



IDAHO WASHINGTON AQUIFER COLLABORATIVE

iwac.us

P.O. Box 1822
Post Falls, ID 83877

Terry Pickel - President
BiJay Adams - Vice President
Rob Lindsay - Secretary
Ron Wilson - Treasurer
Dan Kegley – Past President

Our Water. Our Future.

The Idaho Washington Aquifer Collaborative (IWAC) works to maintain and enhance water quality and quantity for present and future generations by developing management strategies which benefit the Spokane Valley Rathdrum Prairie Aquifer and the Spokane River watersheds.

May 10, 2022, 1:36 – 2:45 PM, via Zoom Representatives Present

Please personally invite IWAC members or potential members to the June 2022 meeting.

	Organization	Representative	Email Address
	Avista	Chris Moan	chris.moan@avistacorp.com
	Avondale Irrigation District	Bob Chandler	bobchandlercda@gmail.com
	Bar Circle S Water Company	Rob Turnipseed	avondalecon@frontier.com
√	City of Coeur d’Alene	Terry Pickel	tpickel@cdaid.org
√	City of Post Falls	John Beacham Craig Borrenpohl Alyssa Gersdorf	jbeacham@postfallsidaho.org cborrenpohl@postfallsidaho.org alyssag@postfallsidaho.org
√	City of Spokane Water Department	Doug Greenlund	dgreenlund@spokanecity.org
	Coeur d’Alene Tribe of Indians	Rebecca Stevens	rstevens@cdatribe-nsn.gov
	Consolidated Irrigation District No. 19	Shane Sheppard	consolidatedirrigation@comcast.net
√	East Greenacres Irrigation District	Ron Wilson	ron@eastgreenacres.org
	Hayden Area Regional Sewer Board	Ken Windram	ken@harsb.org
	Hayden Lake Irrigation District	Branden Rose	branden@haydenirrigation.com.
√	Liberty Lake Sewer and Water District	BiJay Adams Jeremy Jenkins	bijay@libertylake.org jjenkins@libertylake.org
	JUB Engineering	Cory Baune	cbaune@jub.com
	Moab Irrigation District	Scott Inch	moabirr20@gmail.com
	Model Irrigation District	Rick Neal Ryan Neal	rickaneal@gmail.com ryan.o.neal509@gmail.com
	Modern Electric Water Company	Jason Beesley	jbeesley@mewco.com
	North Kootenai Water & Sewer District	Jessie Camburn	jessiec@nkwsd.com
√	SAJB Program Leader	Tonilee Hanson	sajbinfo@gmail.com

√	Spokane Co. Environmental Services	Rob Lindsay	rlindsay@spokanecounty.org
	Spokane County Water District No. 3	Kelly Williquette Justin VanDyke	scwd3engr@comcast.net jvandyke@scwd3.org
	Vera Water and Power	Todd Henry	thenry@verawaterandpower.com
	Whitworth Water District	Tim Murrell Matt Wright	tim@whitworthwater.com matt@whitworthwater.com
√	IWAC Past President and GSI Consultant	Dan Kegley	dmkegs@outlook.com
√	City of Spokane Valley	Henry Allen	hallen@spokanevalley.org
√	U of I Extension	Jim Ekins	jekins@uidaho.edu

AGENDA

Welcome and Introductions – IWAC President Terry Pickel called the meeting to order at 1:36 pm.

Agenda Additions or Revisions – No additions or revisions were requested.

Approval of Meeting Minutes – President Pickel called for additions or corrections to the April 12, 2022, meeting minutes. Rob Lindsay corrected the record stating that he was in attendance but not marked present. The April meeting minutes, as amended, were approved by consensus.

Financial Report – IWAC Treasurer Ron Wilson presented the May financial report which showed a Mountain West Bank balance as of 5/1/22 of \$29,038.65. Accounts payable included check #3816 to Bluehost for iwac.us webhosting services and check #3817 to the Spokane River Forum to sponsor the H2O Breakfast. Tonilee Hanson shared that the Bluehost check should be a reimbursement as she paid the web hosting fees with her credit card. Treasurer Wilson will reissue the check. The financial report, as amended, was approved by consensus.

