IDAHO WASHINGTON AQUIFER COLLABORATIVE

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Mike Galante - President
Ty Wick - Vice President
Bryan St. Clair - Secretary
Alan Miller - Treasurer

The Idaho Washington Aquifer Collaborative (IWAC) works to maintain and enhance water quality and quantity for present and future generations by developing management strategies which benefit the Spokane Valley Rathdrum Prairie Aquifer and the Spokane River region.

June 10, 2014, 1:30 – 3:30 PM, Liberty Lake Sewer and Water District
Representatives Present

	Organization	Representative	Email Address
√	**Avista**	Linda Kiefer	Linda.Kiefer@avistacorp.com
	Avondale Irrigation District	Bob Chandler	bobchandlercda@gmail.com
	Bar Circle S Water Company	Rob Turnipseed	avondalecon@frontier.com
	City of Coeur d'Alene	Jim Markley	jimm@cdaid.org
√	**City of Post Falls**	John Beacham	jbeacham@postfallsidaho.org
	City of Spokane RPWRF	Mike Coster	mcoster@spokanecity.org
√	**City of Spokane Water Department**	Dan Kegley Bill Rickard	dkegley@spokanecity.org brickard@spokanecity.org
	Coeur d'Alene Tribe of Indians	Laura Laumatia	llaumatia@cdatribe-nsn.gov
	Consolidated Irrigation District No. 19	Bob Ashcraft	consolidatedirrigation@comcast.net
	East Greenacres Irrigation District	Ron Wilson	ron@eastgreenacres.org
	Hayden Area Regional Sewer Board	Ken Windram Shirley Carter	ken@harsb.org
√	**Hayden Lake Irrigation District**	Alan Miller	alan@haydenirrigation.com
√ √	**Liberty Lake Sewer and Water District**	BiJay Adams Jeremy Jenkins	bijay@libertylake.org jjenkins@libertylake.org
	Moab Irrigation District	Kathleen Small	kathleensmall@comcast.net
√	**Model Irrigation District**	Jim Lahde	jimlahde@netzero.net
√	**Modern Electric Water Company**	Bryan St Clair	bstclair@mewco.com
√	**North Kootenai Water & Sewer District**	Mike Galante	mikeg@nkwsd.com
√	**SAJB Program Leader**	Tonilee Hanson	sajbinfo@gmail.com
√	**Spokane Co. Water Resources**	Rob Lindsay	rlindsay@spokanecounty.org
	Spokane County Water District No. 3	Ty Wick	scwd3@comcast.net
	Spokane Tribe of Indians	Brian Crossley	crossley@spokanetribe.com
	Vera Water and Power	Todd Henry	thenry@verawaterandpower.com

	Guest Speakers		
√	**Idaho Water Engineering**	Bob Haynes	bob@idahowaterengineering.com
√	**WSU WISDM**	Tung Nguyen	tung.nguyen@email.wsu.edu
√	**WSU WISDM**	Heather Baxter	heather.baxter.2011@gmail.com
	Guests		
√	**University of Idaho – Water Education**	Jim Ekins	jekins@uidaho.edu
√	**IDEQ**	Gary Stevens	gary.stevens@deq.idaho.gov
√	**Spokane County**	Mike Hermanson	mhermanson@spokanecounty.org
√	**City of Spokane**	Doug Greenlund	dgreenlund@spokanecity.org

AGENDA

Welcome and Introductions - President Mike Galante opened the meeting and welcomed everyone. Representatives of IWAC and guests introduced themselves.

Agenda Additions - President Galante called for additions or revisions to the Agenda and no changes were requested.

Approval of Meeting Minutes – The Minutes for May 13, 2014, were approved as submitted.

Financial Report – The Treasurer's report for June 10, 2014 was submitted by Alan Miller.

Income

$ 0.00 No new membership income was received

$ 0.43 Interest Income

Expenses

$ 0.00 No invoices were received this month

Year to Date Income from Membership Dues:

$5,500.00

Year to Date Income from Interest

$ 1.80

Year to Date Expenses

$1,253.00

Current Account Balance

$9,891.95

Old Business

The IWAC logo contest winning logo was JH 5-1. The final version is included above in the header. IWAC members asked to have the modifications made to the logo. No modifications were made prior to the June meeting because at the time of this meeting we had not been able to reach Jessica. Jim Ekins at the U of I Extension worked with the University to locate Jessica. And she generously provided additional fonts, fish, gravel and sizes which can be viewed at http://www.spokaneaquifer.org/wp-content/uploads/2014/06/IWAC-logo-design-options-fonts-fish-gravel.pdf.

