

RESOURCE LIBRARY
ACTIVITY : 50 MINS

Building a Decision Statement

This activity pulls together all the components learned in Activities 1, 2, and 3. Students revisit their work identifying stakeholders and consequences to complete the process of analyzing a decision.

GRADES

9 - 12+

SUBJECTS

Biology, Ecology, Earth Science, Geography, Human Geography

CONTENTS

2 PDFs

OVERVIEW

This activity pulls together all the components learned in Activities 1, 2, and 3. Students revisit their work identifying stakeholders and consequences to complete the process of analyzing a decision.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/building-decision-statement/>

DIRECTIONS

1. Have students discuss what they learned in Activities 1, 2, and 3.

Set the stage by reviewing the sequence of activities within this lesson. Remind students that at the beginning of this lesson, they explored a decision through one stakeholder's viewpoint. They then learned more about the area both geographically and politically, analyzed each stakeholder's influence and connection to the decision, and then identified consequences of the decision to place a dam upstream from Lake Turkana. Explain to students that they have

been learning components of analyzing the environmental decision process. In this activity, they will pull together what they have learned in the previous activities to complete the analysis of the decision about the Gilgel Gibe III dam in the Lake Turkana region. Place students in small groups of three, and assist them through the following process as a group. Each group of three will hand in a decision statement at the end of this lesson. Ask students to pull out their Stakeholder Table and Consequences Web they developed in Activities 2 and 3. They can use their individual documents as evidence to support the group-level conversations.

2. Have students revisit the information gathered on the influence of stakeholders.

Ask students to have available their Stakeholder Table from Activity 2. Distribute one copy of the Your Decision Statement worksheet to each group and have students complete Part 1: Stakeholders. Using the information they gathered in Activities 1 and 2, ask students to rate each of the stakeholders' level of influence within the decision. Remind them that not every stakeholder has a voice or equal influence in the decision. Ask students to reflect on the role these particular stakeholders have played in the decision-making process of building the Gilgel Gibe III dam.

3. Have students revisit the information gathered in identification of consequences.

Remind students that in this case the decision to build the Gilgel Gibe III dam has been made, and that all decisions and actions have consequences. Ask students to refer to their Consequences Web from Activity 3. Have them complete Part 2: Consequences in the worksheet by identifying the impact of the consequences upon each of the known stakeholders.

4. Have students create a decision statement.

Explain to students that the product of the decision-making process is a decision statement. A decision statement contains three things: (1) a statement of the decision; (2) evidence that supports the decision; and (3) a statement of who will positively and negatively benefit from the decision. Ask students to complete Part 3: Your Decision Statement. Remind students that the case they have been exploring already has a decision statement. If they like, they can use that decision or generate their own with the knowledge they have about the situation. Collect completed Your Decision Statement worksheets as a formal evaluation of all four activities.

5. Have students reflect upon the decision-making process.

Ask students to refer to the decision statement they created in Activity 1. Ask them to reflect

upon everything they have learned in Activities 2, 3, and 4. Have them compare what they wrote in Activity 1 with their final decision statement in Activity 4. Ask: *Did your decision statement stay the same or change? If it changed, what influenced your decision? What additional information affected your thinking? If it did not change, are you surprised? Why or why not?* Ask each student to complete an individual reflection answering the prompt: How did the process of analyzing the decision-making process help you or hinder you in your final thinking? Collect the completed responses.

Formal Assessment

Students' Your Decision Statement worksheet is to be used for formal assessment. It shows both knowledge of the decision-making process and application of reasoning to the case study. The decision statement created by students should include: (1) a statement of the decision; (2) evidence that supports the decision; and (3) a statement of who will positively and negatively benefit from the decision.

Extending the Learning

Ask students to use the process of analyzing a decision statement on another case study, such as the following:

- [Case Study: Big Cats in the Ruaha Landscape](#)
- [Case Study: The Greater Southern Bypass](#)
- [Case Study: Big Cats in the Maasai Steppe](#)
- [Case Study: Koobi Fora Research Project](#)

OBJECTIVES

Subjects & Disciplines

Biology

- [Ecology](#)

Earth Science

Geography

- [Human Geography](#)

Teaching Approach

- Learning-for-use

Teaching Methods

- Discussions
- Writing

Skills Summary

This activity targets the following skills:

- 21st Century Themes
 - Environmental Literacy
 - Financial, Economic, Business, and Entrepreneurial Literacy
 - Global Awareness
- Critical Thinking Skills
 - Understanding
- Geographic Skills
 - Acquiring Geographic Information
 - Analyzing Geographic Information
 - Answering Geographic Questions
 - Asking Geographic Questions
 - Organizing Geographic Information

National Standards, Principles, and Practices

ENERGY LITERACY ESSENTIAL PRINCIPLES AND FUNDAMENTAL CONCEPTS

- **Fundamental Concept 1.1:**

Energy is a quantity that is transferred from system to system.

