

Project: GEMS
<http://bit.ly/NI-GEMS>

If you are encountering GEMS protocols for the first time, please read:

- The GEMS protocols can help you develop a monitoring plan for a restoration project. They were developed based on existing published monitoring methods, but should not be considered prescriptive or the only appropriate way to monitor.
 - Each protocol is written as if you are monitoring a single outcome, but it is very possible you will be measuring multiple outcomes and may be able to use the same or similar methods to do so. Think about ways to be strategic and efficient when combining methods from different protocols. For example, are there ways to ask questions about multiple outcomes using a single survey instrument? Or is there a way to host a workshop that asks community members about barriers to accessing multiple types of outcomes?
 - Please be aware that the “who” methods—aimed at documenting who will be affected by social and economic changes caused by a restoration project—are quite similar across protocols. Where possible and sensible, you should consolidate community engagement methods that assess stakeholder perceptions of project outcomes to avoid stakeholder fatigue.
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Background

This document provides an overview of the methods available for measuring full-time and part-time jobs added or sustained because of the installation of a restoration project.

We define restoration jobs as engineers, construction workers, practitioners, education coordinators, and other staff that are employed partially or fully because of project implementation or funding.

The “how much” method allows practitioners to report on expected or measured restoration jobs.

The “who” methods help to document who is and who is not employed in these jobs.

The tables below list when methods would benefit from the expertise of social scientists trained in survey design and implementation, statistics, and economics. These experts should have experience with [human subject research](#), following best practices and, if relevant, conducting research in a way that is accountable to their respective institution’s oversight body, often called an [Institutional Review Board](#). If you do not have such expertise in your project or program, many university programs and consulting firms should be able to assist.

Relevant Coastal Restoration Approaches

Habitat Restoration – Oyster Reef, Salt Marsh, Seagrass, Mangrove, Living Shorelines, Beaches and Dunes, Restoring Hydrologic Connectivity

Recreational Enhancement – Boat Ramps, Fishing Piers, Trails and Boardwalks

Oyster Reef Specific – all except aquaculture

Water Quality Improvement – Sewage System Improvements, Wastewater Treatment Plant Upgrades, Treatment Wetlands, Gray Stormwater Infrastructure, Green Stormwater Infrastructure, Stormwater Outflow Treatment, Agricultural Best Management Practices

“How much” methods:

Overview. This method helps the project answer: How many new restoration-related full-time employees (FTEs) and part-time employees (PTEs) can be attributed to this project?

“How much” method:

Method (click on method title to see more detail)	Method Outcome	Method Description	Human Subject Research Expertise Needed*	Effort Level
Report Hiring and Employment	Number of FTEs and PTEs supported by the project	Use the project budget to report the number of FTEs or PTEs the project hired, intends to hire, or helped sustain each/this year.	No	Low

*Refer to the [NIH Definition of Human Subjects Research](#) for more information

“How Much” Metric Summary:

Social or economic outcome this metric is linked to:	Economic Activity
“How much” metric tier:	<input checked="" type="checkbox"/> 1 (easier) or <input type="checkbox"/> 2 (harder)
“How much” measurement interval:	Annual
Use this protocol if:	The project will create or sustain jobs

“Who” methods:

Overview. These methods help the project answer: Who has access to and is affected by changes in the distribution of restoration jobs as they relate to a coastal restoration project, and are they representative of the employable population?

These methods can help restoration practitioners assess equity in restoration job opportunities. These methods will help identify a) vulnerable groups and historically underrepresented stakeholders in the project service area¹; b) the accessibility and distribution of restoration jobs to communities in the project service area; and c) whether certain groups may be disproportionately accessing or benefitting from restoration jobs.

The table below describes a suite of methods that build off each other to provide a more holistic understanding of the communities that are and can be employed by restoration jobs within the project service area, and how accessible these jobs are for these communities.

The methods below that involve focus groups, surveys, or participatory exercises require inclusive stakeholder engagement² of all relevant communities within the project service area.

¹ The geographic boundary containing those stakeholders for whom a particular project outcome is relevant

² There are many resources available that provide best practices and guidance for inclusive engagement. Some examples include: [Five step approach to stakeholder engagement](#) (BSR); [Equitable Community Engagement Toolkit](#) (Boston Public Health Commission); [Designing equity-focused stakeholder engagement to inform state energy office programs and policies](#) (NASEO); [Inclusive community engagement](#) (C40 Cities), and; [Stakeholder engagement for inclusive water governance](#) (OECD).

“Who” method components:

Method (click on the method title to see more detail)	Method Outcomes	Method Description	Human Subject Research Expertise Needed*	Effort Level
Describe stakeholders	Project service area boundaries	Identify geographic boundary that encompasses all communities that could be employed in restoration jobs in the project service area	No	Low
	Demographics and social vulnerability of the project service area	Collate demographic data of the communities in the project service area	No	Low
	List of relevant stakeholders in the project service area)	Conduct a stakeholder assessment to understand who is interested and qualified for restoration employment in the project service area	No	Low
Accessibility checklist (from project perspective)	Status of restoration job accessibility	Fill out a project checklist to identify accessibility of job-related information provided and accessibility of restoration job-related activities created by the project	No	Low
Assess stakeholder perceptions on access and distribution of restoration jobs	Identification of access, barriers to access, and distribution of restoration jobs and employment opportunities in the employable workforce. Understanding of whether access and distribution is disproportionate compared to the project service area.	<p>Step 1. Use focus groups, workshops, or surveys <i>targeting people in the project service area</i> to ask questions about access, distribution, and barriers to accessing restoration jobs</p> <p>Step 2. Consider information collected through step 1 in the context of the “who” information you already collected</p>	Yes	High

*Refer to the [NIH Definition of Human Subjects Research](#) for more information

To see all GEMS project metrics and protocols, [visit this page](#).

