

Meeting Summary
WRIA 54 Lower Spokane River
September 22, 2005

Planning Unit members and guests recorded on the sign-in sheet were:

Bill Herrlinger, Land Owner	Lloyd Brewer, City of Spokane
Rob Lindsay, Spokane County	Stan Miller, Spokane County
Keith Holliday, WA State Dept. Of Ecology	Wes McCart, Stevens County Farm Bureau
Jim DeGraffenreid, Lincoln County	Doris Dietrich, Land Owner
Hank Nelson, Avista Corporation	Jan Carlson, Land Owner
Bart Haggin, The Lands Council	Dick Price, Stevens County PUD #1
Bill Gilmour, Spokane County	Michael Hamilton, WDNR - Geology
Michael B. McCollum, Eastern WA Univ.	Bob Derkey, WDNR-Geology
Dr. Linda McCollum, Geology Dept., EWU	Paul Juran, Spokane Tribe, DNR
Bryony Stasney, Golder Associates, Inc.	Tony Delgado, Stevens County Commissioner
Lynn Wells, Riverside State Park Advisory	Reanette Boese, Spokane County
David Luders, Fairchild AFB & IVEWA	David Lundgren, Lincoln County Conservation District
Clay White, Stevens County	

Meeting began 6:10 pm

Bill Gilmour opened the meeting at approximately 6:10 pm. The attendees each had the opportunity to introduce themselves and what interest or organization they represent. Each person also documented their attendance on the sign-in sheet.

The August 24, 2005 WRIA 54 meeting summary was reviewed page by page with one comment from David Luders regarding the accuracy of the information of page 3 paragraph 8, lines 1, 2, and 3. Bill stated he would delete lines 1, 2, and 3 of paragraph 8 on page 3 of the August 24, 2005 meeting summary. Jim DeGraffenreid motioned to accept the August 24, 2005 meeting summary with said change, and Bart Haggin seconded.

Public Comment

No public comment was received.

Steering Committee Report

Rob reviewed the main topics covered at the September 7, 2005 WRIA 54 Steering Committee meeting. The main topics included; Spokane County taking the lead on a WRIA 54 fact sheet, list of upcoming presentations at WRIA 54 Planning Unit meetings, WRIA 54 water resource issues such as water supply, water quality and instream flow, a letter to Stevens County requesting a letter of concurrence on instream flow assessment in WRIA 54 and a letter to the Lincoln, Stevens, and Spokane County commissioners thanking them for their support of the WRIA 54 Phase I project. Clay White offered to facilitate obtaining a letter of concurrence from Stevens County and he asked Rob to please contact him later.

WRIA 54 Phase II Consultant Selection Work Group Update

Bill briefly discussed the status of the consultant selection process. There was one amendment to the Requests for Qualifications (RFQ); to move each due date one week later (technical consulting RFQ from 9/22/2005 to 9/29/05 and facilitation RFQ from 9/21/05 to 9/28/05). This change resulted in moving the RFQ response review meeting between Spokane County Purchasing and the Consultant Selection Work Group to October 4, 2005 and the subsequent top firm interview day to October 10, 2005. Bill suggested that it is still possible to obtain Board of County Commissioner approval and get through contract negotiations with a consultant and facilitator under contract by the beginning of November.

WRIA 54 Project Update Presentations to Stakeholder Organizations

Bill handed out a list of WRIA 54 stakeholder organizations that he has contacted regarding scheduling a watershed planning presentation. Six watershed presentations have been scheduled so far with approximately five presentations pending. Bill noted that the updated presentation is showing on the laptop and that people are encouraged to take a couple of minutes and view the power point presentation. Bill also pointed out that he will have the land sat poster board and the one page, front and back, map of WRIA 54 and watershed planning phase objectives for future watershed presentations.

Other Business

Bill brought up that there had not been an official vote to include the Multi-purpose storage assessment optional element grant as part of the WRIA 54 water resource assessment. He stated that there needs to be a majority vote by the Planning Unit approving inclusion of the Multi-purpose storage optional element. Bill called on Bryony Stasney to give a brief summary of her understanding of the background and tasks of the multi-purpose storage optional element.

After Bryony finished her synopsis of the water storage element, a vote was taken. The inclusion of the water storage element in the WRIA 54 water resource assessment was approved by a unanimous vote.