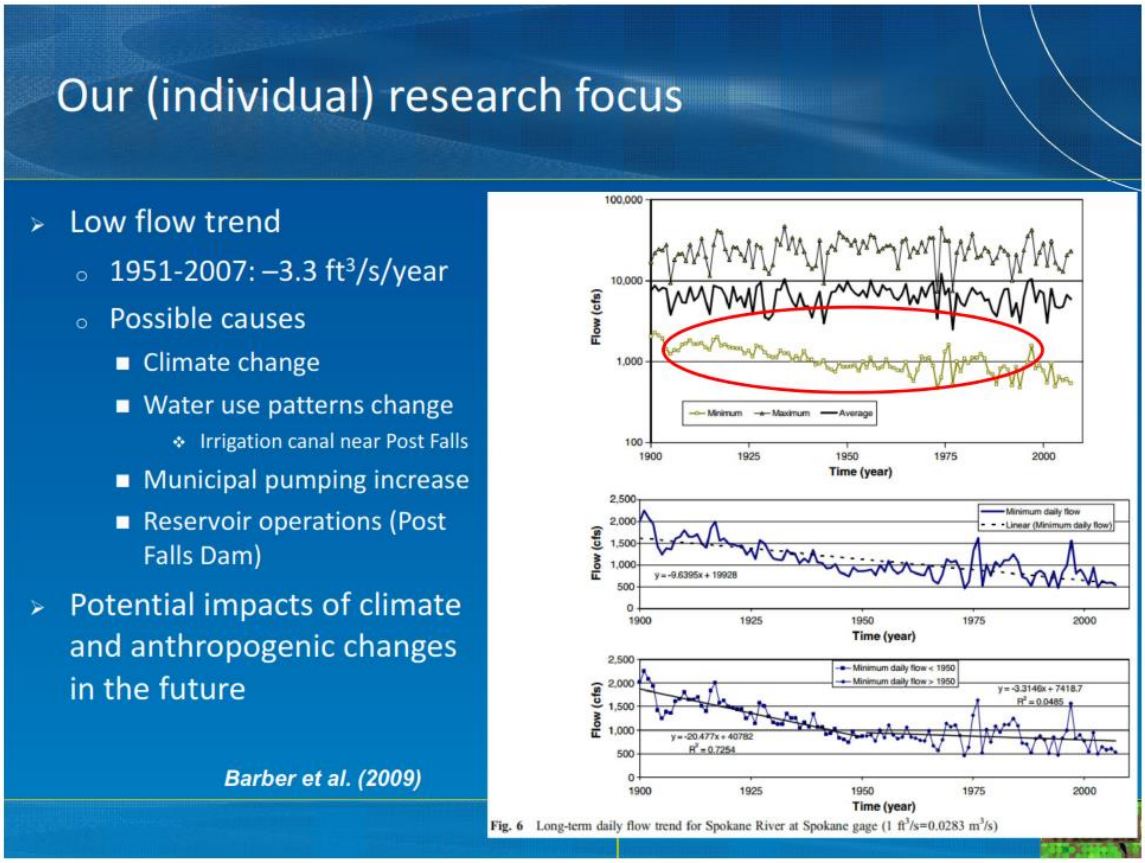
Members were sent the logo design variations and asked for comment. The design shown above received consensus and will be formally approved at the next meeting.

