

Columbia River Policy Advisory Group June 19, 2013

The meeting began at 9:30 a.m. with a presentation by Junior Achievement. Facilitator Neil Aaland explained he was facilitating today's meeting the place of Dan Silver. He also explained that the agenda was revised; Ecology Director Maia Bellon had to cancel her attendance because of the Governor's direction that cabinet officials remain in Olympia during budget negotiations.

Threats to municipal supplies within the Columbia River Basin

Mike Dexel and Russell Mau of the Washington Department of Health discussed this topic. A 2013 USGS report identified groundwater depletions all over the country, including the Columbia River basin. The recent GWMA studies have raised concern about the effects of declining water levels in the Columbia River basin and the effect on municipal water supplies. The Department of Health wanted to look closer at the GWMA data and determine how big a problem this is for each of the 25 municipalities in the GWMA study. Several cities were identified as having problems meeting future demand, some by 2030. The Department of Health is particularly concerned about source capacity and declining well levels for both Othello and Warden; Quincy has the ability to drill more wells to meet future demand in an area with less severe aquifer declines. The best way to manage this is to engage in water system planning, install water level measuring devices in the highest source production municipal wells to monitor declines and evaluate new sources of supply. Unpopular but available tools to manage water level declines include capping growth and limiting connections. The town of Warden only has one well which has a water level that is declining 13.4 feet yearly. They have two emergency wells. One possible solution is to transfer an agricultural right to municipal supply purposes. This would create a new season of use. The Department of Health plans to reach out to all 25 municipalities this year, especially those that are facing water supply challenges in an effort to evaluate their ability to respond to a water supply shortage.

CRPAG members and the audience had the following questions and observations:

- Is there any sense of supply issues in other areas of the state? [There are some issues around Airway Heights; they need to consider their options.]
- In Ritzville, DOH had concerns about letting them use the shallow aquifer due to high nitrate levels.
- How does conservation and Best Management Practices (BMPs) fit? [They are required to assess those as part of planning; they have to show three different demand curves based on water conservation alternatives. Municipal conservation is part of the picture to meet demand, but can't solve the problem. Communities also have to address leakage.]
- Other than the 25 municipalities in the GWMA study, what is DOH doing about the other Group A or Group B water systems in the study area? [DOH is gathering information about these water systems, such as homeowners associations. The plan is to make sure they are informed of the declining water supplies.]
- Are the communities mentioned on the path to address their situation? [Warden is currently working on updating a water system plan, Othello not sure; Moses Lake is monitoring well levels and deepened their existing wells.]
- What about rural customers? [DH is looking at all users in the GWMA.]
- Why is the solution for this problem partnering with OCR? [OCR started evaluating this due to the legislative direction regarding the Odessa aquifer; it's not limited to agricultural wells. Municipal systems may be at risk and the state (OCR and DOH) want to be in a position to help before it's too late.]

Discussion on Aquifer Storage/Recovery (ASR) Policy Questions

At the previous CR PAG meeting in March, a panel discussed ASR projects and focused on the technical aspects. There are a number of projects being funded out of the OCR. Ecology views ASR as one of the major tools to address the legislative mandates establishing the CR program. There was not significant time available to discuss the policy issues in March, so a panel was scheduled today to continue the discussion. Panelists were:

- Guy Gregory, hydrogeologist for the Department of Ecology
- Mike Ladd, Oregon Department of Water Resources
- Phil Brown, GSI Water Solutions

A set of three questions was posed to the panel; each participant will provide an answer. After all three questions are answered, questions may be posed by PAG members and the audience.

Question 1: The state of Washington has opted for using the policy option of Overriding Consideration of the Public Interest (OCPI) in evaluating the water quality of water involved in ASR projects. This is reflected in the ASR Rule adopted by Ecology (WAC 173-157). What are the issues and/or benefits associated with Washington's approach? How does this compare to the approach used by the state of Oregon?

