2011 Massachusetts Envirothon Current Issue Problem

Wetland Protection

Background (For more extensive background see http://www.maenvirothon.org/currentissue.htm)

Wetlands perform critical ecosystem functions and provide important values to human society through their natural functions. Massachusetts was an early leader in providing legal protections for wetland functions and values. The Massachusetts Wetland Protection Act (WPA) regulates work in and adjacent to wetland resource areas, and it vests the primary responsibility for enforcing the law in the municipality where the wetland is located. With very few exceptions, anyone wanting to do work in or near a wetland must obtain a permit from the local Conservation Commission, which sets out specific conditions for the project.

Under the WPA, individual municipalities are allowed to strengthen legal protections for wetlands within their boundaries. Many towns have done this through adoption of a local wetland protection bylaw.

Many of the open spaces we enjoy in our communities have remained in a natural state over the past 40 years because they are associated with wetlands and protected by the WPA. The work of identifying and delineating and monitoring wetlands has produced new scientific understanding, and the requirement to protect wetlands during and after construction has led to green technology development. The ecosystem services provided by wetlands have saved Massachusetts communities many dollars in flood control, water purification, and more.

At the same time, some view wetland regulations as interfering in the exercise of landowner property rights. Wetland regulations have sometimes been cited as the cause of unreasonable delays and obstacles to economic development. Prime areas in Massachusetts communities are often off limits to construction and subject to limits on recreational use because of wetland protection.

Laws are only one element of effective wetland protection. A scientifically literate citizenry, with strong environmental stewardship values and skills for effective action, is another. Laws are simply a reflection of community values, and these values may also be expressed through comprehensive community planning, best practices for work in and near wetlands, public education, and monitoring programs that track wetland health.

The Problem

Your team has been asked to help your municipality to evaluate wetland protection in your town. Are wetlands being adequately protected? Has the town been over-zealous, protecting wetlands at the expense of other important values? What is the town's responsibility to the next generation? Is this responsibility being exercised? What needs to be done with regard to wetlands to assure the brightest future for the community?

It is important to remember that your town must work within the framework of the Wetland Protection Act. WPA legal protections may be strengthened but not weakened by municipalities. It is also important to recognize that legal protections are only one of a variety of tools and strategies for protecting wetlands.

Your presentation to the Envirothon judges is the presentation you would give to a group of citizens, including members of your town's Conservation Commission and Chamber of Commerce, and people on all sides of wetland protection issues.

To make a strong case that is convincing to everyone, your team will have to demonstrate a thorough knowledge of the wetlands of your community, including the functions and values they provide for people and the ecosystem as a whole, and the threats to these functions and values, now and in the future. You should be able to speak about the relative importance of individual wetlands, as well as about wetlands in general. You will also need to demonstrate understanding of the effectiveness of protections already in place, such as local bylaws, open space plans, volunteer and paid time devoted to wetland protection, and an environmentally literate citizenry. And you will also need to be familiar with differing opinions on wetland protection.

In your presentation, you should:

Provide an engaging introduction to the wetlands of your community:

- Speak from firsthand experience of visiting wetlands in your community!
- Use maps to provide an overview of the types and extent of wetlands
- Explain the functions and values provided by these wetlands in their community
- Offer an assessment of the relative importance of specific wetlands (a good tool that you can use is the *Method for the Comparative Evaluation of Nontidal Wetlands in New Hampshire* (google it!) and the summary sheet on page 9 of ttp://ftp-fc.sc.egov.usda.gov/NH/Ecological pubs/NH Method Appendices.pdf
- Provide details current and potential threats to wetland functions and values, including consideration of potential effects of climate change

Tell the story of your investigations of current wetland protections in your community:

- Use your firsthand experiences of attending ConCom meetings, researching in town hall, reading the newspaper, talking with people who have knowledge and opinions about wetlands!
- Provide details of the protection that wetlands have in this community, including laws, planning processes, people power, stewardship values, technology and engineering
- Describe current issues and concerns related to wetland areas, and any solutions proposed. Remember that many water supply, wastewater, and stormwater issues have wetland connections!
- Provide a concise summary of the status of wetland protection in your community.

Provide your assessment and recommendations:

- Answer the question: Are current wetland protections in our community adequate and appropriate?
- If changes are needed, propose specific measure(s) that should be implemented.
- Detail action steps you recommend and list who will need to be involved in decisions and actions.
- Show that you have considered what your recommendations will cost, and how they should be paid for.

Your team has the freedom to plan your own presentation as best fits what you want to say, and to choose whether, how, and in what order you will address these questions.

Some Tips for Your Presentation

How it works:

- The Current Issue Presentation score is 25% of your team's total Envirothon score.
- You will make your presentation to a panel of five to eight judges. Their job is to listen, ask good questions, assess your work, and give you feedback on your research, your proposal, and your presentation.
- You will have 15 minutes for your presentation, followed by a 10 minute period when the judges can ask you questions.
- Five of the judges will give you a number score. An average will be generated to give you a score for the competition.
- All the judges are asked to give you helpful comments. Copies of the score and review sheets will be sent to your coach.
- Your coach will be able to observe the presentation.

Be Prepared! You will be presenting in a tent, outdoors. The day of the Envirothon is often surprisingly windy and cold, and sometimes wet.

Practice your presentation. Practice makes it easier for you to be poised and at ease in your presentation, including being able to make good eye contact and speak naturally with the judges.

Show the judges how you know what you know, and how you came to your conclusions. Tell them about where you visited, who you talked to, what documents you researched.

Use visual aids, especially maps, to introduce the judges to your community and its resources and issues. Mount your visual aids on sturdy boards in case of wind.