It is easy to get discouraged when considering the world's many serious environmental problems. But do not lose track of the conclusion that emerges from our examination of these environmental problems each of the world's many problems is solvable. If one looks at how environmental problems have been overcome, a clear pattern emerges.

Five Steps to Success

Viewed simply, there are five components to successfully solving any environmental problem.

1. Assessment. The first stage is scientific analysis of the problem, the gathering of information about what is happening. To construct a scientific model of an ecosystem, data must be collected and analyzed. A model makes it possible to describe the current state of the ecosystem. A model would also allow scientists to make predictions about the future of the ecosystem.

2. Risk analysis. Using the information obtained by scientific analysis, scientists predict the consequences of different types of environmental intervention. It is also essential to evaluate any negative effects associated with a plan of action.

3. Public education. When it is possible to describe alternative courses of action, the public must be informed. This involves explaining the problem in understandable terms, such as at a public meeting, presenting the alternative actions available, and explaining the probable costs and results of the different choices.

4. Political action. The public, through its elected officials, selects and implements a course of action. Individuals can be influential at this stage by exercising their right to vote and by contacting their elected officials.

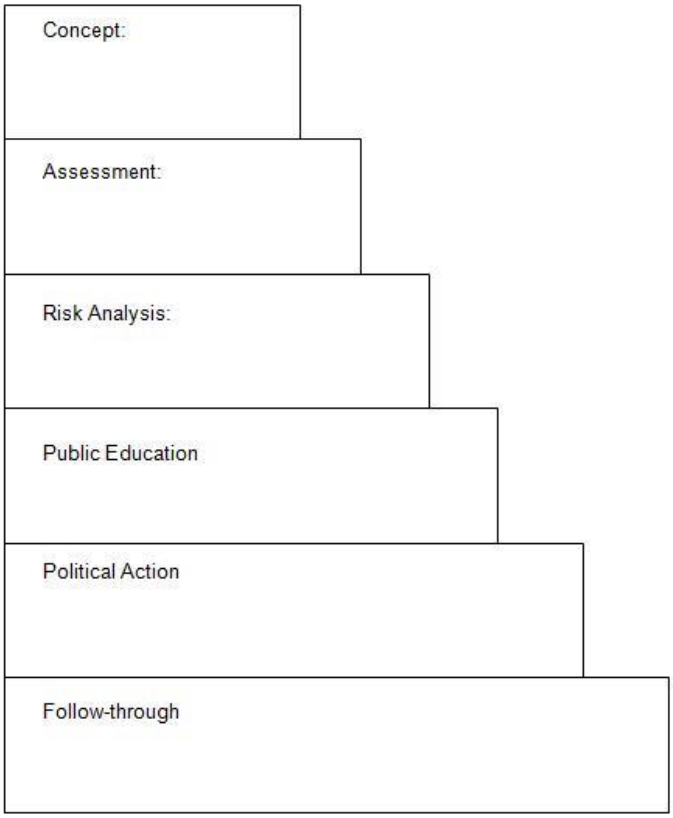
5. Follow-through. The results of any action should be carefully monitored to see if the environmental problem is being solved.

SC.912.L.17.13	Discuss the need for adequate monitoring of environmental parameters when making policy decisions.	High

1. After reading the information on the benchmark, make 2 Concept Ladders to follow steps needed to make a policy decisions on an environmental issue.

Scenario #1: Imagine that a community plans to build a shopping mall. What should the local government consider the effects on wildlife of development area?

Scenario #2: Members of an environmental protection group have noticed that fish populations have decreased in a local wetland area. They think that pollution in runoff from nearby farms is to blame. What are the steps they should take to solve the problem and restore the wetland fish population?



2. After implementing a solution to an environmental problem, environmental workers often continue to collect and analyze data associated with the problem area. Why is it important for public officials to follow through and check the results of implemented solutions to environmental problems?

a. Once data is collected in an area, public officials will always have to monitor that area.
b. The act of collecting data ensures that the problem will never come back again in that area.
c. Public officials always monitor the environment whether or not there has been an environmental problem.
d. Collected data can show public officials whether the solution is actually working or whether it needs to be modified.

3. Members of an environmental protection group have noticed that fish populations have decreased in a local wetland area. They think that pollution in runoff from nearby farms is to blame. What is the first step they should take to solve the problem and restore the wetland fish populations?

A. Enact laws that prohibit farming near wetland areas and near creeks that drain into them.
B. Educate other communities whose wetlands are at risk of the dangers of having farms nearby.
C. Collect and analyze data to assess which factors are causing the fish populations to decrease.
D. Bring in fish from other wetlands to restore the original fish population size of the local wetland area.