



## Palouse Basin Aquifer Committee

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July 21, 2011 Meeting Minutes

### Moscow UI Facilities Services Center, Jack's Creek Meeting Room

#### Attendance

X	UI: Michael Holthaus, Water Systems Manager	X	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
X	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		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; Lauren Carey, UI; Robin Nimmer, Terragraphics; Nathan Moxley, WSU; Brenda Borer, Golder Assoc.; Julie Titone, CAG/PWCN; Guy Gregory, Ecology; Scott Cornelius, self; Kathleen Warnick; Steve Robischon, PBAC

#### Call to Order

Tom Scallorn, PBAC Chair, called the meeting to order at 2:01 PM

#### 1) Approval of the June 16, 2011 Meeting Minutes

Draft June minutes were amended (under Projects) to remove the statement regarding funding of the Moxley project, which is not being funded by WSU as the draft minutes indicated. Amended minutes were approved by consensus.

#### 2) Presentation/Discussion – Palouse Basin Water Rates

Robischon presented information on water and sewer rates in the Palouse basin PBAC member cities, as well as for Seattle. The information presented includes estimated annual costs in each city for different types of residential water users (average user, no

irrigation, small, medium and large irrigators). Presentation slides will be posted on the PBAC site.

### 3) Unfinished Business –

- **UI Administration of PBAC Funds**

Steed reported on a meeting between UI VP Research McIver and Steed/MacDonald. Notes taken at the meeting were transcribed into a series of bullet points outlining issues the Research Office has with PBAC's administration. A listing of the bullet points was distributed to the attendees. The group discussed the list and how best to respond to Mr. McIver. A motion was passed directing Scallorn to form a subcommittee to formulate a written response that will be run back through the full committee for review and then presented to Mr. McIver. In addition, the subcommittee will consider where the executive manager position fits best within the UI organization.

- **PBAC Goals Review Session Planning**

At the May meeting PBAC passed a motion to conduct a goal review session in September. The group discussed the logistics of the event, and decided to postpone the session to the afternoon of October 20. Robischon was directed to explore options for meeting facilitation.

### 4) New Business –

- **Land Owner Well Request Letter – Nathan Moxley (not on agenda)**

Moxley described and Robischon displayed a draft letter he proposes to present to land owners asking permission to install a data logger in their wells as part of his ground water – surface water interaction project. The letter includes reference to PBAC, and Moxley asked the group for their input on the content of the letter. The group reviewed the letter and provided suggested edits which Moxley will incorporate and submit for review.

- **Framework Project Data Gaps Enhanced Evaluation Proposal**

Nimmer described summary information related to a proposal to conduct preliminary investigations of the high priority data gaps identified in the Framework project. The group discussed the project and a motion was passed to fund it from the research budget. Administration will be through UI Facilities, and invoicing and approval of progress payments will be processed through Robischon and Scallorn.

### 5) PBAC Projects Progress Report –

#### **Basinwide Aquifer Testing Project**

Moran reported her thesis document has been approved, and she is continuing work on the pumping rate / water level analysis project.

#### **Continuation of Basinwide Aquifer Testing Project**

Folnagy reported there is now a functional logger in the premix well, and he is continuing work on his analyses.

**Tritium Testing Project**

Carey reported there had been an issue with the standards used to calibrate the O18 equipment which required her to redo her analyses. She expects to present her results at next month's PBAC meeting.

**6) Citizens Advisory Group Report –**

Titone reported the CAG had not met, but members have been inquiring as to the group's status. She also indicated the group would be happy to provide input to the upcoming PBAC goals review session.

**7) Budget Report**

Robischon reported on the status of the budget.

**8) Other Reports and Announcements –**

**Moscow Surface Water Reservoir Feasibility Study**

MacDonald reported he briefed the Moscow City Council on the project, and a council workshop will be scheduled the next month or two to decide upon the next step.

**Moscow Comprehensive Sewer Systems Plan**

MacDonald reported a council workshop is scheduled August 15 to review progress and decide on future direction.

**Moscow Comprehensive Water Systems Plan**

MacDonald reported a draft document should be out in a month or so.

**Moscow Water Conservation Plan**

MacDonald reported the draft plan is under review.

**2011 Water Summit Planning**

Robischon reported a planning meeting was held July 20. The Summit is scheduled for (9am to 2pm, with lunch) October 4. The keynote speaker will be Dr. David Wunsch, Director of Science and Technology, National Ground Water Association. Planners are working to firm up an agenda and secure speakers.

