Establishing a Baseline for the Local Leadership Outcome: Methodologies

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Goal, Outcome, and Objective

- STEWARDSHIP GOAL: Increase the number and diversity of local citizen stewards and local governments that actively support and carry out the conservation and restoration activities that achieve healthy local streams, rivers, and a vibrant Chesapeake Bay.
 - LOCAL LEADERSHIP OUTCOME: Continually increase the knowledge and capacity of local officials on issues related to water resources and in the implementation of economic and policy incentives that will support local conservation actions.
 - **PROJECT OBJECTIVE:** Develop a methodology for establishing a baseline of performance to measure progress toward attaining the goal and outcome stated above, which allows the Chesapeake Bay Program's Local Leadership Workgroup to track trends in the level of action taken by local officials in order to practice adaptive management and to ensure that resources are allocated in a way that facilitates the desired outcomes.





Our Approach

- Step 1: Define the Audience
- Step 2: Define Domains for Knowledge and Capacity for Local Leaders
- Step 3: Brief Environmental Scan on How Best to Gather Input from Local Leaders





Step 1: Define the Audience





New York Pennsylvania Maryland Delaware West Virginia Chesapeake Bay Watershed

The Challenge:

Chesapeake Bay

- ❖ 6 States + DC
- ~200 Counties
- ❖ ~2,400 Cities and Towns
 - Over half have fewer than 2,000 residents
- Thousands of Local Leaders!

Maps by Bay Program GIS Team





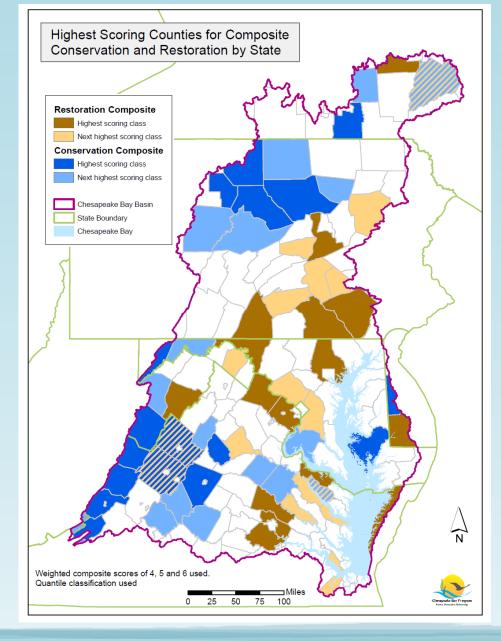
Suggested Solution: Focusing on High Priorities

Criteria for Inclusion

- Counties or Municipalities
 - Rationale: Subject to regulation such as MS4
- High environmental impact
 - Based on conservation composite and restoration composite scores
 - Generally top 20% of those with scores of 4 or higher (on a 6-point scale) in each geographic location (except in PA, where top 10% was used since there are a larger number of townships that met the criteria)





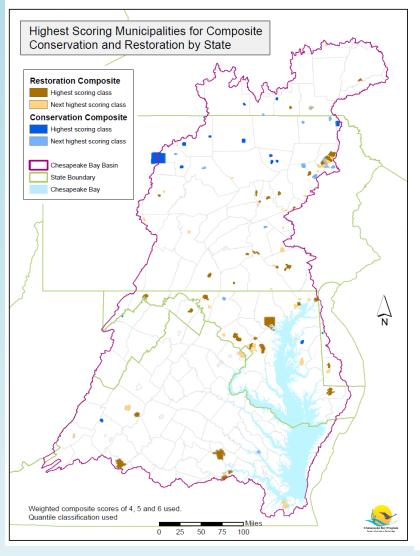


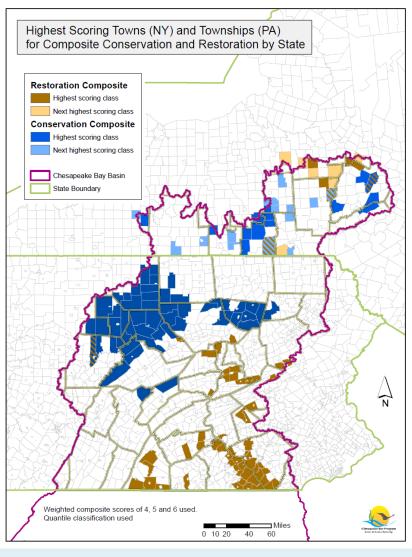
Selected Counties

- 66 Counties
 - Delaware: 2
 - Maryland: 8
 - New York: 4
 - Pennsylvania: 17
 - Virginia: 30
 - West Virginia: 5









Selected Towns, Townships, Cities & Villages

- 254 places
 - Delaware: 3
 - Maryland: 27
 - New York: 46
 - Pennsylvania: 163
 - Virginia: 12
 - West Virginia: 3





Discussion: Target Audience

- Do you agree with the suggested approach for prioritization?
- What refinements or suggestions would you make before moving forward?
- What other questions do you have?





