

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

To: **BOARD OF SUPERVISORS**

Date: **JUNE 24, 2008**

From: ***JD* 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.

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.¹ 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.

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.² With engineering costs, bond sale costs and construction contingencies, staff estimates the total cost would not exceed \$123 million.

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.

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 future agreements, but there is uncertainty now regarding the deal points because of

¹ 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.

² 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).

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.

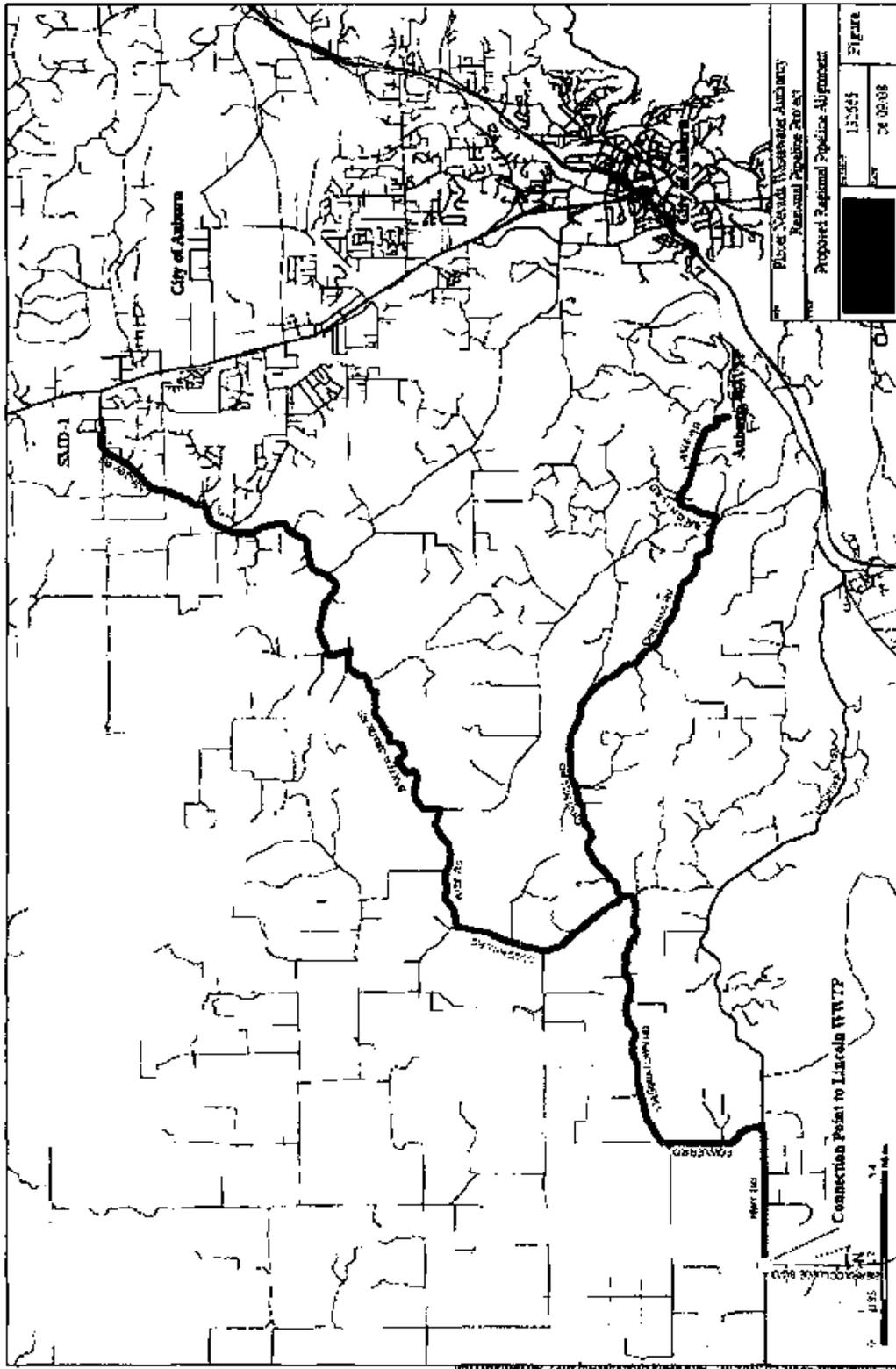
ATTACHMENT: EXHIBIT A-D

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CC: COUNTY EXECUTIVE OFFICE

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Proposed Regional Pipeline Alignment



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	110.00	113.85	117.83	121.96	126.23	130.65
Regional (with Auburn, max grant funding)*	59.51	67.84	67.84	88.19	120.00	124.20	128.55	133.05	137.70	142.52
Regional (w/o Auburn), max grant funding)*	59.51	67.84	67.84	88.19	125.00	129.38	133.90	138.59	143.44	148.46
Regional (with Auburn, min grant funding)	59.51	67.84	67.84	88.19	123.78	128.11	132.60	137.24	142.04	147.01
Regional (w/o Auburn, min grant funding)	59.51	67.84	67.84	88.19	128.78	133.29	137.96	142.78	147.78	152.95

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

Issue	Upgrade Plant	Regional Project with Lincoln
Compliance with regulatory requirements	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.
Local control over operational decisions and fees	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.
Liability	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.
Capacity to accommodate growth	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.
Cost	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.
Schedule	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.
Risk	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.
Availability of grant funds	Unknown whether grant funds will be available for this option.	\$3 million in grant funds currently available, with another \$8 million possible.
Environmental impacts (analysis has not yet begun)	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.
Staffing needs	Same or slightly more than at present.	Reduction of 2-4 full time equivalent positions expected

Environmental Constraints and Permitting Strategy

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 SRF 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.