- Guy: Washington has stringent groundwater quality requirements. In order to store water, have to make the determination that violating those groundwater quality standards is okay because the public interest in storage overrides potential degradation in groundwater storage. We feel comfortable doing that; this is water we want back. These are highly regulated facilities. Absent a legislative change, making that administrative determination is the only option available to us. Other states do this differently.
- Phil: Oregon had the same mindset that Ecology has, but this determination occurred earlier in the rule-making process. There was a waiver of their state anti-degradation standards; within certain standards, putting drinking water into the ground would not be considered as degradation.
- Mike: In Oregon, we have two different aquifer recharge programs. ASR projects are not allowed to degrade groundwater quality. There is a "limited license process" for those that want to test this process. The Oregon health authority has input into the licenses.

Question 2: The issue of consumptive use versus non-consumptive use of water in ASR projects was raised during the panel discussion at the March PAG meeting. Are there beneficial uses for water that are not recovered by the primary beneficiaries of an ASR project? Can those benefits be quantified? If so, how should those benefits be reflected in the permit process?

- Mike: In the ASR program, ASR and aquifer recharge are two different authorizations on how to get a water right. ASR is the ability to use that water right for aquifer storage and recovery purposes. That is different than the permitting process for groundwater recharge, where you have to file two permits - one to pull the water out of the source water for storage, and a secondary permit to pull the stored water out and use it. One cannot use aquifer storage for long term; aquifer recharge can be used instead for aquifer restoration. We start the discussion for use of alluvial aquifers at 85%; may bump that up if you can demonstrate the water will stay around. Some of the water may end up as return flow and provide other benefits. We don't yet have a project that looks at multiple beneficial uses. For aquifer storage and recovery, the starting point is 95% recovery; not likely to let permits go to 100% but we'd look at data collected and see how long the water stays around.

- Phil: Not a lot to add. The models are expensive to estimate benefits. When Mike references whether water is sticking around, we look at trends – are you seeing water level rebounds? If it's not going away, we have changed the water balance for the better. If water goes away in ways that you can't get it back, you'll see static water levels decline. You can use modeling to say how much water is being lost.
- Guy: Ecology does similar things. If you lose control of the water, it doesn't belong to the operator of the ASW project. It goes back into the watershed and may be used for other beneficial uses. That's why ASR provides a lot of alternatives; we get that water back either way. The difference between Oregon and Washington – Oregon has percentages that they assign right up front; Washington decides each time how to assign percentages. We'd like to measure it over time and come up with up front percentages rather than decide every time. Oregon's up front assignment is better than our process.

Question 3: It was asserted by one panelist in March that the drinking water standard might not be the appropriate standard to use in agricultural applications. What does this suggest about making end use (sometimes known as the secondary use) as the determinant of the permit?

- Phil: I prefer the beneficial use logic; what is the receiving aquifer doing? If it's a drinking water aquifer, it may not make sense to put raw surface water with pathogens into it. Receiving aquifer may have poor water quality. In that case having different source water quality standards makes sense.
- Guy: Washington rules reflect that notion. Part of the anti-degradation policy says that you can't degrade the water quality of the receiving aquifer. If it's highly saline, for example, you don't have much to worry about.
- Mike: Oregon also looks at the water quality of the receiving aquifer but it's a slightly different approach if it's going to be ASR. Notwithstanding the water quality of the receiving aquifer, drinking water standards will apply. That's a high standard. There may be other people drinking out of that aquifer, even if the proposal is for agricultural use. If we're not sure what the aquifer may be used for, don't want to write it off.

CRPAG members and the audience posed several questions and observations:

- Regarding monitoring after recharge, you mentioned the number sometimes goes higher, but does the number ever go lower? [Mike has not heard of that happening in his region; not sure statewide.]
- Who pays for the monitoring? [Not too many of the projects have gone to full permitting yet. They will submit a work plan that details their monitoring – e.g. observation wells. The state of Oregon has its own monitoring program that supplements the project monitoring.]
- Is ASR really being encouraged, given the 2/3 flow requirement to out of stream and 1/3 to in stream? If one facility has a 15% loss and that make sit back to the river, can that be assigned to the in stream use, instead of just being lost? [In Washington, the precision of modeling necessary to come up with that is such that the payback to a proponent would be negligible. In Oregon, they've had discussions but haven't yet determined how to do that. Providing that certainty of detail is complex.]

