

High Profile Monitoring:



The RUSS Buoy Program

At the News Conference

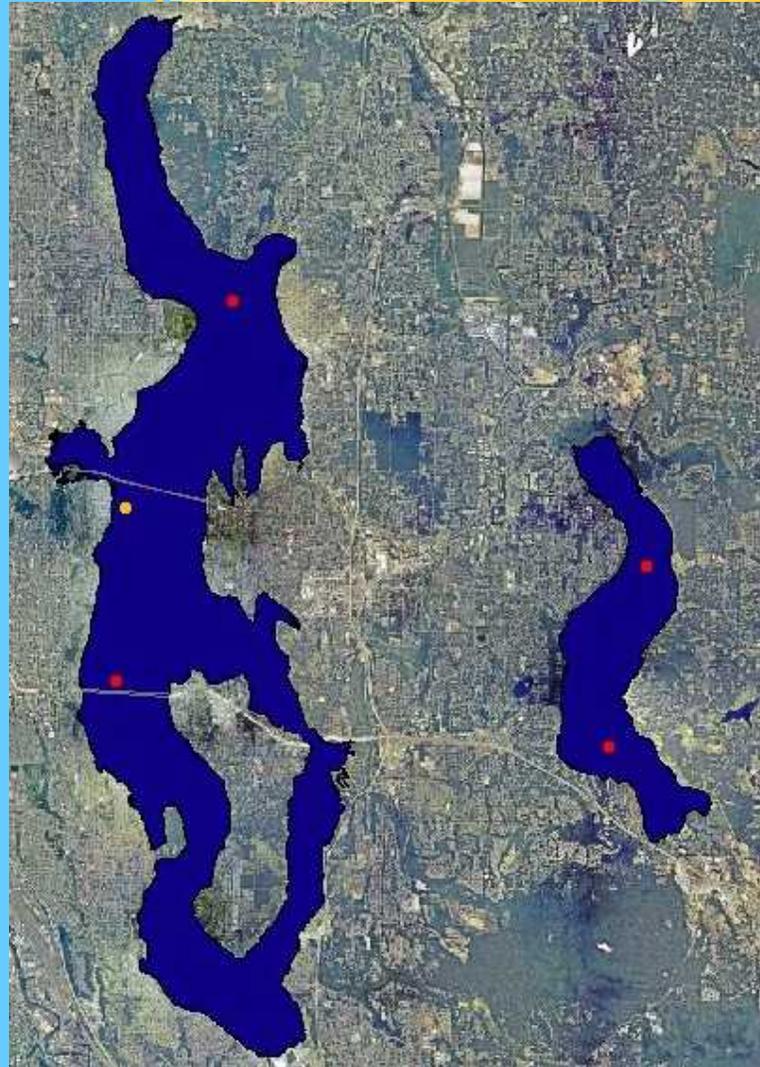


The Big Picture



- Installed in July of 2000 as part of SWAMP
- To build a model of the lake in order to understand nutrient and pollutant cycling.
- To build a long term database of the lakes physical and chemical properties.
- To provide information to the public and promote interest in Lake Sammamish and Lake Washington.

Where They Are

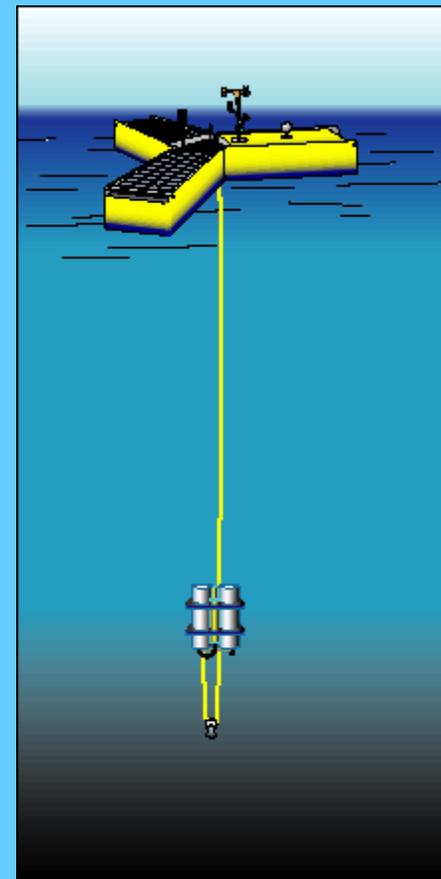


What they are, how they work



Profiling

- Profiler similar to scuba buoyancy apparatus.
- Buoy Profiles from 1m to near bottom 4 times a day, taking readings every meter.