Step 2: Define Domains for Knowledge and Capacity for Local Leaders





Sources of Information to Define Key Knowledge

- Qualitative interviews with five local leaders
- Discussions with Bay Program experts and Local Leadership Group
- Review of Draft Report: "Designing a Strategic Outreach Education Program for Local Elected Officials in the Chesapeake Bay Watershed"





Key Findings and Principles

- Turnover is frequent among this audience—local leaders change often
- The learning curve for local leaders is steep—there are many issues to become familiar with
- Environmental issues are usually not a top priority for local leaders
- Knowledge measures need to be general—specific knowledge requirements vary and change over time





Possible Domain: Local Connections

- Understanding that "the Bay starts here"
 - Recognition that local choices impact the Bay
 - Perceived efficacy to be able to make a difference
- Connections between the Bay and local issues
 - Connecting the Bay to issues that matter in the community
 - Economic impact of choices that are positive for the Bay
 - Benefits to drinking water and local tourism/recreational interests from protecting the Bay





Possible Domain: Regulations and Infrastructure

- Knowledge of regulatory and other legal requirements pertaining to the Bay (including MS4, TMDL & NPDES)
 - Whether community is currently subject to regulations
 - Understanding of future requirements
 - Understanding of the costs and benefits of compliance as well as the costs of noncompliance
- Status and maintenance of water and stormwater infrastructure
 - Knowledge of resources to repair, replace & upgrade infrastructure, including available revolving funds





Possible Domain: Information Seeking

- General understanding of the different parties working on these issues and how they fit together
 - Federal
 - State and County
 - Regional
 - Local
- Knowing whom to contact for assistance or information
- Awareness of case studies/best practices/guidance





Possible Domain: Actions Taken

- Whether local leaders have taken any actions to help protect or restore the Bay
 - Public involvement or times discussed at policy meetings
 - Policy or regulations drafted, in process, or under consideration
 - Policy or regulations created or implemented
 - Public education efforts





Discussion: Knowledge Domains

- Which of the knowledge areas are most important to measure?
- What refinements or suggestions would you make before moving forward?
- What other questions do you have?





Step 3: Brief Environmental Scan on How Best to Gather Input from Local Leaders





Brief Environmental Scan

- Looking for past information-gathering efforts directed at local leaders
- Best practices related to how to measure knowledge/information





Findings

- Surveys of local leaders tend to be either all electronic or electronic combined with paper
 - One effort reported they were able to locate email addresses for about 70% of respondents and mailed the other 30%
- Reported response rates varied widely, from 5% to 83%
 - The median response rate was 30% with a mean of 37%
 - Response rates were higher in more scientific surveys with more intensive follow-ups including phone call reminders
- Response rates may be dropping—some studies fielding over time are seeing drops in response rates





Suggestions

- Assume that any survey of local leaders should be conducted both electronically and via paper, with most responses coming electronically but some (~25%) via paper
- A response rate of 30-40% is likely
- Following up with phone calls to encourage participation may be needed to increase response rates





Discussion: Survey Approaches

- Do you agree with these methodological recommendations?
- Does the anticipated response rate sound correct?
- What other questions do you have?





Suggested Measurement Approaches for Local Leaders





Evaluation Approaches and Examples

- Outputs: Process measurements, e.g., services delivered
 - # trainings held and/or # leaders trained
- Intermediate Outcomes: Critical outcomes that must occur to achieve end goals
 - Increases in knowledge or capacity
 - Positive intentions
- End Outcomes: The high-level goal or desired end state
 - Increased local action
 - Improved environmental quality





Chesapeake Bay Local Leader Logic Model

 Trainings and Information for Local Leaders

Outputs

Intermediate Outcomes

- Increased Knowledge and Efficacy
- Intentions to Implement Policy

 Implemented Policy and Improved Environmental Quality

> End Outcomes

Local leader knowledge and capacity is an intermediate outcome





1) Output: Process Measurements

Data Sources/Sampling	Data collected from organizations conducting trainings including number of sessions and number of participants
Likely Participation Rates	Participation rate should be close to 100%
Costs	Low/Minimal
Advantages	Takes advantage of readily available information to track progress in reaching audience members; information can be used to inform other measures
Disadvantages	Provides no information on outcomes; not a guarantee of positive results





2) Intermediate Outcomes: Participant Survey

Data Sources/Sampling	Participants taking part in trainings are asked to complete a brief written questionnaire upon completion of training
Likely Participation Rates	Participation rate should be close to 100%
Costs	Low/Moderate
Advantages	Efficient; directly tracks self-reported knowledge and efficacy gains among program participants as well as intentions; information can be used to inform other measures
Disadvantages	Provides no information on end outcomes; does not provide a wider picture of knowledge changes among local officials





3) Intermediate Outcomes: Participant Follow-Up

Data Sources/Sampling	Training participants are tracked at 12 month+ intervals to determine if knowledge gains have persisted and to obtain self-reports of end outcomes (electronic); assumes #2 occurs
Likely Participation Rates	Participation rate ~50-70%
Costs	Medium
Advantages	Efficient and allows for some external validity to see if self-reports from training are matched by real-world behaviors
Disadvantages	Does not provide a wider picture of knowledge changes among local officials





4) Intermediate Outcomes: Local Leaders Survey

Data Sources/Sampling	One local leader per high-priority area in the Chesapeake Bay region; invites to approximately n=300 participants; survey electronic and via paper as needed
Likely Participation Rates	Participation rate ~30-40%
Costs	Medium/High
Advantages	Allows for the establishment of a true baseline among the high-priority audience; design is replicable, allowing for tracking; could also collect self-reports on end outcomes
Disadvantages	More expensive to gather information; may only be able to collect information every 2-3 years due to cost





5) End Outcomes: Policy Change Tracking

Data Sources/Sampling	Publicly available information on policy decisions/actions/financing mechanisms among the ~300 high-priority areas
Likely Participation Rates	Participation rate likely ~50% (not all information on policy decisions may be publicly available)
Costs	High to Very High (cost could be reduced if only a sample of these 300 localities are tracked over time)
Advantages	Allows for tracking of actual policy changes; could be linked back to attendance at trainings if outputs are appropriately tracked (see #1 and #2)
Disadvantages	Resource intensive to track information; does not gather information on local knowledge over time (although arguably this is not needed if end outcomes are being achieved)





Discussion: Measurement Approaches

- Which approaches do you favor? Why?
- Are there any approaches you definitely would or would not adopt?
- What refinements or suggestions would you make before moving forward?
- What other questions do you have?





Thank You!

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