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

- **Reading Standards for Informational Text 6-12:**

Key Ideas and Details, RI.11-12.2

- **Reading Standards for Informational Text 6-12:**

Key Ideas and Details, RI.11-12.3

- **Reading Standards for Informational Text 6-12:**

Key Ideas and Details, RI.11-12.1

- **Reading Standards for Informational Text 6-12:**

Key Ideas and Details, RI.9-10.2

- **Reading Standards for Informational Text 6-12:**

Key Ideas and Details, RI.9-10.3

- **Reading Standards for Informational Text 6-12:**

Key Ideas and Details, RI.9-10.1

- **Speaking and Listening Standards 6-12:**

Comprehension and Collaboration, SL.9-10.1

- **Speaking and Listening Standards 6-12:**

Comprehension and Collaboration, SL.11-12.1

- **Writing Standards 6-12:**

Text Types and Purposes, W.11-12.2

- **Writing Standards 6-12:**

Text Types and Purposes, W.9-10.2

Preparation

What You'll Need

REQUIRED TECHNOLOGY

- Internet Access: Optional

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction

BACKGROUND & VOCABULARY

Background Information

This work is modified from the decision-making process called Stakeholder Consequences Decision-Making (SCDM) process. This process is generally used when individuals are at the stage of making a decision. The SCDM process consists of four stages: establishing constraints and considerations; identifying consequences; assessing impact on stakeholders; and weighing impacts on stakeholders. The case studies provided have already articulated a decision. The model was modified to be used as an analysis tool. The modification includes identifying stakeholders, influences over the decision, and consequences of the decision.

Prior Knowledge

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Recommended Prior Activities

- None

Vocabulary

Term	Part of Speech	Definition
abiotic	<i>adjective</i>	characterized by the absence of life or living organisms
aquatic	<i>adjective</i>	having to do with water.
basin	<i>noun</i>	a dip or depression in the surface of the land or ocean floor.
biotic	<i>adjective</i>	having to do with living or once-living organisms.
collective decisions	<i>noun</i>	decisions made by a group of individuals that account for the needs of many others.
conflict	<i>noun</i>	a disagreement or fight, usually over ideas or procedures.
consequence	<i>noun</i>	result or outcome of an action or situation.
controversy	<i>noun</i>	disagreement or debate.
dam	<i>noun</i>	structure built across a river or other waterway to control the flow of water.
debate	<i>verb</i>	to argue or disagree in a formal setting.
desert lake	<i>noun</i>	large body of water in a desert region, often characterized by high salinity.
ecology	<i>noun</i>	branch of biology that studies the relationship between living organisms and their environment.

Term	Part of Speech	Definition
environment	<i>noun</i>	conditions that surround and influence an organism or community.
environmental impact	<i>noun</i>	incident or activity's total effect on the surrounding environment.
flood-retreat cultivation	<i>noun</i>	agricultural method that relies on silt left on a flood plain (following a flood) to cultivate crops.
geographic	<i>adjective</i>	having to do with places and the relationships between people and their environments.
geo-literacy	<i>noun</i>	the understanding of human and natural systems, geographic reasoning, and systematic decision-making.
hydroelectric power	<i>noun</i>	usable energy generated by moving water converted to electricity.
indigenous people	<i>noun</i>	ethnic group that has lived in the same region for all of their known history.
individual decisions	<i>noun</i>	Decisions that are made by an individual that only account for that individual's needs
intended consequences	<i>noun</i>	results of an action or situation that are deliberately brought about and/or anticipated.
outflow	<i>noun</i>	water, sediment, and chemicals discharged by a river or other flowing body of water.
political	<i>adjective</i>	having to do with public policy, government, administration, or elected office.
region	<i>noun</i>	any area on Earth with one or more common characteristics. Regions are the basic units of geography.
seasonal flooding	<i>noun</i>	overflowing of a body of water from its banks, usually predicted by yearly rains or storms.
stakeholder	<i>noun</i>	person or organization that has an interest or investment in a place, situation, or company.
tourism	<i>noun</i>	the industry (including food, hotels, and entertainment) of traveling for pleasure.
unintended consequences	<i>noun</i>	results of an action or situation that are not deliberately brought about and/or anticipated.
upstream	<i>adjective</i>	toward an elevated part of a flow of fluid, or place where the fluid passed earlier.
waterfowl	<i>noun</i>	birds that live near the water.

For Further Exploration

Articles & Profiles

- [National Geographic Education: Wild Winds—Lake Turkana Wind Power Aims to Create Electricity for Kenya](#)
- [UNESCO: World Heritage—Lake Turkana National Parks](#)
- [Freshwater Ecoregions of the World: Lake Turkana](#)

Maps

- [National Geographic Education: Geography of Lake Turkana](#)

Websites

- [International Rivers: List of Dam-Threatened World Heritage Sites](#)
- [National Science Teachers Association: Learning to Make Systematic Decisions](#)
- [Encyclopedia of Earth: Lake Turkana National Parks, Kenya](#)
- [Friends of Lake Turkana: Impact of the Dam](#)

