



Human Significance of the 1989 Exxon Valdez Oil Spill

Grade Level: 5-12
Length: 90-180 Minutes
www.pwsrcac.org/lessons

Adapted from Lesson Plans by Karen Avila-Lederhos, Kelly Daugherty, Carrie S Bjorn-Roli, Laura Cooper, and Chris Kolischak

NGSS Standards

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Additional Resources

Websites

- https://www.arlis.org/docs/v012/a/EVOS_Resources_for_Teachers_&_Students.pdf
- www.childrenofthespills.org includes first-person interviews and videos mostly featuring young people reflecting on the impacts of the spill.

Videos

- <https://www.pbslearningmedia.org/resource/ess05.sci.ess.watcyc.exxon/oil-spill-emexxon-valdezem-1989/#.XvfeLW5FzRM>

Books

- *The Spill: Personal Stories from the Exxon Valdez Disaster*

Pair With Mock Senate Lesson

Overview

A variety of different people are involved in oil spill response, clean up, and recovery of human and natural communities. People involved in and affected by the Exxon Valdez oil spill have diverse perspectives on the disaster. Listening to their perspectives helps us learn about the complex impacts of oil spills on ecosystems, economies, cultures, mental and physical health, politics, and communities.

Objectives

- Students will gain a better understanding of the environmental, economic, psychological, political, and historical impacts of the 1989 *Exxon Valdez* oil spill.
- Students will consider the diverse perspectives of people involved in and affected by the *Exxon Valdez* oil spill.

Materials

- Paper, Science Notebooks, or Laptops/Tablets
- Pencils, Pens, or Colored Pencils/Markers
- Poster Paper or Reused Cardboard
- Multiple Copies of *The Spill: Personal Stories from the Exxon Valdez Disaster* (at least 1 for every 2 students, ideally 1 per student). Contact pwsrcac.org to request a classroom set.

Introducing the Lesson

Review the Exxon Valdez Oil Spill with map location, basic 1989 spill facts, and historic video clips. This video from Alaska Public Media/PBS Learning Media is a good option.

<https://www.pbslearningmedia.org/resource/ess05.sci.ess.watcyc.exxon/oil-spill-emexxon-valdezem-1989/#.XvfeLW5FzRM>

Notes

Activity

1. Break students into groups of 4-5 students to read personal eyewitness reports of the oil spill.
2. Assign each group a specific perspective topic, or let groups choose the perspective they would like to study more. Perspective topics could include, but are not limited to the following:
 - US federal, state, and city government leaders (governor, mayors, etc.)
 - Native leaders and communities
 - law enforcement (State Troopers, Coast Guard, AK Dept. of Environmental Conservation, etc.)
 - first responders (divers, ship crewmen, captains, etc.)
 - clean-up crews
 - oil related companies' personnel (Exxon, Alyeska Pipeline, etc.)
 - local residents and fishermen
 - families and children
3. Provide each group with copies of *The Spill: Personal Stories from the Exxon Valdez Disaster* by Sharon Bushell and Stan Jones. Instruct groups to focus their research into three parts: the spill, the response, and the lasting impact.

>> *Educator Tip: To provide more guidance for students, you can instruct all of them to read the introductions to each section: Spill -pg. 21-25, Response -pg. 53-57 and Impact -pg. 196-199. Then they can choose excerpts from the following list that are relevant to their "perspective group."*

