

Columbia Basin Sustainable Water Coalition

Consultant kick-off

June 23, 2022

9am-12pm

Moses Lake Council Chambers

Introductions of Contracted Consultants:

- A grant secured by Lincoln County Conservation District has made possible the contracting of consultants to assist the Coalition with some specific, short-term efforts.
 - Columbia Basin Development League (CBDL) will be leading formalization and organizational infrastructure.
 - Sara Higgins
 - Landau Associates and GeoEngineers will begin groundwater level monitoring to build on past data, collect additional data, and review technical solution options needed to make informed decisions.
 - Ben Lee
 - Kevin Lindsey, Alicia Candelaria
- Coalition is loosely organized group of stakeholders who care about water levels, focused on municipal water systems, not ag. But acknowledging connection between declining aquifers, ag users, and impacts to domestic water supplies there is an opportunity to work collectively, collaboratively toward a solution.

Comments and Group Discussion with Director Derek Sandison, WSDA – Why are we here?

- Agriculture, fish and wildlife habitat, and potable water are all connected.
- Aquifers in the region don't refill easily = existing and naturally occurring issue exacerbated in the 70s with decision to allow deep wells within the area of the Columbia Basin Project while the east part of the project was not yet completed.
- It is estimated that 200,000 acre feet per year are being pumped out of the aquifer.
- One significant solution is to replace deep well irrigation with surface water from the Columbia River via the Columbia Basin Project → the Odessa Ground Water Replacement Program
 - 90.90 RCW – Ecology will do what it can to solve ground water issues in the Columbia basin
 - Lateral projects have been shovel ready since 2012 but hard to find funding.
 - Canal crossings also need to be replaced, but again, funding is hard to find.
 - The USDA's NRCS PL 566 program which may get lateral projects up and running.
- Need monitoring system for municipal wells.
- Over 100 group A water systems in the FLAG (Franklin, Lincoln, Adams, Grant) counties - 20-30 big users like cities and towns, not counting HOAs, mobile home parks, etc.
- When water came up contaminated, some municipalities went deeper. Some talk now about going shallower and adding treatment.
- Paul Stoker was in charge of GWMA – got funding to do study/research into water quality and understanding aquifer system.
- Jake Wollman – reducing pumping on parts of farmers would help municipal systems. Additional water released from Canada could also help.

- The water we are entitled to is not always actually available.
- If all ag wells went off aquifers there is a lot of speculation what would happen. Many with credentials say you would slow the decline, but whether it would stop the decline is not agreed on.

Comments and Group Discussion with Shawn O'Brien, City of Othello - What is the Coalition's responsibility?

- Types of issues/needs/info the Coalition could address/disseminate:
 - Solutions will be different for different purveyors.
 - Moses lake well field showed how water levels decline on large scale, could see them acting the same way. Levels have consistently been dropping. Moses Lake kept good records back to 1960s and loses 3-5 feet every year.
 - Wells would fluctuate 50-60 feet seasonally, sometimes up to 140 feet.
 - Larger cities like Moses Lake have flexibility to do big projects to get additional sources. Small systems don't have that flexibility.
 - A big user like ML has money and can lead the charge on solutions, but smaller systems need to join, contribute, and benefit.
 - Need solutions that can be scaled down to work for smaller systems too. Need to get support from businesses and industries.
 - Othello did aquifer storage recovery – filtered water, tested and put 380 acre feet into ground, mounded and are sampling, will pump again in the summer to see if there was any effect.
 - Biggest lesson was you can take canal water, treat with self-contained treatment unit (7-800 gallons a minute) and can consistently treat canal water to potable level relatively cheaply.
 - Town of Lind would need 20+ mile pipe to get canal water out there – sounds wild now but may need to happen. For Moses Lake they can build a storage pond for canal water through winter.
 - In the past we would go deeper, but that's not as much of an option anymore
 - Issues with going too deep – expensive, vulnerable, not sustainable
 - Brackish water, soft water that can be corrosive, high silica, sodium, warm water
 - Ecology envisioned it will fix itself – as levels drop, farmers will stop farming and equilibrium will come around BUT farmers will be able to use water for longer than municipal systems can, and communities NEED agriculture.
 - Ag uses 98% of GW pumped, municipals use less than 2%, so water conservation measures won't work.
 - Next step is to treat water, costly option, almost unviable for small communities.
 - Areas with no surface water would need pipelines to get Columbia River water but then would still need to be treated and water wouldn't be available in winter.
 - Water taken out of aquifer is ancient, around 20K years old.
 - At first the thought was municipal systems were over pumping so tried to change land uses and reduce water use. It was determined if they remove all the wells back to the 60s there was still no proof the aquifer would recharge.
- CBDL got all voices together to form a larger/louder voice to expand irrigation project and complete east high canal. Municipal and other water systems need a similar voice.

