

**MEMORANDUM  
DEPARTMENT OF FACILITY SERVICES  
COUNTY OF PLACER**

To: **BOARD OF SUPERVISORS**

Date: **JANUARY 13, 2009**

From: ~~SD~~ **JAMES DURFEE / WILL DICKINSON**

Subject: **SEWER MAINTENANCE DISTRICT 1 COMPLIANCE APPROACH FOR  
SEWAGE TREATMENT - SECOND BOARD WORKSHOP**

**ACTION REQUESTED / RECOMMENDATION:** No action requested. This is an informational workshop only.

**BACKGROUND:** On June 24, 2008, your Board held a workshop to discuss two alternatives for achieving regulatory compliance at Sewage Treatment Plant 1, located on Joeger Road in North Auburn. Our staff report from that meeting is attached as Exhibit A. Staff has requested an additional workshop to achieve the following goals:

- Review the information again with the current Board.
- Inform your Board regarding changes that have affected project assumptions and costs.
- Summarize our efforts to inform the customers of Sewer Maintenance District 1 (SMD 1) regarding the compliance alternatives identified.
- Present the results of a survey taken by over 300 SMD 1 customers.
- Identify any additional information your Board needs to assist in making a decision regarding which alternative to pursue.

**Changes**

Numbers have been placed by text on the June 24<sup>th</sup> memo to reflect new information. Those numbers correspond to the explanations below:

1. Due to changes in bonding cost assumptions, the Upgrade alternative cost estimate has increased from \$87.0 million to \$88.5 million, a \$1.5 million increase.
2. The City of Lincoln is now planning a much smaller capacity increase for their use, and City of Auburn participation appears unlikely. The revised Lincoln treatment plant expansion of 2.4 million gallons per day would, therefore, be primarily for the use of SMD 1 customers. According to the terms of our latest Deal Points draft, when the expansion is complete SMD 1 customers would have pre-paid to connect 9,715 EDUs (2.05 million gallons per day of the 6.4 mgd total plant capacity). This is estimated to provide SMD 1 customers with service through the year 2020. The City of Lincoln would be responsible for financing and constructing future expansions. New SMD 1 customers would purchase capacity through payment of connection fees.

3. Lincoln revised the cost estimate for the SMD 1 portion of the treatment plant expansion from \$35,400,000 to \$40,000,000, which changed the capital cost per gallon of treatment capacity from \$16.09 to \$19.51.
4. Lincoln revised the oversizing charges they wish to recover from SMD 1 customers from \$5,790,000 to \$7,951,000, an increase of \$2,161,000.
5. The overall capital cost for the SMD 1 Regional Project is now assumed to be \$133 million if Auburn participates, as opposed to \$123 million. As noted previously, an additional \$8 million is needed if Auburn does not participate.
6. The fee projections provided in Exhibit B are no longer correct due to changes in capital and operating cost estimates. A revised Exhibit B is attached to this memo. The projected fee for both projects is now higher, with the Regional Project fee substantially higher. Fees associated with the Regional Project could be reduced if more Federal grant funds became available. The current assumption for our fee projection is that we will receive all of the \$21 million authorized by Congress, of which \$13 million would go to SMD 1, \$3 million to the Army Corps of Engineers, and \$5 million to SMD 3. Only \$3 million of the \$21 million has been appropriated thus far. To bring the SMD 1 Regional project into parity with the SMD 1 Upgrade project, we would need another \$18 million appropriated under the original authorization (to insure the \$5 mil in funding for SMD 3) and an additional \$40 million authorized and appropriated for SMD 1.

### **Public Outreach**

Staff developed a public outreach plan for SMD 1 customers with the following goals:

- a. Provide impartial information about the compliance decision to the community.
- b. Solicit public feedback and comments on a preferred compliance option.

Outreach methods included a press release, a postcard mailed to all SMD 1 customers, a dedicated page on the County website, and print and radio advertisements. Coverage was received in the Auburn Journal, Auburn Sentinel, and the Sacramento Bee. Supervisor Holmes also authored a guest column in the Auburn Journal. On the evening of November 17<sup>th</sup> we conducted a two-hour community meeting to discuss this topic. This meeting drew 90 very active participants.

