Meeting Summary Planning Unit Little Spokane River – Middle Spokane River Local Watershed Plan June 18, 2003

Committee members recorded on the sign in sheet were:

Doug Allen, Dept. of Ecology
Lloyd Brewer, City of Spokane
Harry McLean, Jr., City of Spokane Water
Ken Kuhn, Pend Oreille County Planning
Ty Wick, Spokane Aquifer Joint Board
Julia McHugh, SAJB
Dick Price, Stevens County PUD #1 Steve Skipworth, Vera Water Tom Hargreaves, Friends of Little Spokane Valley Megan Harding, WA State Dept.of Health Bruce Howard, Avista Rick Noll, Spokane County Conservation District Walt Edelen, Spokane County Conservation District Jane Cunningham, *The Lands Council* Terry Liberty, *Spokane County Planning* Stan Miller, *Spokane County* Reanette Boese, *Spokane County* Bill Gilmour, *Spokane County*

Consultants that attended the meeting were: Sarah Hubbard-Gray of Hubbard Gray Consulting, Bryony Hansen of Golder Associates, and Chris Pitre of Golder Associates.

Guests that attended the meeting were: Brad Blegen of the City of Spokane

Introductions: Sarah Hubbard-Gray called the meeting to order at 10:05 am. Committee members introduced themselves. Sarah asked for comments or corrections to the May 21, 2003 meeting summary. Several comments were provided and the following changes were made:

- Page 2 A change was made to the first bullet point on the middle of the page so it now reads, "Augment Spokane River flows during the summer with water from Lake Coeur d'Alene by releases at Post Falls Dam." In the second to last paragraph, the third sentence was changed to read "Golder is currently running the first modeling scenario (Turn off all pumping and artificial recharge)", the second to the last sentence was changed to read "Stan said that the greatest source of potential error in the models is the ground water influx across the Idaho state line.", and the last sentence was deleted. In the last sentence of the last paragraph, "six scenarios" was changed to "seven scenarios".
- Page 3 The sentence following the list of numbers was changed to read "Golder Associates will be asked to run the top 4 priority scenarios, and move to the additional scenarios based on further discussions with the Planning Unit and as budget allows.", and the third sentence in the third bullet was changed to read "Part of their work is looking at aesthetics of flow in downtown Spokane, white water flows for recreation, and the water quality, especially temperature and total dissolved gas."

Draft Report on Little Spokane River Instream Flow Analysis: Chris Pitre of Golder Associates gave a presentation on the draft Instream Flow Analysis of the Little Spokane River (LSR) report. Chris presented information on the Instream Flow Assessment including the

approach, field work, analysis, and results. His presentation and overview of the study included the following major points:

- Instream flow assessment why do it?
- The six sites selected for the study
- Data analysis of the wetted perimeter and PHABSIM
 - Wetted perimeter results
 - PHABSIM evaluation
 - Minimum instream flow percentage for optimal habitat
 - Limitations of PHABSIM
 - Limitations of this PHABSIM analysis
- Conclusions drawn from the data analysis
- Possible minimum instream flow options

Chris explained that the study used the Wetted Perimeter method as per the original scope with PHABSIM modeling added to analyze the wetted perimeter data along with information collected on water depth, water velocity, substrate and vegetative cover. This information was compared to habitat suitability curves for the four life stages of Rainbow Trout and Mountain Whitefish (spawning, fry, juveniles and adults). Since site -specific habitat suitability information is not available, habitat suitability information for Rainbow Trout developed in other parts of Washington and habitat suitability information for Mountain Whitefish in Alberta were used for this study. Chris explained that this is a limitation of this study. Chris also reminded the PU that the objective of the study was to assess if the minimum instream flows set by rule (set in 1976 and based on 80% exceedance flows) for the Little Spokane are protective of Rainbow Trout and Mountain Whitefish.

