

# Assessment Goal and Early Lessons in *Effectiveness* *Monitoring*

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# Assessment Goal Elements

## Goal Statement

- “By 2020, States identify the extent of healthy and CWA Section 303(d) impaired waters in each State’s priority watersheds or waters through site-specific assessment”

## Milestones and Proposed Timeline

3. States develop plans to complete “**baseline**” monitoring to gather needed data to assess pre-implementation conditions in priority areas. (2018)
4. States develop plans to complete “**effectiveness**” monitoring to gather needed data to assess post-implementation conditions in priority areas. (2018)

# 2015 Workshop Working Definitions

## Three Bins

### **Baseline Monitoring**

- Monitoring performed to allow initial or ongoing assessment of waterbody-specific ambient conditions.

### **Supplemental/Planning Monitoring** (*not explicit in Vision*)

- Monitoring performed, if needed, to support development of planning documents.

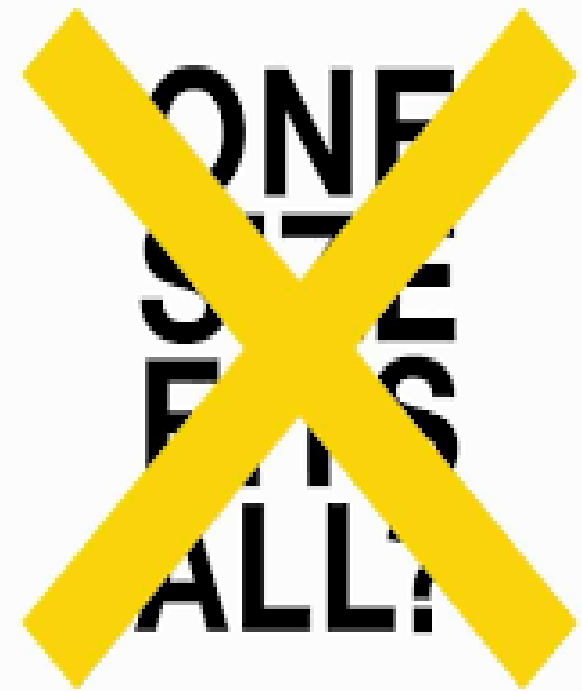
### **Effectiveness Monitoring**

- Monitoring performed to assess waterbody-specific *ambient* conditions post implementation activities.



# Lesson 1: Effectiveness monitoring doesn't mean the same thing to everyone

- There is no one size fits all approach to effectiveness monitoring.



