Location: Airway Heights Community Center, Airway Heights, WA.

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

- Lloyd Brewer, City of Spokane
- Sara Hunt, WA State Dept. of Ecology
- Jim DeGraffenreid, Lincoln County Planning
- Jerry Warner, Palisades Neighborhood
- Stan Miller, Citizen
- Bea Lackaff, Citizen
- Kelly Williquotte, City of Airway Heights
- 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 10:10 am. Those in attendance introduced themselves. Bryony requested that each attendee complete the sign-in sheet.

Review of January 2007 Meeting Summary

The draft January 24, 2007 WRIA 54 Planning Unit meeting summary was reviewed page by page with the following edits: 1) Bryony will confirm Lynn Well’s affiliation; 2) the first page footer will be corrected; and 3) a paragraph break will be included on page 5 after the fifth line under public comment. 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](http://www.spokanecounty.org/wqmp/wria54.htm).

Public Comment

Rob Lindsay updated the group on Spokane County staffing for the WRIA 54 Watershed Planning project. Bill resigned from the County in late January. The County is filling this position as well as another position to help out with the County’s non-point source assessment. Rob said that he appreciates the group’s patience.

“Spokane River Dissolved Oxygen TMDL” by Drea Traeumer, WA State Department of Ecology

Drea noted that she has been with Ecology since June 2006 and is the lead for the Spokane River dissolved oxygen TMDL. Drea noted that her presentation will cover:

- Background on why there is a dissolved oxygen total maximum daily load (TMDL).
- What a TMDL is.
- Where we are to date.
- How Ecology will proceed with implementation.

Drea’s presentation is available at the County’s web site at [http://www.spokanecounty.org/wqmp/wria54.htm](http://www.spokanecounty.org/wqmp/wria54.htm). The following summarizes the presentation and discussion.
Clean Water Act Section 303(d)

- Requires States, territories, and authorized tribes to develop lists of impaired waters that do not meet water quality standards.
- Total Maximum Daily Loads (TMDLs) must be developed for the impaired waters. In this case the TMDL is for dissolved oxygen.
- EPA is responsible for approving or disapproving TMDLs.
- Goal of TMDLs is to ensure that impaired waters will attain water quality standards.
- A TMDL specifies maximum amount (load) of a pollutant that a waterbody can receive and still meet water quality standards.
- Allocates pollutant loads among point and nonpoint pollutant sources.
- Point sources are discharged directly into surface waters from the end of a pipe. For the Spokane area, this includes the dischargers (e.g., the City of Spokane, Inland Empire Paper and Kaiser).
- Nonpoint sources indirectly enter surface waters through surface runoff and erosion, and subsurface flow (e.g., rainfall that falls on a fertilized lawn and then washes off into the river).

Spokane River Dissolved Oxygen TMDL Timeline

- Water quality standard for dissolved oxygen is not met in Long Lake (i.e., Lake Spokane).
- Ecology’s TMDL set water quality target for phosphorus based on its relationship to dissolved oxygen (DO). Phosphorus is the limiting nutrient for algal productivity. Excessive algae in Lake Spokane are caused by elevated phosphorus. When the algae die, they drop to the bottom of the lake. Decomposition of algae requires a lot of oxygen. Lake Spokane stratifies in the summer and there is a colder lower layer that is separated from the surface. Since algae decomposition occurs in this lower layer, the concentration of oxygen in the lower layer becomes depleted to levels lower than the water quality standard.
- Ecology’s draft phosphorus TMDL was released in October 2004 with stringent phosphorus limits for the point sources (i.e., the dischargers).
- In response, the petitioners (i.e., the dischargers) prepared a use attainability analysis (UAA) that defines attainable uses and criteria to protect uses (December 2004).
- Petitioners and Ecology agreed to avoid a lawsuit and negotiate a settlement over UAA and TMDL (February 2005).
- Negotiation produced Foundational Concepts: 20-yr agreement to reduce phosphorus in the Spokane River to target (July 2006).
- The collaboration group (environmental groups, community, EPA, Ecology and the dischargers) will formally agree to the Foundational Concepts at our final meeting on March 7, 2007. After this meeting, Ecology will revise the TMDL submitting the TMDL to EPA for approval.