Chris indicated that the instream flow analysis found that even minimum flows in the Little Spokane River are too fast to provide good spawning habitat for trout. Trout appear to be spawning in slower moving channels off the Little Spokane River main channel. He explained that possible options for minimum instream flows (MISF) in the LSR are to 1) raise the MISF at Dartford, 2) lower the MISF at Chattaroy and Elk, 3) establish a MISF at Dragoon, Deadman and Otter, or 4) leave the current MISF as is. Chris indicated that the results of the report suggest that although the flows could be raised or lowered slightly at the compliance points (Elk, Chattaroy and Dartford), there is not compelling information to adjust the existing regulations on the basis of fish habitat alone, and that the flows set in rule appear adequate for protection of fish. (Note: The complete draft report on the Little Spokane River Instream Flow Analysis may be viewed and downloaded from www.spokanewatershed.org.)

Discussion followed Chris's presentation. Stan Miller indicated that the Planning Unit will need to further evaluate the results of the study, review options, and develop recommendations. Chris indicated that Hal Beecher with the Washington Department of Fish and Wildlife has reviewed the draft report and feels it provides a sound basis for the Planning Unit to consider as they move into their deliberations on LSR instream flow and develop a recommendation. Doug Allen indicated that John Covert with the Washington Department of Ecology reviewed the draft report and that due to the physical characteristics of the LSR he indicated that there may not be justification to raise the current minimum instream flow level. The discussion concluded by acknowledging that the Planning Unit's Instream flow Work Group will meet to review the draft report and identify options for the Planning Unit to consider.

Final Report on Model Calibration: Chris Pitre of Golder Associates gave a presentation on the model calibration report. He went over the modeling approach, the modeling work, the model

conversion, the pre-development scenario, and the next steps. The major topics in his presentation included:

- Model data needs
- Model set-up
- Model calibration
- Model results
- Model scenarios
- Pre-development conditions preliminary results
- Changes in Spokane River flows
- Changes in Little Spokane River flows
- Changes in groundwater elevations
- Scenario evaluation

Chris explained that the MIKE computer model is now ready for use and that the first model run (comparing the non-pumping scenario (e.g., all pumping wells and artificial recharge wells turned off) with calibrated conditions) has been completed by Golder and should help the Planning Unit evaluate effects that human activities have on river flows. Chris explained that the model is a valuable tool to assess the volumetric differences between the calibrated current conditions and the different model scenario runs.

Chris reviewed the effort and estimated cost associated with running different model scenarios and recommended that the Planning Unit focus on specific needs and items that will help develop the watershed plan. (Note: the Draft Model Report is available on the project web page at www.spokanewatershed.org.) It was noted that running each model scenario is estimated to cost between \$5000 and \$10,000. This cost includes imputing the variables into the model, running the model, and data analysis. Stan Miller suggested running the models sequentially as one run many answer several questions and future scenarios may be modified based on the information gathered from previous scenarios. This may also reduce the total number of model runs needed.

Stan discussed the historical drop of instream flow in the Spokane River from 1800 cfs to 800 cfs over the last 100 years. He indicated that human impacts appear to account for about 200 cfs of the drop and that it is unclear where the rest of the water is going. There are many variables associated with how the hydrological system works, such as the Post Falls Dam operation, how the lakes are managed, and environmental changes. Stan noted that the drop is not a loss of water, it is a change in flow during the summer.

It was asked if there is enough data to estimate a margin of error in the model. Chris indicated that the model predicts fairly well the conditions of "our world" to determine "relative" effect versus "actual" effect.

Reanette Boese passed out a handout on the model scenarios, which included preliminary questions each scenario is expected to answer. Reanette asked the Planning Unit members to review the model scenario questions and let her know if they think different, modified, or additional questions should be added. She explained that these model scenarios and questions would be presented at the June 30th and July 1st public meetings.

Other Announcements: The Little Spokane and Middle Spokane Watershed Planning public meetings scheduled for June 30th (in Spokane Valley) and July 1st (in Riverside) were discussed. Planning Unit members were requested to attend the meetings to help explain the project and answer questions.

Ken Kuhn announced that he will no longer be a Planning Unit member representing Pend Oreille County since he is leaving the County to take a new position with the City of Walla Walla.

Wrap Up: There will be no Planning Unit meeting in July or August. The next meeting will be on September 17, 2003 at 10:00 am at the Spokane County Conservation District.