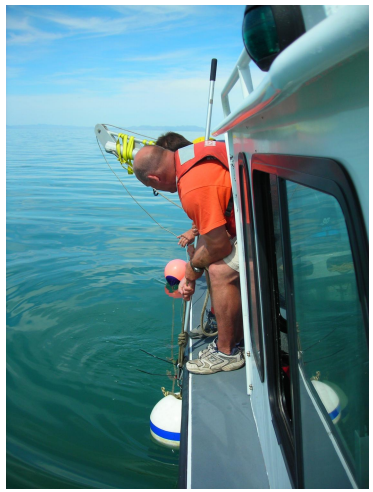
PROGRESS REPORT: NOV 2006



THE UNIVERSITY OF UTAH

USGS

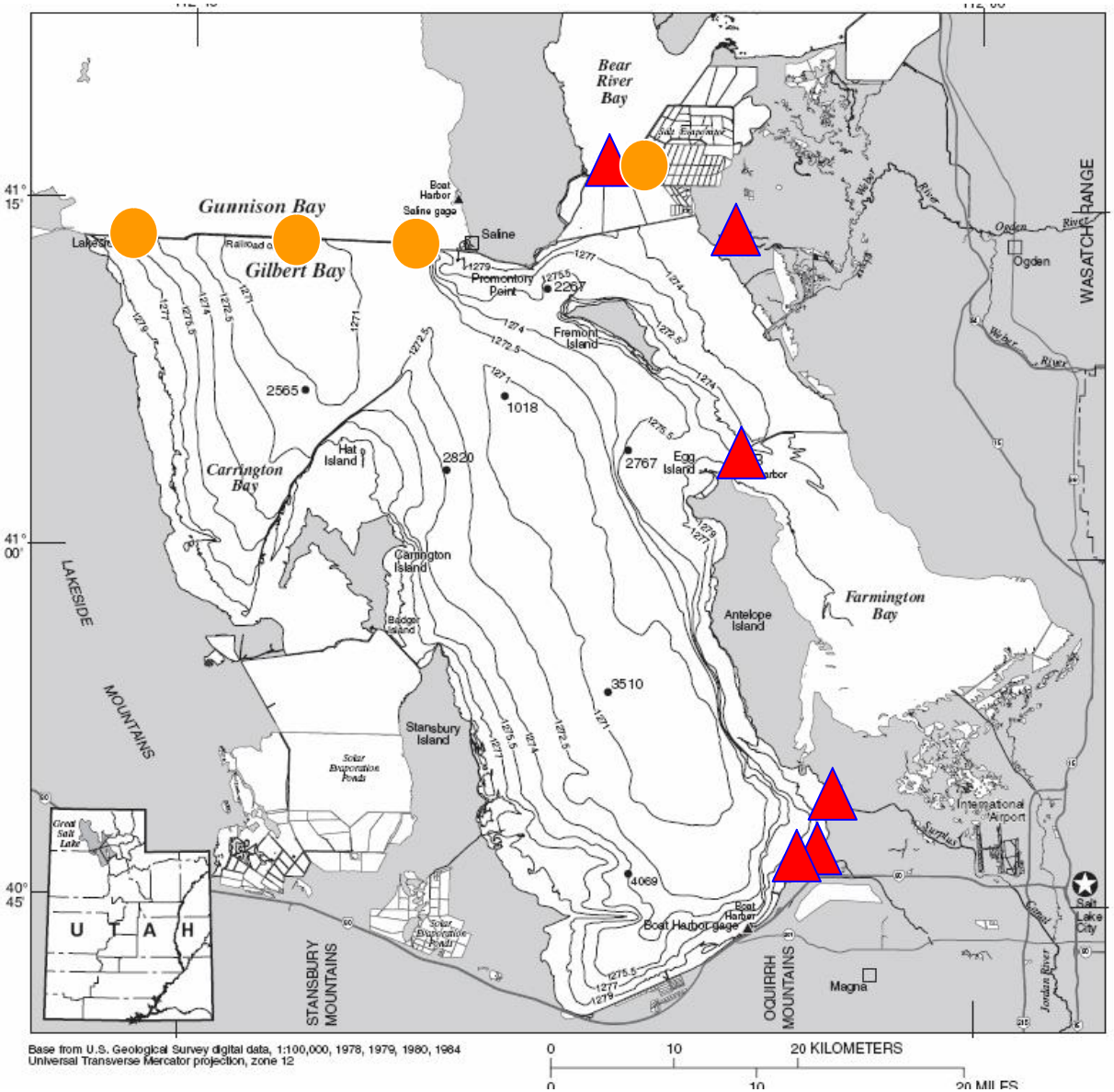
Great Salt Lake Research Team

TOPICS

- Selenium loads from inflow sites
- Comparison to historical Se loads
- KUCC/USGS discharge differences
- Selenium concentration/species
- Additional questions/future plans