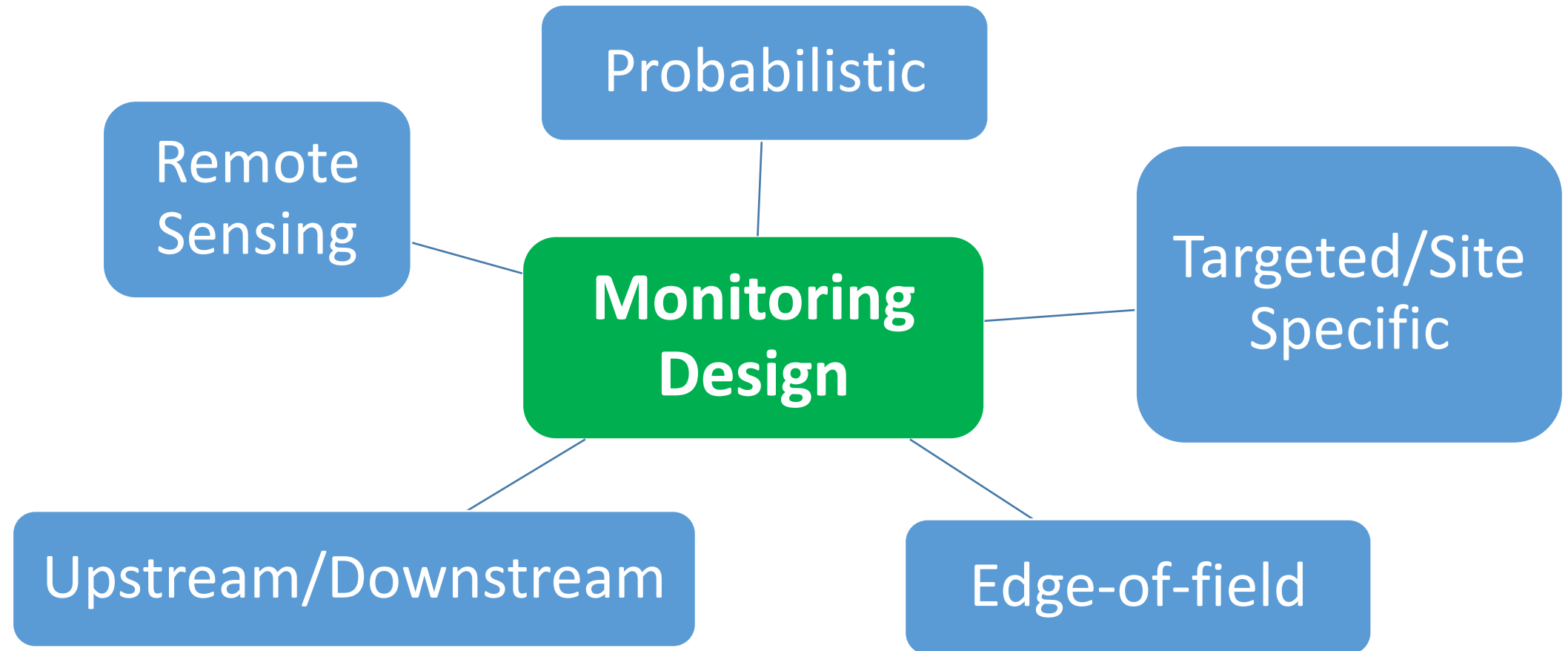
# Lesson 2: It's all relative - What is it that you will be measuring the effectiveness of?

- Specific Best Management Practices
- Combination of practices in a watershed
- Upstream/downstream changes

## Factors to consider:

- At what **scale** are you looking to measure changes?
- Is there a specific **pollutant of concern** that you are tracking?
- Are you trying to measure the effectiveness of **specific controls**?
- What is your **timeframe** for data collection?

# Lesson 3: You can use a combination of approaches depending on your needs



# Lesson 4: Work with Partners

What type of data do you need?



Academia

State monitoring program

volunteer monitoring networks

other federal and state agencies

**Table 1. Elements of Systematic Planning**

<b>Elements</b>
<b>Organization:</b> Identification and involvement of the project manager, sponsoring organization and responsible official, project personnel, stakeholders, scientific experts, etc. (e.g., all customers and suppliers).
<b>Project Goal:</b> Description of the project goal, objectives, and study questions and issues.
<b>Schedule:</b> Identification of project schedule, resources (including budget), milestones, and any applicable requirements (e.g., regulatory requirements, contractual requirements).
<b>Data Needs:</b> Identification of the type of data needed and how the data will be used to support the project's objectives.
<b>Criteria:</b> Determination of the quantity of data needed and specification of performance criteria for measuring quality.
<b>Data Collection:</b> Description of how and where the data will be obtained (including existing data) and identification of any constraints on data collection.
<b>Quality Assurance (QA):</b> Specification of needed QA and quality control (QC) activities to assess the quality performance criteria (e.g., QC samples for both field and laboratory, audits, technical assessments, performance evaluations, etc.).
<b>Analysis:</b> Description of how the acquired data will be analyzed (either in the field or the laboratory), evaluated (i.e., QA review/verification/validation), and assessed against its intended use and the quality performance criteria.



# State Examples

- Using Probabilistic Monitoring to Assess the Effectiveness of Stream Management Efforts (Larry Willis, VA)
- Integration of NY's Monitoring Program into NY's Vision Approach (Ken Kosinski, NY)

# Discussion Questions

- In what other ways have your programs conducted effectiveness monitoring, and with what success?
- In order to track and document success, what is the greater need: more data faster or more controls and a longer timeframe?
- How do you achieve and demonstrate outcomes?
- How do you determine when, after implementation has started, effectiveness monitoring should occur?