Foundational Concepts – Phosphorus Target (where we are now)

- TMDL uses a phosphorus concentration in units of millionths of grams per liter (µg/L).
- Based on water quality modeling, 10 µg/L is the phosphorus target in Lake Spokane during the critical season (Apr – Oct) and for discharger effluent. April to October is the time when there is excessive algal productivity.
- 10 µg/L phosphorus target is expected to be achieved by dischargers in first 10 years of implementation. In the interim, Ecology will be using technology-based limits for the point source discharge permits.
- 10 µg/L phosphorus target is enforceable at 20th year of the implementation plan.

Foundational Concepts – Key Findings

- Current treatment technology cannot consistently meet target of 10 µg/L at end of pipe for dischargers.
- The difference between what the treatment technology can meet and the target is called the ‘Delta’.
- Dischargers will have to work to eliminate the Delta to cumulatively meet target of 10 µg/L in Lake Spokane.
- After 10 years (i.e., in about 2017), Ecology will review the process and apply adaptive management.
- This is the first TMDL of this type in the United States.
Q: Is the 10 µg/L the target throughout the water column and is there an averaging period?
A: Yes, 10 µg/L the target throughout the water column and we are considering seasonal targets. I am not sure if this is correct. Stan Miller said that this is correct and that the permits currently don’t include numeric targets. Instead the permits define the technology to be implemented by the dischargers.

**How will be 10µg/L target be met?**
- The Foundational Concepts provides an aggressive, managed approach that provides a reasonable assurance that the 10 µg/L phosphorus target will be met in first 10 years and that phosphorus will be removed from variety of sources over next 20 years.

**Managed Implementation Plan (MIP)**
- The dischargers will be required to install most effective, feasible treatment technologies with objective to meet 50 µg/L interim target.
- Plan and schedule actions aimed at eliminating the Delta.
- Critical 10th year assessment of DO in Spokane Lake in response to reduced phosphorus.
- Required actions for dischargers are enforceable over 20-yr life of MIP.

Q: What is an approximate range of µg/L difference between April and October now (i.e., by how much is the lake water quality out of compliance)?
A: For the dischargers, the difference is about 200 µg/L. For the lake, it is generally less than 25 µg/L.

**Required Actions for the Dischargers**
- Develop treatment technology selection protocol and conduct pilot tests.
- Prepare engineering reports for Ecology.
- Interim limits based on engineering reports.
- Develop Delta Elimination Plan:
  - Water conservation
  - Water re-use
  - Source control
  - Nonpoint source control
- Ecology has made a commitment to review and act expeditiously.

**Available Optional Actions to reduce Delta**
- Re-use “Class A” reclaimed water instead of sending it to the river.
- Phosphorus source control opportunities like limiting urban fertilizer and dishwashing detergent use.
- Spokane County has taken the lead on a $250K grant for a multi-year regional non-point source reduction program. The first part of this study is to identify what the non-point sources are that are contributing the most phosphorus, which are the easiest to control and what sort of load reductions can be expected.
- Septic tank elimination program.

**10th Year Assessments (in about 2017)**
- Assess DO status using best available data.
- Assess which actions have/have not been productive.
- Consider completed research on sediment oxygen demand, episodic events (e.g., summer storms that may deliver high phosphorus to the lake), and river oxygenation.
- Determine if standards can be met with further action or if they need to be modified.
- Using collaborative approach, set actions for the time remaining until 2027.
**Next Steps**

- 30-day public comment period Spokane River DO TMDL (April 2007).
- EPA finalizes TMDL (June 2007).
- Technology Selection Protocol.
- Delta Elimination Plans.
- Engineering Reports.
- Interim Limits.
- Creation of Oversight Committee.