Staff has also presented these alternatives to the North Auburn MAC and the Sewer Infrastructure Financing Committee. Their recommendations are pending at this time.

### **Survey Results**

Staff received a total of 429 responses from the public from the following sources:

- Comment Cards: 20
- Online Survey: 105 (as of 12/01/2008)
- Phone Survey: 302
- Email: 2

The phone survey results, which were considered statistically significant, indicate that 75% of SMD 1 customers prefer to upgrade Plant 1. They cited lower initial fees and local control as their primary reasons for choosing the upgrade option. Of the 25% of SMD 1 customers who preferred the regionalization option, most listed the efficiencies gained by regionalizing services and the potential for lower fees in 10 to 20 years. The online survey yielded similar results. Many of the people surveyed took the extra time to submit detailed written comments, indicating a high degree of interest in the issue. A copy of the survey is attached as Exhibit C.

### **Future Action**

Staff would like to return to your Board in the very near future with an action item directing us to pursue design and environmental review of either the Upgrade or Regional projects. We would be happy to provide any additional information you may need to assist in making that decision.

Attachments: Exhibit A – June 24, 2008 BOS Memo on SMD 1 Compliance Approach (with attachments)  
Exhibit B – Revised Fee Projections  
Exhibit C – Phone Survey

JD/WD/KMZ

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**MEMORANDUM  
DEPARTMENT OF FACILITY SERVICES  
COUNTY OF PLACER**

To: **BOARD OF SUPERVISORS** Date: **JUNE 24, 2008**

From: **JAMES DURFEE / WILL DICKINSON**

Subject: **SEWER MAINTENANCE DISTRICT 1 – COMPLIANCE APPROACH  
FOR SEWAGE TREATMENT**

**ACTION REQUESTED / RECOMMENDATION:** No action requested. This is an informational workshop only.

**BACKGROUND:** SMD 1 provides sewer service to approximately 7,800 Equivalent Dwelling Units in the Auburn-Bowman area. Plant 1, constructed in 1961, uses biological and filtration processes that cannot meet current regulatory standards as defined in a permit for Plant 1 approved by the Central Valley Regional Water Quality Control Board (CVRWQCB) in June 2005. Through the terms of this permit and an accompanying Cease and Desist Order, the County must meet specific deadlines for coming into compliance with each new standard. Failure to achieve compliance with the new discharge standards will result in additional enforcement action from the CVRWQCB, including the assessment of penalties that could total several hundreds of thousands of dollars per year.

Two alternatives exist for bringing Plant 1 into compliance with its permit requirements:

1. Upgrade Plant 1 by constructing modern treatment processes on the existing site.
2. Regionalize the system by converting Plant 1 into a pump station and storage area (to provide flow equalization). Wastewater collected there would be conveyed via pipeline to a treatment plant owned by the City of Lincoln.

In October 2007 the County hired OEMC to develop a conceptual plan and cost estimate to upgrade Plant 1. OEMC concluded that building a new treatment system on the existing site is a feasible option for meeting treatment standards in the current permit. It would also provide a good treatment platform for meeting future anticipated regulations. OEMC estimated that this project would cost approximately \$64 million to construct. **With engineering costs, bond sale costs and construction contingencies, staff estimates the total cost would not exceed \$87 million.** (1)

County staff has been working with other local agencies for several years to develop regional solutions for meeting new regulatory requirements applicable to sewage treatment plants. We now have a conceptual plan and cost estimate for a Regional

Project that could take flows from SMD 1 to the City of Lincoln treatment plant. SMD 1 wastes would be pumped through a new pipeline to the vicinity of Sierra College Boulevard and Highway 193, and thence to the Lincoln treatment plant through existing interceptors owned by Placer County and the City of Lincoln (see Exhibit A for a schematic representation). The City of Auburn, should they choose to close their treatment plant and join in the project, would share a 4.1 mile section of the pipeline with SMD 1 customers. Auburn and SMD 1 would need to independently construct longer sections of pipeline for their exclusive use.<sup>1</sup> **The City of Lincoln would expand their treatment plant to handle current flows for SMD 1, Auburn and Lincoln, with approximately 2.5 million gallons per day of excess capacity available on a first-come-first-served basis for future development.**

