

Checklist for BMP Monitoring

Date: _____ Location: _____

1. Define the monitoring objective:
 - Regulatory compliance for NPDES permit
 - TMDL or BMP effectiveness
 - Other: _____
 - Educational purposes
 - Baseline data collection

2. Pollutant(s) of concern: _____
 - Physical
 - Chemical
 - Biological

3. Pollutant properties:
 - Dissolved
 - Particulate

 - Moves through groundwater
 - Utilized by plants
 - Moves through subsurface flows
 - Adsorb to soil particles

4. Pollutant characteristics:
 - Are there natural seasonal variations in the pollutant of concern? Yes No Maybe
 - Are concentrations affected by temperature? Yes No Maybe
 - Are concentrations affected by flow? Yes No Maybe

5. Water flow: Perennial Intermittent Ephemeral

6. Pollutant enters the stream: Subsurface flow Overland flow
 Stream Channel Other: _____

7. The pollutant is transported during: Base flow Snow melt Storm events

8. The pollutant concerns are likely to occur during (check all that apply):
 - Spring
 - Summer
 - Fall
 - Winter

9. What BMP(s) will be implemented: _____

10. How long is expected before the BMP will become effective for the pollutant of concern:
 - Within 1 year
 - 2 - 4 years
 - 5 or more years

11. For what distance of stream is the BMP expected to be effective:
 - Less than a mile downstream of the BMP
 - Up to 5 miles downstream of the BMP
 - Greater than 5 miles downstream of the BMP

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12. Are there problems directly monitoring the pollutant of concern:
 Expensive Difficult (procedure) Other _____
13. Should a surrogate or related parameter be monitored: Yes No Maybe
14. Would the use of a model enhance the sampling approach: Yes No Maybe
15. Are there existing data for this sampling site or water quality concern:
 Federal (USGS, USFS, BLM, NRCS, USEPA)
 State (environmental quality)
 University (research and Extension)
 Local Government (County, City, Conservation District, Water Utility)
 Private or Other
16. Which sampling design best fits the pollutant and project area:
 Upstream and downstream monitoring
 Reference site comparison (Before and after implementation – BACI)
 Downstream before and after monitoring
 Historic data comparison
 Monitoring site runoff
17. Do sampling locations have any special challenges or constraints:
 Safe and legal access
 Nearby roads or hike-in only
 Time consuming to sample the site
 Bridge accessibility during high flows
 Access to electricity for equipment
 Canopy clearance for remote access to data
18. What type of samples will be collected (check all that apply):
 Water column: grab sample of water column integrated sample of water column
 Biological Monitoring: macroinvertebrates periphyton fish
 Habitat Monitoring: streambed properties stream bank properties
 stream morphology riparian conditions
 Monitoring outside the water body: land use TMDL/watershed management plan

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19. How many samples should be taken and at what frequency:
____ Samples a day / week / month / quarter / year (indicate # of samples and circle time frame)
20. Are standardized methods being used: Yes No
If not, define the method and explain why standard methods are not being used:

21. Is a certified lab required for analysis: Yes No
22. Are there State credible data requirements that must be met: Yes No
23. Should there be separation of duties between sample collection and analysis: Yes No
24. If contracting with the lab, have the analytical methods been verified: Yes No
25. How will data be recorded:
Field Data: _____
Lab Data: _____
Equipment Calibration/Maintenance: _____
26. Who will review the data for errors:
 Sampler Staff Independent third party
27. What type of data analysis will be conducted:
 Trend Data Before & After Paired Watersheds
 Time Series Other: _____
28. Will any statistical analysis be performed:
 Descriptive & Summary Statistics
 Arithmetic Mean Geometric Mean
 Median Distributions
 Measures of Variability
- Exploratory Data Analysis
 Histograms Time Series
 Comparisons Pie Charts
- Comparative Statistics
 Correlations Regressions
 Student T-tests Other _____

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29. What is the intended length of the sampling project: _____

30. How often should the sampling objectives and sampling design be reviewed and updated:

31. Any additional information:

