Technical Memorandum Name: **Flows and Loads, March 2008**
Commenter: **TAC – Finance Committee**
Comments Date: **March 21, 2008**
Responses Date: **April 30, 2008**

The following comments were submitted in response to the above listed Technical Memorandum (TM). The TM was developed as part of the EIR process for the project, in order to help facilitate and broaden the discussion of project issues important to the community. The responses should be considered preliminary because the EIR process is not complete, and the information necessary to fully respond has not yet been developed. The project team is grateful to those citizens who took the time to review the TM and provide comments at this early stage in the process. The project team will endeavor to fully address the comments and concerns through the on-going project development process.

	Comment	Response
1	What are the number of connections (vs. population) inside the PZ, outside, and total, both currently and at build-out?	There are an estimated 4,280 and 4,770 connections at existing and buildout conditions, respectively, in the PZ. These connections do not accurately reflect the number of dwelling units because some serve multiple units and some serve non-dwelling units. The Assessment Engineer's report considers dwelling unit equivalents for wastewater service. Inside the PZ, the estimated population is 12,500 and 17,840 at existing and buildout conditions, respectively. For the total urban area the estimates are 14,440 and 19,713 at existing and buildout conditions, respectively.
2	What is the cost comparison between a plant that is over sized by 0.1MGD versus a 100,000 gallon spill, including associated clean up costs and potential fines?	These are not comparable costs. A treatment plant is designed with a number of systems to minimize the risks of spills which are not related average flow. For example, additional storage capacity may be included to handle peak flows, but may not translate to additional capacity for biological treatment.
3	What is the impact to load if the entire LO community is hooked up to the sewer, including change in cost per household?	Loads would go up in relation to dwelling unit equivalents and would likely be a 20% to 50% increase. Costs could go up significantly because there is no mandate to require areas outside the PZ to connect to or pay for the sewer system.
4	What is the production data given to the county, developed by all water purveyors in response to conservation ordinances relative to Level III Severity? (James Caruso)	Water purveyors throughout the County, including Golden State, submit a one page form of general water system production data. While this information is useful for estimating the total demand on the basin, it is not detailed enough to estimate average residential indoor water use.
5	Due to highest concerns regarding drinking water quality and impacts to Bay, exfiltration is an important consideration. What is the historical data on exfiltration for gravity collection systems, comparing bell & spigot versus welded joints? What is the historical data for STEP/ STEG systems? What do current county regulations allow for exfiltration	There is little data or comparison of the potential for exfiltration in sewer collection systems. If a pipeline placed in high groundwater developed leaks, it would be expected to experience infiltration, unless it was under pressure. Regulations expected from the Regional Water Board are expected to include provisions for maintenance and monitoring that will identify and

	levels?	address the potential development of leaks. While the potential impacts of exfiltration will be considered in the EIR, it is important to note that any potential exfiltration will have the same pathogen and nutrient constituents that are present in the current septic tank discharges.
6	Carbon footprint analysis and comparison for all technologies and projects is of paramount importance, particularly given AB32 and the inevitable increase in the cost of energy.	Comment noted. An inventory of greenhouse gas emissions is presented in the Greenhouse Gas Emissions Inventory technical memo.
7	In general, it was felt that the Flow and Loads TM lacked depth and depended primarily upon information already presented in the Fine Screen, rather than any new or "value" added approaches to sizing.	Comment noted. The technical memo provides an analysis of the expected flows for specific periods of the day or year, as well as, expected biological loading. This information is intended to be used in project design to optimize pipeline and treatment plant sizing.