

Baseline Data vs. Site Specific Concerns or Cause and Effect Data

Baseline data: A picture of the general properties of a waterbody. Monitored for long-term, non-point source changes. Monitoring for trends. Collect samples in the center of the river stream for best representation of the overall water column. Avoid collecting samples in sites close to known contaminants or in river eddies. If no boat is available you may have to wade into the water, go to a dock, or search out a river bank that has the main channel flowing close by.

Cause and effect data: Testing for point source contamination by a site of concern. For example: for a mining site where suspicion of overflow of settling pond thus contaminants into the river in the spring, you would test for:

- Mercury, Uranium, Lead, Cyanide, etc.
- When would you test? Probably spring when it would overflow. To test that contaminants make it into the Koyukok River use GPS technology and sound sampling techniques to show that the contaminants you found was located in the Koyukok River.

NOTES:

In order to prove that a point source is contaminating the river you must have baseline data. You must have a way of showing that the site you tested down below the point source is different than the overall surrounding bodywater. Therefore, most water quality monitoring programs focus on creating a baseline data base.



This is called the BIG FISH. It is used to collect a water sample deep down in the center of the water column. The USGS use this to collect their “Baseline Data.”