WORKSHEET

A Framework for Ecosystem Services Projects



"Ecosystem services" represent the human benefits that healthy ecosystems provide, including water purification, flood protection, and recreational opportunities. To better understand these services, officials and resource managers need a framework that integrates four elements: biophysical science, human benefits, stakeholder engagement, and communications.

Use this worksheet to explore these four elements and how integrated they are in your ecosystem services project. The questions are designed to assess whether the ecosystem services framework is right for you, as well as help you prepare for the planning process.

You may not have answers to all of these questions, but they should all be considered before you begin project planning. The answers will help determine what additional data and information you need to gather to inform project planning and design.



Section I. Does your project align with the ecosystem services framework?

This section is meant to help you decide whether the ecosystem services framework is right for your project needs. The questions will help you identify biophysical science, human benefits, stakeholder engagement, and communications. The first questions address information needed for all projects; others are specific to ecosystem services projects.

1. What is your management question or issue?

Ecosystem services projects can be intensive, time consuming, and often quite expensive. Being clear on the issue will help focus the planning and ensure that the results will be useful. *(Example: Decreasing habitat due to development pressure.)*

2. What are you going to do to address your management issue?

What scenarios are you putting forward on which you will base your research? What are you proposing that will lead to an improvement in ecosystem health and function? *(Example: Installing mooring buoys to avoid anchor damage to salt marsh habitat.)*

3. What are the biophysical changes and corresponding impacts to services and human benefits?

(This needs to be directly tied to a management issue and scenario.) Note: an ecosystem services project characterizes a change in biophysical health and estimates the resulting changes to human benefits.

Biophysical Change	Services Impacted	Human Benefits
<i>Example</i> Increase in marsh size, improved function	 Example Enhanced protection from storms Carbon storage Nutrient retention 	 Example Safer from hazards Mitigates climate change impacts Cleaner water

Biophysical Change	Services Impacted	Human Benefits

4. Who are the stakeholder groups, and who will benefit from your management scenario? Specifying people or groups of people who will be impacted by or benefit from your management scenario will help you engage them as stakeholders from the beginning of the planning process.

5. What is the desired future outcome of the ecosystem services project?

It is important to have a firm and realistic idea of what you hope to achieve with the project. What is the desired outcome that will occur from the use of the results? (*Example: Consideration of ecosystem services values in a land use decision*.)

Section II. What expertise and data do you need?

Before you can move ahead with the project, it is necessary to have all the right pieces in place. The questions in this section will help you determine the resources you need to carry out a successful project.

1. What expertise do you need on your project team?

Having the required expertise (economists, social scientists, biophysical scientists, engagement specialists, communication experts, resource managers) available to work with you throughout the process is a key component of a successful project.

2. What data or information will you need? What do you already have? What will you need to collect?

Ecosystem services projects are data intensive. Having an idea of the data required and whether these data are currently available or will need to be collected will drive how long your project will take and how much it will cost. This question will need to be answered early in the planning process.

Biophysical Science	Human Benefits	Stakeholder Engagement	Communications

3. Who else could you work with? How could highlighting multiple ecosystem services or cobenefits contribute to identifying potential partners?

Even if you only need information on particular services and benefits, you may want to expand the list based on collaboration and partnering opportunities. These relationships are often necessary to pool resources and obtain sufficient funding.

Note: See results from question 3 in section 1 to help answer this question.

Section III. How ready are you to begin project planning?

Project planning starts with a conceptual picture of the project components. The answers to the questions in this section may change or be altered through the project planning process, but it is helpful to develop preliminary answers to guide you as you begin project planning.

1. What methods will you use for measuring the change in biophysical health and function?

The methods you choose will link to the socioeconomic research components and are driven by the study scenario.

2. What methods will you use for measuring the human benefits?

Depending on your information requirements in your management issue, you will need to determine the best way to measure human benefits. The benefits may or may not be economic.

3. What is your plan for engaging stakeholders?

Having a plan to regularly check in with stakeholder groups throughout the project will allow for feedback on interim steps and ensure that the final results are accurate and useful. At the same time, care should be taken not to overburden stakeholders, so make the interactions with them count.

4. How will you communicate about the project to partners and stakeholders, as well as communicate project results to the intended audience?

Communication is one of the four key components of an ecosystem services framework and needs to be rigorous to ensure that people understand the results and know where the results came from and how to use them. Knowing your stakeholders (those who have an interest in or may be impacted by the project) and target audiences (those who would use the information from the project) and ensuring that they understand the project plan, progress, and results is important. The communication mechanism must be able to anticipate and overcome these challenges and provide the assumptions and caveats that are necessary to accurately interpret the results. 5. How will the project results be used?

6. What are some potential barriers to using the results? What are some potential solutions to ensure that the results are used in your management issue?

Barriers	Solutions
Example:	Example:
Political climate	Get buy-in by including your municipal planner on your project team