Old Business

Aggregate Quarry Risk Assessment and Source Water Protection Grant Update – SAJB President Jeremy Jenkins has been working through the SAM.gov requirement for receiving federal funds through the WA Department of Health. SAJB now has a Taxpayer ID number and a UEI (Unique Entity Identification) number. UEI has replaced the DUNS number. Dan Kegley shared that GSI Water Solutions Environmental Team is ready to begin the Risk Assessment work as soon as the DOH Source Water Protection Grant process is complete.

2022 Media Campaign – Dan Kegley shared that Greta Carlson has joined another company. Rogue Heart Media is engaged in field shoots and recommended the media company [Talk Fast Social](#) to assist with promoting IWAC's existing videos. IWAC members reviewed the inventory of existing [videos](#) and agreed on the following three videos to promote aquifer protection.

1. [How to Make Your Irrigation System More Efficient](#)
2. [Residential Backflow Protection](#)
3. [Protect Our Aquifer – Simple Steps Can Do a Lot](#)

2022 Aquifer Atlas Update - Samples of the 2022 Aquifer Atlas design work by Amanda Summers can be seen below in the redesigned Timeline and Home Protection pages. Dates need to be added to the timeline including the 2010 Rathdrum Prairie Comprehensive Aquifer Management Plan (CAMP). Please send any other significant dates in aquifer protection from 2015 to present.

Timeline

1869 John Mullan John's party's "Western Crossing" while official artist of the Northwestern Boundary Survey

1894 Aquifer accidentally discovered by City of Spokane contractor during Upper Dam construction

1899 Spokane Valley Irrigation District formed and Corbin ditch canal irrigation started.

1931 Washington Water Power Company (WWP) prepares the first comprehensive study of groundwater in the Spokane Valley and Rathdrum Prairie.

1890 1870 1850 1830 1900 1910 1920 1930 1950 1980

ANCIENT STORY OF THE LAKES AND AQUIFER OF THE COEUR D'ALENE TRIBE

Boy Travels Underground
as told by Felix Ariga, Coeur d'Alene Tribe

There was a boy who lived towards Hayden Lake area. The boy loved fishing. The boy loved to walk around. He went to the forests. He went to the meadows. There he saw his friends. There were a lot of animals that lived there. There were animals that fly, there was duck, bald eagle, owl, bear, magpie. Also there were the ones that live in the forest - elk, deer, bear, squirrel. There were the forest animals - cougar, bear. And the ones that live in the river - frog, trout. A lot live on the prairie - rabbit, spudger, prairie chicken, coyote.

One day the boy went fishing. He had a canoe. And he paddled across the water at Hayden Lake. And the weather changed. It began to get windy. The sky became gray.

And the boy approached an eddy. He started spinning, and he went down. He dove in. He arrived at a cave. He was all wet. And the boy was really tired. He laid down. He went to sleep.

He woke up. He walked a long way kind of in a confusion (of where he was at). And the boy walked for three days.

And he heard something loud. There was a waterfall. And then the boy looked through it. He saw animals, there were his friends. They were happy. There was duck, bald eagle, owl, bear, cougar, bear, frog, rabbit, spudger, squirrel, coyote, trout.

And the boy ran. He leaped through the waterfall. There was a splash! He dove in the river! And he swam. He crossed the water. He got really tired. He laid down on the shore. And he slept.

And he awoke. He was at quartzin (Post Falls). That is the end of the road.

1965 Modern Irrigation and Land Company, the first of many, formed to provide SWP surface water to Spokane Valley Farmers.

1968 The SWP aquifer replaces the Spokane River as the City of Spokane's primary source of drinking water.

1938 A survey of all major Washington rivers and watersheds found the Spokane River the healthiest body of water in the state.

1940 A survey of all major Washington rivers and watersheds found the Spokane River the healthiest body of water in the state.

1951 USGS publishes an inventory of SWP aquifer wells in Bonner and Bonanza Counties.

1952 USGS publishes an updated inventory of SWP aquifer wells in the Spokane Valley.

POLLUTION OF RIVER FACES STATE PROBE

Timeline

1972 Federal Clean Water Act provides authority and funding for SWP aquifer protection planning efforts.

1973 Liberty Lake Sewer and Water District created to protect the lake and aquifer.

1974 EX30 T4 opens in Spokane with the theme: "Celebrating Tomorrow's Fresh New Environment!"

1976 Army Corp. of Engineers publishes the 14 volume Spokane Region Water Resources Study. Local citizens and environmental groups petition the DNR to designate the aquifer as a "sole source aquifer."