**Contacts and Information**

- Spokane River Webpages
  - [http://www.ecy.wa.gov/geographic/spokane/spokane_river_basin.htm](http://www.ecy.wa.gov/geographic/spokane/spokane_river_basin.htm)
- Ecology Publications
- Drea Traeumer, Washington State Department of Ecology
  - Email: dtra461@ecy.wa.gov
  - Tel: 509.329.3214

**Q:** Is there going to be a TMDL advisory committee? I think the last time we met was with Ken Merrill.

**A:** Yes. I need to reconvene this group at the end of March 2007.

**Q:** Do you remember what the end of the pipe limit for the Idaho dischargers is?

**A:** 100 µg/L. In Washington we use the concentrations in the Spokane River at the state line as our upstream boundary condition.

**Q:** Rob informed the group that the WRIA 54 Water Quality Work Group had met just prior to this meeting to discuss project scoping for the $100K water quality supplemental work. Sara Hunt informed the group that there was funding as part of the Foundational Concepts to conduct water quality monitoring on the Spokane River. Rob asked Drea to provide guidance so that this group does not duplicate efforts.

**A:** There will be funds to monitor water quality on the Spokane River, the Little Spokane River and Hangman Creek. If the group has water quality issues outside of the Spokane River TMDLs, I advise you to spend your funds on those issues.

**Q:** Do you plan to do any work on the WRIA 54 tributaries to the Spokane River (e.g., Deep Creek and Spring Creek)?

**A:** Not that I am aware of. However it would be best for this group to keep communicating with Ecology since monitoring sites and parameters are likely to be revised over time.

**Q:** How much natural phosphorus occurs in this area?

**A:** The background in the Spokane River is 6 parts per billion (i.e., this is what comes out Lake Coeur d’Alene most of the time). The limit of 10 parts per billion is quite a bit above the background for the river.

**Q:** Is there a phosphorus ban in Idaho?

**A:** I don’t believe so. There may have been an effort in Idaho to reduce phosphorus in laundry detergents in the 1970s. Phosphorus in dishwashing detergents has not been addressed in Idaho. The new Washington state-wide ban on the use of phosphorus in detergents will come into effect next year (2008).

**Q:** Can you review the relationship between what comes out at the end of a pipe and monitoring the Spokane River and Lake Spokane and relating these to phosphorus levels? Also do you monitor down to the mouth of the Spokane River or just as far as Lake Spokane?
A: We monitor in Lake Spokane since this is the water body that is not in compliance with standards. We monitor at the downstream end of the lake, in the lower levels of the lake where the dissolved oxygen levels are below standards. I don’t believe that we monitor below Lake Spokane now. However there may be historic water quality data available below Lake Spokane.

Q: If there is no known technology to get down to 10 µg/L, how will the new wastewater treatment plant be designed?
A: There is technology that will get phosphorus down to 10 µg/L but not consistently at the high flow rates we are expecting from the wastewater treatment plant. The hope is that over time the technology will improve. The County’s new wastewater treatment plant will have to be able to show it can treat water to 10 µg/L phosphorus before the plant can go on line.

Q: What do you see will be some of the pressures in the market place that will drive the research to come up with these new technologies for point sources? And, is this type of TMDL process happening anywhere else in the United States?
A: 10 µg/L phosphorus is the limiting concentration for excess algae. If Spokane achieves this TMDL, then other areas may have the guts to do this too. Some large companies are working on the problem and technologies are being improved to meet this goal. No, this type of TMDL process is the first of its kind in the United States.

Q: The current TMDL collaboration group is made up of scientists, agencies, lawyers and politicians and breaks the mold in that a diverse stakeholder group was able to develop a product that we will implement.
A: The non-point source will be a critical piece of this. Water quality trading will be an important component of controlling non-point sources.

The group thanked Drea for her presentation.

