

Measurement Protocol: Proportion of surveyed harvesters who say that food caught/harvested at the site is important for feeding their household

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

If you are encountering these 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.

This document provides an overview of methods for estimating project impacts on subsistence harvest and food security for households. The “*how much*” protocols provide options for data collection that allows practitioners to determine the proportion of harvesters surveyed that rely on the site for food security reasons and whether or not that has changed with the installation of the project. This method cannot estimate the total contribution of the site to a household or community’s nutrition. The “*who*” protocols describe methods for the project to assess who has access to and is affected by changes in subsistence harvest, and how access and affects are distributed between communities in the project service area¹.

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 restoration, Living Shorelines, Restoring Hydrological Connectivity

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

Oyster Reef Specific – Subtidal projects; Protection or Enhancement of Existing Oyster Reef

“How much” methods:

Overview. These methods help the project answer: How much is subsistence harvest and its impact on household food security changing due to project installation?

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

Below we describe an intercept survey-based method for collecting data. Ideally, your project would collect baseline data on subsistence harvest and food security before project installation, and would continue to monitor this outcome after project installation. This would be a valuable effort because a) data on food security is not only scarce but extremely important, and b) before and after surveys enable a stronger assessment of how the project may have contributed to changes in food security for households. Most often, however, surveys are only conducted after project implementation. As such, the method document linked here outlines how to conduct surveys after project installation. These methods can be adapted if your project would like to collect baseline data.

If you are also interested in measuring outcomes related to recreational harvest, click [here](#).

“How much” method options:

Method Option (click on method title to see more detail)	Method Outcomes	Method Option Description	Human Subject Research Expertise Needed*	Effort Level
Intercept surveys	Proportion of surveyed harvesters who indicate that the site is important for feeding their household. Indication of whether subsistence activities at the site have changed since project installation.	Apply intercept-survey methods with questions focused on subsistence harvest activity at the project site and its relative importance for household food security.	Yes	High

*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:	Human Health
“How much” metric tier:	<input type="checkbox"/> 1 (easier) or <input checked="" type="checkbox"/> 2 (harder)
“How much” measurement interval:	Seasonally to Annually
Use this protocol if:	Subsistence harvesting activity likely to change due to your project There is a public access site from which data collection can take place

“Who” methods:

Overview. These methods help the project answer: Who has access to and is affected by changes in the distribution of subsistence harvest opportunities (and their contribution to household food security)? Are those benefitting from harvest opportunities representative of the population around the site that is interested in subsistence harvest?

These methods can help restoration practitioners assess equity of subsistence harvest outcomes. Some of the methods suggested here can be integrated as modifications of the “how much” protocol described above. Others would require new methods. These methods will help identify a) vulnerable groups and historically underrepresented stakeholders in the project service area for subsistence harvest; b) the accessibility and distribution of subsistence harvest opportunities to communities in the

project service area; and c) how groups who are interested in or rely on subsistence harvest may be affected by changes in subsistence harvest resulting from the project.

The table below describes a suite of methods that build off each other to provide a more holistic understanding of the communities that engage in subsistence harvest activity at the project site, and how accessible the site is for these communities.

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

“Who” method steps:

Method (click on 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 engaging in subsistence harvest around the project site	No	Low
	Demographics and social vulnerability of the project service area	Collate comprehensive 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 in visiting the project area for subsistence harvest	No	Low
Accessibility checklist (from project perspective)	Status of subsistence harvest accessibility	Fill out a project checklist to identify accessibility of harvest areas around the site	No	Low
Assessment of stakeholder perceptions on access and distribution of subsistence harvest opportunities	Identification of access, barriers to access, and distribution of opportunities to harvest for subsistence in the project service area. Understanding of whether access and distribution is disproportionate	Step 1. Use focus groups, workshops, surveys, and/or participatory mapping <i>targeting people in the project service area</i> to ask questions about access, distribution, and barriers to accessing subsistence harvest opportunities Step 2. Consider information collected through step 1 in the context of the “who” information you already collected	Yes	High

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).

	given the population in the project service area.			
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To see all GEMS project metrics and protocols, [visit this page](#).