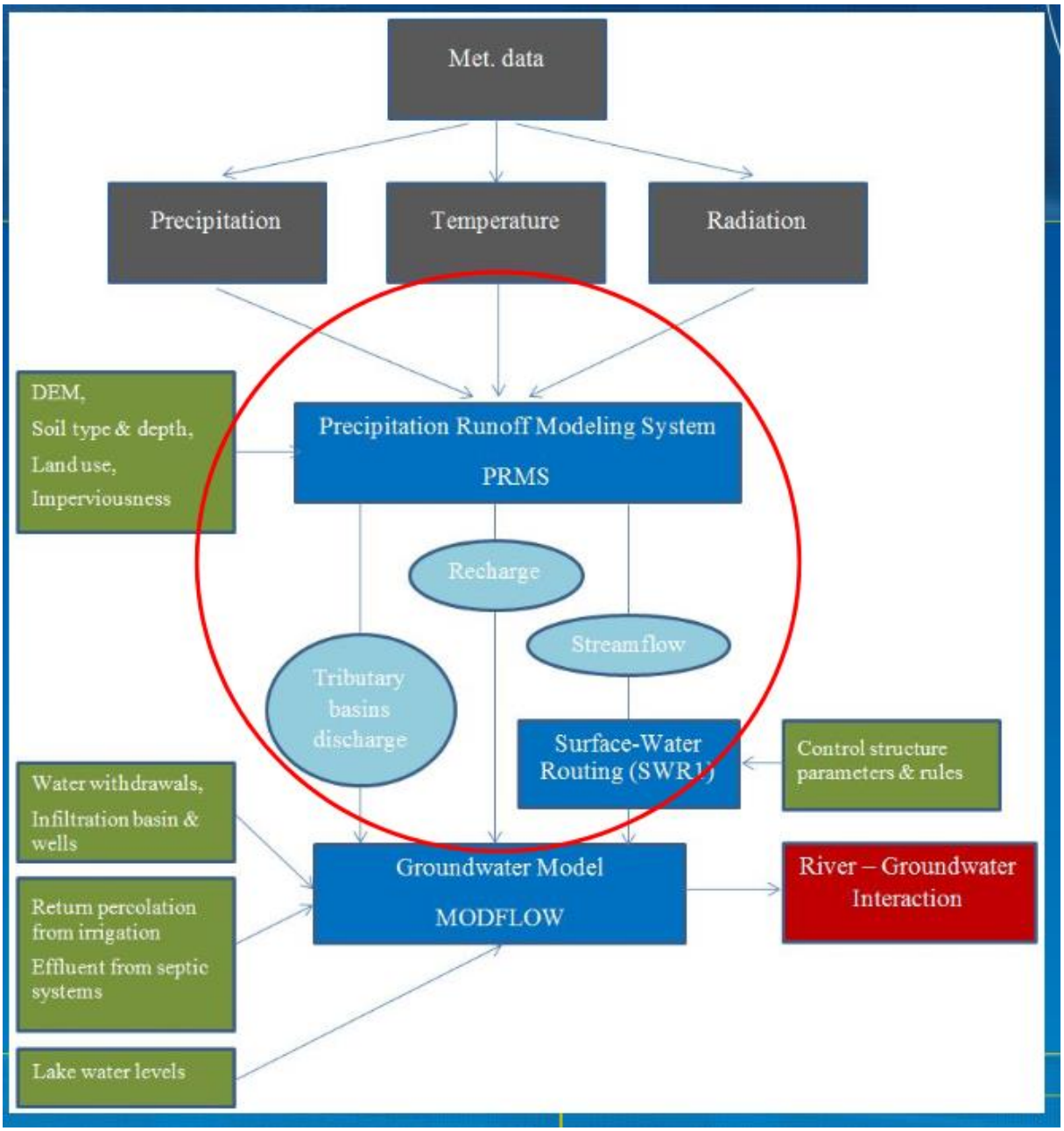
New Business

Low flow trend and modeling under a changing environment in the Spokane River Basin
presented by WSU Doctoral Students Tung Nguyen and Heather Baxter

Washington State University, Central Washington University, University of Idaho and the University of Utah are collaborating on a National Science Foundation and United States Department of Agriculture funded research grant named Watershed Integrated Systems Dynamic Modeling or WISDM. Doctoral Students Tung Nguyen and Heather Baxter explain the technical aspects of modeling the Spokane River low flow trends in a changing environment.
The presentation by Tung and Heather covered the following information and the plan is to have a calibrated model by the end of summer.

- Introduce WISDM project and our group
- Introduce our research focus
- The USGS MODFLOW model (Hsieh et al., 2007)
- Hydrological Modeling using Precipitation Runoff Modeling System (PRMS) model
- Discussion





Tung Nguyen and Heather Baxter's presentation can be viewed or downloaded at http://www.spokaneaquifer.org/wp-content/uploads/2014/08/WISDM-Tung_Heather_SVRP_IWAC_June.10.14.pdf

Bi-State Water Demand Forecast (WDF) Model - In May, the IWAC Water Demand Model subcommittee was formed. Representatives included: Alan Miller, Jim Markley, Linda Kiefer and Rob Lindsay. Alan Miller reported that the subcommittee met with Mike Galante sitting in for Jim Markley. IWAC Goals were identified and discussed that could be addressed by developing a regional water demand model. One purpose for having a common measuring tool is the capability for purveyors to monitor and compare water use at the parcel size. Potable water delivery and waste water processing will dictate future growth across the SVRP Aquifer region.

One missing data set for Idaho purveyors is their water production which is not currently collected. However, data on population and transportation is available in a GIS format through the Kootenai Metropolitan Planning Organization (KMPO). KMPO address: 250 Northwest Blvd, Suite 250 Coeur d'Alene, ID 83814. Phone: 208-930-4154. Website: www.kmpo.net.

