FINAL
Meeting Summary
WRIA 54 - Lower Spokane River Watershed
March 28, 2007

Location: Lakeside High School Library, Nine Mile Falls, WA.

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

Bill Rickard, City of Spokane
Sara Hunt, WA State Dept. of Ecology
Hank Nelson, Avista Corporation
Jerry Warner, Palisades Neighborhood
Lynn Wells, Riverside State Park Advisory
Albert Tripp, City of Airway Heights
Stan Miller, Citizen
Cynthia Carlstad, TetraTech
Rob Lindsay, Spokane County
Jim DeGraffenreid, Lincoln County Planning
Dick Price, Stevens County PUD#1
Craig Volosing, Landowner
Bart Haggin, Lands Council
Judy Kaufman, Spokane Fly Fishers
Scott Chaney, Citizen
Dan Myers, GeoEngineers
Bryony Stasney, Golder Associates Inc.
Wes McCart, Stevens County Farm Bureau and Stevens County Water Conservancy Board
David Luders, Fairchild Airforce Base and Indian Village Estates Water Assoc.
Jeanne Barnes, Spokane Association of Realtors and Lake Spokane Park Homeowners Association

Call to Order

Bryony opened the meeting at 6:00 pm. Attendees introduced themselves and the interest / organization they represent. Bryony requested that each attendee complete the sign-in sheet.

Review and Approve February 28, 2007 Meeting Summary

The draft February 28, 2007 WRIA 54 Planning Unit meeting summary was reviewed page by page with the following edits: 1) Bryony will correct the spelling of Kelly's name; 2) the last sentence on page 7 / first sentence on page 8 will be revised to …"If this group is unable to agree on instream flow recommendations, Ecology ~~is~~ **may** still ~~obligated to~~ set instream flows into rule." Those present accepted the suggested edits and approved the summary as final. The meeting summary will be posted on the County's web site at http://www.spokanecounty.org/wqmp/wria54.htm.

Public Comment

Rob Lindsay noted that the dischargers and Ecology have agreed on the managed implementation plan for the phosphorus TMDL for the Spokane River. Ecology will be writing a rule that will need to be approved by EPA prior to finalization. Rob suggested that a presentation by one or more of the dischargers may be a good option for a WRIA 54 meeting. Wes asked Rob if he could forward emails relating to the Spokane River TMDLs to the WRIA 54 email list.

Presentation on "Reclaimed Water Feasibility Study" by Bill Rickard, City of Spokane

The City of Spokane discharges about 15 billion gallons of wastewater annually to the Spokane River. The purpose of this study, funded by an Ecology grant, is to assess the feasibility of establishing an irrigation district as a customer to beneficially use some or all of the reclaimed water from the City of Spokane's wastewater treatment plant. Cascade Earth Sciences is the prime contractor and is teamed with sub-contractors Golder Associates and Preston, Gates and Ellis.

An irrigation district or special use district can only be established by the people who live within the area of the district. The following criteria were established for identifying potential sites for the district:

- 20-mile radius from the City's water reclamation facility
- Minimum reclaimed water use of 10 million gallons per day

- Reclaimed water use up to 50 million gallons per day

Q: Is the 10 – 50 million gallons per day a seasonal or year round use?
A: The City discharges wastewater all year round. Timing and quantities of irrigation use depend on a number of factors which are yet to be determined.

The feasibility study considered the following:

1. Regulatory / legal requirements
2. Agricultural technology
3. Site identification (where 10 – 50 million gallons of irrigation water per day could potentially be used, considering soil and topographic types)
4. Business model / public information model

Regulatory requirements include:

- Other stakeholders can share the cost for the beneficial use of reclaimed water.
- Other entities can be issued permits to use the City's reclaimed water (such as irrigation districts, public utility districts, water and sewer districts).

Legal issues include:

- The City would be unable to impair existing water rights in the Spokane River by removing wastewater discharge to the river.
- If the City discharges reclaimed water to surface water, the City would be unable to take out the water downstream for beneficial use since the discharged water becomes water of the State. This is unlike aquifer storage since water put in to the ground for storage can, under certain conditions, be removed at a later date.