**Other**

Robischon displayed copies of recent water-related articles. Titone added that the Palouse Water Conservation Network site (<http://www.pwcn.org/>) reposts water-related articles.

**9) Next Meeting –**

The next meeting is scheduled for August 18 in Pullman.

**10) Adjournment -**

The meeting was adjourned at 4:02 PM.

**Submitted for review and approved at the September 15, 2011 PBAC meeting.**

**Steve Robischon, PBAC Executive Manager**

UI Issues concerning PBAC as recited to Walter Steed and Les MacDonald by John McIver, Vice-President for Research on July 8, 2011.

- UI is committed to PBAC.
- PBAC funds have been moved from grant accounts to agency accounts.
- UI receives and administers about \$175,000 per year for PBAC and normally would take an administrative fee of 26% or about \$45,000. UI has forgone this fee as an in-kind service. UI wishes to work with PBAC to justify/explain why the fee is not collected.
- UI would like to see the 2003 Interagency Agreement reviewed.
- UI has managed PBAC funds for 17 years; maybe it is time someone else should take on this function.
- Should PBAC be a stand-alone, nonprofit entity?
- UI needs an explanation of why PBAC's budget balance is large. And what is the plan and timetable for use of these funds?

Not noted by UI but an issue for PBAC is protection of "PBAC's Executive Director Position and related benefits".



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## MEMORANDUM

**To:** Steve Robischon, PBAC, Moscow

**From:** Robin Nimmer, TerraGraphics, Moscow  
Dale Ralston, RHS, Moscow

**Date:** July 9, 2011

**Subject:** Proposal Relative to Enhanced Evaluation of High Priority Data Gaps

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### INTRODUCTION

The recently completed report for the PBAC Framework Project (TerraGraphics and Ralston, 2011) included identification and ranking of data gaps. The following criteria were used to delineate and prioritize data gaps.

- An identified data gap must be related to long-term water supply with a particular focus on the Pullman-Moscow subarea.
- An identified data gap must be defined such that a successful investigational program can be conducted.

Robin Nimmer of TerraGraphics Environmental Engineering and Dale Ralston of Ralston Hydrologic Services presented a summary of the identified data gaps at the June 16, 2011 PBAC meeting. Most of the discussion following the presentation was focused on the three identified, high priority data gaps: 1) hydrogeology west of Pullman; 2) surface-water / ground-water interaction northwest of Pullman; and 3) maximizing upper-aquifer pumping in the Pullman-Moscow subarea. The comments from PBAC members may be combined into three general questions.

- First, how will studies of each of the identified, high-priority data gaps help solving long-term water-supply issues?
- Second, what are the issues involved in designing and conducting investigations relative to each of the identified data gaps?
- Third, what are the external constraints that have the potential to limit implementation of water-supply developments associated with each of the data gaps?

### ENHANCED EVALUATION OF THE IDENTIFIED HIGH PRIORITY DATA GAPS

This memo serves as a proposal to conduct an enhanced evaluation of the identified high priority data gaps. The general objective of the project is to develop additional understanding for each of the three, high priority data gaps with a focus on the questions posed above. Outlines of the enhanced evaluation approaches are presented below for each of the identified data gaps.

## **1. HYDROGEOLOGY WEST OF PULLMAN**

- a. Delineate how investigation of the hydrogeology west of has the potential to help solve long-term water-supply problems in the Pullman – Moscow subarea. The information gained would be used in development of a revised hydrogeologic conceptual model of the area. In this case, if the “ground-water barrier” as identified by Barker (1979) is shown to exist, it may be possible to locate production wells that have minimal hydraulic impact on ground-water levels in the lower aquifer in the Pullman area.
- b. Prepare a detailed work plan for the investigation of the hydrogeology west of Pullman.
- c. Investigate the WSU Knott Dairy farm wells and ascertain the degree of effort that will be required to include these wells in a water-level and ground-water withdrawal data collection program. This will require working with personal from the WSU Facilities Operation group and also visiting the site.
- d. Investigate potential to use public land for the locations for test/monitor wells. This will involve working with Whitman County relative to access to public easements, finding the locations of easement areas that might be suitable for well construction and visiting these sites in the field to assess their suitability well construction (location requirements for the drilling rig and associated equipment, water disposal ...).
- e. Identify and discuss potential constraints to development of extraction wells in the target areas. These would include water-right issues, potential impacts on existing users, combined funding of the project by PBAC entities, and financial issues such as a pipeline to Pullman.