Presentation by Mike McCollum titled “Geology in the West Plains in Relation to Groundwater”.

The first portion of Mike’s presentation focused on the two main aquifers in the area and on one potential aquifer beneath the basalt. WRIA 54 is in general dry south of the Lower Spokane River and wetter north of the river. Where granite is exposed at the surface, the area will have very little groundwater.

There are generally two aquifers in the West Plains, an unconfined aquifer composed of unconsolidated sediments near the surface and a confined aquifer in the basalt usually between 100 feet below ground surface (bgs) and 400 feet bgs. A third confined aquifer between the basalt and underlying older rocks is hypothesized. In general Mike said that the West Plains groundwater should be retained for agricultural use only because it is a nonrenewable resource. Otherwise, the groundwater is old, is being mined, and is not being recharged.

The shallow unconfined groundwater is typically found in paleochannels filled with unconsolidated sediments. Less significant are small water bearing zones found in fracture zones within the basalt. The paleochannels may be a significant resource in that it may be possible to use them as off-line water storage structures. Investigation of paleochannels with geophysical methods to delineate the dimensions may indicate paleochannel usefulness as off-line water storage structures.

There is one main confined aquifer in the West Plains area, a shallow confined aquifer in the Priest Rapids Member of the Wanapum Formation. The aquifer is not continuous because the basalt filled in around preexisting mountain ranges, and therefore aquifer horizons may not be directly connected from one area to another. The best potential for groundwater is between basalt flows, particularly if there is a porous and permeable layer like a sedimentary deposit or fracture zone. Groundwater is typically found within fracture zones between basalt flows. Most of the known interbeds between basalt flows in WRIA 54 are composed of Latah Formation, which is a mudrock that was deposited on ancient lake bottoms. Mudrocks have very low porosity and do not make good aquifers. Most of the lakes and ponds on the West Plains are locations where the Missoula Floods “plucked” basalt from the surface leaving a hole that surface water eventually filled in to form a lake or pond. Wind blown, fine-grained glacial sediment called loess was typically deposited on the bottom of lakes and ponds through time. The fine-grained sediments effectively sealed the lake bottoms, preventing aquifer recharge via downward flow of surface water.

Mike speculated as to whether groundwater exists below the Columbia Basalt Plateau in horst/graben structures associated with the mountain structures mentioned earlier. Mike suggested that the down-faulted valleys which captured drainage and formed 50 million years ago may extend from the Little Spokane River to the Columbia

River. The paleovalleys formed by the faulting and subsequent erosion, filled with sedimentary sediments that may contain an undiscovered aquifer that is roughly proportional to the present-day Spokane Valley – Rathdrum Prairie Aquifer. However, with no drilling information below the Columbia Basalt and ineffective geophysical techniques, the question of whether groundwater exists beneath the Columbia Basalt has not been answered to date.

The second half of Mike's presentation consisted of a discussion of aquifer recharge. He suggested that there is little if any groundwater recharge of unconfined or confined aquifers occurring in the West Plains highland areas bordering the present-day drainage divides of the Upper Crab Creek, Palouse, and Hangman Creek WRIs. Previous conceptual groundwater models for the West Plains suggested that ponds, lakes, streams, and rivers recharge both the unconfined and shallow confined aquifers via fractures. Mike said he has conducted detailed surface mapping in the Medical Lake area and carefully looked into one of the few studies concerning water budget for the area. He found that there is no direct evidence that supports a correlation between the amount of surface water and groundwater in the Scablands. The one water budget investigation Mike cited suggested 25% of the water lost each year could not be accounted for, and that this water was replenishing the vesicular zone within the basalts. Mike reviewed the geologic mapping and found that recharge of basalt vesicular zones was not possible since granite existed under the area. The water unaccounted for probably migrated through a paleochannel from West Medical Lake to Medical Lake.

Public Comment

No public comment was received.

Wrap-up and Adjourn

The Airway Heights Community Center was chosen for the next WRIA 54 Planning Unit meeting on October 25, 2005 from 10:00 am to 12:00 noon. Bill said he would schedule the meeting as soon as possible and notify the Planning Unit.

The meeting was adjourned at 7:45 pm.