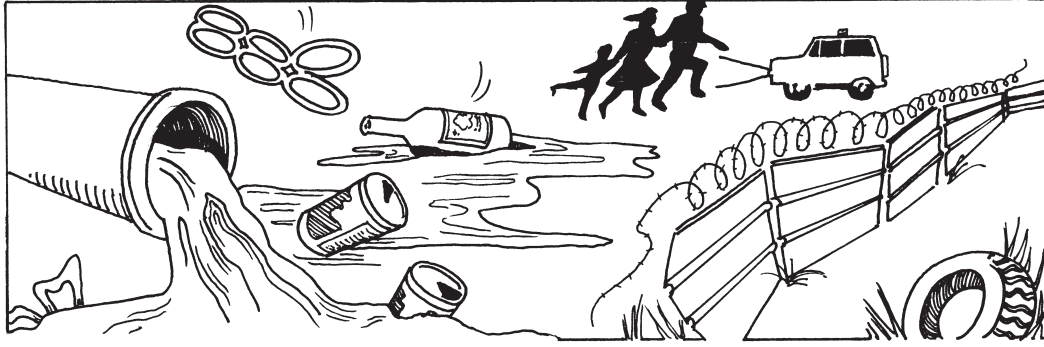


Human Use Chapter Teacher Sheet



Activity #4: What the Tijuana Estuary Does For You

Objectives:

To understand the importance of estuaries and the reasons for preserving them.

Time:

This activity can be assigned as a long-term project that students will complete on their own time, or you can schedule class time for all or part of the project.

Background:

Preserving wetlands from encroaching development can be a difficult task, and requires people living in the community to be educated about the need for estuaries and the role they play in the quality of our lives. Many people are unaware of the benefits wetlands and estuaries provide. As a result, when developers begin to fill in wetlands in order to build on them, there is frequently no public outcry to prevent the development. This activity will give students the opportunity to understand why we need to preserve our estuaries.

The students will work in pairs to prepare an advertising campaign to educate people in their community about the benefits of estuaries. You can decide beforehand if you want to limit the scope of the advertising campaign. For instance, you can ask the students to prepare an ad poster showing one important way estuaries benefit the community, or you can have the students design their own type of ad, such as a one-minute advertising spot for a television or radio station or an ad to appear in the local paper.

When the students have completed their project, you might be able to get permission from the school or from local businesses to display the posters, or from the local school or community media to run the ad. This will give students an added incentive to produce a quality piece.

Materials:

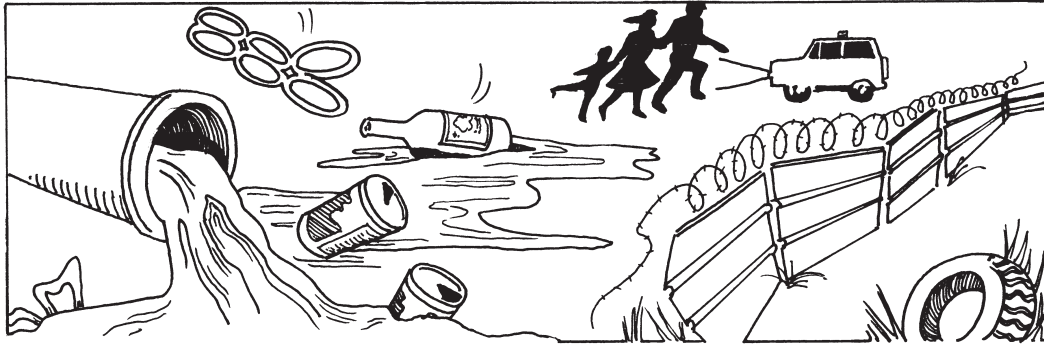
The materials necessary to complete this project depend on the type of advertising campaign you want the students to produce, and also depends on the materials the school can supply.

Procedure:

Once you have decided on the type of project the students need to complete, hand out the student sheets and provide the details of the project.

Note: There are no student questions included with this activity.

Human Use Chapter Student Sheet



Activity #4: What the Tijuana Estuary Does For You

PURPOSE:

After completing this activity, you will understand the importance estuaries play in the lives of the people living in a community.

INTRODUCTION:

Have you ever wondered why estuaries are important? Do you think the people living in your community understand why the Tijuana Estuary is important? In a growing community, there is a constant need for land for new houses and businesses, and since estuaries are so near the ocean, there are many people who would like to live on that land. If people don't know why it is important to preserve our estuaries and other wetlands, they can't make good decisions about land use.

In this activity, you will develop an ad to educate people about the things the Tijuana Estuary provides for us.

PROCEDURE:

The Tijuana river bottoms in the United States were owned by American Plywood and the Helix Land Corporation. Developers and the City of Imperial Beach, aspiring to raise the depressed economic situation in the area, remained intent on the idea of dredging the Tijuana estuary. They wanted to get rid of what they called "muck" and create a marina the likes of which California had never before seen. Local biologists Joy Zedler and Paul Jorgensen knew that what developers called "muck" was the basis for estuarine ecology, with its related importance to water quality, air quality, ocean health, and many living systems outside the estuary, including humankind. As you know from reading the History section, the area of the Reserve near the Visitor Center did not become a marina, but instead was conserved 25 years ago when it became the Tijuana Slough National Wildlife Refuge.

The local Imperial Beach government has now come full circle and is currently developing an Ecotourism Plan, realizing the positive economic impact of the Reserve in attracting Bird Watchers and families to the City. Still, however, many of the residents business owners of Imperial Beach are unaware of the positive environmental and economic impacts derived by the Reserve, even though it does not generate property tax.

Working with a partner, your task will be to develop an ad that will help educate people about "What the Tijuana Estuary Does For You." Your teacher will give you precise details on the type of ad you are to produce, and the due date for completion of the project.

To begin, review the Human Use Section of the Tijuana Estuary Guide. It might also be helpful to review the other sections of the Guide. Go to the estuaries.gov website.

Next, brainstorm in your group and make a list of all the benefits the humans derive from the Tijuana Estuary.

Decide which of the items on your list would be most important to the people in your community.

Hint: You might decide to use all of them!

Now decide what you would like your ad to look like.

Finally, work to develop your ad so that it includes all of the items your group felt was important, and has the look you wanted it to have.