1977 Foothill Health District implements the rule that limits domestic septic systems to one per five acres. Local DNR studies are completed, and the sources of aquifer pollution are identified.

1978 DNR designates the SWP aquifer as a "sole source aquifer" under Section 143(a) of the Safe Drinking Water Act.

1980 Spokane County and Foothill Health District initiate a groundwater monitoring program for the SWP aquifer. DNR designates the SWP aquifer as a "special resource water" in Idaho, the highest level of state protection.

1981 Spokane County adopts a wastewater management plan to eliminate septic systems over the SWP aquifer.

1985 Spokane County authorizes the aquifer protection area for 20 years in a public vote.

1988 U.S. Congress provides aquifer protection funding through the DNR. USGS publishes Malin's Aquifer Report, the first modern SWP aquifer study.

1990 Foothill Health District begins requiring secondary containment of critical materials.

1995 DNR adopts guidelines for land-use/land-cover over the SWP aquifer in Idaho.

1997 DNR designates Aquifer as "sensitive resource aquifer" in the Idaho state Ground Water Quality Rule.

1998 The City of Spokane and the Spokane Aquifer Joint Board publish a wellhead protection plan. The plan is updated in 2007.

2004 Spokane County reauthorizes the aquifer protection area.

2007 The results of a 4-year USGS in-state aquifer study and monitoring program are presented to the public. Kootenai County residents vote to form and fund an Aquifer Protection District to fund SWP aquifer protection programs.

2008 Idaho begins water rights adjudication of the Rathdrum Prairie aquifer.

2009 Antic Post Falls and other Spokane River dams released.

2013 Idaho Washington Aquifer Collaborative forms to maintain and/or enhance the aquifer quality and quantity.

2015 Washington Department of Ecology issues an interim flow rule for the Spokane River.

Spokane River Discharge Differences in Monthly Average Flows

Top to bottom, left to right: Post Falls, Upper Falls, Monroe Street, New Mills and Long Lake.

Aquifer Protection & Stewardship

Protect the Aquifer at home.

Many products that we use every day contain hazardous materials that can be dangerous to people, water, and the environment! Use safe housekeeping practices when storing, handling, and disposing of harmful materials, including automotive fluids, cleaning products, fertilizers and pesticides, fluorescent lights, medications, paint, and swimming pool or hot tub chemicals.

Do this.

- ✓ Use products that are non-toxic and environmentally friendly.
- ✓ Read and follow directions carefully when using any hazardous product.
- ✓ Store products in their original containers and label them clearly.
- ✓ Store products above basement flood level, and off the ground in garages and sheds.

Not this.

- ✗ Don't throw toxic substances or their containers in the trash.
- ✗ Never pour leftover products down sink drains or into the toilet.
- ✗ Never mix leftover products.
- ✗ Do not dispose household hazardous waste in streams, rivers or lakes.
- ✗ Do not dump toxics into storm drains.



HOUSEHOLD HAZARDOUS WASTE



TOILET CLOGGERS

Household drains and toilets are designed to take only used water, human waste, and toilet paper. Many products, like wipes, claim to be "flushable." But that doesn't mean these items are treatable in the wastewater system!

Some things don't belong in your drain. They can clog pipes and pollute our water!

SINK CLOGGERS

Eliminate the use of garbage disposals. Ground-up garbage does not decompose easily, causes buildup of solids in septic tanks, and may clog distribution pipes.

PIPE POLLUTERS

Medications and toxic substances including chemicals, cleaners, degreasers, oils, paints, disinfectants, and pesticides should never be put down the drain.

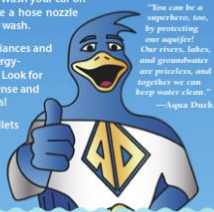
LAUNDRY CLOGGERS

Use liquid laundry detergent, and use it sparingly. Powdered detergent is more likely to have fillers that could damage a septic system!