## **2. SURFACE-WATER/GROUND-WATER INTERACTION NORTHWEST OF PULLMAN**

- a. Delineate how investigation of the interaction of the South Fork of the Palouse River (SFPR) in the area immediately northwest of Pullman can help solve long-term water-supply issues. The information gained would be used in development of a revised hydrogeologic conceptual model of the area. In this case, alternatives to enhance recharge to the lower aquifer by increasing leakage from the river into the lower aquifer during high-flow events would be explored.
- b. Learn about the progress that Kent Keller’s graduate student has made in his investigation of the site. Contact the authors of the WDOE 2009 report and gain greater input relative to the specific location of losing reaches and to gain their input relative to investigation approaches.
- c. Investigate potential locations to use public land for test/monitor wells. This will involve working with the City of Pullman, Whitman County, and possibly WSU relative to access to public easements, finding the locations of easement areas that

might be suitable for well construction, and visiting these sites in the field relative to well construction requirements.

- d. Identify and discuss potential constraints to enhanced recharge from the South Fork of the Palouse River in the target area. These would include water quality and quantity issues relative to both surface water and ground water, water-right issues relative to both surface water and ground water, combined funding of the project by PBAC entities, and potential benefits to ground-water users.

### **3. MAXIMIZING UPPER-AQUIFER PUMPING IN THE PULLMAN-MOSCOW SUBAREA**

- a. Delineate how investigation of increasing withdrawal from the upper aquifer in the Pullman – Moscow subarea can help solve long-term water-supply issues relative to the lower aquifer. The information gained would be used in development of a revised hydrogeologic conceptual model of the area. In this case, ground-water withdrawals from the lower aquifer would be replaced by obtaining a greater portion of the water supply from the upper aquifer. The focus of this effort would be in the Moscow area and the portion of the Pullman – Moscow subarea immediately west of the state line.
- b. Gain an improved understanding of water quality and water quantity issues relative to utilization of upper aquifer versus lower aquifer as a water supply source in the Moscow area. This would involve assembly of water quality and quantity information relative to historical use of both aquifers by Moscow and the University of Idaho and selected upper aquifer users in Eastern Washington.
- c. Evaluate the potential to minimize water quality issues by mixing water from wells completed in the upper aquifer with water from wells completed in the lower aquifer. This would involve meeting with water supply officials with both the City of Moscow and the University of Idaho
- d. Identify and discuss potential constraints to greater withdrawal from the upper aquifer in the Pullman – Moscow subarea. These would include water-right issues, ground-water quality issues, combined funding of the project by PBAC entities, and potential benefits to users of the lower aquifer.



## Cost Proposal

**Date:** 07/07/11

**Project:** PBAC Framework Addition

**Project Number:** E11056

**Client:** Palouse Basin Aquifer Committee

**Project Manager:** Robin E. Nimmer

**Client Contact:**

**Client Address:** PO Box 443301  
Moscow, ID 83844-3011

**Phone:**

**Project Address:** Moscow, Idaho

<b>Phase Description</b>	<b>Hours</b>	<b>Billing Rate</b>	<b>Contract Total</b>
<b>Hydrogeology West of Pullman</b>			
Administrative Assistant II	1.50	59.59	\$89.38
GIS Specialist II	5.00	60.15	\$300.74
Project Controller II	1.00	62.42	\$62.42
Scientist III	17.00	90.67	\$1,541.32
Expense			\$100.00
Consultant	16.00	135.00	\$2,160.00
			<b>\$4,253.86</b>
<b>Surface-Water/Ground-Water Interaction NW of Pullman</b>			
Administrative Assistant II	1.50	59.59	\$89.38
GIS Specialist II	5.00	60.15	\$300.74
Project Controller II	1.00	62.42	\$62.42
Scientist III	17.50	90.67	\$1,586.66
Consultant	16.00	135.00	\$2,160.00
			<b>\$4,199.20</b>
<b>Maximizing Upper-Aquifer Pumping in Pullman-Moscow Subarea</b>			
Administrative Assistant II	1.50	59.59	\$89.38
GIS Specialist II	2.00	60.15	\$120.30
Scientist III	8.00	90.67	\$725.33
Consultant	8.00	135.00	\$1,080.00
			<b>\$2,015.01</b>
Sub-Total			<b>\$10,468.07</b>