

# ISSUES AFFECTING YOUR ESTUARY Level IIIA- IDENTIFYING ISSUES & OPPORTUNITIES

Dumping household garbage near an estuary is an example of an issue that affects both the environment and the community.

### GOAL

Students will understand how issues are identified and drive the planning process to resolve an environmental problem.

**OBJECTIVES**, students will:

- 1. Use research-based evidence from data they have collected to identify issues affecting the estuary.
- 2. Conduct at least a community issue identification process to gather subjective evidence to identify issues affecting the estuary.
- 3. Develop a process to prioritize issues.
- 4. Write an issue statement for one of the issues on the priority list.
- 5. Document the results of this unit on the **ESTUARY ISSUE RESULTS** form.

## SETTING

Classroom. Community sites for community involvement process

## MATERIALS

ESTUARY ISSUES RESULTS form. This form is attached to this unit.

## BACKGROUND

An issue is a problem or concern. Its existence may be supported by scientific evidence

based on documented research. An issue may also be based on people's perceptions, beliefs, culture, traditions, and/or opinions that a problem exists even when there may be little or no scientific evidence to support it. This is called "subjective" data since it is based on emotions, perceptions, personal bias, etc. Subjective data is very important because it represents people's feelings and perceptions.

Typically, an issue has a basis in both. To find solutions, we must respect both the scientific and subjective basis of an issue. That's why finding solutions to issues must be a dynamic, community-oriented process!

ANALYZE Level IIIA Analyze scientific data Analyze subjective data Identify & prioritize Issues Create an Issue Statement

In this unit, students will complete the first step in an issue planning process- to identify issues affecting the environment using both scientific data and community input.

Students should review the scientific data they have documented in Level II units to develop a list of issues or problems they feel are affecting the estuary now or could negatively impact it in the future. They will also conduct at least one Community Issue **Identification Process** to gather subjective data based on the community's perception about issues facing the estuary's natural resources.

Using scientific data and community input, students will create a final list of issues they feel may affect the estuary now or in the future. They will prioritize the issues and select one that they want to work on to resolve. Finally, they will write an Issue Statement to clarify the scientific and social aspects of that problem.

## ACTIVITIES

## 1. Use Scientific Evidence to Find Issues Affecting the Estuary

- a. List any issues affecting the estuary that were discovered through the research gathered in Level IIA sampling activities. Evidence may include: observations, results of sampling procedures, or hypothesis based on student research. Be able to document how scientific evidence supports the issue.
- b. Research other sources of scientific evidence that could help identify potential issues that could affect the estuary now or in the future. These could include research done by other scientists, observations by natural resource managers or biologists, etc. Be sure to document the source of the scientific evidence that supports the issue.
- c. List these findings on the ESTUARY ISSUE RESULTS form under "Scientific Evidence".

## 2. Gather Community Input to Find Issues Affecting the Estuary

a. Participate in at least one **Community Issue Identification Process** to ask members of the community about their concerns about the estuary or the issues they feel are important to consider. Examples of several Community Issue Identification Processes are included at the end of this unit. **Issue or Opportunity?** 

List the issues gathered on the **ESTUARY ISSUE RESULTS** form under *"Results of Community"* Issue Identification Process".

Even though an issue is defined as a "problem", issues can also be opportunities to improve the current situation. Scientific data or community input may suggest opportunities for improving or enhancing the estuary. Treat these suggestions in the same manner as an issue for the purposes of this unit.

## 3. Prioritize The Issues

Students now have important issues that they discovered through Level II Activities plus issues and input that community members have identified in the Issue Identification Process.

Review both sets of issues. Combine issues that are alike or have the same intent. Eliminate duplicates.

Rank the issues based on their importance being:

**HIGH**-- a critical issue needing immediate help

**MODERATE** --important, but not threatening

**LOW**—present problem, but no immediate action seems needed now

**EMERGING**—a concern that may happen, but not yet a problem

Write the results of how the issues were ranked and <u>why</u> that rank was chosen should be listed on **ESTUARY ISSUE RESULTS** form.

## 4. Select One Issue to Resolve

From the prioritized issue list, the students or class should select one issue that they would like to work on resolving.

This issue will be the focus of their work in Level III-B and Level III-C.

