

Section 3: Making Informed Decisions

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Section 3: Making Informed Decisions

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- Gather Information
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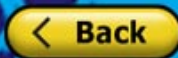
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Bellringer

Section: Making Informed Decisions

Describe a problem in your life that presented a difficult decision. Consider how you usually approach decisions. Is it by flipping a coin or by talking to your friends? How do you weigh what is important to you?

Write your responses in your *EcoLog*.

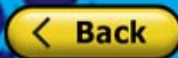


Objectives

- **Describe** three values that people consider when making decisions about the environment.
- **Describe** the four steps in a simple environmental decision-making model.
- **Compare** the short-term and long-term consequences of two decisions regarding a hypothetical environmental issue.

Values and the Environment

- Scientific research is an essential first step in solving environmental problems.
- However, before research can begin, an examination of values is usually needed.
- **Values** are principles or standards that an individual considers to be important.
- There are many values that affect environmental decision making.



Values that Affect Environmental Decision Making

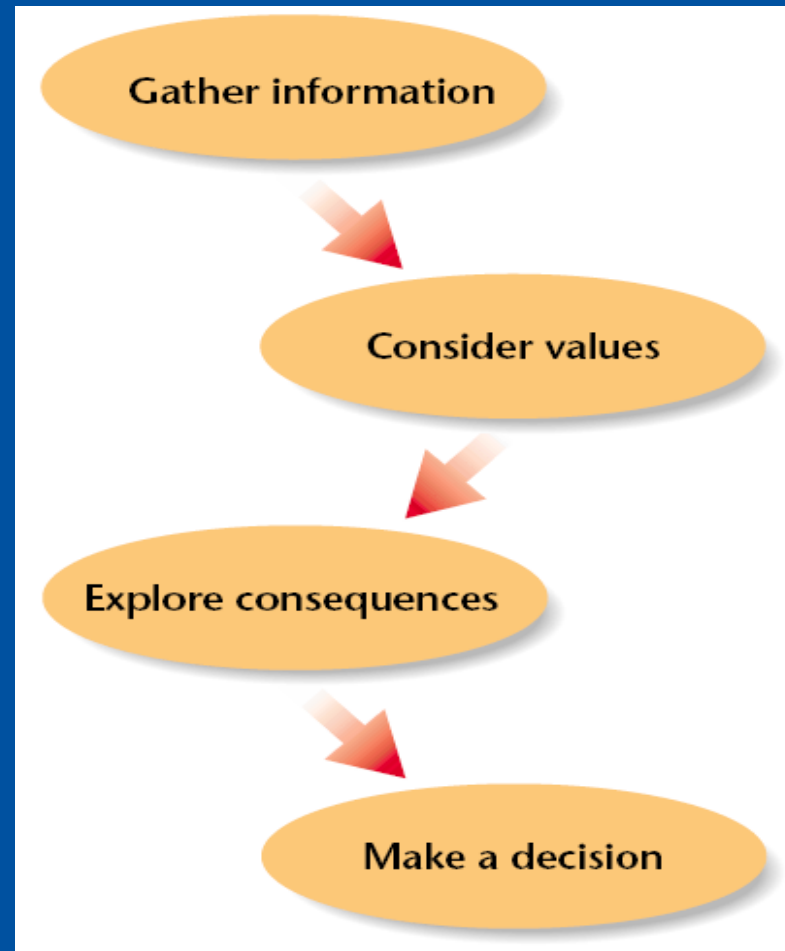
Values That Affect Environmental Decision Making	
Value	Definition
Aesthetic	what is beautiful or pleasing
Economic	the gain or loss of money or jobs
Environmental	the protection of natural resources
Educational	the accumulation and sharing of knowledge
Ethical/moral	what is right or wrong
Health	the maintenance of human health
Recreational	human leisure activities
Scientific	understanding of the natural world
Social/cultural	the maintenance of human communities and their values and traditions

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An Environmental Decision-Making Model

- A **decision-making model** is a conceptual model that provides a systematic process for making decisions.
- Decision-making models can be used to help you make decisions about environmental issues which can be very difficult.

Decision-Making Model



A Decision-Making Model

- The first step in the model is to gather information. This includes things such as watching news reports, and talking to experts.
- Second, consider which values apply to the issue.
- Next, explore the consequences of each option.
- Finally, evaluate all of the information and make a decision.

A Hypothetical Situation

- The golden-cheeked warbler population is declining in Valley County.
- The town of Pleasanton, in Valley County, is growing rapidly, and much of the new development is occurring outside the city limits.
- Biologists who have been studying the warbler warn county officials that if they do not take action, the state fish and wildlife service may list the bird as an endangered species.