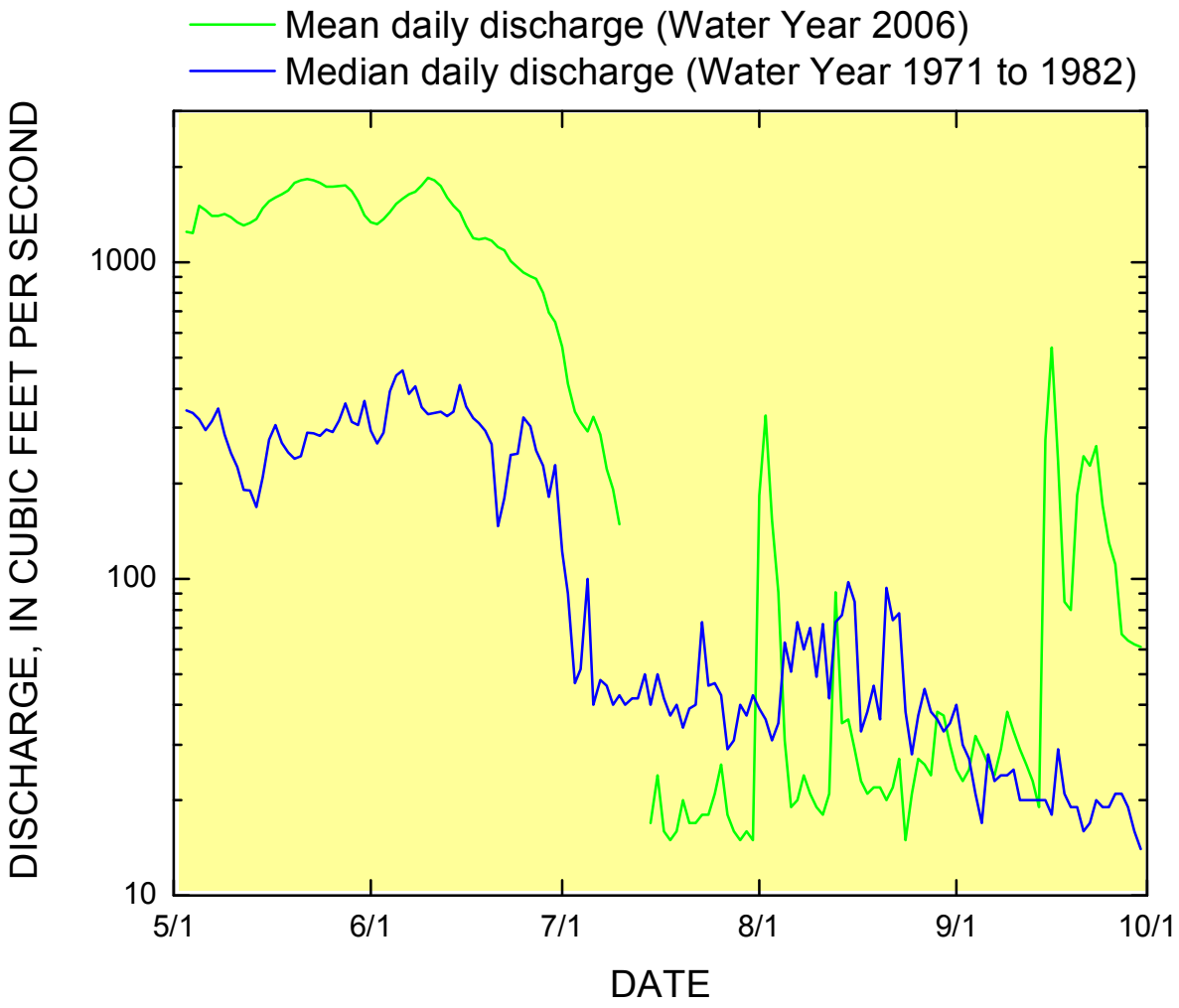
GAGE SITE LOCATIONS

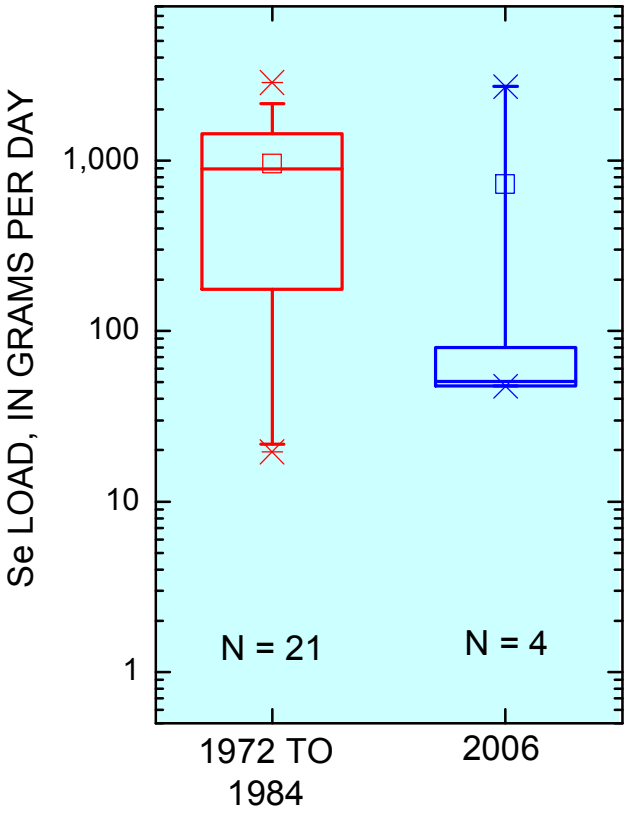
- Continuous gages
- Intermittent gages/sample points



