

PBAC April 2006 Meeting



Palouse Basin Aquifer Committee

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PBAC MONTHLY MEETING - APRIL 20, 2006

Holiday Inn Express, Salon A, 1190 Bishop Boulevard, Pullman 8:00 - 4:00

Attendance

<input checked="" type="checkbox"/> UI: Michael Holthaus, Water Systems Coordinator	<input checked="" type="checkbox"/> WSC: Joe Kline, Project Engineer
<input checked="" type="checkbox"/> UI: Brian Johnson, Vice President Facilities	<input checked="" type="checkbox"/> WSC: Rob Corcoran, Asst Dir, Arch, Engr & Const Services
<input checked="" type="checkbox"/> Moscow: Tom Sealkorn (Chair), Water Dept Superintendent	<input checked="" type="checkbox"/> Pullman: Mark Workman, Director of Public Works
<input checked="" type="checkbox"/> Moscow: Aaron Amerin, City Council Member	<input checked="" type="checkbox"/> Pullman: Art Garro, Maintenance & Operations Superintendent
<input checked="" type="checkbox"/> Moscow: Les Macdonald, Director of Public Works	<input checked="" type="checkbox"/> Pullman: Barney Waldrop, City Council Member
<input checked="" type="checkbox"/> Latah County: Tom Townsend, Citizen and County Representative	<input checked="" type="checkbox"/> Whitman County: Mark Storey (Vice Chair), County Engineer
<input checked="" type="checkbox"/> Latah County: Tom Stroschein, County Commissioner	<input checked="" type="checkbox"/> Whitman County: Jerry Finch, County Commissioner
<input checked="" type="checkbox"/> Colfax: Emily Adams, City Administrator	<input checked="" type="checkbox"/> Colfax: Andy Rogers, Public Works Supervisor

Guests

Name	Representing
LARRY KIRKLAND	
Gene J. Greenway	WA - DOPC - OF ECOLOGY
Helen Harrington	IDWR
Chuck Harris	UI - Water Resources Program
Alyssa Douglas	Golden Associates
Earl Bennett	CAG
Glenda Edwards	UI student
Michelle Edwards	student
Evan Ellis	KQOW Radio
Jerry Fairley	CAG / UI hydrology
Kendal Cook	WSU

PBAC Monthly Meeting – April 20, 2006
Attendance (continued)

Name	Representing
Furcifer Leek	WSU
David Hall	Palouse winter Conservation Network
Jim O'Steeney	UI
Jan Bell	UI

Palouse Basin Aquifer Committee

April 20, 2006 Meeting Minutes – approved at May 18, 2006 PBAC meeting
From Summary Notes compiled by Victoria Leuba

This was an interesting meeting/retreat to attempt to facilitate. The participants stated desires for the day that ranged around clarifying the goals of the Palouse Basin Aquifer Committee and how to move the work of the committee forward. There was an expression of concern about possible loss of focus or dilution of effort over time. It is a long-standing committee and the emphasis shifts as new knowledge is obtained, the organizational structure evolves, and members of the group come and go. The desire of the group to continue to work together, cooperatively and harmoniously on the “health” of the basin aquifer and water supply issues was apparent.

The work for the day seemed to be goals clarification and freshening as well as long-term or strategic planning. Concerns appeared to be realistic timeframes and the appropriate balance of study and action to accomplish the Mission. The mission statement was reviewed and at the end of the day had not been modified: “To ensure a long-term, quality water supply for the Palouse Basin region.” The goals were reviewed and several of them were dropped or rearranged. The attached mission and goals statement reflects the thinking of the group at the end of the day with the addition of one goal I suggest.

During the day there were presentations:

- Steve Robischon, the PBAC’s executive director, presented information on the evolution of the Mission and goals of the committee.
- Dale Ralston, retired University of Idaho faculty member, spoke about the state of understanding of the aquifer in both Palouse/Moscow and Lewiston.
- Rob Buchert, local watershed planning unit lead and Palouse Conservation District manager, provided information on the status of the local watershed planning effort that is underway.
- Barbara Cosens, faculty member at the University of Idaho law school, presented information on the ways states sharing water resources develop cooperative agreements.
- Earl Bennett, representing the Citizens’ Advisory Group (CAG), had a series of suggestions for the PBAC regarding steps to move forward.