A Hypothetical Situation

- Several groups join together to propose that the county buy several hundred acres of land where the birds are known to breed and save the land as a nature preserve.



A Hypothetical Situation

- The group also proposes limiting development on land surrounding the preserve.
- The group obtains enough petitions to put the issue to a vote, and the public begins to discuss the proposal.

A Hypothetical Situation

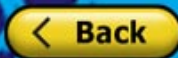
- People who own property within the proposed preserve oppose the plan.
- These property owners have an economic interest in the situation. They believe that they will lose money if they are forced to sell their land to the county instead of developing it.
- Other residents do not like the idea of more government regulations on how private property can be used.

A Hypothetical Situation

- Other landowners support the plan and fear that without the preserve the warbler will be listed as an endangered species. Once listed as endangered, the state will impose a plan to protect the bird that will require even stricter limits on land development.
- People who have land near the preserve think that their land will increase in value.
- Many residents also look forward to hiking and camping in the preserve.

How to Use the Decision-Making Model

- The hypothetical situation in Pleasanton can be used to illustrate how to use the decision-making model.
- Michael Price is a voter in Valley County who will vote on whether the county should create the nature preserve.
- The steps Michael took to make his decision follow.

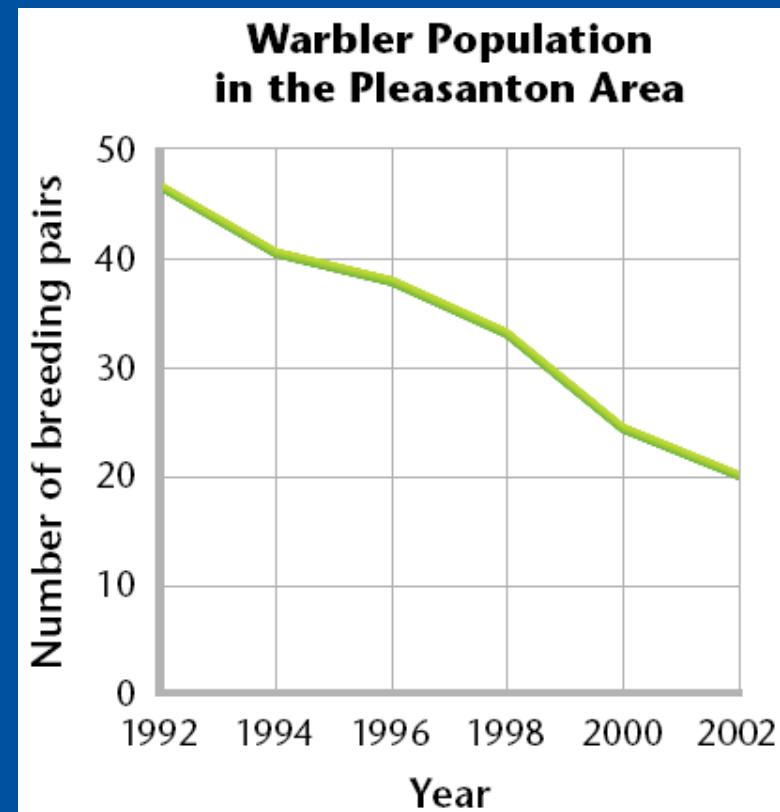


Gather Information

- Michael studied the warbler issue thoroughly by watching local news reports, reading the newspaper, learning more about the golden-cheeked warblers from various Websites, and attended forums where the issue was discussed.
- Several of the arguments on both sides made sense to him.

Gather Information

- Michael also gathered scientific information that included graphs of the decline of the warbler population.



Consider Values

- Michael made a table to help him clarify his thoughts and values.
- Michael considered the environmental, economic, and recreational values of the preserve.
- He believed these to be important, but someone else might have thought other values were more important to consider.

Should the Valley County Set Aside a Nature Preserve?

Should Valley County Set Aside a Nature Preserve?			
	Environmental	Economic	Recreational
Positive short-term consequences	Habitat destruction in the nature preserve area is slowed or stopped.	Landowners whose property was bought by the county receive a payment for their land. Property outside the preserve area can be developed with fewer restrictions.	Parts of the preserve are made available immediately for hiking and picnicking.
Negative short-term consequences	Environmental controls are made less strict in parts of the county outside the preserve area.	Property owners inside the preserve area do not make as much money as if they had developed their land. Taxpayers must pay higher taxes to buy preserve land.	Michael could not think of any negative short-term consequences.
Positive long-term consequences	The population of warblers increases, and the bird does not become endangered. Other species of organisms are also protected. An entire habitat is preserved.	Property near the preserve increases in value because it is near a natural area. Businesses move to Valley County because of its beauty and recreational opportunities, which results in job growth. The warbler is not listed as endangered, which avoids stricter controls on land use.	Large areas of the preserve are available for hiking and picnicking. Landowners near the preserve may develop campgrounds with bike trails, swimming, and fishing available on land adjacent to the preserve.
Negative long-term consequences	Other habitat outside the preserve may be damaged by overdevelopment.	Taxpayers must continue to pay for maintaining the preserve. Taxpayers lose the tax revenue that this land would have provided if it was developed.	State officials might restrict some recreational activities on private land within the preserve.