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The expected cost to SMD 1 customers to construct the improvements needed to handle build-out flows (pipelines, pump station, headworks, equalization facilities, decommissioning) under the Regional Project totals \$50,790,000. **Capacity at the Lincoln treatment plant for current SMD 1 customers would cost \$35,400,000. SMD 1 would also pay the City of Lincoln \$5,790,000 for previous oversizing of pipelines and treatment plant components.**<sup>2</sup> **With engineering costs, bond sale costs and construction contingencies, staff estimates the total cost would not exceed \$123 million.**

3

4

5

Grant funds are available for the Regional Project that are not available for the Upgrade option. It is anticipated that SMD1 and the City of Auburn together could utilize between \$3 million and \$11 million in grant funds on the Regional Project (depending on the level of future Federal appropriations).

Exhibit B shows a projection of monthly Maintenance and Operations fees under the two alternatives through Fiscal Year 2016. The Regional alternative is shown with and without City of Auburn participation, and with different assumptions regarding future appropriations of grant funds. As reflected in the projections, upgrading our existing plant will likely prove less expensive through the first 15 years of operation. Beyond that time frame, there is a very good chance that future regulations will make additional costly upgrades necessary at all treatment plants. This would likely have a bigger financial impact to small plants such as ours as compared to the Lincoln plant. It is probable, therefore, that the regional option would prove more cost-effective in the long term.

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The Regional Project would require a high degree of cooperation between the agencies, and possibly the formation of a new agency to manage shared facilities. County, Lincoln and Auburn staff had negotiated deal points to form the basis of

<sup>1</sup> If the City of Auburn does not participate, SMD 1 would have to pick up an additional \$8 million of construction costs for the 4.1 mile section.

<sup>2</sup> Under this scenario, anyone connecting to SMD 1 in the future would pay a connection fee to the City of Lincoln for capacity in the treatment plant (in addition to a local connection fee for pipeline capacity).

future agreements, but there is uncertainty now regarding the deal points because of recent changes proposed by City of Lincoln staff in order to make participation by the City of Auburn more economical.

The City of Auburn has indicated that they will probably not choose to participate in a regional project, but the City Council has deferred final action until late June to allow the City of Lincoln more time to develop an alternative proposal.

Exhibit C provides a comparison of the two projects, listing several factors that are important in making this decision.

**ENVIRONMENTAL CLEARANCE:** A discussion of environmental review and permitting requirements for the Regional Project are included in Exhibit D. The treatment upgrade option will be less complicated to analyze and will require fewer permits.

**FISCAL IMPACT:** The sewer fee projections provided in Exhibit B are for comparative purposes only. The capital cost estimates driving these projections are based on conceptual plans, not engineered designs, and will likely change as we develop better information. We also do not have a firm understanding of operating costs and grant funding sources available under the two options. It is clear, however, that complying with State and Federal regulations will significantly increase costs and the fees we must charge our customers.

We continue to meet with the Sewer Infrastructure Financing Committee to discuss potential funding sources and options for reducing fee increases.

ATTACHMENT: EXHIBITS A-D



**SEWER MAINTENANCE DISTRICT 1**  
 Sewer M&O Monthly Fee Projections Under Different Scenarios

Alternative	2006-07 historical	2007-08 current	2008-09 current	2009-10 projection	2010-11 projection	2011-12 projection	2012-13 projection	2013-14 projection	2014-15 projection	2015-16 projection
Upgrade	59.51	67.84	67.84	88.19	113.00	116.96	121.05	125.29	129.67	134.21
Regional (with Auburn, max grant funding)*	59.51	67.84	67.84	88.19	123.00	127.31	131.76	136.37	141.15	146.09
Regional (w/o Auburn), max grant funding)*	59.51	67.84	67.84	88.19	128.00	132.31	136.76	141.37	146.15	151.09
Regional (with Auburn, min grant funding)	59.51	67.84	67.84	88.19	126.78	131.09	135.54	140.15	144.93	149.87
Regional (w/o Auburn, min grant funding)	59.51	67.84	67.84	88.19	131.78	136.09	140.54	145.15	149.93	154.87

\*Note: these scenarios assume full future appropriation of authorized Federal grant funds.