Review Consolidated WRIA 54 Issues
Bryony passed out a draft technical memorandum entitled, “Second Draft Consolidated List of WRIA 54 Issues”. Bryony developed this list by consolidating the issues posted by WRIA 54 Planning Unit members in the summer and fall of 2006. Where two issues from the verbatim list said the same thing, Bryony combined the issues, using the same language where possible. Bryony provided a verbatim list of issues to the Planning Unit in November 2006. This consolidated list will be provided to Ecology in April 2007 in partial fulfillment of the Phase II facilitation grant with Spokane County and Ecology. The consolidated list of issues will provide the basis for the Planning Unit to prioritize their issues. In Phase III, the Planning Unit will develop goals and objectives to address priority issues. In accordance with the operating procedures, the issues, goals and objectives will be developed in a consensus process for inclusion in the Watershed Plan.

Q: The TMDLs in WRIA 54 are addressing some of the water quality concerns identified in this issue list. We also need to be aware of future TMDL work. What is the best way to coordinate with ongoing and future planned work for TMDLs?
A: We will need to make sure that there is good coordination with the ongoing TMDL process. For example, if there is a management action ongoing or planned in the TMDL process, this group needs to be aware so that we are not duplicating efforts. Drea Traeumer will be the link between Ecology’s ongoing and planned TMDLs and the Planning Unit’s water quality work.

Q: Are actions to be taken synonymous with recommendations?
A: Yes. An agreed upon action to address an issue could be a recommendation or an obligation in a Watershed Plan. An entity must agree to take on an obligation or recommendation in a Watershed Plan.

Bryony explained the process that she followed to develop the Second Draft Consolidated List of WRIA 54 Issues:
1. Pulled out statements that appear to provide over-arching guidance, including:
   o All categories/sections/areas of the WRIA Plan must be guided, whenever and wherever applicable, by the principles of sustainability and quality.
   o Apply test of reflecting on consequences of plans and strategies and recommendations seven generations into the future.
   o This watershed planning process should provide clear statement of goals and guidelines to achieve these goals.

2. Revised the issue categories to include:
   o Surface water and instream flows
   o Hydrogeology and groundwater supply
   o Storage
   o Habitat
   o Water quality
   o Water management (e.g., water rights)
   o Growth and land use
   o Education

3. Combined similar issues under the appropriate categories.
4. Identified statements that appear to be goals and recommended actions.
5. Noted questions and comments (in bold, italic text) that need to be addressed by the Planning Unit in the future.

Bryony said that she found the Water Management category of issues the hardest to consolidate. Bryony’s comments and questions on these issues are included in the consolidated list in bold, italic text for consideration by the Planning Unit (in preparation for the Phase III workshops).

Q: Under storage, I think you have missed capturing this issue (and this key to me); the Chamokane basin is closed we therefore need water storage to open this basin and also to provide water supply options for areas where we have projected growth and we see that we will run out of water. The storage issues as stated in this consolidated list do not address closures.
A: Bryony asked Wes to note his comments and come ready to discuss this at the June and July workshops. The consolidated list is in a draft form and is the place from which we will start further work on the issues, including finalizing language.

Q: For issues that were originally stated under multiple categories, is there a reason why you have included this issue under only one category in the consolidated list?
A: Bryony said she had done this to avoid duplication of effort by having work groups for each category working on the same issue.

Q: This Planning Unit opted not to address habitat as a supplemental project. However, we have habitat issues. Can you explain to me why habitat was not selected for supplemental work?
A: Lloyd said that he did not recall this as a decision that was made by the initiating governments. Lloyd said that he remembered two reasons for not taking on the habitat supplemental work: one was that the tasks that needed to be completed as requirements for the habitat supplemental project exceeded the dollars that are available; and the second was that by addressing the water quality component, the group felt that habitat would be taken care of. Stan said that he did not recall making a decision not to apply for supplemental habitat funds. Stan said that the group needs to decide if it is worth applying for habitat supplemental funding to address the issues identified when this funding will require the group to also address items that are requirements of the grant funding. Wes said that the Planning Unit can still address habitat issues in the Watershed Plan without applying for additional funding at this stage.
Q: Bryony asked Sara Hunt (Ecology Watershed Lead) if habitat supplemental funds can be made available by Ecology after a Watershed Plan is approved.
A: Sara said that she did not know and would check with Ecology.

