



IWAC

Idaho Washington Aquifer Collaborative

March 11, 2014, 1:30 – 4:30 PM, Liberty Lake Sewer and Water District

Officers: President Mike Galante; VP Ty Wick; Secretary Bryan St. Clair; Treasurer Alan Miller
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	Mike Neher	mneher@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	Rick Neal	
✓	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	therry@verawaterandpower.com
	Guest Speakers		
✓	Spokane County Water Resources	Mike Hermanson	
✓	Idaho Water Engineering	Bob Haynes	bob@idahowaterengineering.com

√	Idaho Dept. of Water Resources	Helen Harrington	Helen.harrington@idwr.idaho.gov
√	Washington Department of Ecology	Guy Gregory	ggre461@ecy.wa.gov
	Guests		
√	CAMP	Allen Isaacson	niwaterman@roadrunner.com
√	City of Spokane Valley	Henry Allen	hallen@spokanevalley.org
√	IDWR	Morgan Case	Morgan.case@idwr.idaho.gov
√	IDEQ	Gary Stevens	gary.stevens@deq.idaho.gov
√	Panhandle Health District	Dale Peck	dpeck@phd1.idaho.gov
√	Self	Stan Miller	Samillerh20@comcast.net
√	Spokane River Forum	Andy Dunau	info@spokaneriver.net
√	University of Idaho	Mark Solomon	msolomon@uidaho.edu
√	Water Now Consulting	Toni Taylor	ttaylor@waternowconsulting.com
√	Welch Comer	Ashley Williams	awilliams@welchcomer.com
√	Welch Comer	Necia Maiani	nmaiani@welchcomer.com
√	WSU	Kate Tillotson	ktillotson@wsu.edu
√	WSU	Melanie Thornton	melanie.thornton@email.wsu.edu

AGENDA

Welcome and Introductions - President Mike Galante opened the first IWAC – CAMP joint meeting and welcomed everyone. Representatives of IWAC, Rathdrum Prairie CAMP 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 February 11, 2014, were approved with the edits submitted by Linda Kiefer.

Financial Report – Treasurer, Alan Miller, reported income of \$3,500 from membership dues and \$0.33 interest income in February. Expenses totaled \$308 paid for facilitation in January. The current account balance is \$8,890.74.
To date a total of twelve (12) organizations are paid members.

Seven organizations became IWAC members in 2013:

- Consolidated Irrigation District No. 19
- Hayden Lake Irrigation District
- Liberty Lake Water and Sewer District
- Modern Electric Water Co.
- North Kootenai Water & Sewer District
- Spokane County Water District No. 3
- Vera Water and Power

Five organizations have become IWAC members so far in 2014:

- City of Coeur d'Alene
- City of Millwood
- City of Post Falls
- City of Spokane
- Model Irrigation District No. 18

Old Business

The IWAC logo contest has received several submissions which were displayed for comment. The submission deadline was extended to March 31, 2014. A winning logo will be announced by 4/15/14.

New Business

Purpose and Goals for Rathdrum Prairie CAMP and IWAC Meeting – IWAC facilitator, Bob Haynes, set the purpose of the CAMP-IWAC regional discussion including the following: to protect the SVRP Aquifer, encourage bi-State collaboration and determine the interest and potential for supporting compatible water demand forecast models for Idaho and Washington future water needs. The two states have each developed water demand forecasts and there is an opportunity to understand the methodologies and discuss ways in which a common numerical value for water demand could add value to a regional forecast.

Spokane County Water Demand Forecast Model – Presentation - Mike Hermanson, Spokane County Water Resources Specialist, previously presented the Spokane County water demand forecast model to IWAC on October 8, 2013. That presentation inspired discussion of developing a consistent regional model and an interest for including the Rathdrum Prairie CAMP Advisory members in the discussion. The October 8, 2013 and March 11, 2014 presentations are available at www.spokaneaquifer.org.

Mike Hermanson presented a summary of the development process and data collected to create, modify and update the Spokane County Water Demand Forecast model. The County model is a complex excel spread sheet and does not require special software. It is non-proprietary and available for downloading at www.spokanecounty.org/WQMP/content.aspx?c=2761.

Presentation Overview

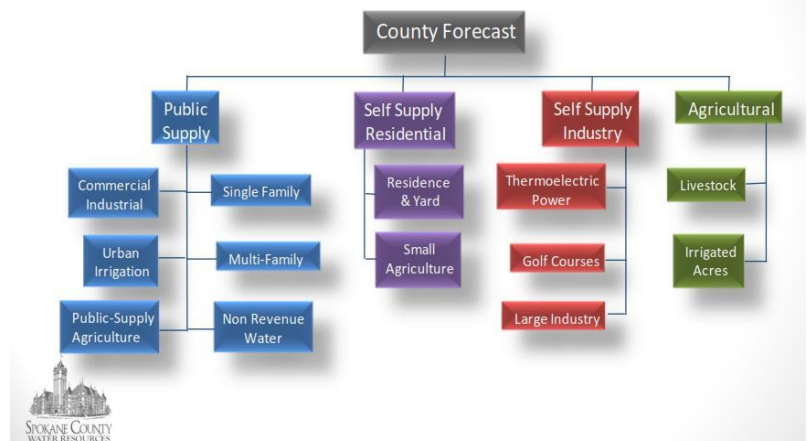
- Project Overview
- Overall Model Structure
- Model Development
- Forecast Results
- Comparison to Idaho Future Water Demand Study
- Potential Application in Idaho

