

Developing a sampling plan for watershed characterization

ARC 2007

Water Monitoring Workshop



- **Planning for Watershed Characterization**
 - Establish sampling plan
 - Establish targets
 - Implement plan
 - Format and analyze data
 - Report results

Data Purpose

- Define purpose of water sampling
- Action steps to consider before sampling
 1. Determine the stressor to characterize.
 2. Select the indicator used to determine the affect on the drainage system.
 3. Establish the type of data you will collect.
 4. Determine the method of data collection and frequency.
 5. Identify who will collect the data.
 6. Identify who can provide adequate analysis.

Sampling goals

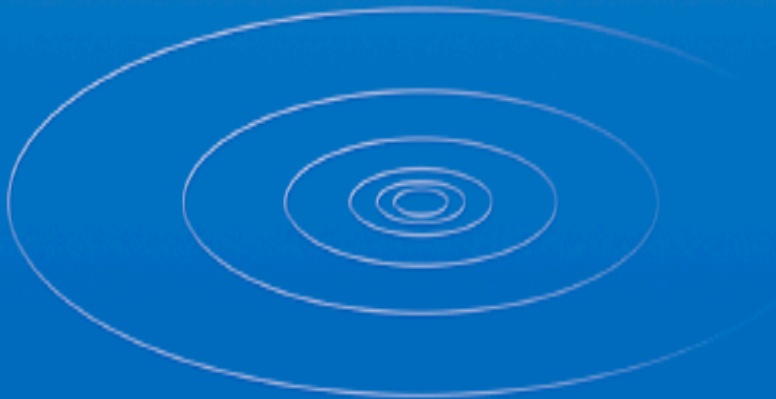
Sampling goals should define:

- What is sampled
- How it is collected
- Where sampling occurs
- When the data is collected
- How the data is managed



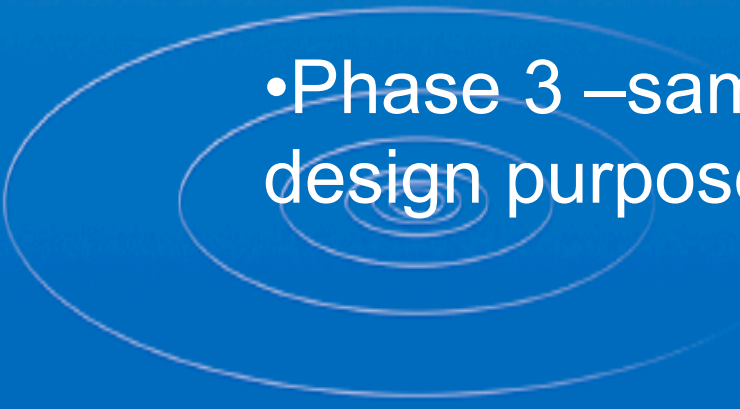
Setting up a sampling plan

- List of sites
- List of parameters
- Sampling frequency
- Purpose of sampling
- Timeline



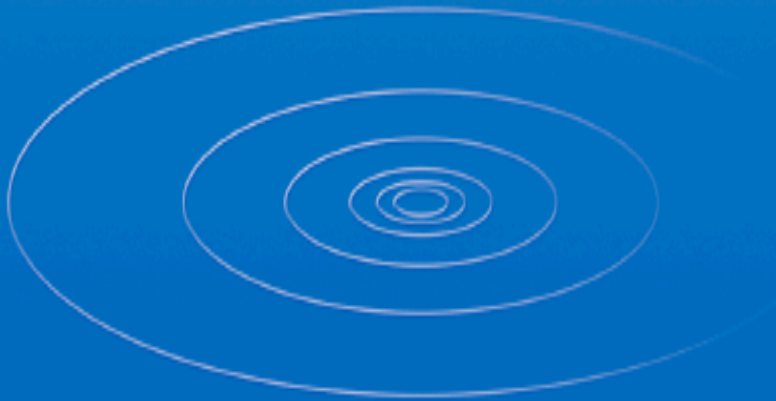
Phased sampling approach

Allows field inspectors to efficiently assess a watershed in a structured approach

- Phase 1 and 2 -identification, quantification, and prioritization of pollution sources in the basin
 - Phase 3 –sampling for treatment design purposes
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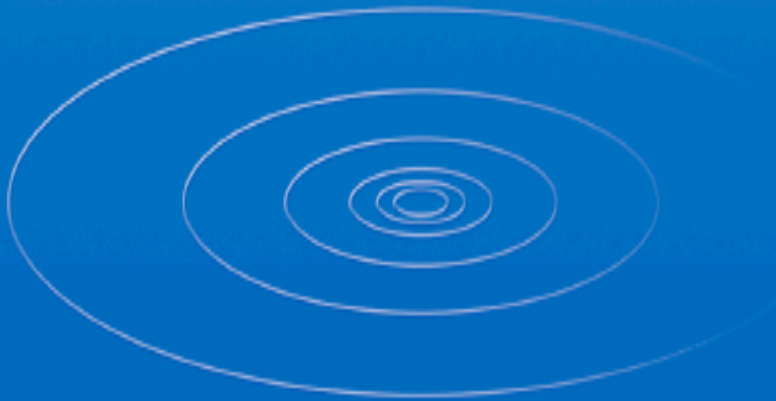
Phase 1

- Phase 1 “basin reconnaissance”
- Phase 1 “hollow crawling”



Phase 2

- Phase 2 high and low flow water quality sample collection and discharge measurements



Phase 3

- Phase 3 discrete pollution source sampling through time for design purposes

