

# Data for PacifiCorp Phytoplankton Sampling in the Klamath System, 2001-2004

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## **Spreadsheet Contents**

This spreadsheet contains data generated from laboratory analysis of the phytoplankton samples collected by 2001-2004. PacifiCorp began sampling phytoplankton in the vicinity of the Project in 2001, primarily in the Project program was expanded in 2002 to include a number of river stations. The sampling program was designed to describe the phytoplankton community and to identify the typical seasonal succession of phytoplankton in the vicinity of the Project. Data have been collected from 17 sites in the Klamath River (and associated reservoirs) and from four tributaries in the Project.

The spreadsheet file contains seven additional tabs. The sampling sites are listed in the SITES LIST tab. A map is depicted in the SITES MAP tab. The DEFS tab provides definitions for the various field (column) headings in the spreadsheet. The tab CHLA contains a worksheet with the chlorophyll *a* data for the collected samples. The tab PPLK contains phytoplankton density and biovolume data for the collected samples. The tab 17JUL02CHLA contains a worksheet with chlorophyll *a* data for the samples collected on July 17, 2002 to assess spatial variation in phytoplankton abundance in Iron Gate reservoirs. The tab MCYS contains the data (from tab PPLK) specific to the occurrence of *Microcystis*.

## **Sampling Procedures**

Phytoplankton samples have been collected from the Klamath River in the vicinity of the Project in 29 total months from October 2001 and November from 2001 through 2004. In addition, samples were collected in 2002 from near the mouth of Shovel Creek, Fall Creek, and the Shasta River.

Samples were collected from approximately 0.5 m depth at the river and stream sites, and from 0.5 to 1.0 m depth in reservoirs at sites near the dams. In addition, an integrated sample of the top 10 m of water in Copco and Iron Gate reservoirs was collected by lowering a weighted tube to 10 m, clamping off the top, retrieving the tube and draining it into a container. The contents of the container were mixed and dispensed into sample bottles. Approximately every 10<sup>th</sup> sample, but in every sample set, was duplicated for quality control purposes. An additional sample was taken on August 1, 2002 (under the observed conditions present at the time of sampling) from the most concentrated area of a localized algal bloom in the water in Copco reservoir. The data for this additional sample is noted where present in the following spreadsheet.

Immediately after collection, samples were dispensed into bottles supplied by the laboratory. Phytoplankton samples were preserved with Lugol's solution; chlorophyll *a* samples were preserved with magnesium carbonate. Chlorophyll *a* samples were kept in opaque bottles, on ice in the dark until analyzed. Samples were collected by E&S Environmental of Copco and analyzed in the laboratory by Aquatic Analysts of White Salmon, Washington for chlorophyll *a* and phytoplankton abundance and biovolume.

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