US Department of Transportation reported a 55% increase in Kootenai County population between 1990 and 2000. www.fhwa.dot.gov/planning/processes/metropolitan/related_topics/rapidly_urbanizing/rapurbknt.cfm. Severe, long term droughts in the south western United States may force 2 -5 million people to look for new places to live. With a perception of abundant water in our region, how would we handle a population explosion of this magnitude?

Cost of developing a Water Demand Forecast model was estimated at $50,000. Camp Dresser & McKee (CDM) is a national firm located in Denver that worked with Spokane County on the original WDF model but local consultants would likely be less expensive. The Idaho legislature allocated $500,000 for water resource studies which is administered by the Idaho Water Resources Board. The Rathdrum Prairie CAMP is also a possible source of funding and utilizing University partnerships. One issue with university involvement is the significant indirect fees applied to grants. Indirect fees can range from 20% to 45% and are deducted off the top of grant funds. An Idaho water purveyor group is planning to present a $168,000 water demand forecast study request at the July CAMP meeting. This model appears to be planning at the '30,000 foot level' and what IWAC members need is a model that will be more about management and ground level application.

There is no thought of presenting two different proposals for water demand forecasts at this time. It will be useful to drill down on specifics and be prepared to explain the differences between the two models. The IWAC WDF model subcommittee can work to define the differences in practical application term. One challenge is the different levels of knowledge on this issue for water purveyors, the Water Resource Board members and the rank and file citizens.

One of the CAMP goals is to minimize conflict between Idaho and Washington. If there are two different forecast platforms and different processes for measuring future water demand how will conflict be minimized? If one model gives only a broad view this might open up more conflict for those on the ground who are interested in application and need to stay focused on the 'bottom line'.

Melanie Thornton introduced President Galante to Dr. Johnathan Younger, the new Washington Water Research Center (WWRC) Director. Dr. Younger and Dr. John Tracy from Idaho Water Resources Research Institute (IWRRI) may be interested in a regional water demand forecast model. President Galante reported that Dr. Younger expressed an interest in attending an IWAC meeting.

IWAC may want to consider small amounts of funding from several sources.

- Spokane County has offered in-kind support through Mike Hermanson's time and expertise.
- It may be possible to get traction with a Washington Watershed planning grant to keep the ID and WA models consistent with GIS.
- Mark Solomon may be interested in making the Idaho model more robust by adding GIS.
- If the Eastern Washington Department of Ecology thought there was merit in keeping WA and ID aligned it might provide funding. Keith Stoffel and Guy Gregory would likely support anything that levels the playing field across the region.
- American Water Assn / PNWS - look for funding in the research section.
- The Idaho Water Users group does not have funding but has political influence with the ID legislative agenda. Having their support carries weight.

Next Steps

- Report on the July CAMP discussions and decisions
- Outline the practicality and purpose to have people understand the concept. Build a framework of the 'practical why' and to what end as preparation for the funding requests.
- Everyone send suggestions on wording for the 'Purpose' to the subcommittee
- Bob Haynes will see what funding might be available at the Bureau
- Rob Lindsay would be willing to contact Michelle Marr for more project specific information
- Jeremy Jenkins suggested that funding might be available through a climate change adaptation study that integrates the WDF model GIS with gridded climate change projections. Jeremy will send more information about the climate change focus.

July 8, 2014 –Agenda Planning

Conservation and Education ideas and initiatives will be shared. Please send conservation resources to Bob Haynes who will compile the information for distribution.

Updates Around the Table

Alan Miller remarked on the 2015 Aquifer Atlas Update working group and expressed his appreciation for the quality of the document past, present and future.

Tonilee Hanson requested feedback on the use of the Aqua Duck, Recycle Man and Storm Drain Dan 'Super Heroes' in the 2015 Aquifer Atlas update. Concerns, that the use of the 'heroes' created an impression of the Atlas belonging to specific Washington based groups rather than being a regional document, were raised by members of the Aquifer Protection District and brought to the Atlas working group. Tonilee (SAJB) and Amanda Hess, Spokane County Stormwater are scheduled to attend the APD meeting on 6/11/14 and wanted some input from this bi-state regional group. Member comments included:

- The Aquifer Atlas is a professional document and super heroes may detract from the professional credibility.
- Eighth grade is a targeted grade level for aquifer education using the Atlas in Idaho. Super heroes appeal to the younger audiences but 8th graders may not embrace the characters or view them as 'childish'.
- Incorporate the heroes as another a visual tool to engage readers of all ages.
- The Atlas is used by teachers, parents and students grades 2- high school. Some appropriate placement of the heroes is useful.

Handouts: Agenda and IWAC Goals