Q: Stan asked if the word, “guidana” in the water quality section at the bottom of page 4 was a typo or a technical term.
A: Bryony said that she would check and would revise accordingly before the memo is submitted to Ecology.

Bryony encouraged the group to review the verbatim and consolidated list of issues and to come prepared to work with others to develop and prioritize the issues during the Phase III workshops. These workshops are currently scheduled for June and July 2007.

For the remainder of this agenda item, those present discussed:

- The ongoing multi-purpose storage assessment addresses the need to develop a water storage plan. The ongoing storage assessment (due to be finalized in June 2007) will include recommendations that can be incorporated into the Watershed Plan. The May 2007 Planning Unit meeting is planned as a public meeting to present the draft multi-purpose storage assessment report.

- Spokane County and the consultant team have developed a long-range schedule for the Watershed Plan and supplemental projects (instream flow, water quality and storage). This schedule will be presented to the group at the next meeting and will help you to see how we anticipate the technical and planning work to progress through the end of Phase III.

- Sara Hunt (Ecology Watershed Lead) said that she would research the habitat supplemental grant requirements and if these grant funds could be made available in Phase IV Implementation, once this group has some agreed-upon projects/actions. Sara said that she will report to the Planning Unit at the next meeting.

- Drea Traeumer confirmed that she will be the link between Ecology’s ongoing and planned TMDLs and the Planning Unit’s water quality work (to avoid duplication between the Watershed Planning and TMDL processes).

- The Phase III workshops are currently scheduled for June and July 2007. Further development and prioritization of these issues will occur during these workshops. Therefore, there will be opportunity to further refine the draft issue language.

Updates on the Instream Flow Technical Team, Water Quality Work Group, Storage Work Group and Multi-WRIA Meeting

Instream Flow Technical Team (IFTT)
The last meeting of the IFTT occurred in the afternoon of February 27, 2007. Pete Rittmueller (from EES) and Cynthia attended and gave a fine presentation of the technical work that is documented in the draft report entitled, “Draft Technical Report Spokane River Instream Flow Studies”. We will have a similar meeting at 1 pm today in this room. Rob encouraged people to attend. The work presented will include the technical results for the free flowing reaches of the Spokane River (above the confluence with Latah Creek to the backwater of Ninemile Dam) and also screening-level work on Deep Creek, Coulee Creek, Little Chamokane Creek and Spring Creek. Hal Beecher from Washington Department of Fish and Wildlife will be attending the afternoon meeting. Cynthia noted that the comment period for the draft instream flow report will close on March 23, 2007. Comments can be provided to Cynthia and / Rob. Rob provided hard copies of the draft report. The report is also available on the County’s web site at http://www.spokanecounty.org/wqmp/wria54.htm.

The WRIA 54 Planning Unit will work with Ecology and with WRIA 57 (the Lower Spokane Watershed) in a holistic and collaborative process to develop instream flow recommendations. Ecology will then be responsible for setting instream flows into rule. If this group is unable to agree on instream flow recommendations, Ecology
is still obligated to set instream flows into rule. Cynthia noted that discussions will continue over the next few Planning Unit meetings to prepare for recommendations that will be developed by this group for inclusion in the Watershed Plan.

**Water Quality Work Group (WQWG)**
The Water Quality Work Group had a second meeting today at 9 am. The first meeting occurred on February 14, 2007. The role of the WQWG is to develop the scope of work for the water quality supplemental project for Planning Unit approval. Today the WQWG agreed to keep the same consultant team to complete the water quality supplemental work. This recommendation will be made to the Steering Committee and will come back to the Planning Unit for approval. The WQWG also developed a generalized idea for the scope of the project. Rob will be working with Cynthia to detail the scope.