YSI Model 6600 Water Quality Sonde

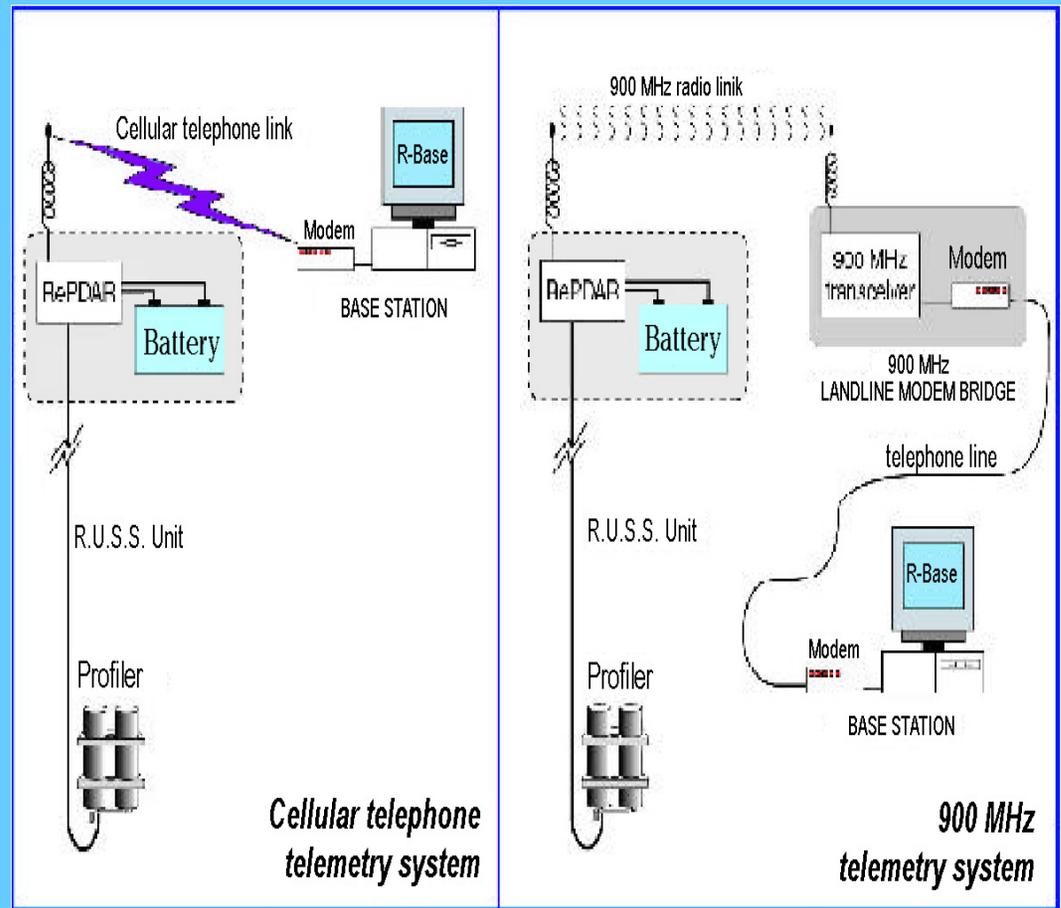
- Depth
- Temperature
- Conductivity
- pH
- Oxygen
- Chlorophyll



Communications

Originally 900 MHz radio, now we are moving to CDMA Cellular Modems.

