



Lesson Four: Working Together

Grade Level: 5th Grade

Time: Two Days: 45 to 60 minutes per day

Essential Question: How can we be stewards of Wyoming's public and private lands to benefit current and future generations?

Objective: Students will identify how different public and private agencies and organizations practice stewardship.

Purpose: Students learn that the majority of public land in Wyoming is held in trust for the American people by the Federal government and managed by agencies such as the Bureau of Land Management, Forest Service, Fish and Wildlife Services, and the National Park Services. Students will also learn how private individuals and organizations can work alongside federal agencies be good stewards of Wyoming lands.

Required Materials/Resources:

- 4 Corners signs
- Information Cards to go with the 4 Corners signs - (Sources 3 - 8)
- White paper
- Markers/colored pencils
- Scissors
- Construction paper (three pieces per student)
- Stapler
- ESA Streamlining
<https://www.fs.usda.gov/detail/r2/landmanagement/?cid=stelprdb5341949> (Source 7)

- Blank emblem for check for understanding (one per student)
- Practice text from Lesson One: Wyoming Conservation Corps crew tackles erosion on Casper's Bridle Trail
- Wyoming Conservation Corps Video https://www.youtube.com/watch?v=loSCP Avj_pc (6 min. 46 sec. – start at 2:30 if pressed for time) (Source 9)
- Portraits of the Wyoming Conservation Corps and Albert Sommers for Portrait Gallery
- Sommers Family – 2012 Leopold Conservation Award Video <https://www.youtube.com/watch?v=UPzI5VnvjLw> (7 min. 32 sec.) (Source 10)

Suggested Teacher Preparation:

- Hang/place 4 Corners activity materials (posters, information cards, white paper, markers/colored pencils, scissors) in four different locations of your classroom. Do not take them down before Day 2 of the lesson.
- Review the 4 Corners information cards, Wyoming Conservation Corp text and video, and Pathfinder Ranches PowerPoint.
- Print portraits of the Wyoming Conservation Corps and Albert Sommers.

Standards:

Science: 5-ESS3-1 (Explicit)

ELA: 5.RI.2, 5.RI.5 (Practiced/Encountered)

CVE: CV.5.3.1 (Practiced/Encountered)

Vocabulary:

- **Agency** - a business or organization established to provide a particular service
- **Bureau of Land Management (BLM)** - an agency within the United States government that administers more than 247.3 million acres of public lands mainly located in twelve western states of the United States
- **Federal land** - Lands owned by the government and managed through a federal agency
- **Fish and Wildlife Service** - the United States Fish and Wildlife Service (USFWS or FWS) is an agency of the federal government within the U.S. Department of the

Interior dedicated to the management of fish, wildlife, and natural habitats

- **Forest Service** - the United States Forest Service (USFS) is an agency of the U.S. Department of Agriculture that administers the nation's 154 national forests and 20 national grasslands, which encompass 193 million acres
- **Held in trust** - principle that the governing body holds certain lands in trust for public use in some way
- **National Park Service** - the National Park Service is an agency of the United States federal government that manages all national parks, many national monuments, and other conservation and historical properties with various title designations

Instructional Procedure/Steps:

Day 1:

1. Say: **“In our previous lessons, we have been learning about ownership and management of Wyoming lands. We have learned that as citizens we can use public lands as long as we follow the rules and regulations for use of that land. We have talked about State Trust Lands and State parks. Today, we are going to talk about federal public lands which make up the biggest portion of public land in Wyoming. These lands are held in trust for the American people by the federal government through agencies such as the Bureau of Land Management, Forest Service, Fish and Wildlife Services, and the National Park Services. ‘Held in trust’ is a phrase that means the federal government has been trusted to care for and regulate the use of land, so it has the biggest benefit for the public. Today, we are going to learn about the agencies who collaborate to be good stewards of our federal public lands.”**
2. Say: **“First, we need to figure out what each of these agencies does. We are going to play 4 Corners. In each corner of the room, there is a sign with one of the agency names on it, and an information card telling about the agency. I am going to number you all from 1-4.”** Number the students now, so they will be ready to move when you give the release

word. Say: **“When I give the release word ‘multiple use,’ you will find the corner that matches your number and meet the rest of your team there. You will read the information on the card and decide how you want to be responsible for sharing it with the rest of the class. You must make visual aids to help with your presentation using the materials in your area. For example, if you need a fish, make one with paper, markers, and cut it out. The only thing you can’t do is just read the information card. Make sure that everyone is involved and can give a brief summary of the information. Ready? ‘Multiple use.’”**



In this task, students will be engaged in the higher order thinking skill of synthesis by creating and imagining.



3. Allow students time to read their information cards in their corner. Circulate around the room checking that all students are participating and that they are brainstorming ways their group might share the information. Look-fors include the following: *each member taking responsibility for one idea in the information card, one student giving a brief summary while the rest act it out, students giving a summary and drawing representation of main points, etc.*
4. When groups have had enough time to internalize their information and decide on a presentation, reconvene the whole class, and have all groups share one at a time starting with corner one.



In this task, students will be engaged in the higher order thinking skills of synthesizing and evaluating by composing and judging.