**Storage Work Group**
The storage work is underway. Cynthia said that the team has been working on quantifying water needs in the focus areas and reconciling this with planning for growth. The hope is that opportunities for the water systems to work together to meet water needs will be identified, e.g., opportunities to extend existing infrastructure. The team has refined the West Plains study area to extend south of I90, as suggested by Rob at the last Planning Unit meeting. This was done to include the communities of Medical Lake and Four Lakes. We need to schedule another storage work group meeting, probably to coincide with the March 28, 2007 Planning Unit meeting.

**Multi-WRIA Meeting**
Rob noted that the multi-WRIA meeting was held on February 1, 2007 at Eastern Washington University. It was a successful meeting, attended by more than 100 people, including members of watershed planning units from WRIA 54 (Lower Spokane), WRIA 34 (Palouse), WRIA 56 (Latah / Hangman), and WRIA 43 (Upper Crab Creek). The leads from WRIA 54 (Rob Lindsay), WRIA 34 (Rob Buchert) and WRIA 56 (Walt Edelen) gave short presentations on how limited water resources are impacting their watersheds. Excellent presentations were then given by Steve Reidel (WSU Tri-Cities), Bob Derkey (WA DNR) and John Covert (Ecology), starting with the big picture geology of the Columbia Basalts and focusing in on specific groundwater recharge and population growth concerns across the West Plains. The purpose of the meeting was to raise awareness of groundwater mining and did not attempt to identify options to address the problem at this stage. On March 6, John Covert and Rob Lindsay, along with representatives from Spokane County Planning will be giving a briefing to the Board of County Commissioners. We received feedback from 35 people who said they would be interested in some sort of follow-on activities. This will be coordinated by Spokane County. This meeting has already generated positive discussions. Rob stated his hope that this will become a multi-WRIA collaboration effort involving the entities that have an interest in this problem, and that recommendations can be developed by this collaboration group for inclusion within watershed plans and updates to existing plans. If recommendations are included in three or four watershed plans, this will send a stronger message to the legislature. Rob thanked Bryony for her coordination and facilitation of this meeting.

**Public Comment**
Wes McCart said that he had attended the Washington State Association of Counties (WSAC) meeting on the Columbia River Management Plan. There is a desire by the County Commissioners, the watershed leads and Ecology to get the eastern Washington watershed planning groups together. Hopefully Ecology will be setting up this collaborative meeting. Wes said that he had not seen the Spokane County Commissioners at the meeting and asked Rob to pass on this information and ask them to attend the WSAC. Rob asked Wes to send him an email with this information. Sara Hunt informed the group that all the watershed leads for the eastern Washington watershed planning units will be meeting in Lacey in late March 2007 and that she will discuss this.

Sara noted that she would not be able to attend the next Planning Unit meeting and said that she would send an alternate.
Wes asked who to send a request to, to add people to the email distribution list. Bryony said either to her or to Rob Lindsay.

Bryony reminded the group about the instream flow public meeting today at 1 pm in this room.

Cynthia noted that the comment period for the draft instream flow report closes on March 23, 2007.

**General Schedule Announcements**

The following meetings are scheduled and open to everyone:

- WRIA 54 Steering Committee on Wednesday March 14, 2007, 10 am – noon at the Spokane County Public Works Building, Conference Room 4A, 1026 W. Broadway Ave, Spokane, WA.
- WRIA 54 Water Quality Work Group on March 23, 2007, 10 am at the Spokane County Public Works Building, Conference Room 4A, 1026 W. Broadway Ave, Spokane, WA.

**Next Meeting Date and Adjourn**

The next Planning Unit meeting is scheduled for Wednesday March 28, 2007, 6:00 – 9:00 pm at the Lakeside High School library. The library is located opposite the cafeteria.

The meeting was adjourned at 12:01 pm.