Data Management and Performance Measures

Documenting Environmental Results in Indian Country

Why Do We Want to Improve Water Quality?

- Maintain the natural habitat for wildlife, native plants, and for those in your community
- Support the designated uses of that waterbody (fishable, swimmable, etc)
- Protect and maintain the cultural significance
- Protect drinking water (health concern)
- Esthetically pleasing

Environmental Results

Projects that are funded with federal dollars are producing positive environmental outcomes

- Tribal guidance released in 2007 set forth new requirements for the CWA § 106 Tribal program
 - Assist tribes collect critical data and information for effective management of their water quality programs
 - Help EPA comply with the Government Performance and Results Act (GPRA)

EPA Performance Measures

> WQ 6a:

 Tribal Water Quality Program completion of a <u>Monitoring Strategy</u>

> WQ 6b:

- Tribal Water Quality Program submittal of surface water quality data in STORET-compatible format
- > SP-14:
 - Documentation of <u>Water Quality "Improvement"</u> in Indian Country

Implement Watershed Restoration Activities: CWA §319 funds

Monitor a Water body: CWA §106 funding

Prioritize Water Quality Issues

> Analyze Data Build Trends

Organize Data using the STORET-Compatible Template

EXAMPLE

- Monitoring Smith Creek for 1.5 years
- After analyzing the data from those monitoring events you realize that Turbidity has increased, and Dissolved Oxygen has decreased
- You go upstream of the monitoring site and see this....



EXAMPLE

- Where do we go from here? What is the next step to improving this stretch of the water body?
- Can a BMP be implemented?
- If so, what kind of BMP do you think would provide the biggest impact to improving water quality?
- How are you going to determine if this BMP is working?

EXAMPLE



- BMP implemented
- Post-project monitoring should be put into action
- Comparison of postproject data to pre-project data sets make a determination on the effectiveness of the BMP
- Analysis of data and recognizing trends is imperative to making decisions regarding your water quality programs
- Is there an improvement on your water quality?