Canadian Treaty: Overview of public comments

Derek provided some introductory comments. BPA and the ACOE held a set of public information sessions recently. They have just finished iteration 2 (putting some sideboards on what is possible about river operations), now they're going into iteration 3 (developing the

alternatives for recommendations to the state department). Birgit Koehler of BPA will discuss what was heard.

Birgit reviewed the process. The review is collaborative between the U.S. entity (federal agencies) and the sovereigns (states, tribes). We're also working with stakeholders in the region. The treaty does not expire, but we can choose to terminate in 2024. The momentum is on modernizing the treaty. Recommendations will be made to the Department of State by the end of the year. Other national interests will be weighed, and to the extent possible regional interest will be considered. The more unified the northwest is, the higher the likelihood those will be addressed.

We've gone in two parallel modes, doing modeling studies and conducting regional engagement. Some of the general interests expressed at the meetings:

- Be careful how you balance benefits and the costs
- Climate change was mentioned a number of times
- The concept of modernizing the treaty
- Water supply
- Irrigation
- Flood risk management should remain one of the high priority interests
- [Other interests mentioned are shown in the PowerPoint file of Birgit's presentation – available on the OCR website]

The issue of Canadian entitlements is of keen interest; the U.S. entity thinks the payments are too high. Conflicting comments from the public on what should be done with the savings if payments are reduced e.g. ecosystem restoration, giving it back to ratepayers.

How are these comments being incorporated? We've already incorporated some into the "working draft" recommendation. Some of the comments are not particularly relevant to the treaty. For example, the issue of allocating new water is not considered a treaty issue; treaty issue is getting the water. The Sovereign Review Team will be reviewing the comments as they develop the recommendation to the State Department.

Some of the comments are being reflected in iteration 3. There are three new alternatives in iteration 3 (in addition to keeping the treaty or terminating the treaty); the results should be available at the end of the summer.

The "five-pager" [draft recommendations] will be released next week and be available on the SRT website. This is import, it will preview draft recommendations. A final draft will be released at the end of August. More public meetings will be held in the fall.

CRPAG members and the audience posed a number of questions and observations:

- The potential conflict between ecosystem benefits and water supply could be handled by providing more flows, which could be a win/win [this might require another domestic process]
- Flood risk management projects could facilitate higher flows for higher out migration
- Could the 2014 date for the first year to give notice start a process that formal declarations serve as a rolling deadline? [BPA pays Canada \$20 million/month, that is an incentive to resolve]
- Who decides between diametrically opposed positions? [The U.S. Entity wants regional consensus but they will determine the final recommendation to the State Department.]

- What if Canada doesn't want to modernize? [It's a negotiated process; we could say "let's terminate" and go from there.]
- How does it work to seek lower Canadian entitlements and ask for more water? [There's a complicated set of assumptions about payments that is being addressed.]
- When will the domestic groups be started? [Uncertain; not sure that the U.S. entity is the logical one to lead those groups]

Project updates

Derek Sandison and Wendy Christensen lead this topic. Derek mentioned we don't have a budget yet, so hard to provide updated information. Operating budget comes first, then the capital budget. He also passed on regrets from Maia Bellon, Ecology Director; she really wanted to be here but couldn't because of the budget deliberations. Bud Hover, Department of Agriculture, also wanted to be here but had the same issues.

Projects:

Lake Roosevelt: Project is in the second year of making municipal and industrial deliveries. Three parts to the Lake Roosevelt agreement: Odessa, M&I, and instream flow. Instream flow was 12,500 AF, M&I is 25,000 AF. Odessa is 30,000 AF, instream flow is 15,000 AF. By next year, think we'll be at full capacity of the M&I water.

Lake Sullivan: project is re-operation of a hydro project in Pend Oreille County. This is 14,000 AF for a cost of \$14 million. OCR is hoping to make the first payment of \$2.5 million; poised to issue the first permit once the contract is closed.

KID is starting construction of pumping project on Red Mountain.

Icicle Creek integrated plan is starting up, many PAG members are part of that. This is in the organizational phase.