Issue	Upgrade Plant	Regional Project with Lincoln
<b>Compliance with regulatory requirements</b>	Will be designed to comply with current permit requirements. Should be adaptable to reasonably foreseeable future requirements with some additional cost. Site size is a limiting factor.	Complies with current permit. Has a large site to accommodate new treatment processes. Should be in good position to meet future regulatory requirements.
<b>Local control over operational decisions and fees</b>	County maintains control over operations and fees.	County would have very little control over treatment plant operations or future plant improvements. County would still operate pumps, equalization ponds and pipeline. Fees would be set by Board of Supervisors, but much of the cost would be determined by the City of Lincoln.
<b>Liability</b>	County remains liable for treatment plant operations, including potential accidental discharges to Rock Creek.	County has complete liability over pump stations, equalization ponds and pipeline, and shares liability for treatment operations.
<b>Capacity to accommodate growth</b>	Sized for average dry weather flow of 3.0 million gallons per day, which equates to 70% of General Plan buildout. Future expansion to 4.0 mgd possible but not included in cost estimate.	All components except treatment are sized for average dry weather flow of 4.6 million gallons per day. Lincoln treatment plant will provide 2.2 mgd for SMD 1 and have 2.5 mgd of excess capacity available on a first-come-first-served basis for all users. Lincoln plant is easily expandable beyond that point, for additional cost.
<b>Cost</b>	Lower initially. Uncertain in long term, but likely more expensive within 15 years.	Higher initially. May be more cost-effective in long term due to economies of scale and adaptability.
<b>Schedule</b>	New plant likely to be functional by 2011.	Connection to Lincoln likely by 2014. A delay of this length would require interim improvements (not included in cost calculations), payment of fines or special approval by RWQCB.
<b>Risk</b>	Lower risk of construction cost delays and overruns. Lower risk of failing to obtain environmental approvals, or failing to reach agreement with regional partners.	Lower risk of failing to meet future permit requirements.
<b>Availability of grant funds</b>	Unknown whether grant funds will be available for this option.	\$3 million in grant funds currently available, with another \$8 million possible.
<b>Environmental impacts (analysis has not yet begun)</b>	Should be limited to short-term construction impacts.	Possible off-site impacts due to pipeline construction and reduction of creek flow. Environmental benefits include productive use of reclaimed water.
<b>Staffing needs</b>	Same or slightly more than at present.	Reduction of 2-4 full time equivalent positions expected

# Environmental Constraints and Permitting Strategy

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## Decisions that Require CEQA and NEPA Review

There are multiple decisions necessary to implement the proposed Placer County Regional Wastewater Project. They extend from local government project approvals to state and federal agency permitting and funding actions. The decisions that the EIR/EIS may need to support include:

### Local Government

- Placer County approval of decommissioning SMD-1 and funding of the regional wastewater interceptor; issuance of road encroachment and blasting permits;
- City of Auburn approval of decommissioning its treatment plant and funding of the regional wastewater interceptor;
- City of Lincoln approval of its WWTRF expansion facility plan and acceptance of wastewater flows from Placer County and City of Auburn;

### State Government

- RWQCB approval of new WDRs for City of Lincoln WWTRF under CWA Section 402; approval of CWA Section 401 water quality certification for construction of regional interceptor;
- DFG approval of streambed alteration agreement for construction of regional interceptor; issuance of California ESA 2080.1 concurrence for effects on protected species;
- Caltrans approval of state highway encroachment permit;

### Federal Government

- EPA approval of funding for project design and construction; approval of use of SWRCB SRP funding for design and construction;
- U.S. Army Corps of Engineers approval of funding for project design and construction; approval of CWA Section 404 permit for project construction;
- NOAA Fisheries potential issuance of BO under federal ESA for construction and operation impacts to species protected under the federal ESA (steelhead);
- U.S. Fish and Wildlife Service potential issuance of BO for construction and operation impacts to species protected under the federal ESA (California red-legged frog, Valley elderberry longhorn beetle);



## Status of CEQA and NEPA Compliance

The CEQA/NEPA compliance effort is in the very early stages. Until a project and alternatives are identified and described in some detail, there will be no official outreach to the public and resource/regulatory agencies and there will be no start to impact analysis. During these early stages of project development, Jones & Stokes (the environmental consultant hired by the PNWA) has compiled documents and made informal inquiries regarding the likely major concerns that must be addressed in the EIR/EIS. The lead agency for the CEQA effort is Placer County. While not confirmed officially, it is likely that the U.S. Army Corps of Engineers will be the lead agency for the NEPA analysis. It is expected that the U.S. EPA will be a cooperating agency under NEPA.

