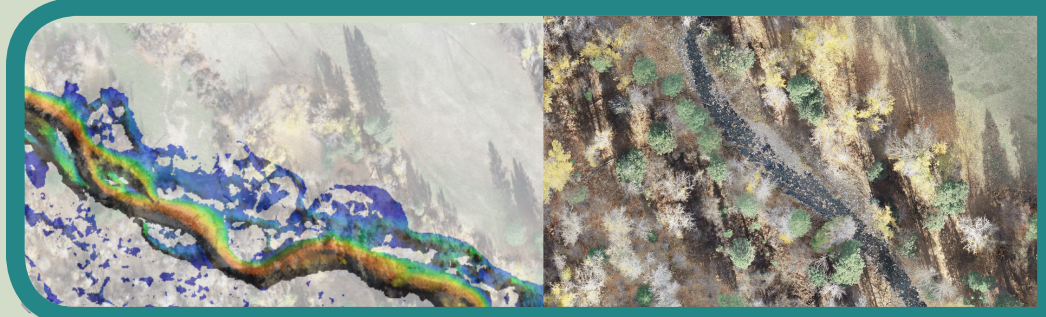
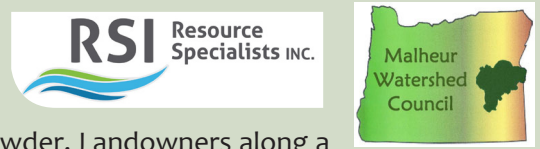
Beaver Restoration Assessment Tool (BRAT)

BRAT in the North Fork Burnt River watershed came about as a result of a request from the North Fork John Day Watershed Council to the Whitman Ranger District for a letter of support of a grant they were writing to get funding to do the BRAT in the John Day watershed. The Whitman RD was asked because the district includes subwatersheds contained within the John Day Basin. The district hydrologist recognized the opportunity to have a BRAT analysis done for the North Fork Burnt River (NFBR) watershed by piggybacking onto the John Day Basin assessment. Stream restoration efforts and abundant temperature and flow data exist in the NFBR watershed and beaver are present, though not expanding their range. IPC was approached to see if they would be interested in funding a BRAT analysis in the NFBR watershed as a way to test the BRAT method for possible application to the entire Powder Basin. The goal was to help determine if the method could quickly identify areas where beaver might be an appropriate restoration strategy. In partnership with the Wallowa-Whitman Forest Service and Utah State University, the Council promoted a one-day workshop to discuss the importance of beaver in the watershed. Additionally, attendees learned about BRAT, a decision, support, and planning tool developed by Joe Wheaton and Wally Mcfarlane at Utah State University's Ecogeomorphology & Topographic Analysis Lab. Wally and Joe explained that the GIS-based, modeling tool helps scientists and researchers better understand potential for beaver to help restore and conserve watersheds. In order to calibrate the model, on the ground data collection was completed by four volunteers. These volunteers spent one to several days in the field walking portions of the NFBR and its tributaries to complete a beaver dam census.



RESTORATION

The Council is currently working on restoration projects in Halfway and North Powder. Landowners along a one mile stretch of Pine Creek sought the Council's assistance in preventing flood damage. Concerns included bank failure, loss of pasture, sediment deposition and irrigation diversion upgrades. In 2017, the Council secured funding to have engineers assess potential designs for Pine Creek. During the 2018 year, an engineer was contracted and began design work. The Council is looking forward to the outcome of this work in 2019. Another facet of restoration includes irrigation efficiency projects, like the current work taking place on the Powder River near North Powder. Irrigation efficiency, riparian fencing, and streamflow enhancement are all objectives in this partnership with Malheur Watershed Council, the Oregon Watershed Enhancement Board, and a private landowner. Work has so far focused on design development and permitting.



OUTREACH & EDUCATION

Outreach and Education has always been an integral component to achieve the Council's mission. In order to sustain the program, the Council has added a handful of new events and fundraisers that lead to successful partnerships within the community as well as generated much needed funding. Some of these events include attending local and regional fairs and festivals, holding an annual meeting with fun family activities, participating in local elementary and high school functions, and providing technical assistance to agencies and landowners. In addition to working with a wide array of community members, the Council has been developing curriculum for Burnt River High School students through the BRIARR House funding project. By offering hands-on lessons and helping build job skills, we hope to encourage students to pursue careers in the field of natural resources management and watershed restoration. Lastly, the Council is continuing to work with Idaho Power Company to reach out to livestock producers and offer resources for off-channel livestock watering options. The goal of this project is to reduce grazing stress on riparian vegetation and improve water efficiency for irrigation ditches. Funding for the Thalweg, the Council's basin-wide newsletter, is provided through this project.

Community and Events

The Council participated in four community events over the spring to fall months including: Miners Jubilee, Anthony Lakes Mountain Bike Festival, Wallowa Resources Watershed Festival, and Pine Fest. During the events, the staff and volunteers provided watershed information and an educational craft for children. Participating in events such as these helps the Council achieve its goal of increasing awareness about watershed issues as well as increases Council visibility among community members.

Field Day

The 2018 Field Day for Baker, Haines, and Keating Elementary Schools was a success. While the switch to Fall allowed more time for planning, it also required a change in learning activities from past experiences. The event offered science and art-based, hands-on, opportunities featuring: macroinvertebrates, measuring stream discharge, flycasting, bird adaptations, and scientific sketching. The stations were led by staff, Council volunteers, and partnering agencies, contributing over 92 hours of volunteer service. Some of the agency representatives included: BLM and ODEQ.

River Cleanups

As tradition, the Council hosted spring and fall-time litter removal work parties along the Powder River in downtown Baker City in partnership with SOLVE Oregon. Both events helped boost volunteer contributions from community members and Baker High School. Approximately 240 pounds of garbage was removed from 2.1 miles of the Powder River by a total of 56 youth, adult, and staff. After the cleanup, recyclables were donated to the Eastern Oregon, Southern Washington Girls Scouts for their fundraising effort to visit Glacier National Park.

Outdoor School

Council staff led a watershed-themed station for two consecutive days at the annual Outdoor School for 150 Baker 5J 6th grade students. This year students visited neighboring watershed, the Grande Ronde, where they camped at Camp Elkana for an entire week. During PBWC activities, students learned about the hydrologic cycle, how to calculate the volume of water in a pond, how to measure streamflow, and how to measure the rate of infiltration.