USGS
science for a changing world

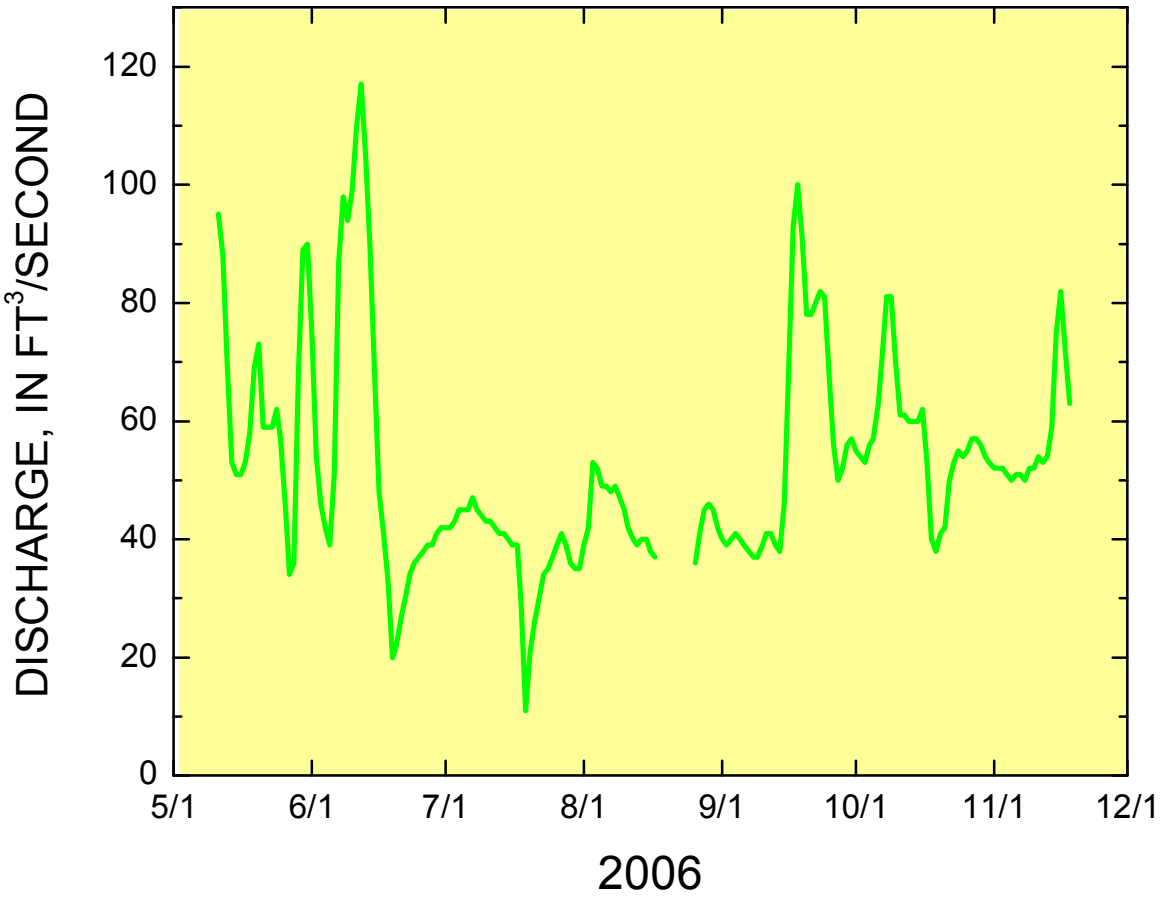
GOGGIN DRAIN DISCHARGE

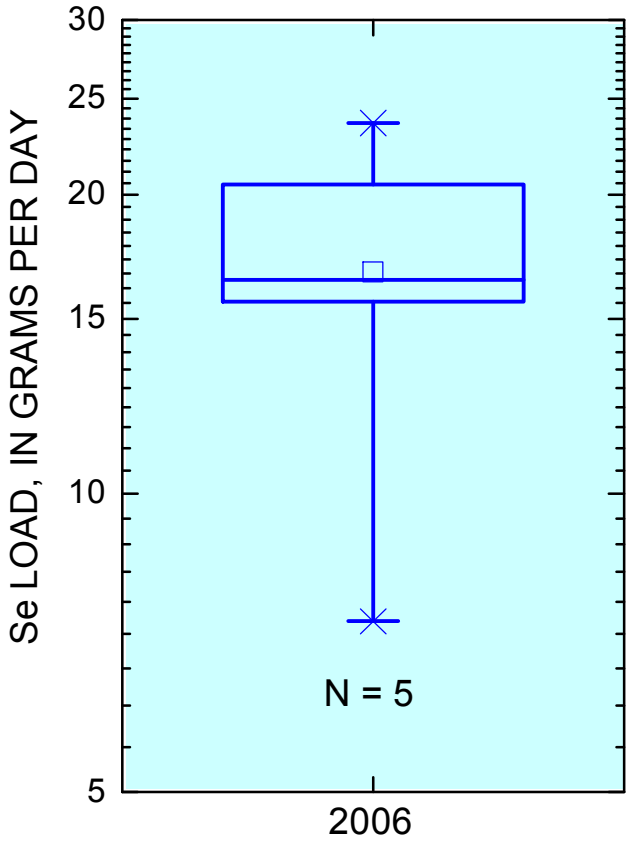




USGS
science for a changing world