The Methow complex (series of projects in the Methow) will get MVID off the Twisp River permanently

Columbia River Regional ASR Project – pump test soon, this is at a larger scale than has been done in the past. [This is located in northern Douglas County]

Odessa – Bureau of Reclamation has applied for their secondary use permit; this draft should be out for review in July

Yakima River Basin (YRBWEP) - \$20.9 million was requested – outside of CR program funding. This has morphed into \$45 million; the Teanaway Valley acquisitions have been added. There are some issues around full acquisition.

Wendy Christensen discussed some early action projects moving forward by the Bureau of Reclamation. Wymer, Kachess/Cle Elum are moving forward with some required testing. Manastash tributary habitat (30 miles of habitat restoration) is moving forward as is modeling for the Cle Elum fish passage. This is all under their existing authority.

The meeting adjourned at 12:20 p.m.

The next meeting of the CRPAG will be September 25, 2013 at the Hal Holmes Center in Ellensburg.

Attendees:

CRPAG members and alternates:

Wendy Christensen, BOR
 Jim Fredericks, USACE

Michael Garrity, American Rivers
Paul Jewell, Kittitas County Commission
Levi Johnson (for Craig Simpson), East Columbia Basin Irrigation District
Mike Leita, Yakima County Commission
Carl Merkle, Confederated Tribes of the Umatilla
Rick Miller, Franklin County Commissioner
Gary Passmore, Confederated Tribes of the Colville Reservation
Lisa Pelly, Trout Unlimited
Phil Rigdon, Yakama Nation
Teresa Scott, Washington Department of Fish and Wildlife
Mike Schwisow, WA Water Resources Assc./Columbia Basin Development League
Mark Stedman, Lincoln County Commissioner
Richard Stevens, Grant County Commissioner
Leo Stewart, Confederated Tribes of the Umatilla Reservation
Rob Swedo, Bonneville Power Administration
Ron Walter, Chelan County Commissioner

Others in attendance:

Neil Aaland, Facilitator
Peter Beaudry, City of Kennewick
Moroni Bennally, University of Washington
Phil Brown, GSI Water Solutions
Sally Carpenter, citizen
Scott Cave, SC Communications
John Covert, Department of Ecology
Phil Crane, WDFW
Stuart Crane
Jim Davenport
Mike Dexel, Washington Department of Health
Melissa Downes, Department of Ecology
Robert Granger, WDFW
Guy Gregory, Department of Ecology
Bob Hall, YBST
Dan Haller, Aspect Consulting
Perry Harvester, WDFW
Tim Hill, Department of Ecology
Justin Iverson, Golder Associates
Mike Kaputa, Chelan County
Charles Klarich, YBSA
Ted Knight, Spokane Tribe
Birgit Koehler, BPA
Mike Krautkramer, Robinson Noble
Paul La Riviere, Washington Department of Fish and Wildlife
Mike Ladd, Oregon Department of Water Resources
Kevin Lindsay, GSI Water Solutions
Chris Magan, Intera
Chris Marks, Confederated Tribes of the Umatilla Reservation
Daniel Martinez, S. Martins Livestock
Russell Mau, Washington Department of Health
Jason McCormick, WWT

David McClure, Klickitat County
Laura Merrill, WSAC
Hannah Mink, American Rivers
John Monahan, Geo Engineers
Joe Morrice, Aspect Consulting
Kathy Moses, Confederated Tribes of the Colville Reservation
Dave Nazy, Department of Ecology
Judy Oleson, PGG
Steve Patten, Walla Walla Basin Watershed Council
Jeremy Pratt, CardnoENTRIX
Joye Redfield-Wilder, Department of Ecology
Tom Ring, Yakama Nation
Rick Roeder, Department of Natural Resources
Patrick Royer, CBGWMA
Chuck Sams, Confederated Tribes of the Umatilla Reservation
Derek Sandison, Department of Ecology
Mark Schuppe, Department of Ecology
Sheri Sears, Confederated Tribes of the Colville Reservation
Jim Skalski, Department of Ecology
Paul Stoker, Groundwater Management Area
Tom Tebb, Department of Ecology
Steve Thurin, HDR
Duane Unland
Rich Walpole, CNW Eng.
Bruce Williams, GeoEngineers
Bill Zachman, Department of Ecology