

Draft

**MINUTES OF THE MEETING
JOINT WASTEWATER FACILITIES COMMITTEE**

June 26, 2009

10:05 a.m. – 12:30 p.m.

53823 Sherritt Lane, Soda Springs, California.

1. **Call to Order:** The meeting was called to order by Committee Chairman Wade Freedle at 10:05am.

Members of the Committee in attendance at the Donner Summit Public Utility District (DSPUD) Board Room were:

Wade Freedle – Committee Chairman and Pres. SLCWD Board of Directors
Ulrich Luscher – SLCWD Board of Directors
Bob Sherwood – DSPUD Board of Directors
Blake Tresan – Resident Serene Lakes; Subcommittee Infrastructure

Staff and Consultants present:

Tom Skjelstad – General Manager DSPUD
Jim King – Plant Manager DSPUD
Bill Quesnel – Operations Manager Sierra Lakes County Water District (SLCWD)
Robert Emerick – ECO:LOGIC Engineering
Jeff Hauser - ECO:LOGIC Engineering

Guest present and identified were:

Bernard Pech, resident of Serene Lakes
Peter Van Zant, 408 Broad St., Nevada City and previously on the South Yuba River Citizens League (SYRCL) Board
Susan Snider, 11731 Stillwater Creek Rd., Yuba Head Waters Campaign Director SYRCL
Cheryl LeBel, resident of Serene Lakes
Chris Parker, Sugar Bowl
Mike Livak, Royal Gorge

Recording Secretary: Anna Nickerson

2. **Appointment of Committee Co-Chair - Committee:** No appointments made.
3. **Memo to DSPUD Board of Directors from Tom Skjelstad, DSPUD General Manager:** Mr. Skjelstad asked for any questions or comments. There were none.

4. ECO:LOGIC – J. Hauser, Presentation of White Paper; Preliminary Investigation Wastewater Management Options:

Opening comments were made by Mr. Bernard Pech. In his opinion the facility set forth in Mr. Geselbracht's memo has merit; the ideas were grounded on processes. He further commented that, in his opinion, the option of working with a combination of Waterworks and Brentwood makes more sense than starting from scratch. Mr. Pech also stated, "getting Brentwood in the picture working with Waterworks would be a good combination".

Mr. Wade Freedle explained that Eco:Logic's White Paper was a general overview of the facilities options within the industry for conditions typical of Donner Summit. A review of the White Paper would result in the "Facilities Plan", which will be a more detailed evaluation of the options identified in the White Paper. Mr. Freedle went on to say that Mr. Geselbracht's memo was a forward look to the "Facilities Plan" suggesting what might work for the plant. Mr. Freedle continued that DSPUD had been looking at facilities options and adding facilities since the late 90's, specifically 2002, when their wastewater discharge permit was reissued with tighter specifications. In 2009, DSPUD's permit had been reissued again with even tighter specifications and a five year deadline to meet the requirements. To date DSPUD has not met the requirements of either permit.

Mr. Ulrich Luscher asked Mr. Jeff Hauser to explain where Eco:Logic considered Waterworks' concept in their White Paper. First Mr. Hauser explained, in detail, DSPUD's current system. He went on to say that Waterworks' plan was to keep the current system and add an external pump system to recirculate plant effluent to reduce the plant's effluent nitrate concentration. Eco:Logic's response was to increase the "mixed liquor" internal recirculation rate to lower the nitrate concentration. In summary, Eco:Logic's response was a modification of Waterworks' idea of external recirculation to a less expensive internal recirculation with a similar result. Page 29, Item #1, of Eco:Logic's White Paper, was noted as Eco:Logic's internal recirculation approach. Discussion continued as to the differences and detailed requirements of both the external and internal approaches. Finally, Mr. Hauser summarized the processes that would need to be described, investigated and priced in the "Facilities Plan" study.

Mr. Tom Skjelstad and Mr. Jim King explained how they are working on modifying the current plant to add an additional anoxic zone to study the results of additional recirculation.

Mr. Peter Vanzant asked "what happens next?" Mr. Robert Emeric of Eco:Logic responded. He explained that due to the possibility of an algae bloom in the river, the District needs to first get nitrate levels down below 10 mg/L, as required by their permit, but that nitrate levels may need to be significantly below 10 mg/L to avoid any "contribution" to an algae bloom. Any "contribution" could

result in a fine. The goal was to discuss the options in the White Paper and direct Eco:Logic what options they are authorized to investigate further.

Ms. Susan Sneider commented on the need for State requirements to protect against algae blooms. She stated that “if there is too much algae in the river then there is not enough oxygen in the water for aquatic life to survive.” Her concern, like Mr. Pech’s, was that the outcomes for the option scenarios in the White Paper are unknown. She also questioned the lack of financial information in the White Paper. Mr. Freedle explained that cost will be addressed in the Facilities Plan.