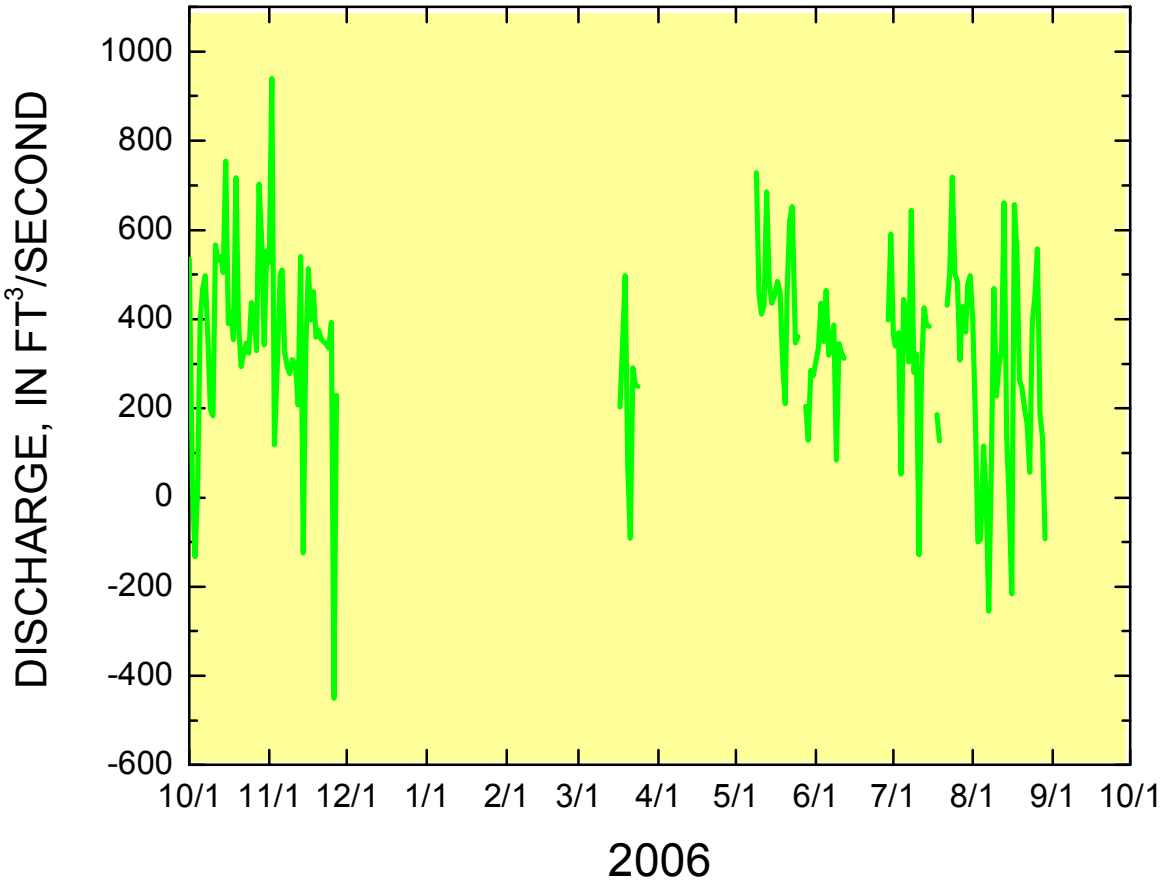
WEBER RIVER DISCHARGE

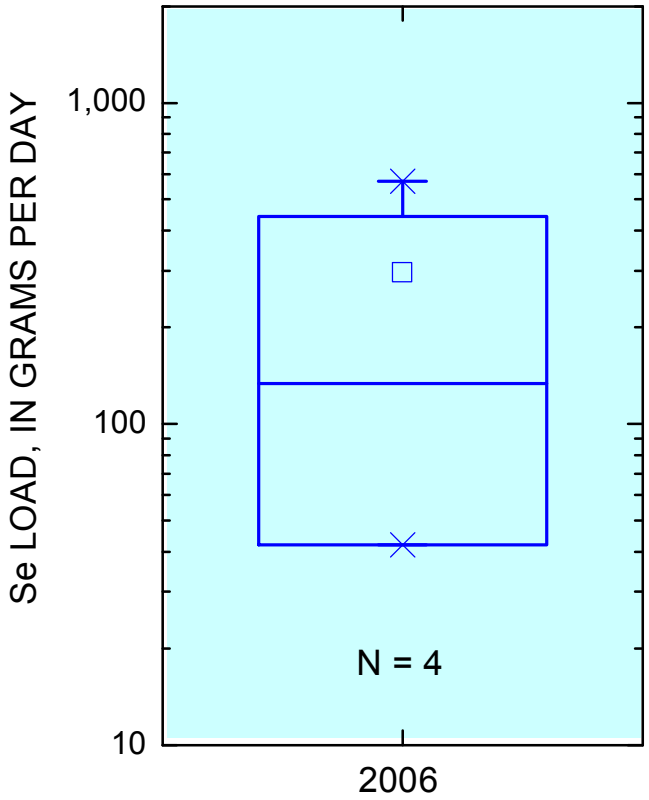




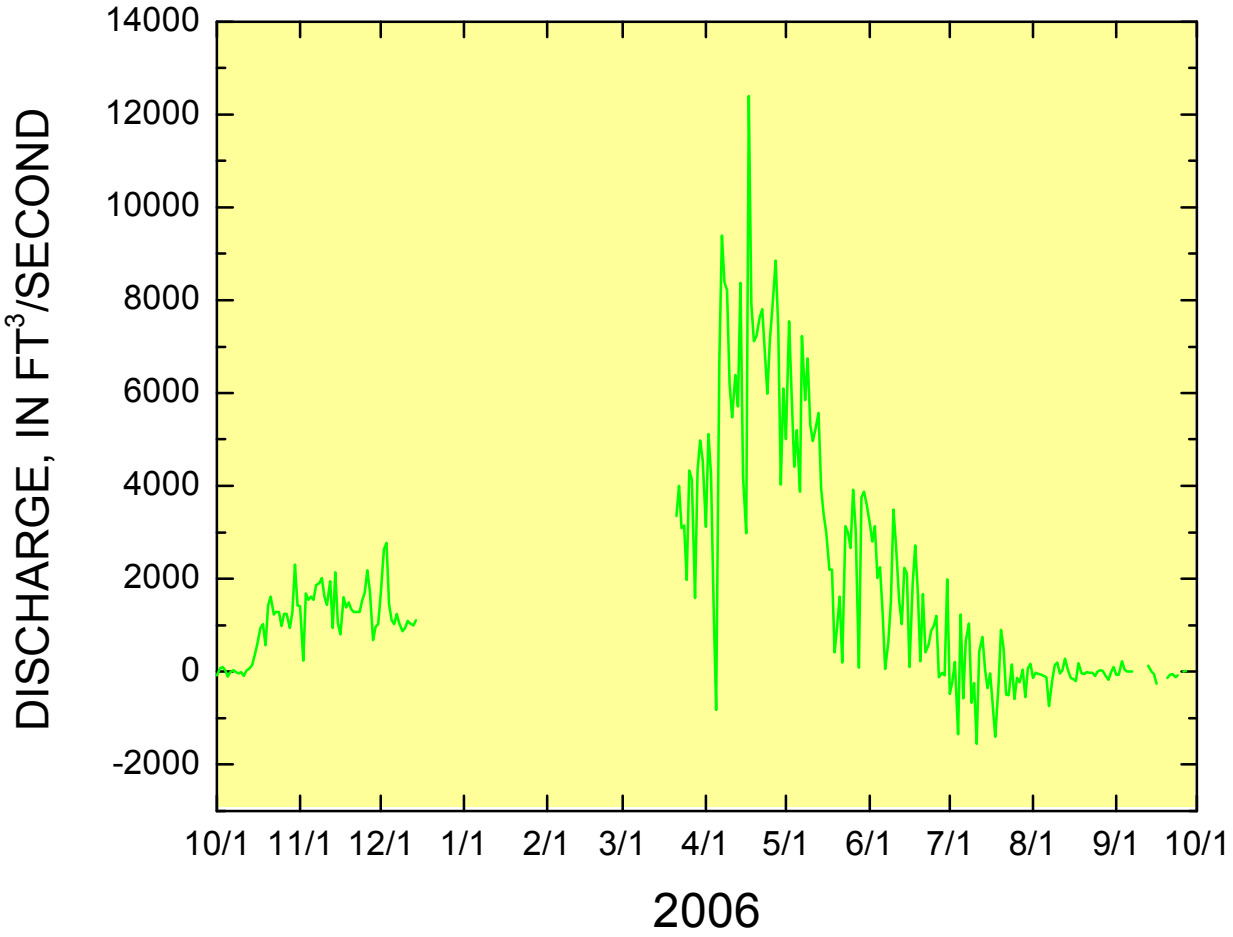
USGS
science for a changing world

