



## Otter Point Creek Environmental Survey

*An Interactive Exercise Combining Middle and High School  
Class, Field and Laboratory Experiences*

### - TO THE TEACHER -

We at the Anita Leight Estuary Center are pleased to offer a unique field trip intended to replicate real world environmental decision making. Your students will be presented with a fictional (but possible) scenario in which they must gather facts, evaluate alternatives and consequences, and judge how the community should proceed. This program allows students to explore environmental issues in a fun, engaging, and hands-on way. Additionally, students will practice applying environmental science as a decision making tool.

Although this program provides guidelines and objectives for participating students, it is flexible and can meet the specific needs of your class. All these objectives can be expanded or adapted as needed.

- Engage students in a realistic and meaningful scenario which the students will be able to relate to real world situations and decision making processes.
- Expose the students to real world **field monitoring** (with regard to environmental science) and connect the experience to actual decision making applications.
- Students will participate in real world **laboratory** experiences (with regard to environmental science) and apply this knowledge to decision making.
- Students will use teamwork and skills from many disciplines to collect evidence and predict outcomes of actions.
- Challenge students to use evidence, predicted outcomes, and experience to make and justify decisions.

Your class will be asked to *Approve, Disapprove, or Approve with Recommendations* the proposed Bush River Marina Expansion Project. The class will be divided into two teams with each team working to gather data and record data. Then the teams will be expected to combine their findings (developing an average of the findings between the two teams) and develop a single recommendation for the entire class.

You have been provided with the following materials to prepare the students before the actual visit:

1. Pre-visit Test- This will help us assess the students' knowledge base before exposure to any of this material. We need to have this test administered and returned to the Anita C. Leight Estuary Center prior to your visit.
2. Letter to the Student- This will give the students an idea of what to prepare for and where to find the answers. The recommended websites provide all needed information.

3. Video Introduction- This video presents short segments that set the stage for students. It may be run all at once or in segments to suit your class. Please show the video prior to your actual visit. This may also provide a mechanism for further discussion and additional investigation.
  - The first segment assigns the students with the task of doing an environmental survey for Harford County Planning and Zoning. The individual on the tape actually works for Planning and Zoning and stresses the need to justify all findings. Final recommendations (from the students) must be based upon field and laboratory findings and need to be supported by the evidence.
  - The second segment presents the students with the overall plan of the ABC Company. The President and CEO take this opportunity to present the benefits of such a project to the community.
  - The last segment presents the students with concerns from a naturalist. Here students will be introduced to the fine balancing act between community needs and environmental limitations. Not an easy task!
4. Background Materials- Additional material including maps, letters and websites are provided to help students get a better understanding of the *whats, wheres, and hows*.
5. Data Record Sheets- You have samples of the forms that students will use in the lab and field portions of the trip. Students may look over these forms to get a better idea of what they will do during their visit.
6. Final Report of Survey- The students will use this template to analyze their data, recommend a course of action to Harford County Planning and Zoning, and justify their recommendation with evidence.

Materials will be provided for the students during their visit. They will also be provided with materials to complete after the visit. The students will need to complete their survey sheets, combine their findings, and develop their final report. Please feel free to contact us should you have any questions along the way.

Thanks for your participation and we welcome your comments and suggestions.

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