Cascade Earth Sciences assessed available agricultural technology and what kind of land would be needed to grow specific crops. The following information was assessed:

- 4 classes of reclaimed water are recognized in Washington (Classes A, B, C and D).
- Mostly Class A water was considered since it allows almost unrestricted use.
- 27% of Spokane County comprises agricultural land (315,228 acres) of which only 3% is irrigated.
- Irrigation water greatly expands the number of crop types that can be grown and the potential yield.

Q: Is the City's treated wastewater currently Class A?
A: No. The current wastewater treatment processes do not sufficiently treat or disinfect to this standard. Capital improvements at the City's wastewater treatment plant are currently underway to meet the first phase of the TMDL implementation requirements for discharge to the river (and not for production of Class A reclaimed water). These improvements to the treatment processes to meet the first phase of the TMDL implementation plan would produce a treated wastewater close to Class A reclaimed water.

Seven areas were initially identified with the potential for establishment of an irrigation district. These were reduced to five areas for evaluation after removal of two areas considered to be too urbanized. Area 1,2 was rated the most favorable for the City, considering site soils and topography. This area is located in WRIA 54, in both Lincoln and Spokane Counties, south of the Spokane River and north of Deep Creek.

Q: Did the study assess the cost to convey the reclaimed water per mile?
A: No, but the study produced an Excel spreadsheet that allowed a dynamic assessment of costs. Other studies have produced conveyance costs that vary substantially. The next phase of this study would more narrowly examine the conveyance costs to the chosen site(s).

The business model was developed as an Excel spreadsheet in which variables can be changed to assess alternatives. The primary issue identified is that irrigation demand does not currently exist and must be created.

This provides an opportunity to stimulate the local agricultural economy. Public outreach must be integrated into the project at an early stage to inform potential customers and success would be based on inclusion of all stakeholders.

Study conclusions include:

- A reclaimed water irrigation district is feasible and has the potential to stimulate the local agricultural economy.
- Early and extensive public information will be critical.
- Hurdles include:
    - Resolving water rights in the Spokane River
    - Reclaimed water must meet state standards prior to agricultural use
    - Sufficient irrigation demand needs to be developed

Potential project phases include:

- Phase I – Feasibility Study (completed with $79,981 Ecology grant)
- Phase II – Concept Planning (e.g., costs and preliminary pipeline layouts)
- Phase III – Preliminary Engineering and Environmental Assessment
- Phase IV – VI – Design, Construction and Operation

Bill noted that the Managed Implementation Plan Oversight Committee will be responsible for determining whether and how to proceed with this project. This project could be considered as a delta elimination project. This Committee does not exist currently.

Q: Has the City talked with land owners in Area 1,2 to see if they might be interested?
A: No. This would likely be done in Phase II.

Q: Did the project consider the feasibility of using reclaimed water for non-agricultural uses such as irrigation of lawns and gardens?
A: This project assessed areas that could be considered for large uses of reclaimed water. The City has considered reuse sites in urbanized areas as part of the TMDL collaborative group and is considering pilot projects for the use of reclaimed water on golf courses. The problem is that any one urbanized site could use only a maximum of 0.5 – 0.75 million gallons per day of reclaimed water. About 60 to 70 of these sites would be needed to use 50 million gallons per day. In addition, streets and other urban infrastructure would need to be torn up to put pipe in the ground to supply urban sites.

Q: What about consideration of areas that are planned for urbanization in the future?
A: This was not considered in this project.

Q: One of the Watershed Planning issues this group is considering is water supply to the West Plains. If reclaimed water is used to irrigate land on the West Plains, a possible benefit would be groundwater recharge.
A: Bill acknowledged this comment.

Q: What about the concept of subsidies to make this work?
A: We did not examine this specifically. However, it is likely that funding for this project would be a blend from various sources. The business model has the ability to consider how much landowners do or do not capitalize. Bill noted that it is typical for large public works projects to be financed with some combination of subsidizing.

Q: Are there any limitations on the types of crops that the reclaimed water could be used to irrigate?
A: If the reclaimed water is Class A, the water can be used to grow all the crops that could be considered in this area, including potatoes, canola, alfalfa. Class B and C water could be used to irrigate crops with restricted human contact, such as poplar trees (since poplar trees are not grown for human food consumption).

Q: Over what timeframe do you expect the City to be able to produce Class A reclaimed water?
A: This is speculative. Our current policy is to adhere to the foundational concepts and participate in the TMDL oversight committee. So, at the moment the City does not anticipate producing Class A reclaimed water, in the quantities discussed in this study, within the next 10 years. However, this timeframe may change in the future.

