# WRIA 55/57: Little Spokane River and Middle Spokane River Watersheds WRIA 56: Hangman/Latah Creek

# Joint Watershed Implementation Team (WIT) Meeting

Wednesday August 14, 2013 10:00 a.m. – 12:00 p.m. Spokane County Water Resource Center

## Committee members recorded on the sign in sheet were:

Lindsay Chutas, *SCD*Rob Lindsay, *Spokane County Utilities*Bill Rickard, *City of Spokane*Peter Grunte, *Resident, Hangman Creek* 

Rick Noll, SCD Amanda Parrish, Lands Council

Howard Rowley, WBLSR (Horseshoe Lake) Ty Wick, SAJB

Doug Greenlund, City of Spokane Harvey Morrison, Trout Unlimited

Sue Kahle, USGS Doug Rider, SC Water Conservancy Board Susan McGeorge, Whitworth Water District Greg Sweeney, West Branch LSR/Eloika

Lloyd Brewer, City of Spokane Tonilee Hanson, SAJB

Dick Price, Stevens PUD Mike Hermanson, Spokane County Utilities

Cadie Olsen, INLT Brian Hood, Sacheen Lake Assoc.

Allyson Beall, WSU Melanie Thornton, WSU

Todd McLaughlin, Pend Oreille Co. Henry Allen, City of Spokane Valley

John Porcello, GSI Consultants Walt Burt, GSI Consultants

The August, 2013 meeting was called to order by Rob Lindsay, and the committee members introduced themselves. The July 2013 meeting minutes were approved with no changes.

#### **Announcements/Public Comment:**

No announcements/public comments were made.

#### Little Spokane River Basin Hydrogeology Presentation: Sue Kahle, USGS

Ms. Sue Kahle, Geologist with the USGS, provided a presentation of the recently published Scientific Investigation Report 2013-5124, "Hydrogeology of the Little Spokane River Basin, Spokane, Stevens, and Pend Oreille Counties, Washington".

Sue focused her presentation on three main topics:

- 1. Methods of Investigation
- 2. Summary of the hydrogeologic units in the study area.
- 3. Recommendations for further work to compliment the study.

**Investigation Methods:** The USGS collected data from existing well logs, existing maps and investigation reports, and depth to water information from existing wells in conjunction with Spokane County staff. The geologic maps for the area were reviewed, compiled and simplified, including some changes to

existing maps based on field visits or other evidence gathered as part of the investigations. Lithology from the various well logs was added to Rockworks 2006, a stratigraphic software tool, to develop x-sections.

**Hydrogeologic Units:** Eight distinct hydrogeologic units were identified as part of the study. The report includes information on the lithological and hydrological characteristics of each unit, including maps identifying the areal extent of the upper aquifers, lower aquifers and basalt aquifers. Of note is the relatively discontinuous nature of the lower aquifers and basalt aquifers in the basin. Ms. Kahle also characterized the shallow unconsolidated sediments as a 'veneer' of surface soil atop the lower/basalt aquifers; and the associated hydrogeology as a series of perched, disconnected aquifers.

Recommendations: Ms. Kahle characterized this effort as a stepping stone to ultimately develop a ground water/surface water flow model to estimate effects of groundwater use on stream flows. Such a tool could be used to evaluate various water-use scenarios for ongoing watershed planning activities. The report included the following recommendations: evaluate the WRIA 55 basin boundary to assess the potential for recharge from outside the WRIA; investigate the ground water divide near Newport WA; continue collection of stream flow and ground water level information, particularly during low flow conditions; continue refinement of water use information and long term demand; develop a ground water budget; and, acquire deep borehole information to fill data gaps, particularly at the outlet of the basin near Dart Hill. Ms. Kahle also noted the importance of maintaining consistency with respect to data collection and reporting protocols among the various participating agencies.

It was noted that a proposal to develop a ground water/surface water flow model for the Little Spokane River basin (\$350K) was presented to WDOE earlier this year, but the funding was not approved.

A number of questions were raised regarding water quality issues in the Little Spokane River basin. Ms. Kahle confirmed that the study does not specifically address water quality issues in the basin, but that she is aware of the human health and nuisance issues relative to nitrates, naturally occurring radiation (uranium, radium), iron, and manganese in various areas in WRIA 55. Ms. Kahle also noted that contaminant assessments in the area may provide beneficial hydrogeologic information.

The USGS report was distributed in hard copy to those interested. Please contact Spokane County Utilities/Water Resources for additional copies of the report. The report is also available on-line at http://wa.water.usgs.gov/projects/littlespokane/.

Watershed Integrated Systems Dynamics Modeling (WISDM) Presentation: Allyson Beall, WSU professor and Melanie Thornton WSU PhD candidate

Ms. Beall provided an overview of the WISDM effort, which is funded by a multi-year Grant from the National Science Foundation. The goal of the WISDM effort is to:

"...improve understanding of interactions between water resources, water quality, climate change, and human behavior in agricultural and urban environments, including

exploring how primary water users can be involved in the research process to develop scientifically sound and economically feasible public policy."

Ref: WISDM website: http://www.cereo.wsu.edu/wisdm/index.html

Ms. Beall noted the process is a collaborative modeling of various processes, and that similar studies have been conducted throughout the U.S. The WISDM effort is being conducted regionally in 4 basins, based on unique character: Spokane River (urban), Willamette River (ag/rural), Yakima River (ag) and Salmon River (control/climate).

In the Spokane River segment, the hydrologic inputs to the model were derived from the SVRP Atlas, information collected as part of the Bi-State / USGS study, and from the aquifer augmentation study conducted by WDOE and WSU.

As the WISDM effort is intended to support public policy decision making, Ms. Beall asked the WIT members for input on various scenarios that would be of interest to the region, such as: the importance of seasonality to water supply, economic impacts of implementing instream flow rules, various growth scenarios, various effects of climate change, various legal scenarios regarding water allocation, and effects of wetland restoration projects. Feedback from the WIT was limited, but Ms. Beall noted the process will be ongoing for a number of years and there will be more opportunities for participation. Rob Lindsay asked Ms. Beall how the WIT could more effectively support the effort and suggested that interested WIT members could convene at a later date with Ms. Beall and Ms. Thornton to develop specific scenarios to evaluate.

## **Updates**

#### 1. Regional MOA Development:

A meeting to discuss the Draft Regional MOA as proposed by the City of Spokane was held on July 31. Comments to the MOA were compiled by Lloyd Brewer and have been submitted to legal staff at the City of Spokane for review. Lloyd will notify the WIT when he has additional information to report.

#### Adjourn

The meeting was adjourned at 12:00 pm. The next meeting was set for Wednesday, September 11<sup>th</sup>, 2013. It will be held at 10 am at the Spokane Conservation District.