Joe Hazelwood -Captain of the Exxon Valdez: pg. 26-27 & 279-282

Mark Delozier -coast guard officer, Valdez Alaska: pg. 28-31

Steve Cowper -governor of Alaska 1986-1990: pg. 40-43

Tom Blanchard -Exxon Valdez second mate after the spill: pg. 44-46

Dennis Kelso -commissioner, AK Dept of Environmental Conservation: pg. 61-65

Frank Iarossi -President, Exxon Shipping Company: pg. 92-95

Don Cornett -Exxon Public Relations Manager: pg. 96-99

Stan Stephens -Valdez Tour Boat Operator: pg. 100-102

Clyde Robbins -Vice Admiral, West Coast, US Coast Guard: pg. 106-110

John Devens Jr. -cleanup "scrounger:" pg. 111-113

Otto Harrison -Exxon Clean-up Manager: pg. 114-117

Admiral Paul Yost -Commandant, US Coast Guard: pg. 124-128

Charles Wohlforth -reporter, Anchorage Daily News: pg. 132-135

John Devens Sr. -Mayor of Valdez: pg. 152-155

Tom Copeland -Cordova Fisherman: pg. 156-159

Debra Nielson -resident of Big Fort Island: pg. 188-190

Lyle Von Bargaen -Alyeska Community Relations Manager: pg. 191-193

4. Ask student groups to first identify interviews from *The Spill* that are relevant to their topic. Ask them to also identify at least two other books, online resources, and/or newspaper pieces to inform their work. Review the resources they will be using to ensure that they are appropriate choices.
5. Instruct student groups to carefully read, watch, or listen to the resources they have chosen, focusing on recording quotes and understanding the perspectives of the people involved. Instruct students to consider the person's motivation and purpose in sharing the information. Highlight phrases that stand out as opinions, that support statements made by others, or that contrast with things other accounts have shared.

>> *Educator Tip: The reading and viewing portion of the lesson can take place out of class.*

6. Ask each group to create a one to three-page written report, as appropriate for their grade level and current skills. Explain that these reports should focus on sharing their findings and the point of view of their "perspective group." Provide at least 30 minutes for groups to work on this project together.
7. Instruct students to create an oral and visual presentation to share with the class. This presentation should include key points, quotes from people involved, and visual aspects to highlight the perspective and priorities of the "perspective group."
8. After each group has presented, shift the groups in a jigsaw format. This means that you will divide the class into 4-5 new groups, with each group having one person each from the original study teams.
9. Ask groups to discuss some of the following key questions (choose 3-5 for them to focus on):
 - Who caused the spill?
 - Who should have been responsible for clean up?
 - What errors were made that lead to the spill?
 - What errors were made in the handling of the spill and clean up?
 - Was the final settlement fair?
 - Was the spill cleaned up?
 - What were the most important human impacts?
 - What were the most important ecological impacts?
 - What lessons have been learned?
 - Is another spill inevitable?
 - What are the implications for Arctic drilling?
 - How can Alaska and the U.S. better prepare for similar disasters?

Wrap-up

Have each group report one key discussion point back to the whole group. Discuss ways that students can become involved in oil spill prevention and preparedness in their own community.

Optional Extension

Instruct students to prepare for a Socratic Discussion. Ask them to use specific passages from the book, or specific information they have researched to support their conclusions.

Facilitate a Socratic Discussion of the following prompts:

- What are the main factors that led to the confusion and frustration during the oil clean-up? What can people learn from this?
- What could have been done differently by various groups to work through some of the obstacles the spill presented?
- How did the media influence reactions, actions, and outcome of this accident? How can that apply to us today? What is the inherent power of the media? Should the media have any limits or controls on what perspectives they represent or stories they share?
- Why is it useful to hear as many perspectives as possible about an event or issue? What obstacles get in the way of achieving this? Why are people often resistant or reluctant to do this?
- What conflicts and issues do you see in our country today that face similar challenges as the oil spill in that many different groups of people, motivations, and values are involved? Consider all the different perspectives/interests involved in issues such as immigration, health care, climate change, equity

Assessment

Review student written reports and presentations for thoroughness, effort, and effectively taking on the perspective of their assigned group. Evaluate the reports and presentations for inclusion of different sources with similar perspectives. Listen during discussion for evidence that students have gathered and combined information from many sources and perspectives to understand how different communities and groups of people use science ideas to protect Earth's resources and the environment.

Pair With

- Mock Senate Lesson Plan