Base station at KSC calls each unit 4 times a day and downloads data

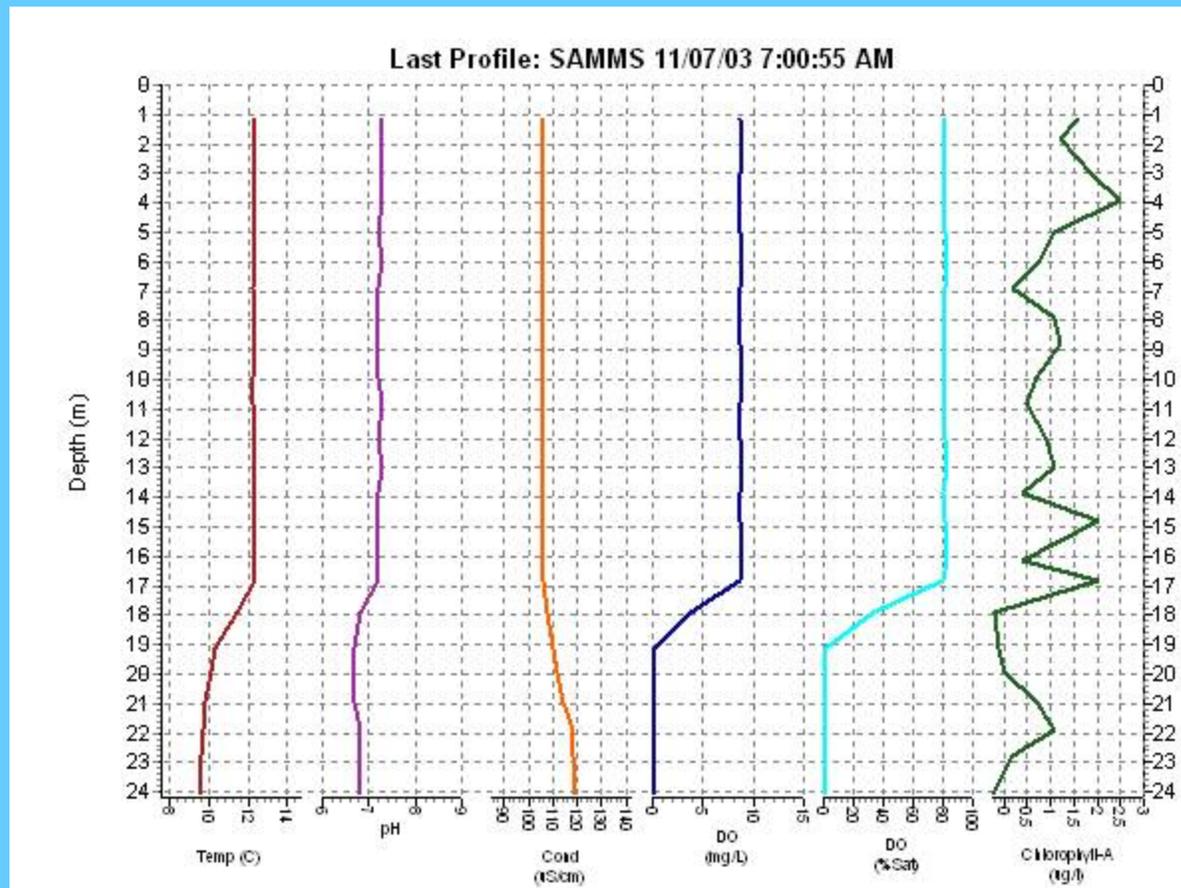


Data Processing

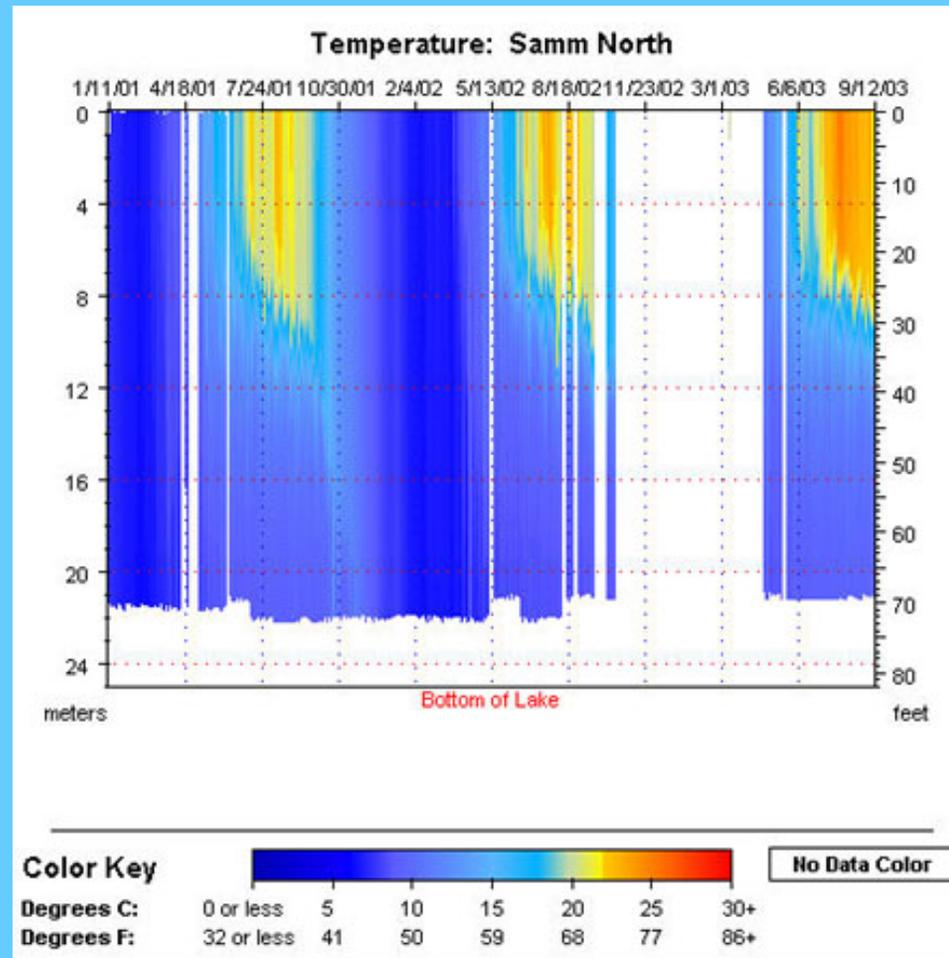


- 1. Text file is parsed and entered into database.
- 2. Database performs basic QC check for outliers.
- 3. Query of recent profiles is performed, and the data is processed for the web.
- 4. As sondes are end checked and the end check is entered, data is given a final QC by the database.

Profile Data



Annual Data



How the Data is Used



- Develop Long term database of Lake Conditions.
- Develop circulation model of lakes.
- Provide data for Agencies and Institutions doing work on the lakes.

Data Users



- UW Fisheries
- UW Oceanography
- NOAA
- Muckleshoot Indian Tribe
- KING and KOMO TV
- Members of the public including swimmers, sport fishers, windsurfers.
- <http://www.metrokc.gov/lakedata>