FARM. BAY DISCHARGE





BEAR RIVER DISCHARGE

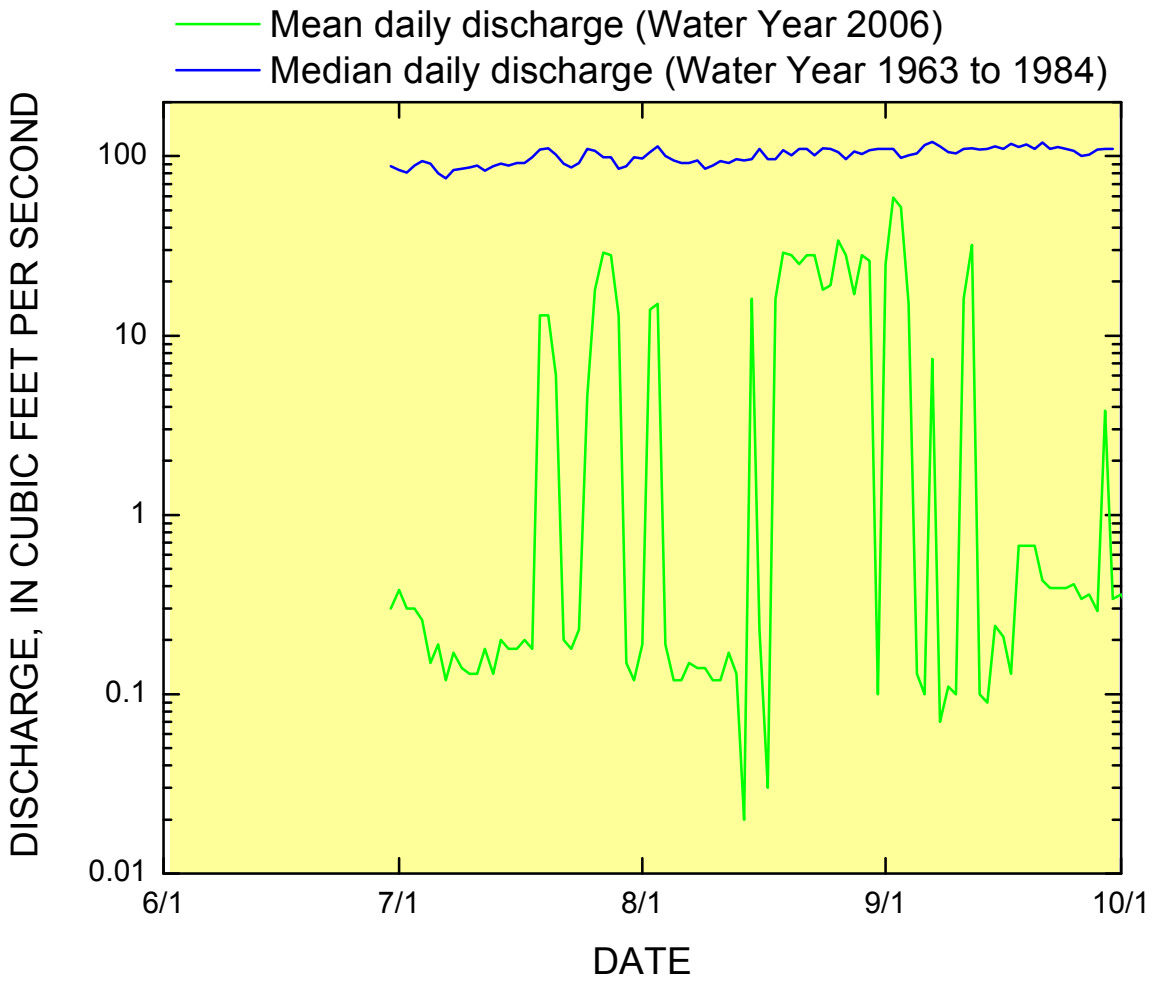


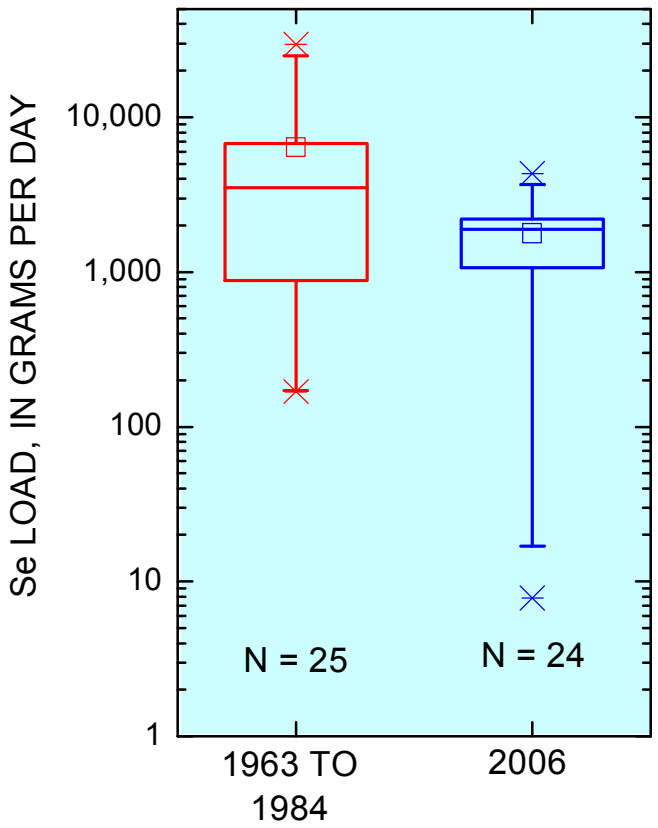
Se Loads

5/3 = 3,180 g/d

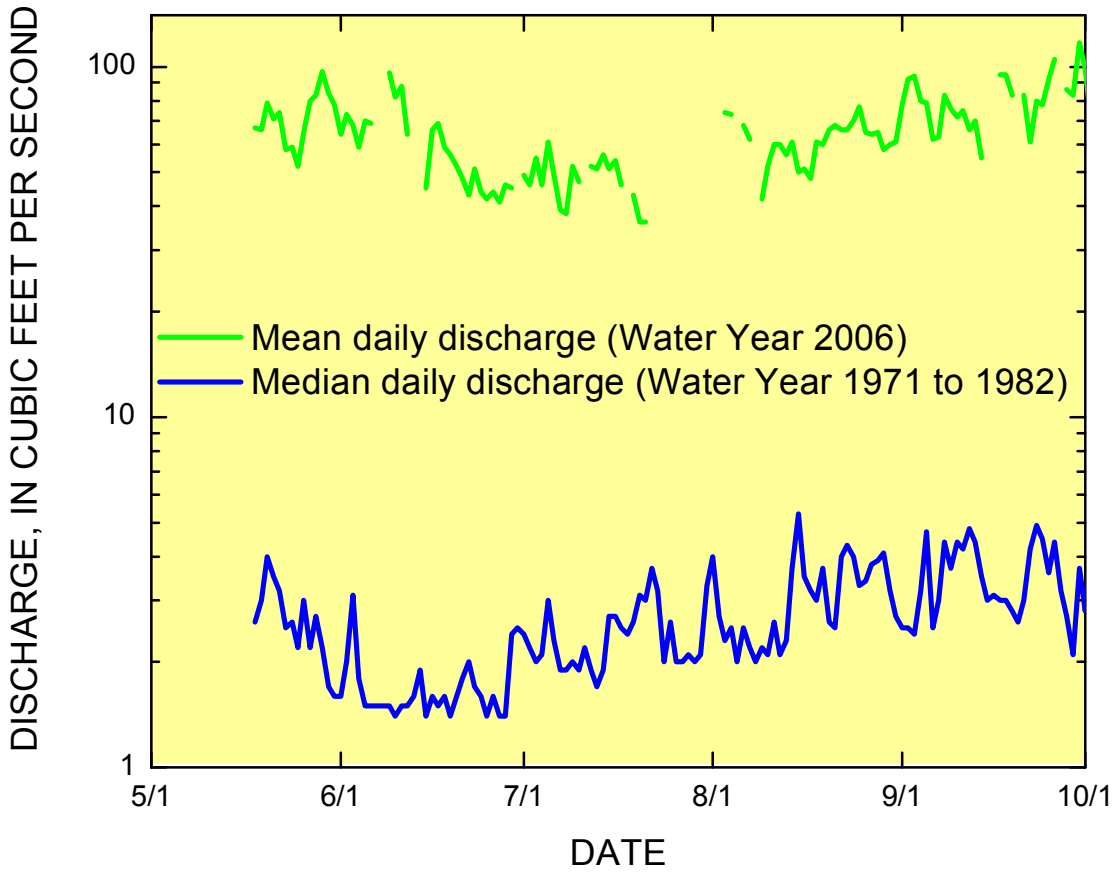
