CBSWC Stakeholder Meeting Notes

Thursday October 27, 2022, Moses Lake

Introductions and welcome

Ben Lee and Kevin Lindsey gave overview of potential projects for specific systems and area wide benefit

Water Present = Water In – Water Out

- Town or system specific
    - Well drilling/deepening
        - Expensive, but familiar.
        - Not a sustainable solution as we see static water levels continue to drop in existing wells.
        - Aquifer system is in decline and functional depth limit for municipal systems
        - Pump lift issues as you drill deeper. Drilling deeper yields warmer water, often higher in minerals.
    - Rehab existing wells
        - Maintenance is often overlooked, but is critical to keep large scale wells performing long term.
        - Maintenance can't solve aquifer levels
        - Cost vs success – is it worth the cost to access the well? Risk ruining the well if elements are old and have not been maintained.
    - Gives example of Richland applying treated, potable water on ball fields.
        - Shallower aquifers can be used for irrigation. Save money and capacity in treatment and avoid need for increased treatment capacity.
    - Storage
        - Land position is critical for storage, may involve land acquisition
        - Relatively small volume, especially for large water users.
        - Impoundments/bulges are another option to store water, more used in agriculture.
        - Reservoirs are another option, can be large. Permitting and land position can be barriers
    - Aquifer Storage Recharge (ASR)
        - Managed Aquifer Recovery (MAR), Aquifer storage recovery (ASR) often refer to the same thing
        - Passive vs direct.
        - Source/goal controls the size
        - Important to ask iss it doable from water quality standpoint? Is treatment necessary?
        - Water Rights and permitting are necessary
        - Municipal scale ASR – store water when there's a surplus, access in times of need. Need source, treatment, distribution, Permitting, testing.
            - Not always scalable for smaller communities

    - Shallow strategies – watershed centric. Capture event water (flood) and apply to ground that will feed into streams to keep stream levels stable.
    - MAR variation
        - Alluvial filtration, can reduce treatment costs. Important to have the right setting.
        - Reuse/recycle for source. Can use treated wastewater to recharge aquifers but WA is not there.
    - Batch treatment
- Area wide benefit projects
    - Passive rehydration
    - CBP Completion
        - CBP originally authorized in 1935, again in 1943
        - Authorized for 1,029,000 acres, currently at 680,000
        - Full build out is third main canal (east high) with multiple laterals, and extension of east low canal.
        - Benefits are access to irrigation water that takes pressure off groundwater supplies.
        - Challenges are that it doesn't relieve all pressure on Odessa groundwater and reservoir management constraints. Secondary use permits are often based on timed diversions. Water serving additional acreage in OGWRP can only be withdrawn November to March. BOR has to then retain water for summertime use.
        - Reservoir management schemes will impact how surface water can be accessed even with full build out.
    - OGWRP will pursue modified partial replacement which will replace 70,000 acres north and south of I-90.
        - Replacement means ceasing to pump groundwater and replace with surface water.
        - Benefits are that it relieves some pressure on groundwater and is implementable soon
        - Challenges are that partial buildout does not relieve all pressure on groundwater and leaves ~300,000 irrigable acres on the table.
        - Slows the decline, does not stop it. In order to stop it water must be put into the groundwater
    - Passive Rehydration is option for adding water to aquifer. Water would be pumped from Banks Lake, treated, applied to land to seep into groundwater
        - Benefits and recharges aquifers and enhance lakes and streams.
        - Challenges include water rights (can transfer existing water rights which means purchasing them and moving them), pipe routing, environmental permitting, cost, freeze limitations. Could be done with wintertime source water.
        - Question is how long would it take for water injected to reach the area where it's needed? With high enough pressure the response could be within a couple years. Actual movement of water could be hundreds or thousands of years.

        - Passive rehydration may not be the most efficient way to recharge – will lose water to evaporation and other factors.
    - Wide scale ASR or water injection. Can inject treated water into existing wells.
        - Benefits are that it uses existing wells, and provides direct recharge of depleted aquifers.
        - Challenges are water rights and availability, pipe routing, environmental permitting (currently in WA injected water has to be potable and treated to drinking water standards), cost.
        - Could do central treatment plant with pipes that go to multiple wells in order to scale up.
    - Other potential region-scale solutions
        - Regional shared water system (massive consolidation)
        - Crab creek reservoirs (has been looked at, cost prohibitive)
        - Treated/re-used wastewater from Spokane and Upper Crab Creek.
        - Palouse River for Washtucna Coulee rehydration.
- Planning and funding considerations for system specific and area wide solutions
    - Water rights
        - CBP completion/expansion would require USBR to acquire additional secondary use permits
        - Rehydration/ASR required new/transferred water rights
        - System-specific projects may not require additional water rights
    - Source of supply – Columbia River? Banks Lake? CBP Canals? Conservation? Re-use?
    - Timing of water availability – no diversions April thru September. Any new water rights would likely be provisioned similarly.
    - Water quality standards
    - Environmental permitting
    - Funding. Local system project cost could be >$1million to $10million
        - Region wide project planning 1-10million, construction 1-5Billion
    - Funding Sources
        - State (legislature/Ecology/Commerce/DOH)
        - USBR
        - USDA/NRCS
        - Local
- Other ideas – agreement with Canada to release more water. Capture run off through additional dams to allow infiltration. Change restrictive policies.
- Idea to hear from climatologists to understand how climate change is impacting snow pack and precipitation and impacts to water availability and from those managing reservoirs to see what impacts of changing precipitation on existing reservoirs.

Round Table

Lind Case Study. Currently have 8 wells, original 2 drilled in 1903/1910. Many have been deepened. Current well 8 is over 2K feet deep, produces warm water (~80 degrees). Water production continues to decline, is roughly half but water use has stayed the same. VFD's have helped maintenance by slowing production and avoiding stripping the well. Public education and awareness is necessary and area where

Coalition can help. Public needs to understand this is not just Lind issue but is Basin wide. Would also help to get big ag users off groundwater. Advocate for better use of the aquifer.

City of Othello may begin construction on ASR in 2024, will keep group informed of how the project goes. Othello also serves Simplot, potato processing uses a lot of water.

Contract updates

Technical: trying to identify monitoring wells, looking at municipal wells. Narrowed list to 17, contacting them to verify availability of the well

Organizational: Steering Committee meets monthly. CBCD is seeking funding to host a website for the Coalition.

One pager waitlist: Moses Lake, Othello, Quincy

Ideas for topics: Nitrate mitigation and treatment. Bob from Quincy will kick off next round table with nitrate issue in Quincy.

Next meeting January 19

Online Attendees:

Jake Wollman, Jr.
Jamie Clark, DOH
Jon Erickson, ECBID
Margie Hall, Commerce
Mike Schwisow
Noll M, WSDOT
Patric Connelly, Port of Quincy
Rep Mary Dye
Rob Jones, Grant County
Sasha McLarty, WSU
Scott Tarbutton, Ecology OCR
Bonnie,
Dean White
Jed Shumway