Lake Powell Water Quality Sampling Program
Instrument Sensors

- Temperature
- Dissolved Oxygen
- pH
- Conductivity
- Turbidity
- Chlorophyll a
- Depth
- Redox
Lab Water Quality Analyses

- TDS / TSS
  - ROE & SOC
- Major ions
- pH
- Conductivity
- Chlorophyll
- Alkalinity
- Nutrients
  - P and N
- DOC/TOC
- Plankton
  - Phyto and Zoo
- Metals / ICP Scan
Other Data Collected at Station

- Secchi disk depth
- Meteorological info
- Station Depth
- Wave height / wind
- Surface elevation
Temperature in Dam Forebay over Time

[Graph showing temperature changes over time at various depths from 2m to 140m, with dates from 8/20/2011 to 8/20/2012]
Lake Powell Release Temperature
2016 Projected Temperature based on March 2016 Forecast

#Projection start date is based on initial conditions (May 2015)
Changes in WQ sampling:

• Radionuclide samples were taken for MWD, but this was discontinued as no critical levels were found over time.
• Samples for general metal analysis (ICP Scan) has been provided for the State of UT, recently due to results of no critical levels and budget issues the metal sampling has been reduced to once a year.
• Changes in instrumentation over time.
• Changes in sampling interval over time.
Past Unique Lake Powell Water Quality Sampling Projects

- Hydrocarbon levels
- Mercury levels in water, sediment and fish tissue
- Selenium loading
- Sediment chemistry of the Colorado R delta
- Gold King mine spill metal analysis, water & sediment
Questions ?

RECLAMATION