

Essential Question: How do wheat farms benefit from dams on the Lower Snake River in Washington? Would Rep. Simpson’s proposal to improve salmon habitat by removing those dams outweigh the benefits?

Background



Figure 1: Ice Harbor Dam on the Snake River near Burbank, WA from U.S. Army Corps of Engineers. *Ice Harbor Lock and Dam*, nwd.usace.army.mil/Media/Images/igphoto/2000790239/



Figure 2: A barge is loaded with wheat grain from Tri-City Herald, tri-cityherald.com/opinion/opn-columns-blogs/article217658985.html

Vocabulary

hydropower: energy from moving water is used to generate electricity without carbon emissions.

carbon emissions: the release of carbon (a greenhouse gas) into the atmosphere; in this case, by burning fossil fuels for electricity generation.

irrigation: water from a river or other source used to grow crops.

opinion: a specific type of article where the author presents a claim with evidence about a topic.

breaching: removing the structures of a dam that hold the water back in a reservoir.

bias: a preference towards one idea or claim. Unbalanced or misleading evidence.

Dams are structures built across a river to hold back water and create a reservoir. The reservoir, or pool of water behind the dam, is used to generate electricity through **hydropower**, and, in the case of the Ice Harbor Dam (fig. 1), provide water for **irrigation**.

Dams also allow barges to be able to move through the river system. Barges (fig. 2) are large ships used to move goods like wheat, soy, and corn to market.

Since they interrupt the natural river system, dams affect the environment both at the point of the dam and reservoir as well as up- and downstream. In particular, dams disrupt the migration of salmon who swim upstream to reproduce.

In the following **opinion** article you will read an argument about improving salmon habitat by **breaching**, or removing, dams on the lower Snake River. An opinion is a type of news article that argues for one claim and includes the author’s own ideas and analysis about the claim. Opinion pieces are great sources for specific claims and evidence but be wary of **bias** from the author. Take extra care to critique your source: examine what evidence is provided and see how convincingly it supports the author’s claim and how it compares to your background knowledge.

Read your article at least two times. Follow the instructions below for each time you read.

1. MARK THE TEXT

Underline claims the author makes. A claim is the idea (or ideas) the author will show you or try to convince you of.

2. CONNECT AND RESPOND

Use these symbols to mark sentences or paragraphs in the article. Explain your connections or responses in the **margin**. Include at least two of the following:

- Something you have a connection to (Do you know something else about the point the author is making? Did you learn this information in another place?)
- † Something you agree with
- × Something you disagree with or have a counterclaim for

Circle the vocabulary words listed in the box above if you find them in the text.

Essential Question: How do wheat farms benefit from dams on the Lower Snake River in Washington? Would Rep. Simpson's proposal to improve salmon habitat by removing those dams outweigh the benefits?

Commentary: Speak up now in favor of Snake River dams *Capital Press*
March 27, 2020 by Kristin Meira

- 1 Most people in the Pacific Northwest don't think a lot about the rivers flowing through the hearts of our communities and states and all they provide us, but farmers certainly do.
- 2 The Columbia and Snake Rivers in particular are an incredibly generous waterway system. Hydropower from their dams is one of the most reliable and environmentally friendly sources of power available, and contributes 90% of the renewable energy produced in the Pacific Northwest. This low-carbon energy heats our homes, powers our equipment, and never quits. It's the major factor in achieving our goal of being carbon-neutral by 2040.
- 3 Those same waterways irrigate our crops in eastern Washington and Oregon. That food — potatoes, apples, pears and more — makes its way to local tables and is exported to other countries, supporting our regional economy. And of course, those rivers allow wheat and other products to get to market by barging — the cleanest, safest and most efficient method of transportation to our deep-water ports on the Lower Columbia.
- 4 All of those benefits are in jeopardy as long as advocates seeking a solution to declining global salmon populations continue to propose breaching the four Lower Snake River dams. Multiple data-driven studies have shown that dam breaching does little for fish while harming our farmers, workers, communities and economy.
- 5 There are many factors that contribute to the survival of fish, and most would not be improved by a free-flowing Lower Snake River. Juvenile fish survival rates currently range from 95% to 98% past each of the eight federal dams on the Columbia and Snake Rivers, with continued investment in additional fish passage improvements. But ocean conditions, predators and other factors play a large part in whether these fish make it back upstream to spawn as adults.
- 6 Salmon populations around the world are struggling due to climate change, rising carbon levels, pollution and more. Eliminating the clean power and efficient transportation provided by the Lower Snake River dams would add to climate change and pollution by increasing carbon from truck traffic and other sources of power, such as natural gas. This would lead to a cumulative increase in carbon emissions equivalent to building a coal-fired power plant like the one in Boardman, Ore., every 5 or 6 years.

- 7 In addition to more carbon emissions, losing the Snake River dams puts us at risk for higher electricity prices and doubles the risk of blackouts from lack of power during peak demand periods.
- 8 Dam breaching would also put 1,100 family farms at risk — farms whose owners have been working and conserving their land for generations, but could go bankrupt from a loss of irrigation water and river transportation options.
- 9 Without barging, the food that's sold in communities across the Pacific Northwest and exported to feed hungry populations around the world would shift to trucking and rail systems — assuming those modes of transportation could actually absorb all that tonnage — increasing costs to farmers.
- 10 We all benefit from a healthy and abundant supply of salmon, whether it's for recreational fishing, as a food source, or for keeping a balanced ecosystem.
- 11 While a vocal minority continues pushing for removal of the dams, there is still time to stand up for a balanced solution. It takes hard work and compromise with all who rely on the river system, but we've been doing it for decades and will continue showing the world how.
- 12 Publisher's Note: Kristin Meira is executive director of the Pacific Northwest Waterways Association, a collaboration of ports, businesses, public agencies and individuals who support navigation, energy, trade and economic development in the Pacific Northwest.

