

## APNEP Engagement and Stewardship Output/Outcome Metrics

Applicants for APNEP engagement and stewardship project funding can utilize this list of output and outcome metrics to prepare their applications and plan project evaluation. Each output or outcome metric chosen for evaluation should:

- Have a quantitative target identified (e.g., 100 publications distributed, 80% of participants will be able to identify a way to take action, etc.).
- Include a short explanation of how it assists in measurement of one or more CCMP Actions being implemented by the project.

Measurement of short-term outcomes are not required except for multi-year proposals, and no projects are required to measure long-term outcomes. This list of potential outputs and outcomes was created with input from the APNEP Engagement and Stewardship Action Team and adapted from the *NIEHS Partnerships for Environmental Public Health Evaluation Metrics Manual* (2012). [Read the manual](#) for a full list of metrics. This list is not meant to be exhaustive, and applicants are welcome to propose their own output or outcome metrics.

### Definitions

**Output:** Information needed to determine if a project/initiative is being implemented as planned. Immediate and tangible results at the individual or group level - are we doing what we said we would do? What things were done and how were they done?

**Example:** Number of participants, number of publications, number of presentations given

**Outcome:** Information needed to evaluate progress towards the desired goal(s) (i.e., environmental literacy, citizen stewardship) resulting from outputs. More challenging to measure than outputs - involves longer time frames and can be affected by outside factors/confounding variables. Includes effects on a school, community, society at large, or in the environment – is what we’re doing working? Is it having the effect we thought it would have? What broader changes occurred as a result of the project/program?

**Short-term (1-2 years into/after project):** Changes in knowledge, behavior, or skills within a classroom, school, or community targeted by an initiative

**Long-term (5+ years post-project):** Change in knowledge, behavior, or skills within the Albemarle-Pamlico region

**Metrics:** Measurements (such as size, capacity, quantity, duration, or frequency) of a characteristic or aspect (outputs and outcomes) of the program. Metrics provide a reportable and more systematic means for describing how a program has performed and the extent to which it has achieved its stated goals.

### Output Metrics

#### Partnerships and Leveraged Resources

- Number and description of partner organizations involved
- Description of any formal partnership agreements, including provisions and requirements
  - Number of partners who signed agreement
- Level of funding committed by partners or other funding sources (direct or in-kind)
- Number and description of tangible (physical space, supplies) or intangible (organizational, technical, staff, volunteers, etc.) resources obtained from partners or other sources

## **Audience and Location**

- Number and types of target audience(s) reached
- Description of audience(s), such as:
  - Language, literacy, and education/grade levels
  - Age
  - Gender
  - Race and ethnicity
  - Socioeconomic status
  - Special needs
  - County of origin (if attendees are from elsewhere)
- Description of location of program/project impact, such as:
  - Type and number of locations reached (classrooms, schools, libraries, etc.)
  - Location (address) where program/project is held or of program/project impacts
  - Counties reached
  - Congressional districts reached (state and/or federal)
  - Tier 1 counties reaches (NC only)
  - River basins impacted
  - Number/locations impacted with Title 1 status (NC K-12 schools only)

## **Communications Strategies and Products**

- Product or message distribution:
  - Description of outlets, methods, or strategies used to disseminate products and messages
  - Number of events attended to disseminate products or materials
  - Number of partners, volunteers, and community members disseminating materials (for example, number of individuals or hours spent disseminating)
  - Number of languages in which the products are available, especially in the language of the target audience
- Print materials:
  - Number of products and materials distributed
  - Number of requests made for materials
  - Description or list of audiences receiving materials
- Web-based products:
  - Number of hits to website by originating sources (.edu, .gov, etc.)
  - Number of hits to website by geographic areas
  - Number of third-party links to the website
  - Number of downloads
  - Average and range of time users spend at website
  - Number of unique visitors
  - Page views per visitor (e.g., total time spent per user, frequency of visits, depth of visits)
- Audio-visual products:
  - Number of products disseminated
  - Description of how product is tailored to audience
  - Description of type (podcast, *YouTube* video, film)
  - Number of viewers
  - Traffic to and usage of the products posted online or provided by other means
  - Interactions (such as leaving comments, participating in discussion forums, leaving reviews and ratings, etc.)
- Effectiveness of products, established by feedback from product recipients and users

## **In-Person Outreach and Engagement**

- Description, dates, locations, and format of programs (classes, trainings, events, etc.) held
  - Description and number of partners participating/collaborating to implement programs
- Number and type (teachers, nonformal educators, students, general public, etc.) of people reached (directly and/or indirectly)
  - Number of contact hours with people reached
  - When reaching educators: approximately how many learners/year reached by each educator
- Number of volunteers and volunteer hours
- Measures of program effectiveness
  - Assessments of participant satisfaction and/or knowledge gained (surveys, quizzes, or other forms of feedback)
  - Assessment of whether characteristics of participants matched the intended target audience

## **Short-Term Outcome (1-2+ years) Metrics**

- Assessments of retention of information (answers to questions remain stable over time)
- Results from surveys, tests, quizzes, participant testimonials, or other forms of feedback from program participants
  - Number/percentage with change in knowledge
  - Number/percentage utilizing skills or resources from program
  - Number/percentage with intent to change behavior
  - Number/percentage with demonstrated change in attitude

## **Long-Term (5+ years) Outcome Metrics**

- Number/percentage of participants with changed behavior(s)
  - Number of individuals and partners taking action to change workplace, school, or community processes
- Community or region-scale knowledge, attitude, or behavior change
- Changes in associated policies and regulations
- Improvements in the local or regional environment/ecosystem
- Increased quality of life and healthier communities

## **Resources**

- [NIEHS Partnerships for Environmental Public Health Evaluation Metrics Manual](#)
- [MEERA: My Environmental Education Evaluation Resource Assistant](#)
- [Best Practices Guide to Program Evaluation For Aquatic Educators](#)
- [NOAA National Marine Sanctuaries Education Project Evaluation](#)