The overall model structure segregated water use data in three ways:

1) by water use sector

Overall Model Structure

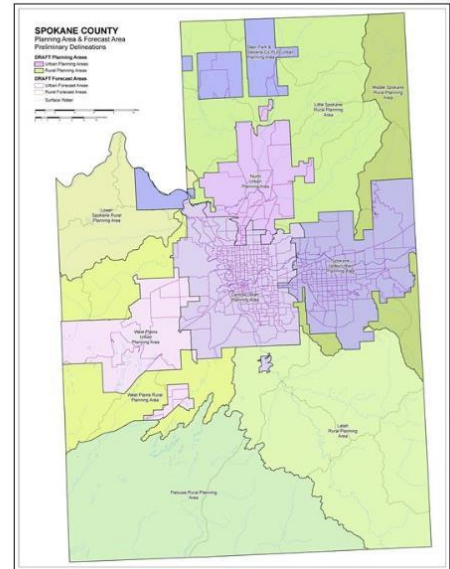
- Segregated by Water Use Sector



2) spatially

Overall Model Structure

- Segregated Spatially
 - 513 separate forecast units
 - A unique water demand calculation is done for each forecast unit
 - Can evaluate different areas of interest
 - Areas over the SVRP aquifer for groundwater return flow
 - Areas served by aquifer for SVRP groundwater withdrawals

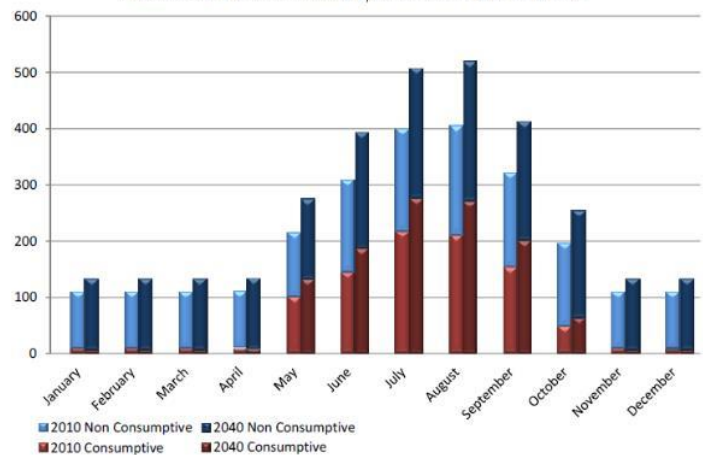


Overall Model Structure

3) in monthly increments

- Segregated in monthly increments

Figure 6: SVRP Aquifer Monthly Water Demand 2010 & 2040



Potential Application of WA model in ID

- Demand Driver Data available
 - Kootenai Metropolitan Planning Organization (KMPO)
 - Housing & Employment
- Need to determine how much data is available from water purveyors – water use by connection by sector by month
- Spokane County Model used many ancillary sources of water use data:
 - Spokane County Utilities wastewater
 - Spokane County Parks irrigation use
 - Irrigation use for schools
 - Irrigation use from golf courses
 - NPDES DMR Data
 - Misc. water use data from Watershed Planning Assessments

Mike Hermanson's entire presentation is available at
<http://www.spokaneaquifer.org/spokane-county-water-demand-forecast-3-11-14/>

Questions for discussion included:

- How could the econometric variable of different pricing structures for different utilities be used as a predictor of water use or conservation?
- How can rates for waste water treatment be tied to rates for water use when only a few regional water purveyors provide both sewer and water services?
- For water conservation, how can we compare the impact of pricing vs. the impact of weather?
- Did the Spokane County water demand model take into account single family residences that have automatic sprinkler systems?
- How did the model account for climate change?
- How can we increase certainty regarding the aquifer recharge data?
- Are there plans to update the Idaho water demand forecast?

Helen Harrington expressed appreciation for the opportunity to meet with IWAC and hear the Spokane County Water Demand Forecast model presentation. Helen will work with the CAMP Advisory Committee to set the next CAMP meeting date, review the presentation and think about incremental next steps.

April 8, 2014 –Agenda

WSU's Watershed Integrated System Dynamics Modeling (WISDM) – Melanie Thornton will present an overview of the Oasis model which will be used in place of the systems dynamics model demonstrated at the September 10, 2013 IWAC meeting. A comprehensive presentation of Oasis is also being planned for the fall Spokane River Forum Conference.

Handouts: February 11, 2014 revised Meeting Minutes,
The meeting adjourned at 4:30 p.m.