

2008

There is confusion as to whether Sacheen is or is not Class 5 Designation. Dave Lamb had spoken about. (Sheila will attach previous research Dave Lamb has done on this.

Sacheen Lake Sewer and Water District Board, c/o Sheila Pearman

REGARDING: Sacheen Lake listing as Category 5 on State 303d list

I have researched the information that I had available on this subject and there are several pertinent points worth noting.

1. Sacheen Lake was added to the 303d list of "impaired water bodies" (i.e. those not meeting water quality standards) in 1996. The "Basis for Consideration of Listing" indicated in the WDOE 303d website is "Completed Phase I State Clean Lakes Restoration in 1991 - Problems Encountered: Blue-green algae, low dissolved oxygen, sediment phosphorus recycling, tributary nutrient inputs, fecal coliform bacteria, aquatic macrophytes (Eurasian watermilfoil)". The reference given for this information is Kennedy 1991 which is the Phase I study performed by the EWU Biology Department and myself.
2. The State's Water Quality Assessment Categories (of which Sacheen is currently Category 5) is not exactly a 1 to 5, best to worst ranking. Here are the titles of the five categories:
Category 1: Meets tested standards for clean waters,
Category 2: Waters of concern,
Category 3: No data,
Category 4: Polluted waters that do not require a TMDL *,
and Category 5: Polluted waters that require a TMDL *.
*TMDL is Total Maximum Daily Load is a study and management process which determines how much of a pollutant, like coliform bacteria or phosphorus that a water body can receive and still meet the appropriate State water quality standards.
3. That being said, the Phase I report, on page 72, states: "Sacheen Lake was within the State of Washington Class AA (Extraordinary) water quality standard for fecal coliform." Further, the maximum fecal coliform count found at any in-lake station was 10 colonies (per 100 milliliters of sample). This does not provide any justification for the Category 5 rating. Phone calls with WDOE staff Paul Turner and Ken Merrill provided no insight into how the Cat. 5 was determined.
4. I reviewed two other reports that were generated for the Phase II project, namely "Water quality of Sacheen Lake Prior to Whole Lake Herbicide Application" (July 1995) and "Sacheen Lake Phase II Restoration Project,

Project Completion Report, Volume V. Post-Restoration Water Quality Report" (October 1997). Both report indicated that Sacheen Lake met Class AA (extraordinary) water quality standards.

In the 1995 report the maximum fecal count in any in-lake station was 2 colonies/100 mL and in the 1997 report the highest was 25/100 mL.

- 5. Following discussions on this issue at SLSWD Board meetings in 2005, it was agreed to perform testing of lake water samples for fecal coliform bacteria. One sample collected during July 2005 resulted in readings of less than 3 colonies /100 mL from the Terrace area, 4 colonies from the Moon Creek area and 4 from the Narrows. While this effort needs to be continued with more samples in 2008, I see no reason to believe that bacterial water quality is, or has been anything less than Class AA which is appropriate for all contact recreation.**