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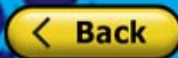
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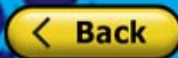
Explore Consequences

- Michael decides that in the short term, the positive and negative consequences listed in his table were almost equally balanced.
- For example, some people would suffer financially from the plan, but others would benefit.
- Also, taxpayers would have to pay for the preserve, yet all residents would have access the previously private property.



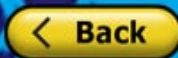
Explore Consequences

- It was the long term consequences that allowed Michael to make his decision.
- Michael realized that the environmental values were an important factor in his decision.
- The thought of the warbler becoming extinct distressed him, and protecting the habitat now would be less costly than protecting it later under a state imposed plan.



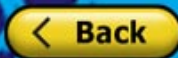
Explore Consequences

- Michael considered that there were long term benefits as well.
- He had read that property values were rising rapidly in counties where land was preserved for recreation.
- He also found that people would pay more to live in counties that have open spaces.



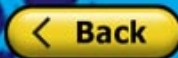
Explore Consequences

- Because the county contained little preserved land, Michael thought that creating the preserve would bring the county long-term economic benefits.
- He also highly valued the aesthetic and recreational benefits of the preserve, such as walking trails.



Make a Decision

- Michael chose to vote in favor of the nature preserve.
- However, someone else who looked at the same table of pros and cons might have voted differently.
- If you lived in Valley County, how would you have voted?



Make a Decision

- As you learn about issues affecting the environments, use this decision-making model as a starting point to making your decisions.
- Be sure to consider your values, weigh the pros and cons, and keep in mind both the short-term and long-term consequences of your decision.

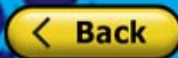


Image and Activity Bank

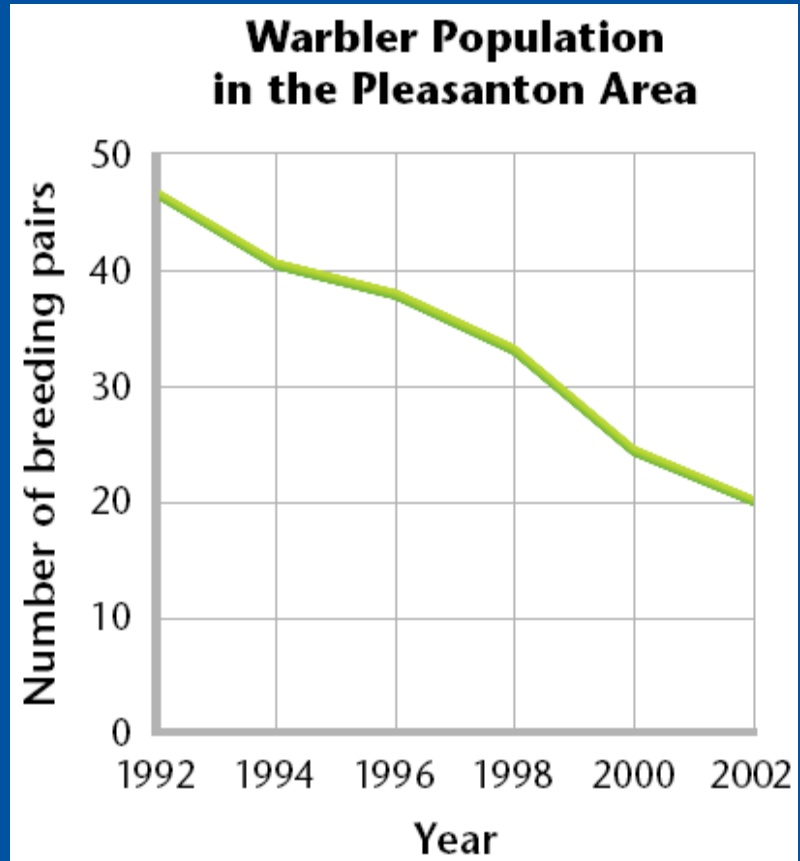


Image and Activity Bank

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