5. Say: **“During the 4 Corners activity, you learned about four federal agencies, and how they work together to take care of Wyoming lands using good stewardship practices. You are now going to decide which agency is the most interesting. If you need to go look at the information cards again, you will be able to do that when we start our Check for Understanding.”** Display the photos of the different agency emblems from the “ESA Streamlining?” website. Say: **“I am going to give you a blank emblem like the ones you see on the website. First, you will write the name of the agency you chose at the top of the emblem. Below**

that, write one sentence that states the purpose of the agency. Then, name or list at least two stewardship practices and why it is important for the agency staff to practice good stewardship.” When students are finished, collect the emblems. Check that students matched the agency they chose with its correct purpose and that good stewardship practices are listed.

Day 2:




1. **“The other day, you learned about four federal agencies. Today, we are going to learn about two different groups that will help us understand how private citizens and organizations collaborate with federal and state agencies for the purpose of good stewardship. In Lesson 1, we practiced a reading protocol using the text ‘Wyoming Conservation Corps crew tackles erosion on Casper’s Bridle Trail.’ We’re also going to watch a video on some of the other projects the Wyoming Conservation Corp does. In the article and video, young people from the Wyoming Conservation Corps are hired to help various agencies. Look for ways that the Wyoming Conservation Corps uses science as they work on projects, and how they partner with other agencies and organizations.”** Pass out the text, and have students reread and discuss what they read as well as what they saw in the video. Listen in on students’ conversations to see if they identified the look-fors listed below. Some might include:
 - *Improving drainage and building trails to reduce erosion*
 - *Fencing for wildlife and livestock*
 - *Cutting down beetle-kill trees to improve forest health*
 - *Partnerships with federal and state agencies are key to the program*
 - *Skill and resume building for young people interested in careers in stewardship*

When finished discussing, post the Wyoming Conservation Corps portrait in the Portrait Gallery. Say: **“We will now watch a video that shows how a rancher collaborates with multiple agencies to manage federally owned lands for multiple use.**



In this task, students will be engaged in the higher order thinking skill of synthesis.

2.  Play the *Sommers Family – 2012 Leopold Conservation Award* video. When the video is finished, ask the questions below. Allow students to respond before moving on to the next question:


- **“Which agencies and organizations does the Sommers family work with for their ranching operation?”** *U.S. Forest Service, Bureau of Land Management, University of Wyoming, neighbors*
- **“Can you name some ways that Albert Sommers uses science to make good stewardship decisions.”** *Range monitoring on grazing allotments, range science (understanding which grasses are present and how to manage for healthy pastures,) management plans, pasture rotation*



Add Albert Sommers’ Portrait to the Portrait Gallery.



In this task, students will be engaged in the higher order thinking skill of synthesis.

Assessment:  Pass out a piece of paper to each student. Have students respond to the following sentence stems:

- Albert Sommers is a good steward when...
- Albert Sommers uses science to help him manage his ranch by...
- One way the Sommers Ranch collaborates with federal agencies is...

Credits/Sources:

1. Bureau of Land Management. (n.d.). *National History*. Retrieved August 20, 2017, from <https://www.blm.gov/about/history/timeline>
2. Bureau of Land Management. (n.d.). *Our Mission*. Retrieved August 20, 2017, from <https://www.blm.gov/about/our-mission>

3. Bureau of Land Management. (n.d.). *What We Manage*. Retrieved August 20, 2017, from <https://www.blm.gov/about/what-we-manage>
4. USDA.gov. (n.d.). *About the Agency*. Retrieved August 20, 2017, from <https://www.fs.fed.us/about-agency>
5. U.S. Fish and Wildlife Service. (2016, March 24). *About the U.S. Fish and Wildlife Service*. Retrieved August 20, 2017, from https://www.fws.gov/help/about_us.html
6. NPS.gov. (n.d.). *About Us*. Retrieved August 20, 2017, from <https://www.nps.gov/aboutus/index.htm>
7. U.S. Forest Service, Rocky Mountain Region. *ESA Streamlining*. Retrieved August 1, 2022 from <https://www.fs.usda.gov/detail/r2/landmanagement/?cid=stelprdb5341949>
8. Leah Todd, Casper Star Tribune. (2013, June 30). Wyoming Conservation Corps crew tackles erosion on Casper's Bridle Trail. Retrieved August 19, 2019, from https://trib.com/news/local/casper/wyoming-conservation-corps-crew-tackles-erosion-on-casper-s-bridle/article_1e3c66f9-7590-567d-91ae-e529fa99e902.html?utm_medium=social&utm_source=email&utm_campaign=user-share
9. Chamois Anderson, University of Wyoming Environment and Natural Resources Program. (2011, May 25). *Wyoming Conservation Corps*. Retrieved August 19, 2019 from https://www.youtube.com/watch?v=loSCPAvj_pc
10. Sand County Foundation. (2012, August 2). *Sommers Family - 2012 Leopold Conservation Award - Wyoming*. Retrieved October 15, 2019 from <https://www.youtube.com/watch?v=UPzI5VnvjLw>