These presentations added information helpful in strategic planning, but limited the time available for the group to work on that planning.

I asked the group to develop a statement of the problem that the group was addressing. This proved (as it almost always does) to be a very difficult assignment. Strong concerns about the status of the aquifer and the capacity to reverse a downward trend were voiced. The need to address the complete water system was acknowledged, not just ground water. Lack of a full or complete understanding of the system was mentioned as a problem when looking at alternative ideas. Concerns about too much study and too little action were also expressed.

The idea of a technical committee to assist with problem definition and study design was brought out. Dale Ralston offered to work with Jim Osiensky and other faculty from the two local universities on a technical committee to assemble a bibliography of studies if someone would capture the collective knowledge. Steve Robischon volunteered to assist that group. Jan Boll, professor at the University of Idaho, spoke briefly about the funding for the Water of the West program at the U of I and the possible availability of graduate student assistance to the group. The group seemed to favor having a feasibility study done that would produce a series of alternative strategies for “stabilizing” the water supply both in quantity and quality. In addition to the environment feasibility, an economic feasibility component was recommended.

Palouse Basin Aquifer Committee

There was a brief discussion of Aquifer Storage and Recovery projects underway in similar basins in Washington and Oregon. These types of projects may have applicability in the Palouse Basin, but no decisions on the advisability were reached. Understanding of how water works in the basin was deemed important, but finding the answers separate from investigating solutions did not appear to be an attractive choice for most of the members of the PBAC.

Guy Gregory of the Washington State Department of Ecology, Water Resources Program, and Helen Herrington of the Idaho Department of Water Resources spoke about the work of the PBAC. Helen commented that although the CAG was strongly recommended by her employer, the CAG was an advisory group to the PBAC and not under the direction of the state. Both Guy and Helen stressed the desire to have PBAC continue and to have the states provide technical support when requested and available. Both stated the importance of the strong local control of the issues and solutions and the desire of each state to work cooperatively with the PBAC on identified opportunities and strategies. Idaho and Washington water resource programs view the PBAC as the local authorized experts on water supply in the area.

Les MacDonald wrote a goal for the group to consider. It would replace the first goal listed on the 2005 goals list:

“Develop and Implement a balanced basin wide Water Supply and Use Program by 2020.

1. Create an action plan for aquifer system enhancement and alternate water supply development by 2010.
2. Direct research and implement pilot projects necessary to understand the basin hydrogeology in a manner sufficient to support the Water Supply and Use Program and the affiliated supply projects.
3. Direct research and implement pilot projects necessary to understand the basin hydrogeology in a manner sufficient to support the supply projects identified in the Water Supply and Use Program.
4. Update the Palouse Basin Groundwater Management Plan to reflect the Water Supply and Use Program.”

There was very little time left for discussion and the group seemed satisfied with the substitution of this goal for the previous one in 2005. The other goals were reviewed and general consensus on the attached list was developed.

At the end of the day, the group agreed to a problem statement. I have paraphrased it below and the group may want to take up refining it, or changing it, if it would be helpful in illuminating a path forward.

“The PBAC recognizes the threat of an inadequate quality water supply for the future. [Some felt] the declining aquifer level is an indicator of possible future water supply problems.”

The wrap up comments from the participants reflected a useful session that might be repeated from time to time. Re-visiting the goals and checking the mission statement annually seemed to be accepted as a reasonable way forward. It would minimize the introspection and yet allow the group to change targets as new information is developed and analyzed.

This session did not penetrate very far into the strategic planning phase or values statements this group could undertake. Time was limited and a group normally needs to establish a working relationship with a facilitator in order to move this type of work forward successfully.