- Coalition provides a platform to get cities and towns involved in the issue, individuals and industries that need groundwater too.
- Responsibility to educate – local leaders, but also individuals so they understand how big a deal this is. Can only achieve this through involvement, input, participation.

Feedback from stakeholders on needs and interests

- Sage Hill rep is extremely concerned about water table going down. Can't afford to deepen well or drill a new one. Too expensive for 20 people who live there to fund. Wants to see what everyone else is doing.
- Ritzville – city is growing but running out of water rights. When the canal water comes out, will there be water rights available for municipalities.
- Mattawa – water rights are a big concern, growth is happening at a rate that their water rights can keep up with.
- Davenport – won't be reached by east high canal. Nearest water is near Rockland, 6-8 miles of hills to get to Davenport. Solution for Davenport right now is conservation because so far from alternative water source.
 - Davenport is a good indicator of drought conditions to come
- Grant County Conservation District – wants to help ensure monitoring efforts are coordinated and not duplicate efforts. Wants to get projects on the ground, working with PL 566 as a great solution, but supporting complimentary efforts while coordinating.
- Moses Lake – wants to learn so they can prioritize the projects the City is working on.
- Port of Royal Slope – learn more, realized how intertwined the issues between ag and municipal suppliers. Don't know if their wells are impacted yet, but want to stay around for planning purposes and to keep learning more
- Paul Wollman – wells are dropping at substantial rate. Want to see water solutions for community purveyors. Solution is to save ground water for drinking water so interested in expediting the completion of the east high canal. Needs to be coordinated effort between farmers and water purveyors. Solution is consistent messaging and coordinated efforts between purveyors and farmers.

EXPECTATIONS FOR COALITION

- **Generate ideas**
- **Help inform decisions**
- **Serve as the voice for potable water (the way CBDL is voice for CBP irrigation)**
- **Represent ALL group A water system**
- **Provide coordination**
- **Provide unified, consistent messaging**
- **Leverage opportunities and partnerships**

OBSTACLES TO FULFILLING EXPECTATIONS AND MEETING NEEDS

- **Us v. them mentality**
- **Low/inconsistent stakeholder participation**
- **Insufficient education/info on issue**

- **Lack of time**
- **External factors**
 - **Climate**
 - **Foster decision**
 - **Hurst**
- **No/minimal funding**
- **Lack of continuity**
- **Undefined target audience**
- **Decision-makers are not all at the table**
- **Unclear or unknown vision & goal**
- **Lack of common ground—everyone is not on the same page**
- **Lack of clarity for messaging necessary for political support (funding)**
- **Lack of strategy**
- **Lack of story**

OTHER CONSIDERATIONS

- Suggestion to get information out and have regular, hybrid meetings to get people to share their experiences.
 - “Meat and Potatoes” agendas where in regular meetings we talk about who is doing monitoring and what system experience
- Coalition could be housed at GCCD which is also housing Moses Lake Reclamation grant. They have experience doing this kind of coordination.
- CBDL could also be an entity that houses the Coalition, especially since the League was created to develop the Columbia Basin.
- Coalition would need to be the one to determine appropriateness of being housed under another entity and approach that entity accordingly. That returns to the question how this Coalition make those decisions? Part of the grant secured by LCCD is intend to provide the means for the Coalition to formalize, with an established, decision-making body. Participation is needed. A steering committee was formed in 2019, but hasn’t been active. Members of the steering committee are being asked to re-engage.

