



Palouse Basin Aquifer Committee

University of Idaho PO Box 443301

Moscow, ID 83844-3301

Phone: (208) 885-6429

pbac@uidaho.edu www.uidaho.edu/pbac

April 21, 2011 Meeting Minutes

Pullman City Hall, East End (Large) Conference Room

Attendance

	UI: Michael Holthaus, Water Systems Manager		WSU: Mike Leonas (Chair), Director, Capital Planning & Dev.
X	UI: Joe Kline, Director, Utilities and Engineering	X	WSU: Steve Potratz, Plant Engineer – Facilities Operations
X	Moscow: Tom Scallorn (Vice-Chair), Water Dept Superintendent	X	Pullman: Mark Workman, Director of Public Works
X	Moscow: Walter Steed, City Council Member		Pullman: Art Garro, Maintenance & Operations Superintendent
	Moscow: Les MacDonald, Director of Public Works	X	Pullman: Barney Waldrop, City Council Member
	Latah County: Paul Kimmell County Representative		Whitman County: Mark Storey, Director of Public Works
	Latah County: Tom Stroschein, County Commissioner	X	Whitman County: Michael Largent, County Commissioner
X	Colfax: Carl Thompson, City Administrator		Colfax: Andy Rogers, Public Works Supervisor

Visitors and Others

Katie Moran, UI; Attila Felnagy, UI; Brenda Borer, Golder Associates; Bob Haynes, IDWR; Beth Pratt-Situala, citizen; Scott Cornelius, Self; John Marone, Nalco; Steve Robischon, PBAC

Call to Order

Tom Scallorn, PBAC Vice-Chair, called the meeting to order at 2:00 PM

1) Approval of the March 17, 2011 Meeting Minutes

Draft March minutes were approved by consensus.

2) Presentation/Discussion – 2010 Census, Per Capita Water Use

Robischon presented information from the 2010 census as it relates to the Palouse ground water basin (slides at PBAC site

http://www.webs.uidaho.edu/pbac/Presentations/2011/110411_2010_Census_Water_Use.pdf). 2010 per capita water use for the larger cities inside the basin was 120 gallons per person per day.

3) Unfinished Business –

- **Framework Project / PBAC Goals**

Group members reported progress reviewing the Framework project final report and will continue the review/discussion at next month's meeting.

4) New Business –

- **Pumping / Water level Analysis Proposal – Katie Moran**

Moran summarized a proposal to conduct work over the summer analyzing potential short and long term relationships between pumping and water levels in the lower aquifer. The group discussed the merits of the proposal, and approval for funding was obtained from all 4 research funding entities. Robischon reported the UI hiring process may be cumbersome, and the group discussed possible alternative methods to accomplish the task.

5) PBAC Projects Progress Report –

Tritium Testing Project

Robischon displayed an email from Lauren Carey reporting the oxygen isotope machine is up and running. Moran added that all of the samples have now been analyzed. She will next move on the modeling the results and comparing them to the tritium and carbon data.

Continuation of Basinwide Aquifer Testing Project

Folnagy reported work conducted investigating the relationship between earthquake events and water levels. Several examples were displayed. Folnagy hopes to use the information to derive aquifer storage coefficient values and compare them to those resulting from the analytical modeling of previous projects.

Basinwide Aquifer Testing Project

Moran reported her thesis defense is scheduled for May 2 at 12:00 PM at the UI College of Natural Resources (Forestry) building in Room 14. Moran invited all members to attend.

6) Citizens Advisory Group Report –

Robischon reported there was no CAG meeting in April.

7) Budget Report

Robischon reported on the status of the budget and polled the members on the funding outlook for next fiscal year. At this point the group will proceed assuming next year's assessments will be the same as this year.

8) Other Reports and Announcements –

Moscow Surface Water Reservoir Feasibility Study

Scallorn provided details of the some of the issues addressed in the study and reported a draft report on the first phase of the project is complete and is currently under review.

Moscow Comprehensive Water Systems Plan

Scallorn reported work continues on the water system plan, most draft chapters have been submitted and the draft report is nearing completion.

