1. Title / Content Area:	Stewardship: It's Everyone's Business	
2. Developed by:	Lorrie Henrie-Koski	
3. Grade Level:	6-8	
4. Essential Question:	How does the Mining Law of 1872 affect the use of public lands? How can a mine show stewardship?	
5. Contextual Paragraph	Montana has relied on its rich mineral resources to support our economy for over 150 years. With 10 national forests covering 19.39 million acres and 15 wilderness areas totaling almost 3.5 million areas, our outdoor recreational opportunities are equally as important to Montanans and to those who visit the state. Understanding the need for balance in protecting our public lands as well as providing jobs through developing mineral resources and sharing the responsibility in maintaining that balance is the focus of these lessons.	

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TEACHING with PRIMARY **SOURCES**

Annotated Resource Set (ARS)

Phase I

6. **Resource Set**					
Abandoned Mine	Abandoned Mine Shaft		(Resource Title Here)		(Resource Title Here)
This image is an example of the location of many mines – in forested areas.	This image is an example of the location of many mines – in mountainous areas.	This image shows an abandoned mine and its impact on its surroundings.			
https://www.loc.gov/item/2017787865/	https://www.loc.gov/item/2017730507/	https://www.loc.gov/resource/fsa.8b38010/			

Foundations Annotations

7. Curriculum Connections

Earth Science, economics, Montana history

8. Curriculum Standards

Montana Reading Standards for Literacy in History/Social Studies 6–12

1. Cite specific textual evidence to support analysis of primary and secondary sources.

2. Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.

4. Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.

5. Describe how a text presents information (e.g., sequentially, comparatively, causally).

7. Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

Montana Writing Standards

2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

9. Content & Thinking Objectives

Students will examine historical images and infer results of mining activities and their impact on the land and future generations.

Students will compare/contrast image of current operating mine with abandoned mines to project current and future impact on the land and future generations.

Students will analyze primary source documents for stewardship justification and expectations.

Students will examine the Good Neighbor Agreement between the Northern Plains Resource Council and the Stillwater Mine to identify what the two groups are doing to work together to protect the environment surrounding the mine.

10. Inquiry Activities & Strategies

1. Examine either the Mining Law of 1872 or the Wikipedia overview and discuss what the law's intent may have been.

2. View images of abandoned mines. List 5 things noticed about the images. Discuss how students' observations might be connected to the Mining Law of 1872.

3. Read and discuss "Progressive Era to New Era." Discuss students' thoughts on how this perspective differs from that of the Mining Law of 1872.

4. Use maps of National Forests in Montana and Active Mines in Montana to identify mines that are located on or near Forest Service land.

5. Discuss possible impacts and concerns of the locations of the mines. Discuss whose responsibility it is to address the impacts/concerns.

6. Examine images of Stillwater Mine and list 5 things noticed about the mine. Compare/contrast with abandoned mines with operating mine. Infer reasons for the differences.

7. Examine the Good Neighbor Agreement webpage to learn how the mine is working with concerned citizens to protect the land and water around the mine. Older students could examine the objectives section of the agreement itself by following the link to the Good Neighbor Agreement.

8. Discuss the definition of stewardship and use information from the resources to determine who is responsible for stewardship, including how individuals, groups, and companies can fulfill their roles.

11. Assessment Strategies

Students will create a presentation of their choice (powerpoint, prezi, YouTube) discussing their understanding of a mine's impact on the environment, the need for stewardship, and ways citizens and companies can cooperate.

Other Resources

12. Web Resources

Map of Active Mines in Montana - This map shows current active mines in Montana. http://www.mbmg.mtech.edu/pdf/2012ActiveMines.pdf

Forests in Montana - This map is included for comparison with active mine map to indicate where mining occurs. http://www.plicmapcenter.org/pdf/MT_FS_Counties_PLIA.pdf

Image of Stillwater Mine – Use this to compare to other images of mine sites. https://northernplains.org/wp-content/uploads/2017/09/gna_provisions.jpg

Northern Plain Resource Council - The Good Neighbor Agreement between The Northern Plains Resource Council and Stillwater Mine shows a mine's commitment to stewardship. https://northernplains.org/issues/good-neighbor-agreement/

13. Secondary Sources

"Progressive Era to New Era: Conservation in the Progressive Era – The Necessity of Conserving Our Resources"
http://www.loc.gov/teachers/classroommaterials/presentationsandactivities/presentations/timeline/progress/conserve/teal.html This written work provides a background of Theodore Roosevelt's role in promotion of resource conservation.

Mining Act of 1872 – http://minerdiggins.com/Ripple/1872T.html This is the original text of the Congressional Act. Good for guided close reading. https://en.wikipedia.org/wiki/General_Mining_Act_of_1872 This Wikipedia entry gives an overview of the Act.
⬇ 14. **Print and Other Media Resources** ⬇

ARS Component Guide

Phase I Components

1. **Title / Content Area:** Provide the title of the ARS. If the title doesn't explicitly denote the sets theme, please also provide a content area (e.g. Environment, Government, Immigration, War/Military, Women's History, etc.).

2. **Developed by:** Provide your name and any other contributors to the ARS.

3. **Grade Level:** Provide the grade level(s) for which the set is to be taught.

4. **Essential Question:** Provide an essential question that encompasses the set theme and that could be used as a launching point for use in the classroom.

5. **Contextual Paragraph for Resource Set:** Provide a short paragraph explaining the resource set and describing the context in which the set is to be used

6. **Resource Set:** Provide titles, context, thumbnails and addresses for specific resources. It isn't necessary to provide a thumbnail for all resources (e.g. audio and video files). **Important**: Be sure to use a permanent URL and check your hyperlinks for all resources.

Phase II Components

7. **Curriculum Standards:** Provide local, state or national standards that could be addressed through the use of the ARS and subsequent activities

8. **Curriculum Connections:** Provide other curriculum areas to which this set of resources could be applied

9. **Content & Thinking Objectives:** Provide objectives to be met through the use of the ARS and subsequent activities

10. **Inquiry Activities & Strategies:** Provide specific strategies and learning activities which the ARS will be used to support

11. **Assessment Strategies:** Provide assessment methods which will be used to demonstrate student learning after the use of the ARS and subsequent activities

Other Resources

12. **Secondary Sources:** Provide any secondary sources that could be used to supplement the ARS

13. **Web Resources:** Provide links to any additional web resources that could be used to supplement the ARS

14. **Print and Other Media Resources:** Provide other resources that could be used to supplement the ARS