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SPECIAL MONTHLY MEETING – APRIL 20, 2006 8:00 – 4:00

HOLIDAY INN EXPRESS – SALON A, 1190 BISHOP BOULEVARD, PULLMAN

Agenda

8:00 – 8:30

Introductions, Purpose of the Retreat, Facilitation/Ground Rules

8:30 – 9:30

Mission, Vision, Goals

9:30 Break

9:45 – 10:30

Basin Conceptual Model – Ralston (Conceptual Model, Discussion)

10:30 Break

10:45 – 12:00

Basin Characterization, Solution Alternatives, Management Plan

12:00 – 1:00

Working Lunch – WRIA - Buchert (Background, Status, Future, Discussion)

1:00 – 2:00

GWMP, Organizational Structure, CAG, Public Involvement

2:00 Break

2:15 – 2:45

Transjurisdictional Issues – Cosens (Background, Examples, Discussion)

2:45 – 3:00

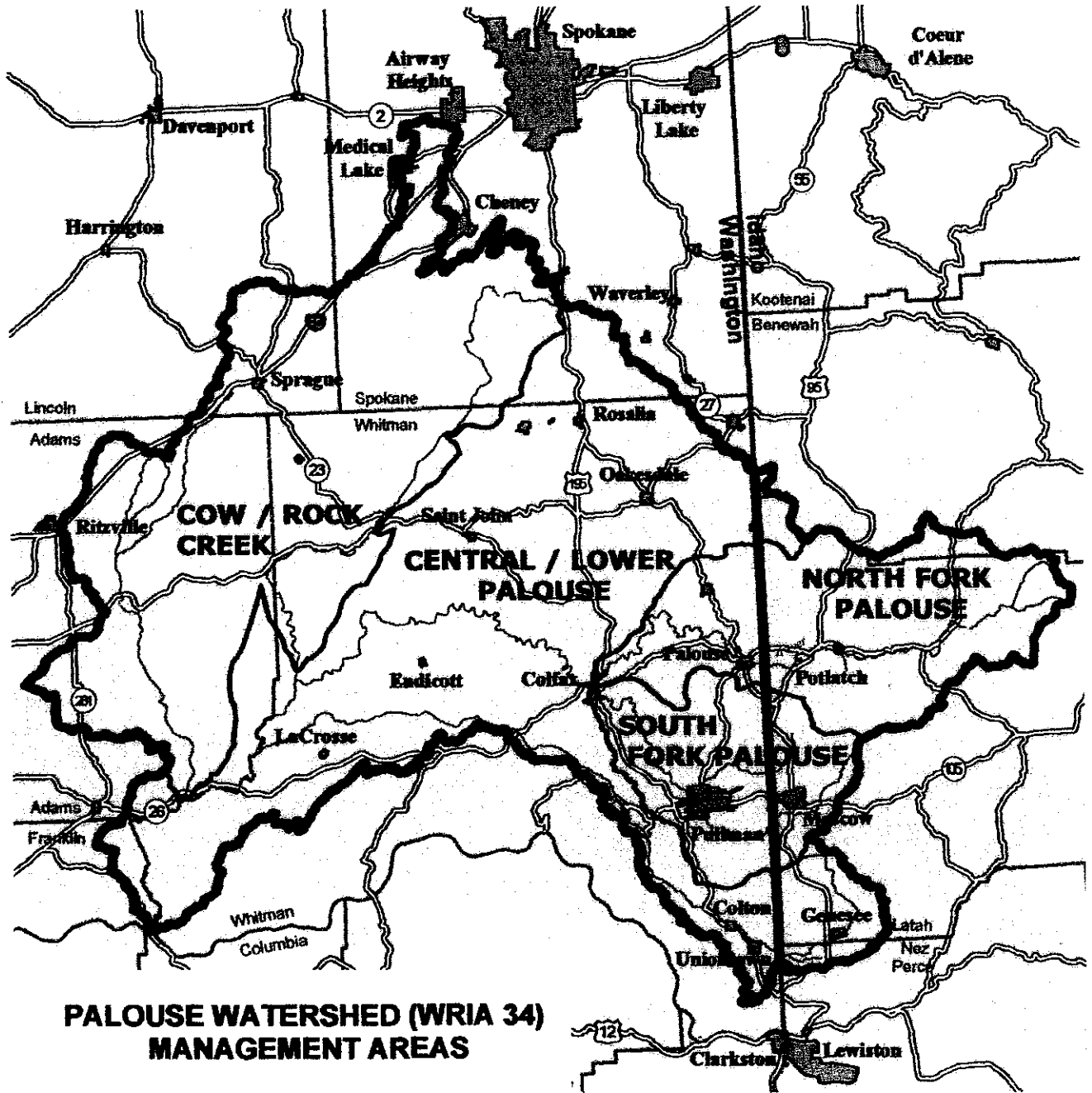
WDOE, IDWR Feedback – Gregory, Harrington (Discussion)