- Remember, what goes down the drain doesn't just disappear, it ends up in our water! The following list of items should never be poured down the drain or flushed in the toilet.
- ✗ Baby wipes
 - ✗ Band-aids
 - ✗ Bandages
 - ✗ Chemicals
 - ✗ Chewing gum
 - ✗ Cigarette butts
 - ✗ Cleaning wipes
 - ✗ Coffee grounds
 - ✗ Cotton balls
 - ✗ Dental floss
 - ✗ Diapers
 - ✗ Eggshells
 - ✗ Feminine products
 - ✗ Food
 - ✗ Grease
 - ✗ Hair
 - ✗ Kitty litter
 - ✗ Kleenex
 - ✗ Medications
 - ✗ Napkins
 - ✗ Nursing pads
 - ✗ Paper towels
 - ✗ Plastic bags
 - ✗ Q-tips
 - ✗ Rags
 - ✗ Vitamins
 - ✗ Wrappers

Conserve water around the home.

- Only water when needed. Depending on the weather or type of plants/turf you may only need to water once or twice a week.
- Water early in the morning or late in the day. Water when the sun is low to minimize evaporation.
- Watch where you are watering. Check sprinkler heads to be sure water is not wasted on driveways, sidewalks, or streets.
- Keep an eye on the weather. If rain is in the forecast, turn your sprinkler system off.
- Use drought-resistant species. Native plants are adapted to the local climate and need less water and maintenance.
- Mulch Beds. Two to three inches of mulch retains moisture and helps prevent weeds.
- Set your mower higher. Mow at 2.5-3.5 inches high to reduce evaporation and protect your lawn from burnout, weeds, insects, and disease.
- Check for leaks and breaks. Inspect your landscaped area regularly to make sure system pipes and sprinkler heads are in good condition.
- Sweep don't spray. Use a broom instead of a hose to clean patios, decks, and sidewalks.
- Repair leaky pipes, running toilets, and dripping faucets ASAP. Faucets that drip once per second waste over 3,000 gallons a year!
- Car Wash Wisely. Wash your car on the lawn and use a hose nozzle or take it to a car wash.
- Replace old appliances and fixtures with energy-efficient models. Look for the EPA Water Sense and Energy Star logos!
- Convert older toilets to low-flow with a displacement device.



"You can be a superhero, too, by protecting our aquifer! Our rivers, lakes, and groundwater are precious, and together we can keep water clean."
—Aqua Duck

The United States dumps 300-400 million electronic items per year. Less than 20% of e-waste is recycled. E-waste represents 2% of trash in landfills, but is 70% of that toxic waste. Visit E-Cycle or the Waste and Recycle Directory for proper e-waste disposal options.

Let's pull the plug on e-waste!

WHAT IS E-WASTE?

E-waste consists of all discarded, surplus, obsolete, and broken household or business electronic devices and electric appliances.

E-WASTE LEACHATE & THE AQUIFER

As rainwater flows through a landfill, it dissolves many of the toxic compounds found in e-waste.

The contaminated landfill water, called leachate, eventually escapes the many layers of landfill liner. When the leachate reaches groundwater, it can be lethal to humans.

For the SVRP aquifer, this could threaten the drinking water for over 600,000 people.

WHY IS E-WASTE A PROBLEM?

Printers, computers, televisions, and cell phones contain toxic heavy metals such as cadmium, lead, mercury, and chromium.

Disposing of electronic items in the garbage means these toxins could be released into the environment through landfill leachate or incinerator ash.

A typical 17-inch computer contains roughly 2.2 pounds of lead. Lead is a toxic substance that may cause lead poisoning!

Local Resources For Waste Management

- Coeur d'Alene Lake*Asty ourgem.org/documents/landowners/hazardouswastes.pdf
- Idaho Department of Environmental Quality deq.idaho.gov/media/1074/deq-recycling-guide.pdf
- Panhandle Health District phd1.idaho.gov
- Spokane County Regional Solid Waste System spokanecounty.org/utilities/solidwaste
- Kootenai County Solid Waste kcgov.us/departments/solidwaste
- Spokane City Solid Waste spokanecitysolidwaste.com
- City of Spokane Valley spokanevalley.org/solidwaste

Get There! Want to Recycle But it's the right place!