Mr. Emeric discussed how, in response to a possible algae bloom, DSPUD had monitored the algae levels in the Yuba River this year starting some weeks ago. Algae had been noted three weeks ago nine miles downstream from the District, and two weeks ago upstream near Lake Van Norden; DSPUD began storing effluent about two days ago and “got completely out of the river” (i.e. stopped discharging treated effluent into the river). The algae studies provide additional information that will help with the District’s decision on which facilities option to select.

Mr. Skjelstad said what was needed from Eco:Logic was an assurance that the plant effluent would meet permit requirements and protect against bio stimulation. Further, he stated that if the District was in the river during an algae bloom the District would be considered a “contributor” and therefore subject to a fine.

Mr. Freedle summarized that the wastewater discharge alternatives will be part of the study for the Facilities Plan, and that DSPUD had been testing some of the options to meet current requirements.

5. **Discussion of White Paper – Committee; Accept White Paper; Identify options for further study by ECO:LOGIC; Next Steps**

Additional discussion followed regarding algae in the river. Mr. Hauser stressed “that algae can and will grow in the South Yuba River regardless of whether or not DSPUD discharges effluent to the river,” but that if algae is growing in the river, DSPUD cannot contribute to the growth by supplying nutrients through the discharge of effluent. Mr. Luscher responded that he was not convinced that the threat of an algae bloom and DSPUD’s possible contribution to that bloom was sufficient reason to require DSPUD to “get out of the river” during June. Mr. Hauser countered stating that the bio stimulation study, that had been started, will determine the necessity for and the length of time that DSPUD would need to be out of the river during June. The question remained, “can DSPUD remain in the river while algae growth is possible?” Mr. Hauser stated that a full-blown bio stimulation study to support DSPUD’s being in the river during a bloom could be very costly to the District.

Table 4 of the White Paper, “Overall Wastewater Management Options,” was next reviewed and the following options were selected for further study:

- A. Wet Season Discharge to SYR, Seasonal Storage, Dry Season Irrigation – **Upgrade Existing IFAS 2–Stage** (Brentwood Accuweb System) (high recirculation) (similar to Waterworks’ suggestion)
- B. Wet Season Discharge to SYR, Seasonal Storage, Dry Season Irrigation – **Upgrade Existing IFAS 4–Stage** (Brentwood Accuweb System) (high recirculation) (additional tank for recirculation)
- C. Wet Season Discharge to SYR, Seasonal Storage, Dry Season Irrigation – **NEW IFAS 4-Stage** (new alternative)
- D. Wet Season Discharge to SYR, Seasonal Storage, Dry Season Irrigation – **Submerged Attached Growth** (similar to Tahoe Truckee Sanitation Agency, designed to meet more stringent discharge limits similar to DSPUD’s new requirements)
- E. Wet Season Discharge to SYR, Seasonal Storage, Dry Season Irrigation – **MBR (Membrane Bio-Reactor) 4-Stage** (top of the line system)

Additional considerations to be included in Eco:Logic’s Facilities Plan are:

- Infiltration and Inflow
- Equalization Storage
- Covering Basins to Conserve Heat
- Disinfection Alternative
- Solids Handling
- Planning for Future Growth
- Schedule for Future Work

Discussion was had regarding the issue of “Seasonal Storage”. Mr. Luscher and Mr. Pech voiced concerns about greatly increasing the amount of seasonal storage. It was agreed that Eco:Logic would conduct the facilities studies based on current limited storage capacities, with a separate analysis showing a range of storage options.

The ongoing need to reduce inflow and infiltration (I/I) in both Districts was also discussed. Considering the uncertainty of achieving significant I/I reduction, Eco:Logic stated that they would base their studies on roughly present I/I quantities.

6. **Correspondence:**

Mr. Freedle reported that he had received a suggestion to raise the dam at Lake Van Norden to be used to dilute the effluent being discharged into the river to avoid a possible algae bloom. He felt it was an avenue that should be investigated by sending a letter to the owners, Royal Gorge and Sugar Bowl. Several environmental objections were made. Mr. Hauser commented that he felt that this was not a practical solution and had a low likelihood of success. Ms. Snider stated that SYRCL did not view the damming of Lake Van Norden to store water as

“Meadow Restoration”. Tom Skjelstad related a phone conversation he had with Gary Reedy, SYRCL Science Director. Mr. Reedy wondered if Van Norden could be utilized to discharge or store DSPUD’s treated effluent during the months when algal blooms were likely to occur. According to Tom Skjelstad, Mr. Reedy felt if done properly this scenario could provide meadow mitigation and wetland restoration.

It had been suggested to Mr. Freedle that other areas similar to DSPUD/SLCWD, such as Bear Valley, be looked at for comparison. Mr. Emeric noted that the main difference between DSPUD/SLCWD and Bear Valley was that Bear Valley had 106 million gallons of water storage, which they used to maintain a 20-1 effluent dilution rate.

7. **Next Meeting:** It was agreed that Eco:Logic would prepare a proposal (including scope, schedule and cost) to implement the Facilities Plan. The Committee would then meet again to act on the proposal.
8. **Public Participation** None
9. **Adjournment:** Mr. Freedle adjourned the meeting at 12:30 p.m.