Grant Tasks:

Task A - Watershed Group Development. The Recipient shall conduct Watershed Group development activities. These activities include, but are not limited to:

- Watershed Group formalization – create foundational documents (bylaws, charter, etc.), and continue to expand the Coalition membership group. Establish a formal process and structure for the group, including the establishment of a board of representatives, and committees.
- Outreach and education – develop and distribute educational and outreach material to increase Watershed Group participation and membership. One single-page flyer with basic information on the critical water supply challenge, the Watershed Group’s mission, and how to participate.
- Annual report of activities – prepare and submit two (one for each year of grant funding) annual progress reports to USBR to document project progress.

Task B – Watershed Restoration Planning. The Recipient shall conduct Watershed restoration planning activities. These activities include, but are not limited to:

- Identify groundwater monitoring well sites – use a groundwater consultant to identify potential locations for groundwater monitoring well sites. Potential well sites will be existing wells (no drilling or construction is proposed) and solicited from Watershed planning group members and attendees.
- Collect water level data – collection of limited groundwater level data (with semi-continuous recording pressure transducers and periodic hand measurements) at select (anticipated to be four to six) well sites will help provide data to make future management plan and project decisions.
- Produce a map of monitoring well locations – creation of a map of monitoring wells will facilitate future management decisions.
- Identify and evaluate watershed management project alternatives to advance the Watershed Group’s mission. Project alternatives will be solicited from Watershed Group members and attendees.
- Develop a preliminary watershed management plan document. The preliminary watershed management plan will be a brief (expected to be less than ten pages) document that summarizes the critical water supply issue being addressed by the Watershed Group, the Watershed Group’s prioritization for implementation of one or multiple project alternatives, the ranking system used to select a priority project (or projects), and a project matrix for project prioritization.

Landau Associates and GeoEngineers, Technical Consultants

- Technical side is defining the issue, identifying some potential solutions, then making recommendations on how to move forward. Outcome will be “preliminary watershed management plan” which will identify the problem, solutions, and make recommendations for moving forward.
- Possible ASR, passive rehydration, build out E High Canal, East Low laterals and pumping stations, recycled/reclaimed water, conservation.
- Most important is collecting the data - part of technical role is to start collecting some of that data to build a monitoring network expanding on the work others are doing. Goal is to fill data gaps
- First step is identify past or other current studies to know what’s been done, what’s being monitored now in order to identify data gaps.

Current monitoring efforts

- GWMA data will be big help, to potentially be updated with current conditions.
- Ecology Eastern and Central Regional Offices and OCR
- LCCD has monitoring locations
- Black Sands Irrigation District is also doing monitoring – seeing sustained water levels which is also important bc that’s in an area that is served by the Columbia Basin Project canal infrastructure which shows the effect of bringing surface water into an area.

- WSU is using WaterSMART grant to do extensive GW monitoring, sent Landau the location of their monitoring wells.
- All these data points together help identify “gaps” so they can develop strategy to choose small number of wells (6). Monitoring wells will have transducers so continuous year round monitoring can happen.
- Non-pumped municipal (or other) wells at intermediate depth (300 to 1500 ft deep) are ideal.
- Call to action to the group: contact us if you have, or know of, a well that may be suitable for monitoring
- Wells will be identified by numbers so there’s a level of anonymity
- We will evaluate prospective wells for suitability and representativeness to begin monitoring efforts.

Notes respectfully submitted by Claire Miller and Sara Higgins