Spokane Kootenai Waste & Recycle Directory

spokanewastedirectory.org

kootenaiwastedirectory.org

AQUIFER PROTECTION AT HOME 5

State And Federal Resources For Waste Management

- IDAHO**
The Idaho Department of Environmental Quality provides information on household hazardous waste and pollution prevention, and offers regulatory and technical assistance.
To visit their website, go to: deq.idaho.gov
- WASHINGTON**
Households, small businesses, school districts, small governments, and charities can recycle products free of charge through E-Cycle Washington.
To find electronic recycling services in your area, call 1-800-RECYCLE or visit: 1800recycle.wa.gov
- U.S. ENVIRONMENTAL PROTECTION AGENCY**
The Environmental Protection Agency offers information on proper waste disposal, household hazardous waste, and recycling.
For more details about computers and their impact on landfills, visit: epa.gov/waste

Spokane County Waste Disposal Sites

Office: 509-477-3604 Hotline: 509-477-6800
Regional facilities in Spokane County accept trash, recyclables, organics and yard waste, household hazardous waste, construction and demolition waste, and appliances.

Waste to Energy Facility
2905 S. Gougeon Boulevard
Spokane, WA 99224

Valley Transfer Station
2841 N. Sullivan Road
Spokane Valley, WA 99216

University Transfer Station
2405 N. University Road
Spokane Valley, WA 99220
Office: 509-924-5678

North County Transfer Station
22123 N. 48th Chatterbox Road
Colbert, WA 99005

It's easy to recycle and properly dispose of waste materials. Just go to any of these locations!
—Recycle Man



Kootenai County Waste Disposal Sites

Office: 208.446.1430 Hotline: 208.446.1433
Kootenai County provides two, full-service transfer stations. The transfer stations are open to the general public and waste-hauling companies.

Ramsey Transfer Station
3850 N. Ramsey Road
Coeur d'Alene, ID 83815

Prairie Transfer Station
15580 W. Prairie Avenue
Post Falls, ID 83854

NOTE: All waste disposal facilities in Kootenai and Spokane Counties are closed on the following holidays: New Year's Day, Memorial Day, 4th of July, Labor Day, Thanksgiving Day, and Christmas Day.
For information regarding solid waste collection facilities within Bonner County, visit: bonnercounty.us/solid-waste

H₂O Breakfast

The Keynote speaker is [Tamara Lawless, Water Conservation in Flagstaff, AZ](#). The Regional Reports will include a Water Forecast presented by Guy Gregory and an introduction to the [Outdoor Watering Nerds Website Development](#) by Tonilee Hanson.

New Business

Should IWAC resume in-person meetings? Liberty Lake Sewer and Water district is undergoing an office remodel and the conference room will not be available for meetings. This item was tabled to June.

Updates Around the Table

Dan Kegley, IWAC Past President, shared an event at Gonzaga University’s Hemmingsen Center Auditorium on 5/16 at 7:00 pm.

Rob Lindsay, Spokane County Public Works, shared that the city of Spokane has drafted a drought response ordinance. **Update June 7, 2022:** The proposed ordinance was passed by Spokane City Council on 5/23, vetoed by Mayor Nadine Woodward on 6/2, and the City Council voted to override the Mayor’s veto on 6/6/22. Here is a link on the [Spokane Riverkeeper’s website to the veto and Ordinance C36209](#).

Spokane County Public Works has an opening for a [Water Resources Manager](#). The position closes 6/17/22

Terry Pickel, CDA Water Dept., provided an update on the CDA Lake water rights adjudication. The redesignation of CDA Lake as an irrigation reservoir resulted in the CDA Tribe pulling out of negotiations. Issues on the table include changes in lake levels returning to historic levels or maintaining the current summer pool levels. Avista’s FERC license would be impacted by the redesignation and a change in lake levels.

IWAC members shared the challenges of on-going construction projects, new wells, water mains and storage tanks, sewer construction, and appreciation for intertie support in emergencies.

Adjourn - There being no further business this 10th day of May 2022, President Pickel adjourned the meeting at 2:45 pm.



The Future of Water Conservation

Agenda

- 7:15 **Breakfast Buffet**
Enjoy the display tables and visiting with each other
- 8:00 **Welcome**
- 8:05 **Ty Wick Defender of the Aquifer Award**
- 8:15 **Keynote Speaker**
Tamara Lawless: City of Flagstaff Water Conservation Manager, aka Conservation Pirate
- 8:50 **Regional Water Reports**
- 9:30 **Adjourn**

President Terry Pickel

Vice President, Bijay Adams

Handouts sent via e-mail: IWAC Agenda, IWAC April Meeting Minutes. Previous IWAC meeting agendas, minutes, supporting documents and presentations can be found at <http://www.iwac.us/category/meetings/>.