SUMMARY

Spokane River TMDL Collaboration

Reuse & Conservation Workgroup
August 5, 2005

Member Attendance:

Here	Name	Sponsor	e-mail	Phone
x	Anderson, Gerry	Ecology	gand461@ecy.wa.gov	(509) 329-3400
	Blau, Pat	Petitioners	Pat.Blau@kaisertwd.com	(509) 927-6350
x	Brewer, Lloyd*	Petitioners	lbrewer@spokanecity.org	(509) 625-6968
x	Cupps, Kathy*	Ecology	kcup461@ecy.wa.gov	(360) 407-6452
p	Fox, Tom	Ecology		(206) 296-5279
	Hyatt, John	Petitioners	pwdir@city-of-airway-heights.org	(509) 244-5429
	Kimball, Jim	Petitioners	JKimball@JUB.com	(208) 762-8787
x	Koch, Richard	Ecology	rkoc461@ecy.wa.gov	(509) 329-3400
	Krapas, Doug	Petitioners	Doug_Krapas@iepco.com	(509) 924-1911
	Mellish, Lee	Petitioners	Sewerdoc@aol.com	(509) 922-9016
x	Rawls, Bruce	Petitioners	Brawls@spokanecounty.org	(509) 477-3604
x	Riley, Craig	Ecology	craig.riley@doh.wa.gov	
	Smith, Doug	Petitioners	dsmith@libertylakewa.gov	
x	Lilly, Jeff	Petitioners		(509)-625-7960
	Werner, Terry	Petitioners	Twerner@postfallsidaho.org	(208) 777-9857

Attach Audience Attendance Roster

Kevin Cooke, Bill Rickard, Dave Peeler, Rick Eichstaedt, Bill Ross (p), Mike Sharar(p)

Meeting Summary:

Discussed discharger preliminary estimates of percent reduction to be achieved by indoor water use conservation

City of Spokane: No estimate available at this time - City wastewater has not identified this as an action item currently, but will be reviewed with facility plan update. City water is focusing most of its effort at outdoor water conservation as this is expected to yield the greatest savings of water for the conservation dollar. In December of 2004, the City instituted an inclined rate structure such that the greatest water users pay more per unit of water than the least. This is expected to help in reducing in-home water use but it will take awhile before the effect can be determined. The Spokane water department has about 500 remotely read meters on the West Plains and is considering the potential of giving people more immediate information on their water use.

Spokane County: Has reviewed the experience of the Lott Plant in Thurston County and expects that a savings of 5-20% is possible with similar incentive programs. It was estimated that such a program could be in-place in 5-7 years. Bruce Rawls shared his experience trying to conserve in-home water. He indicated that savings beyond 20% would require considerable modification of people's behavior and as a consequence would be difficult to achieve. Going from an 80 gal/capita use to 60 or 65 gal/capita use is probably feasible given high incentives.

Inland Empire Paper: (as provided to the participants by e-mail from Doug Krapas) IEP is currently experimenting with water reclamation efforts within the mill. We have converted our 75' diameter x 14' side water depth primary clarifier to reclaim water from the Deinking process. Solids are removed from process water off of the Deinking process and the clarified water is returned to the Deink process at various shower locations.

A second project includes reclaiming clarified water from the 100' diameter x 12' side water depth primary clarifier. The clarified water is processed through a strainer to remove fine particulate matter and is reused at various shower locations in both the refining and Deink processes.

We have also upgraded and increased the capacity of specific pumps within the mill to reclaim additional process water that was going to the mill's effluent system.

The combination of the above projects has reduced IEP's treated effluent flow from approximately 4.5 MGD to 3.5 MGD for an approximate 22% reduction. Also note that our total effluent stream includes appx. 0.75 to 1.0 MGD of non-contact cooling water, so our total effluent will be reduced from approximately 5.4 to 4.4 MGD. You can use this totalized data for both the Reuse & Conservation and the Flows & Loadings groups.

As stated, these projects are currently in the experimental stage to observe the affects on all processes. Some of the adverse affects could be continual solids concentration build-up within the reclamation loops, contamination of the end product, increased chemical and bleaching costs, slime build-up, shower nozzle plugging problems, temperature increase, increased effluent concentrations, and higher capital and operating costs. Advantages include lower effluent discharge, reduced flow requiring tertiary treatment (future), reduced hydraulic and BOD loading to the WWTS, and improved WWTS performance.

The schedule for final implementation of the above projects is approximately one year, to both fully study the overall affects and to implement any further modifications to overcome any operational issues.

Discussed optional conservation workshop

It was pointed out that the Steering Committee was supportive of the idea of a conservation workshop if it would result in informing the full group on measures that would result in measurable reductions of phosphorus into the Spokane River. After considerable discussion most (but not all) participants agreed that given the very low level of phosphorus being considered for discharge from the treatment plants, savings in loading made as a consequence of indoor water conservation would not be measurable. Planning for a conservation workshop at this time was put on hold. All agreed that a conservation workshop would be a good thing to do in the near future.

Notes on Status of Revised Fundamental Questions:

1. Define concentric rings from each existing and proposed treatment plant to establish a range of distances for re-use of treated municipal wastewater? Answer the question, "What is the total quantity of re-use opportunities within those concentric rings for re-use in agricultural, commercial, industrial, landscaping, aquifer recharge and golf-course applications using the period April 1 to October 31 as a first tier consideration. Identify other opportunities that are not seasonal.

   Spokane County, City of Spokane, and Liberty Lake Sewer & Water District have draft lists of potential reuse opportunities. Further refinement is needed in consistent identification of the water use potential.

2. Estimate the flow reduction that can be attributed to re-use of municipal wastewater assuming reasonable opportunities are captured over the next 20 year period.
Waiting on #1.

3. Identify the range of potential opportunities that exist in the Spokane River basin. Focus on the following elements (a) identify the largest and most immediate re-use opportunities in the area, (b) identify the longer term and perhaps more comprehensive opportunities, (c) as time allows, identify the experiences of other communities to determine the possible long term range of opportunities, degree of difficulty in implementation and other dimensions, (d) identify where more thorough study would be useful to help guide actions over the long haul.
Dischargers are beginning to compile this using the information from #1.

4. What is a reasonable expectation for reduction in municipal wastewater influent flows from water conservation measures in the Spokane region?
The issue was discussed as summarized above, but needs finalization by the group.

(KCC add on note – subsequent to meeting – *It occurred to me that it* might be easier to establish a flow of 60-65 gpcd as the conservation target and see what impact that has on the flows to the treatment plant. We should recommend that the technology for treatment be appropriate for flows and loadings estimated)

5. Focus on identifying opportunities for aquifer recharge – see question #1. Provide 'key questions' back to the Steering Workgroup about aquifer recharge in the Spokane area.
A list of key questions has been produced. Identification of specific opportunities still needs to take place.

Topics for Next Meeting:

- Status of Question #1 answers
- Resolve meaning of 'reasonable opportunities' in Question #2
- Review status of Question #3 answers
- Discuss Question #4 final answer
- Identify aquifer recharge opportunities

Next Meeting Time and Place:

19 August (Friday) 9:00am
Spokane City Water Dept. conference room
914 E. North Foothills Drive