5/25 = 1,970 g/d

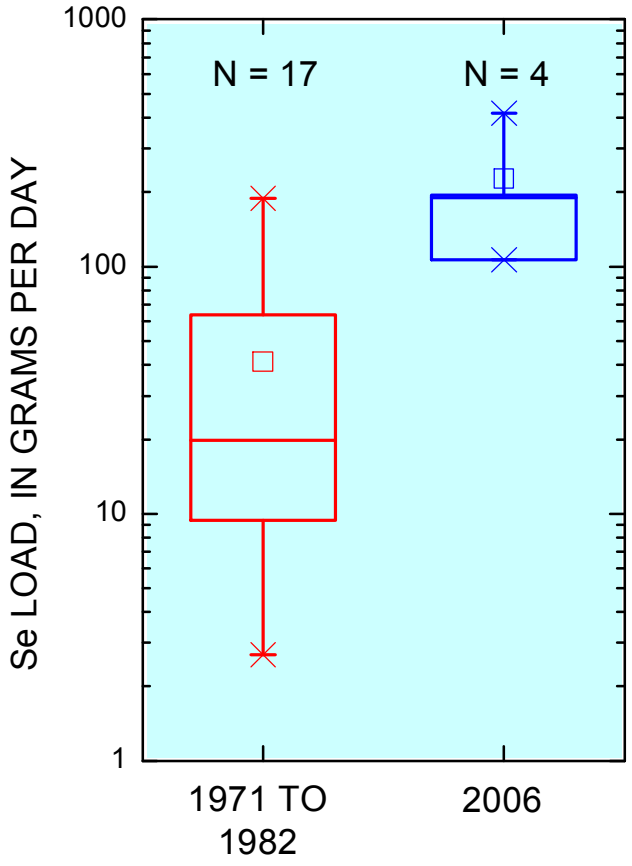
KUCC OUTFALL DISCHARGE





LEE CREEK DISCHARGE





USGS
science for a changing world

Summary Selenium Loads (g/day)