Moscow Water Conservation Plan

Scallorn summarized the plan contents and reported Les MacDonald is in the process of reviewing a draft.

2011 Water Summit Planning

Robischon reported the next planning meeting is scheduled for April 27 at 11:30 in Pullman at the Market Square building in Pullman. The Summit is scheduled for October 4 in Pullman at the Schweitzer Event Center.

Snowpack

Robischon displayed larger basin (NRCS/IDWR) snowpack maps showing that the Clearwater Basin area is at 119% of normal snowpack. Data from the Moscow Mountain SNOTEL site indicate that precipitation this snow year is higher than it has been in the past 5 years, and the amount of water remaining in the snowpack is near a 5-yr normal level.

Other

Haynes announced plans to retire from IDWR as of June 10.

9) Next Meeting –

The next meeting is scheduled for May 19 in Moscow. The group thanked Haynes for his many years of service to the Palouse basin, and Haynes praised the group on their continuing efforts. Discussion of how his ex officio position on PBAC will be filled is ongoing at IDWR.

10) Adjournment -

The meeting was adjourned at 3:21 PM.

Submitted for review and approved at the May 19, 2011 PBAC meeting.

Steve Robischon, PBAC Executive Manager

4/21/2011

Project Proposal for PBAC

Project Title

Evaluation of the relationship between pumping rates and long-term water level declines in the Grande Ronde aquifer of the Palouse Basin

Statement of problem

Annual water level declines between 0.9-1.5 feet have been observed in Grande Ronde aquifer wells since the aquifer was first developed in the 1890s. Water level declines have decreased slightly during the last fifteen years, possibly as a result of an overall decrease in annual pumping, but the relationship between water levels and pumping is uncertain. Better understanding of the relationship between water level decline and pumping in the Palouse Basin may reveal changes in hydrogeologic properties or regional flow that have occurred within the period of record, and provide information for future basin management.

Proposed project description

The overall goal of this project is to investigate the relationship between Grande Ronde pumping rates and measured water levels in order to draw conclusions about historical and future water use within the Palouse Basin. Available historical water level and pumping data will be compiled and used to calculate long-term rates of water level decline and pumping. Comparisons of changes in water level among different wells within the basin as well as changes in water level per volume pumped over time will be performed to identify similarities and differences within the record which could indicate changes in aquifer properties or inflows/outflows.

The relationship between pumping and water level decline will also be evaluated on a shorter time scale. Water levels collected from the WSU 5 well during 2009 and 2010 will be compared to comprehensive HOBO-collected pumping data to identify the relationship between water level decline and pumping on a shorter time scale than the annual averages investigated in the historical data. This analysis will identify any seasonal disparity in water level response to pumping which could indicate seasonal changes in inflow or outflow. Both the long-term and short-term analyses performed during this investigation will utilize pre-existing information; no additional hydrogeologic data will be collected.

The work described in this proposal was identified as a medium-priority data gap in the Palouse Ground Water Basin Framework Project Final Report (TerraGraphics, Inc., 2011, section 6.2.2.4.)

Specific Objectives

- Identify the quantitative relationship between annual pumping and historic water level declines for the period of record. Evaluate changes in this relationship over time, and consider possible sources for these variations, such as regional recharge/discharge or changing aquifer parameters.
- Investigate WSU 5 well water level responses to changes in basin pumping on short (weekly) time scales, and compare this relationship to the long-term relationship between annual pumping and basinwide declines.
- Possible objective (depending on the time needed to complete first two objectives): Investigate the differences between seasonal water level trends in Palouse and those observed in Moscow/Pullman water levels with respect to recorded pumping data.

Timeline

Project will begin May 16, 2011 and continue through August 16, 2011 (3 months total).

Deliverables

Results of this investigation will be documented in a written report and presented to PBAC during the August, 2011 meeting (8/18/2011, tentatively).

Costs

Wages

Katie Moran: \$4,550 (\$692 per 2-wk pay period for 20 hr/wk)

Fringe Benefits (9%): \$409.5

Total: \$4,959.5