3:00 Break

3:15 – 4:00

Recap / Review / Next Steps

4:00 Adjourn



**PALOUSE WATERSHED (WRIA 34)
MANAGEMENT AREAS**

PALOUSE WATERSHED PLANNING (WRIA 34 & ID)

	<u>COMPLETED</u>	<u>FUNDING</u>
<u>Phase 1: Get Organized</u>	June 2003	\$50,000
<u>Phase 2: Technical Assessment</u>	March 2005	\$200,000
<u>Supplemental Planning Elements:</u>		
Water Quality Assessment:	December 2006	\$100,000
Instream Flow Recommend:	June 2007	\$100,000
Storage Assessment:	June 2006	\$100,000
<u>Phase 3: Plan Development</u>	June 2007	\$250,000
<u>Phase 4: Implementation</u>	Begin June 2007	\$100,000/yr for 3yrs.

BENEFITS: Funding Mechanism For Local Priorities
& Forum for Bi-State Cooperation on Shared Issues/Problems/Opportunities

FUTURE?

October 2007 Water Summit, Establish Permanent Council, Bi-State Participation, Etc.



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AQUIFER STORAGE AND RECOVERY PROGRAM GUIDE

Phased Approach to ASR – Logical Approach that Manages Costs

1. Assess ASR feasibility with **existing** information and infrastructure as much as possible
 - Compile existing hydrogeology / hydrology / water quality
 - Confirm water is available for recharge, can be conveyed to injection areas, and is treatable (WRIA 34 Storage Assessment will provide some scenarios)
 - Develop internal “pre-feasibility” document that establishes whether and/or how ASR can provide solution for water supply sustainability
 - Pre-feasibility would include:
 - Identification and physical examination of existing wells for possible retrofit to ASR wells
 - Geochemical compatibility screening – esp iron/manganese
 - Preliminary operational scenarios and water system compatibility overview
 - Preliminary conveyance and treatment layouts
 - Develop observation well network and monitoring plan
 - Public involvement/education plan
2. Develop pilot scale program(s) using existing wells / water system infrastructure
 - Develop permitting strategy
 - Initiate monitoring
 - Conduct short-term recharge test in one existing well with water withdrawn from another distant / unconnected well
 - Collect additional data if needed
 - Develop next Phase / pilot test
3. Initiate formal ASR pilot program and build up operational ASR system over time

AQUIFER STORAGE AND RECOVERY PROGRAM GUIDE

The following include the major components of an ASR program:

1. REGIONAL HYDROGEOLOGY

- Combine existing studies into local / regional hydrogeologic characterization report(s)
- Develop focused list of priority data gaps specifically related to ASR feasibility
- Work on completing these studies in an organized manner over time

2. DEVELOP A MONITORING NETWORK

- Start with existing wells and add to the network over time
- Record water levels / pumping volumes and maintain database(s)

3. HYDROGEOLOGICAL/ENGINEERING ANALYSIS OF EXISTING WELLS

- Stress the aquifer using current pumping regime and monitor responses to improve understanding of how the aquifer behaves (e.g. is it a large scale regional type aquifer versus aquifer divided by fault blocks / structural features?)
 - Modify existing pumping schedules and rates and monitor water level responses (e.g., pump 3 wells at higher rates instead of 6 at lower rates)
- Identify which existing wells could be candidate ASR wells – consider well construction and existing water system infrastructure.

4. WATER QUALITY COMPATIBILITY MODELING

- Characterize source water quality for recharge – treatment requirements (esp. Fe/Mn and disinfection byproducts)
- Do initial water quality modeling to assess recharge water / receiving aquifer compatibility with existing data
- Identify data gaps (parameters / locations) and collect additional water quality or rock geochemistry information to fill gaps

5. WATER AVAILABILITY

- Identify where is water available to divert / withdraw
- Assess whether the communities have sufficient water rights to divert / withdraw water for recharge
- IF NO, then apply for new water rights now.

6. FUNDING

- Storage is a priority in WA. Columbia Basin Water Initiative will provide framework for many types and quantities of storage. Initial funds spent to lay the foundation = bonus points in new grant applications
- Apply for and provide funds for public education and outreach now and throughout the program.