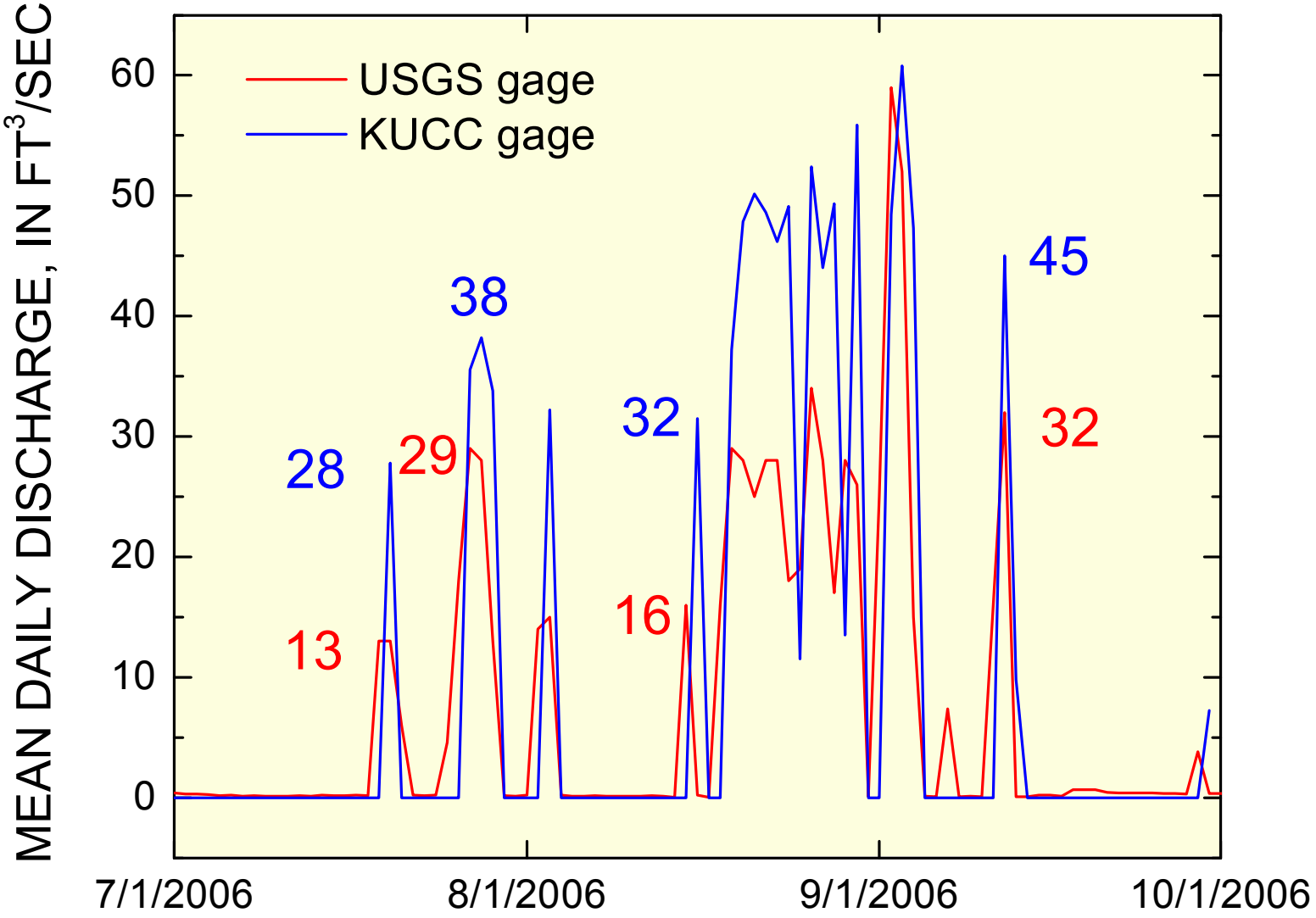
Bear River	1,966 to 3,177
Farmington Bay	42 to 570
Goggin Drain	48 to 2,717
KUCC Outfall	8 to 4,330
Lee Creek	106 to 417
Weber River	7 to 23
N. Arm (cumulative)	305