## Major Environmental Issues with Potential Mitigation Requirements

As indicated above, the impact analysis for the regional wastewater project will not begin in earnest until the PNWA identifies a project and alternatives to be considered in the EIR/EIS. However, there are several issues that have already surfaced that may require thorough evaluation, and potentially require significant mitigation actions.

The major environmental issue for the regional project will likely be project effects on protected anadromous fish (steelhead) in Auburn Ravine and Coon Creek. The regional interceptor project would remove wastewater flows from these streams in the upper parts of their watersheds; this could be detrimental to designated critical habitat for steelhead. Mitigation may include habitat enhancement in other stretches of these creeks and/or replacement of wastewater flows with other surface water sources. The project would also increase wastewater discharges from the Lincoln WWRTF in the lower section of Auburn Ravine (also critical steelhead habitat). Meetings are being scheduled with NOAA Fisheries and the local water purveyors (Nevada Irrigation District and Placer County Water Agency) to better define the significance of these potential impacts and better understand the likelihood that surface water would be available, if needed, to augment stream flows. No other long-term, significant environmental issues have been identified to date. Construction of the long pipelines envisioned with this project would create short-term issues such as traffic disruption, noise and vibration associated with blasting, and tree removal or trimming. Small areas of wetland adjacent to construction zones may also be temporarily affected.

## Probable Permitting and Review Requirements

The regional wastewater project will be subject to numerous federal, state and local permitting requirements. Those permits mirror the likely uses of the CEQA/NEPA document listed above. They are likely to include:

### Local

- Placer County blasting permit
- Placer County road encroachment permit

### State

- California RWQCB Clean Water Act, Section 402 NPDES permit modification
- California RWQCB Clean Water Act, Section 401 water quality certification
- California RWQCB Porter Cologne Act, waste discharge requirements
- California Department of Fish and Game, Fish and Game Code Section 1602 streambed alteration agreement
- California Department of Fish and Game, Fish and Game Code Section 2080.1 endangered species consistency determination
- Caltrans state highway encroachment permit
- California State Historic Preservation Office, National Historic Preservation Act Section 106 compliance

### Federal

- U.S. EPA concurrence on Clean Water Act compliance
- U.S. Army Corps of Engineers Clean Water Act Section 404 permit
- U.S. Army Corps of Engineers Rivers and Harbors Act Section 10 permit
- U.S. Fish and Wildlife Service Endangered Species Act consultation
- U.S. NOAA Fisheries Endangered Species Act consultation

These permitting and review requirements need to be considered during and integrated into the CEQA/NEPA processes.



**EXHIBIT B**

REVISED 12-19-08

**SMD 1 MAINTENANCE AND OPERATION FEE - \$/MONTH**

<b>Alternative</b>	<b>2008-09 current</b>	<b>2009-10 projection</b>	<b>2010-11 projection</b>	<b>2023-24 projection</b>
<b>Upgrade</b>	\$ 67.84	\$ 90.00	\$ 118.00	\$ 158.98
<b>Regional (with Auburn, max grant funding)*</b>	\$ 67.84	\$ 90.00	\$ 142.00	\$ 182.98
<b>Regional (w/o Auburn), max grant funding)*</b>	\$ 67.84	\$ 90.00	\$ 150.00	\$ 190.98
<b>Regional (with Auburn, min grant funding)</b>	\$ 67.84	\$ 90.00	\$ 148.30	\$ 189.28
<b>Regional (w/o Auburn, min grant funding)</b>	\$ 67.84	\$ 90.00	\$ 163.30	\$ 204.28

\*Note: these scenarios assume full future appropriation of authorized Federal grant funds.