Q: Has the City considered sub-surface irrigation over lands such as the airport and Fairchild Air Force Base? Fairchild Air Force Base has about 1,000 acres of unimproved land.
A: The City currently hauls biosolids to agricultural land in this area so, yes, we could consider use of reclaimed water on similar lands.

The group thanked Bill for his presentation. A copy of the presentations will be posted on the County's web site at http://www.spokanecounty.org/wqmp/wria54.htm. Bill said that copies of the report will be available on CDs in time for the next WRIA 54 meeting.

Storage Work Group and Project Update

Cynthia provided a one-page handout entitled, "Summary of Water Storage Opportunities for West Plains and Suncrest Study Areas". Cynthia informed the group that the Multi-Purpose Storage Work Group (MSG) met today to review the initial screening of WRIA-wide water storage opportunities for the two study focus areas (i.e. the West Plains and Suncrest). In accordance with the scope of work for the storage project, the consultant team was originally tasked with focusing on three projects for more detailed study. The MSG took a slightly different direction for the remainder of the project today.

Cynthia noted that the storage report will include a general section on various storage options relevant to WRIA 54. There will also be a special focus on the Chamokane Creek basin, along with information on topics such as use of reclaimed water, artificial storage and recovery (ASR) and the underground injection control (UIC) program. Although the team originally identified Suncrest as an area that is likely to need additional water supply to provide for population growth, water providers (such as Stevens Public Utility District #1) have assured the team that there are adequate water rights and supply to provide for these areas in the future. The work group selected the West Plains as the area for more focused study since groundwater levels are declining and entities are unable to obtain new water rights.

The Multi-Purpose Storage Work Group made the following study recommendations for the remainder of the storage work:

- Description of the federal underground injection control (UIC) program, aquifer storage and recovery (ASR), water reuse and reclamation and enhanced infiltration, including documentation of regulatory issues associated with these concepts.
- Description of potential dam locations in side canyons to the Spokane River.
- A general overview of the Suncrest area to include documentation of the geology and deposits that may provide opportunities for aquifer storage.
- A detailed study of the West Plains area, including consideration of the large and small scale water storage opportunities listed on the handout.
- A study of the Chamokane Basin and water storage opportunities.
- Documentation of funding opportunities (e.g., via the Columbia River Management Program)

Q: Can you expand what you have said about the dam sites? Reservoirs such as these are destructive to the environment and cover significant land areas. This should be considered as a last resort.
A: The potential sites identified include sites on Little Chamokane Creek, Little Sandy Canyon and Sorenson Canyon. The sites were located based on topography and are potential surface water storage sites. Stored water could be used for a variety of purposes. These projects will be identified in the report since they are potential water storage options. The report will not recommend that these projects are implemented.

The Spokane Tribe has rights to almost all of the water in the Chamokane Basin. We will consider options to provide water for new consumptive uses and for streamflow augmentation. Options for consideration include:

- Leasing water from the Spokane Tribe
- Evaluation of the lower aquifer
- Infiltration to upper aquifer at Walkers Prairie (identified as a groundwater recharge area)
- Beaver habitat and the potential for instream flow augmentation
- Side canyon dams

Wes noted that the Chamokane Basin is currently closed to new water rights appropriation and there is discussion on limiting domestic exempt well water use. Cynthia noted that there may be opportunities for funding storage implementation projects in the Chamokane Basin via the Columbia River Management Program.

Q: What level of detail do you expect to provide for the storage ideas?
A: A general overview of the storage concepts and where these might be applied within the watershed.

Cynthia noted that the current schedule for the storage work includes release of the draft storage report at the end of May 2007 and finalization of the report by September 15, 2007. The May 2007 WRIA 54 meeting is scheduled as a public meeting to present the draft storage report.

Water Quality Work Group Update and Scope of Work

Rob noted that the Water Quality Work Group initially considered studies such as educational and data gathering projects as options to complete under the supplemental water quality project for WRIA 54. The group initially focused on water quality data gathering to support existing and potential future water quality issues. Concepts discussed by the Water Quality Work Group have included water quality monitoring and evaluation for the palaeochannels on the West Plains and for the tributaries to the Spokane River.