### Basic Recipe for Conducting a Community Issue Identification Process

Solving issues or finding new opportunities to improve the environment begins with learning how to care for your community, its people, and future generations. Learning to care means adopting an attitude of fairness, listening to the opinions of others, and willingness to compromise to ensure equal treatment and find fair solutions.

No matter which issue identification process is used, these steps will help you get the community involved.

- 1. Make a list of people who represent different interests and who can give a wide range of opinions and perceptions about the estuary.
- Contact the people selected in Step #1 by phone or letter. Explain the purpose of the process, what you will be asking them to do, and invite them to participate. Schedule a date, time, and location where they can meet with you to give you their opinions. Plan to take notes on who gave you the opinion and what he or she said.
- 3. At the beginning of the process: Introduce the students who are be participating. Ask everyone to introduce him or herself. Thank the community member(s) for participating and repeat the reason why you are asking them for their opinions. Let them know that their opinions will be used to create a list of priority issues affecting the estuary.
- 4. Set the stage so that community members are familiar with the estuary and the Adopt-An-Estuary project. Give the community member(s) to the estuary a summary of the results of your Estuary Exploration and a brief summary of why you are concerned about the estuary. Share the issues your class has identified and the scientific data collected by your class that supports these issues.
- Ask the community member(s) a specific, but openended question them to give you their specific opinions about the estuary. An examples of a question to ask could be: What are the 3 most important problems facing this estuary and <u>why</u>?
- 6. If there is time, ask follow-up questions to determine why the community member(s) has these opinions about the estuary. Are their opinions based on personal experiences, things they have heard or read about, cultural traditions?
- 7. Ask the community member(s) if there is anything else that they would like to add to the process
- 8. Thank the community member(s) for their participation.

## 5. Write An Issue Statement

An issue statement helps to clarify the problem or opportunity and make it easier to understand. Write a one or two sentence statement that describes the essence of the issue the students have selected to work on.

One of the easiest methods to use is the "5W's and an H" method. Write the issue statement to answer the following questions:

What is the situation?

Where is the issue occurring?

When is the problem occurring?

Who is affected by the issue?

What are the consequences of the situation?

How do you know this is an issue?

#### Example of an Issue Statement:

Household garbage that is being dumped at the Fish Creek Estuary's boat landing, during the summer months, detracts from the area's beauty and is polluting fish spawning beds with trash.

Write this Issue Statement on the ESTUARY ISSUE RESULTS form.

#### LEVEL IIIA

## **EXAMPLES OF COMMUNITY ISSUE IDENTIFICATION PROCESSES**

There are many ways to gather input about issues. These are examples of easy public involvement processes to try. Some advantages and disadvantages of each method are listed to help students choose the process that will best fit their interests.

#### **One-on-One Interview**

Select people within the community who know about the estuary and interview him them about problems they feel are affecting the estuary.

Advantages: Fairly easy to do, you can ask for more information Disadvantages: Information limited to the opinions of only one person

#### **Focus Group**

Ask a group of people who represent different interests & opinions to meet together. Ask them to discuss issues they feel are important to the estuary. Develop a list of issues based on what they say.

- Advantages: Opinions of many people are gathered at one time The group may come up with new ideas as they discuss the problems
- Disadvantages: It can be hard to get a group of people together Not everyone in the group may feel comfortable talking and sharing ideas One person may dominate over the opinions of others

#### **Questionnaire or Survey**

Design a survey to gather written opinions from community members about their opinions on issues affecting the estuary.

- Advantages: Opinions of many people can be gathered Community members do not need to attend a meeting in order to give opinions The survey gives a written record of each person's opinion
- Disadvantages: The survey must be properly designed to get the information wanted It costs money and/or time to distribute surveys It takes time to develop a good survey and tabulate the results Not everyone who gets a survey will complete one and send it back

There are many other Issue Identification Processes. One source of help is your County's UW-Extension Office's Community Resource Development Agent.

An excellent and fun web resource that gives "recipes" students can use to develop these and other techniques to identify issues can be found at the:

Learning Technology Dissemination Initiative Website Institute for Computer Based Learning Heriot-Watt University Riccarton, Edinburgh, EH14 4AS, Scotland. http://www.icbl.hw.ac.uk/Itdi/cookbook/recipes.html