Total = 2,200 to 11,500 g/day

USGS
science for a changing world

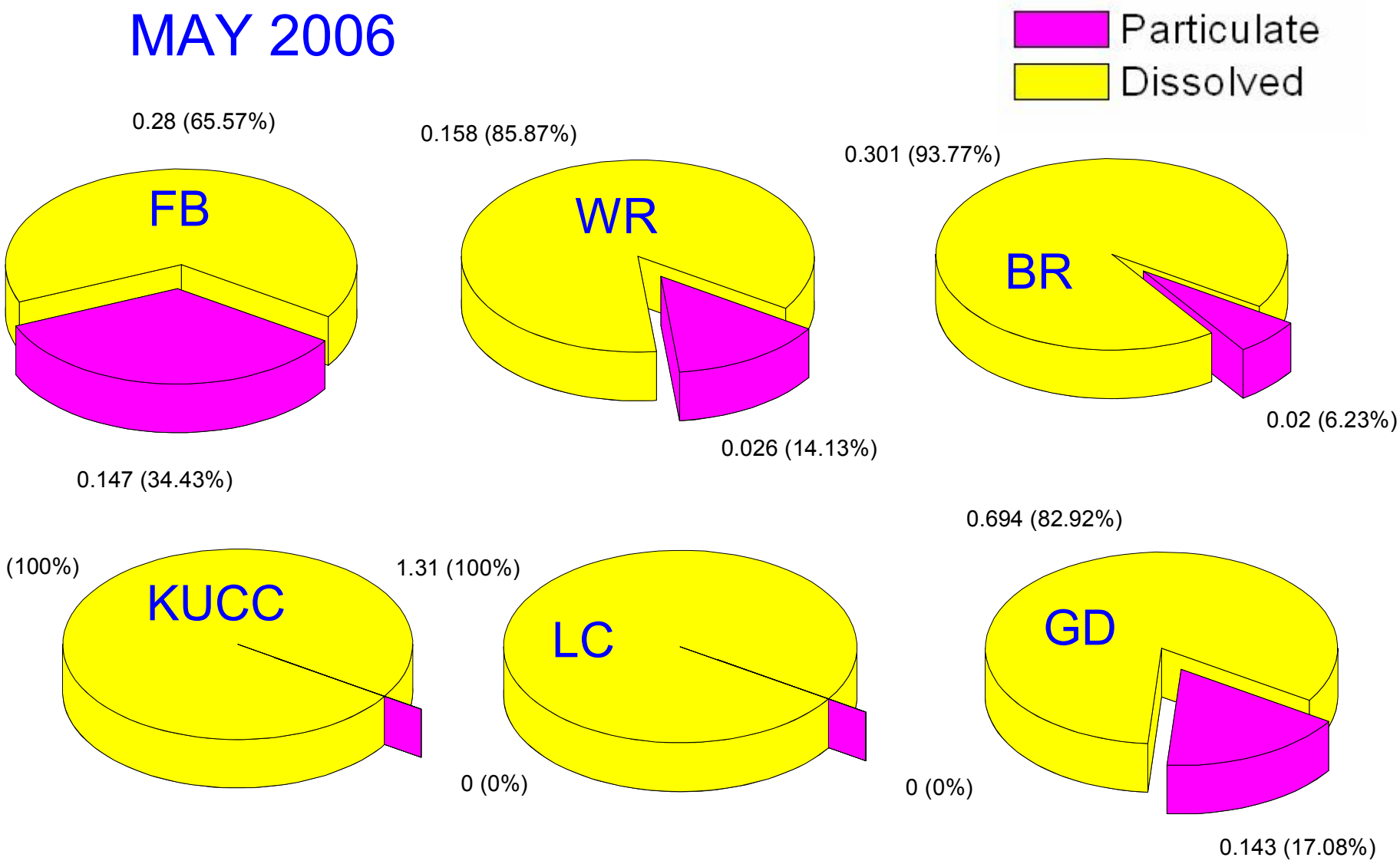
KUCC/USGS Q DIFFERENCES

UP TO 1.4 x 10^6 FT^3/DAY IS MISSING



DISSOLVED VS. PARTICULATE

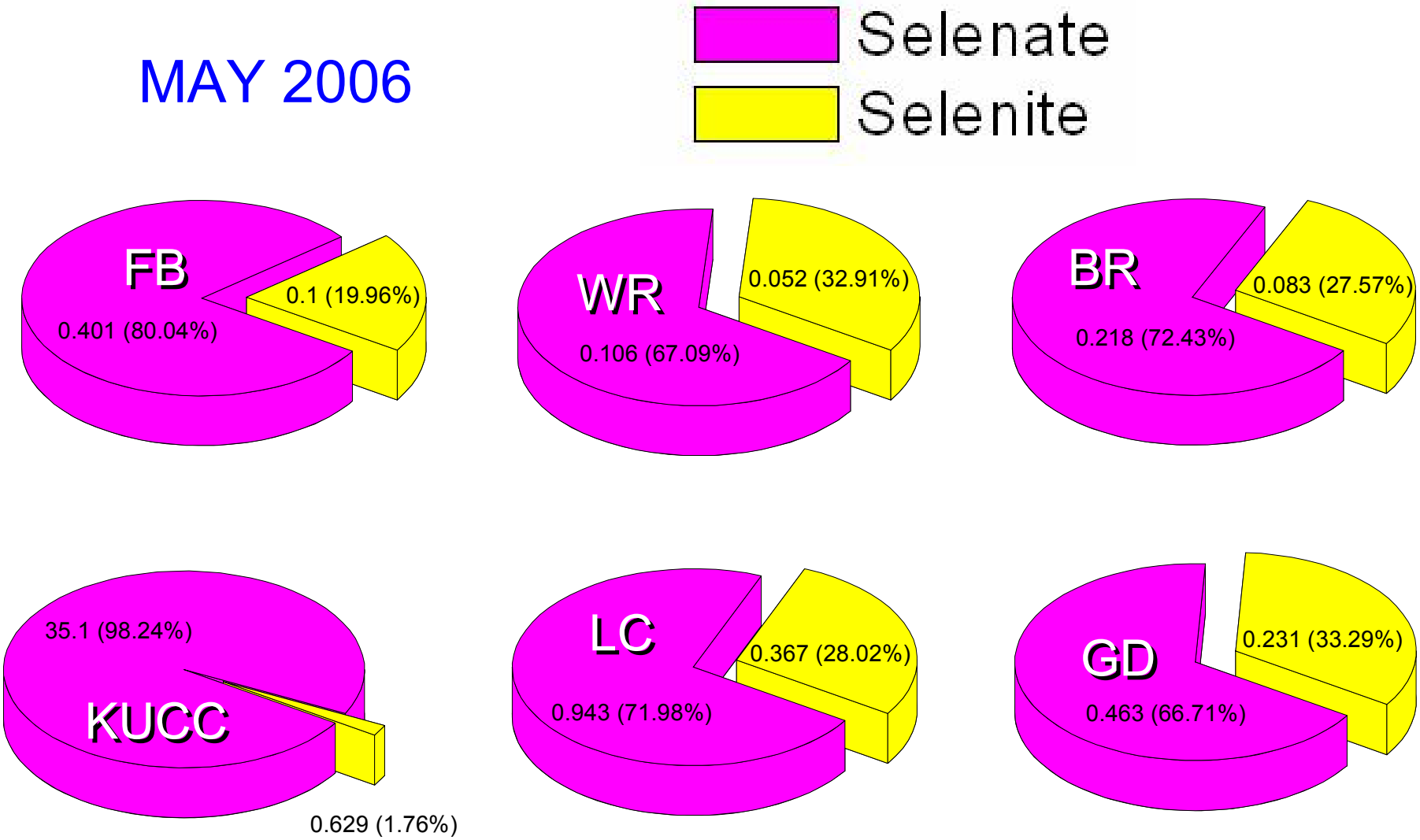
MAY 2006



USGS
science for a changing world

SELENATE VS. SELENITE

MAY 2006



USGS
science for a changing world

Questions/Future Plans

- Source of increased Se loads to Lee Creek?
- Obtain complete Se data set from inflow sites
- Resolve USGS/KUCC discharge discrepancy
- LOADEST modeling of inflow sites (present + historic)
- Estimate total Se load to GSL (MAY thru SEP) and compare to historic model data
- Continue monthly sample collection and gage site operations