Cynthia provided a preliminary scope of work after the Water Quality Work Group meeting on Friday March 23, 2007. This scope includes tasks that are required by the grant, including: identification and documentation of water quality concerns within WRIA 54; documentation of WRIA 54 water body uses; and documentation of where water quality standards are not being met within WRIA 54. Once these water quality concerns are documented along with ongoing processes (e.g., TMDLs), this group will need to decide where and how to focus efforts (i.e. confirm specific projects for implementation). Rob proposed that these tasks be completed as Step A. Ecology requires that quality assurance projects plans (QAPPs) are completed to support water quality data collection efforts. Rob proposed that QAPPs for specific projects be completed as Step B. Implementation of data gathering projects would be completed as Step C.

Spokane County's goal is to get this $100,000 grant in place and start work on this project on July 2, 2007. Those present agreed by consensus with the Step A, B and C approach that Rob described. The next Water Quality Work Group meeting is scheduled for April 16, 1 – 3 pm.

Q: Were any decisions made on how much money would be assigned to Steps A, B and C?
A: Rob said that this is described in the preliminary scope of work as: Step A - $25,000-30,000; Step B – $30,000–50,000, depending on the projects selected. Completion of needed QAPPs will provide a good foundation for future data collection efforts. In addition, documentation of water quality concerns will provide the information the group needs to make water quality recommendations in the Watershed Plan.

Instream Flow Q&A

Cynthia provided a handout entitled, "Comments on draft technical report – Spokane River Instream Flow Studies (WRIA 54 and lower WRIA 57)". Responses to these comments will be sent out for review on April 13, 2007.

Cynthia said that the comments received are within four general categories:

- Clarifications and editorial corrections.
- Recommendations. There is a difference of opinion as to whether or not the technical report should include recommendations. We received several comments saying that recommendations should be included and one comment saying that recommendations should not be included. Cynthia proposed to the group that the recommendations remain in the technical report.
- Technical Comments. For example, comments were received suggesting that the Spokane River flow records be assessed pre- and post-1968 to consider different dam operations after 1968.
- Photo Transects. Comments were received that the photos are valuable. These photos were taken by Spokane County staff (Bea Lackaff). There is no budget in the current instream flow project to assess these photos. These photos are available from Spokane County.

Wes said that he appreciates the quality of this instream flow study. Rob thanked Avista for their cooperative efforts to time the Spokane River flows to support the project field work.

Bryony informed the group that there will be opportunities at the next couple of WRIA 54 Planning Unit meetings to address additional instream flow questions. Following discussion, the group decided to consider presentations by Ecology and Avista at future meetings.

Habitat

Sara Hunt confirmed that there is no additional grant money to address habitat in Phase II of Watershed Planning. The group may identify projects / recommendations related to habitat that can be included in the Phase III Watershed Plan. The group agreed by consensus not to address the habitat element further in Phase II.

General Schedule Announcements

A draft long-range plan for Phase II and III Watershed Planning was provided to the group for review. This long-range schedule will be revised as needed as the project progresses. Rob noted that the Planning Unit has until September 2009 to finalize the WRIA 54 Watershed Plan.

The following meetings are scheduled:

- The next WRIA 54 Steering Committee meeting is scheduled for Tuesday April 10, 2007, 10 am – noon at the Spokane County Public Works Building, Conference Room 4A, 1026 W. Broadway Ave, Spokane, WA 99260. This meeting is open to everyone.
- A WRIA 54 Water Quality Work Group meeting is scheduled for April 16, 2007, 1 – 3 pm at the Spokane County Public Works Building, Conference Room 4A, 1026 W. Broadway Ave, Spokane, WA 99260. This meeting is open to everyone.
- The Society of Inland Northwest Environmental Scientists (SINES) has a meeting scheduled on Wednesday April 11, 2007, 6:30 pm at the Shilo Inn in Spokane. Guy Gregory (Ecology) will be presenting on the Bi-State Spokane Valley Rathdrum Prairie aquifer study.
- An Ecology sponsored watershed workshop is planned for May 17 in Moses Lake. All are welcome to attend.

Next Meeting Date and Adjourn

The next Planning Unit meeting is scheduled for April 25, 2007, 10:00 am – noon at the Airway Heights Community Center. The meeting was adjourned at 8:15 pm.