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## Placer County Phone Survey Questions

Hello, this is [Jim Holmes, chairman of the Placer County Board of Supervisors]. We would appreciate your participation in a phone survey to help us as we consider two project options that could affect your sewer fees. Your participation will help me and the other Supervisors make an informed decision. Please stay on the line to take the whole survey, because incomplete phone surveys will not be counted, thank you.

**[Begin automated voice]**

State and federal regulators have imposed new and more stringent requirements for waste water treatment plants; therefore the County must make significant system improvements.

Two options are under consideration. Each option has advantages and disadvantages

Option one is to reconstruct the existing waste water treatment plant in North Auburn to meet State requirements. This option is estimated to have lower upfront costs, but may result in higher fee increases in 10 to 20 years. Initial monthly sewer fees with this option are estimated at \$118.00.

Option two is to build a regional pipeline and pump station to transport North Auburn's waste water to the City of Lincoln's waste water treatment plant. This option is estimated to cost more initially, but would likely make compliance with future regulations less expensive. Initial monthly sewer fees with this option are estimated at \$150.00.

Failure to implement one of these options could result in State fines greater than the cost of either option.

Now we're ready to ask you questions about those two options. If you're ready to go ahead, press 1; if you want to hear a summary of those two options again, press 2. (if 2, repeat from the beginning. If 1, continue to Q2.)

1. Great. First, before today, have you read about the sewer decision in the newspaper or on the Placer County web site:  
[www.placer.ca.gov/SewerDecision?](http://www.placer.ca.gov/SewerDecision?)

Yes, press 1

No, press 2

2. Did you attend the public workshop on November 17<sup>th</sup> on this topic?

Yes, **press 1**  
No, **press 2**

**3.** Which is more important to you: 1) keeping sewer fees low initially even though they may become significantly more costly in 10-20 years, or 2) paying higher sewer fees now with the expectation that they will not increase as fast in the future?

keeping sewer fees low initially, **press 1**  
paying lower sewer fees in the future, **press 2**  
not sure, **press 3**

**4.** Under the Regional Pipeline Option, the City of Lincoln would control all financial and operational decisions regarding the regional treatment plant. Do you consider this change a benefit, a cause for concern, or not important?

Benefit, **press 1**  
Cause for concern, **press 2**  
Not important, **press 3**  
not sure, **press 3**

**5.** Assuming that one of these two options must be selected, would you prefer Option One – reconstructing the existing waste water treatment plant, or Option Two – building a regional pipeline to transfer North Auburn’s waste water to the City of Lincoln’s waste water treatment plant?

If you prefer Option One – reconstructing the existing waste water treatment plant, press 1.

**[Skip to number 6]**

If you prefer Option Two – building a regional pipeline to transfer North Auburn’s waste water to the City of Lincoln’s waste water treatment plant, press 2.

**[Skip to number 7]**

To repeat the background information on the two options, press 9.

**6.** What is your primary reason for selecting the option to reconstruct the existing waste water treatment plant? Lower initial sewer fees? Environmental benefits? Keeping local control? Or another reason? If the main reason you chose option 1 was ...

Lower initial sewer fees, **press 1**  
Environmental benefits, **press 2**  
Maintaining local control, **press 3**

Other reasons, **press 4**

**7.** What is your primary reason for selecting the option to build a regional pipeline to transfer North Auburn's waste water to the City of Lincoln's waste water treatment plant? Lower sewer fees in 10 to 15 years? Environmental benefits? More efficiency due to regionalized services? Or another reason? If the main reason you chose option 2 was...

Lower sewer fees in 10-20 years, **press 1**

Environmental benefits, **press 2**

Efficiencies gained by regionalizing services, **press 3**

Other reasons, **press 4**

**8-10.** We are almost done gender/age/income level. (Asked to key in on phone pad)

**11.** Last item. If you would like to leave a comment wait for the beep or you may hang up now. Here comes the beep.

This is Jim Holmes. Thank you for taking this important survey. For more information, please call 530.889.6846 or visit [www.placer.ca.gov/SewerDecision](http://www.placer.ca.gov/SewerDecision).