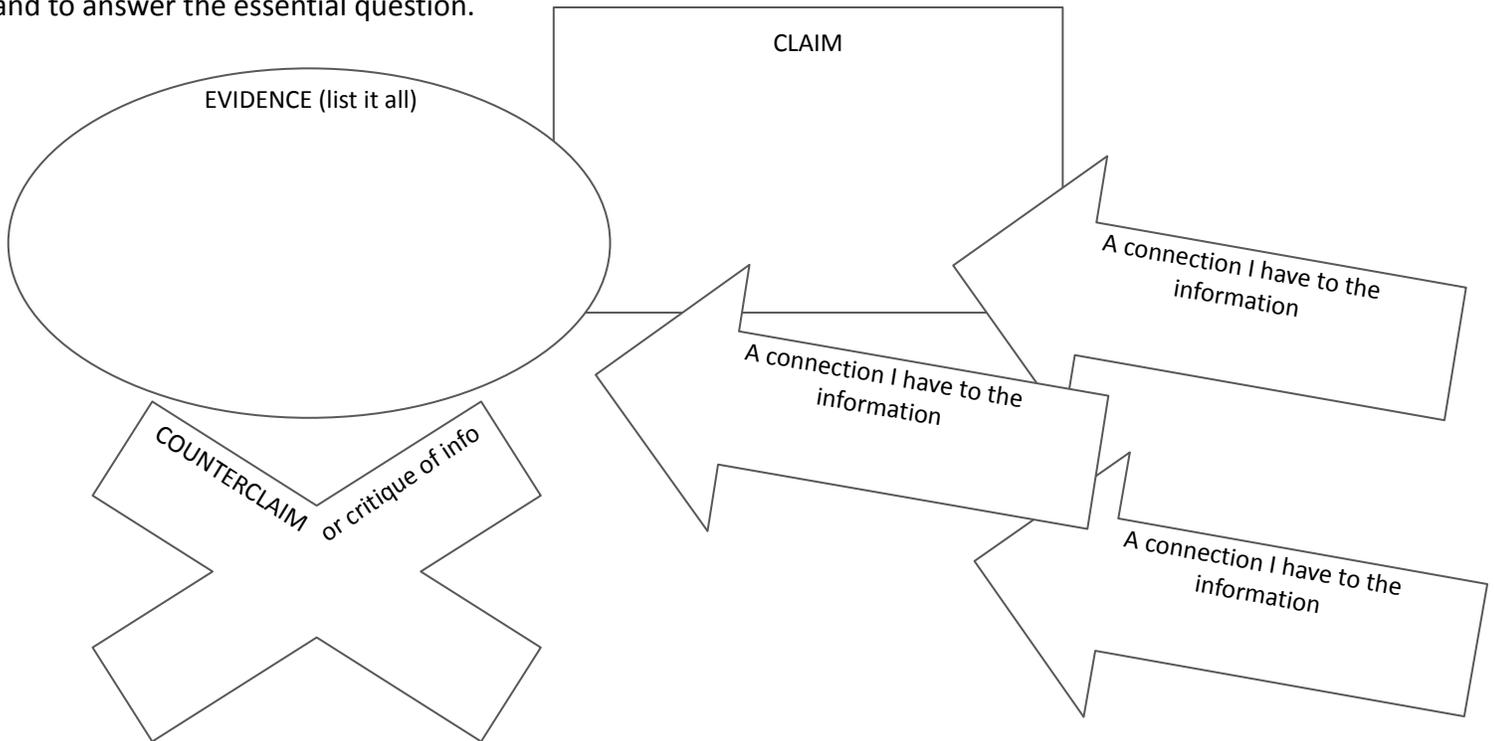
Adapted from Meira, Kristin. "Commentary: Speak up now in favor of Snake River dams." *Capital Press*, 27 March 2020. capitalpress.com/opinion/columns/commentary-speak-up-now-in-favor-of-snake-river-dams/article_94288140-705c-11ea-8d6b-c3d37b8f873e.html/?&logged_out=1.

Summary: Review the essential question and your annotations. Answer at least two of the following questions in the space below. What claim(s) does the author make about the essential question? Do you agree with the claims? Are they well supported by evidence from the article? What connections did you make that help you evaluate the author's claim?

NAME: _____ PRD: _____

Essential Question: How do wheat farms benefit from dams on the Lower Snake River in Washington? Would Rep. Simpson's proposal to improve salmon habitat by removing those dams outweigh the benefits?

Discussion Use your annotations on your article and fill in the shapes to help you prepare for the discussion and to answer the essential question.



During the discussion, use the sentence frames below to get you started.

Near the beginning

Give (and analyze) claims and evidence

My article says...but I think...

My article says...and I think...

In the middle

Evaluate information and look for connections and/or counterclaims

From what I know...because...

A counterclaim would be that...

Does anyone have more information about...

Near the end

Answer the essential question

When you said...I thought...

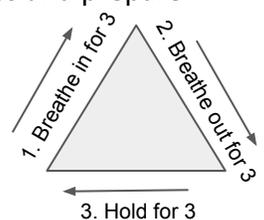
Does the group agree that...?

After listening to everyone's thoughts, I think...

Nervous about speaking? It's normal.

Here are some things that might help:

Breathe. Use a triangle breath to regulate your nerves and prepare yourself to speak.



Go back to your article and look for where you noted **personal connections** to the text. Speaking about something you have experience with may be easier in the group discussion.

Look at the sentence starters above. Write out what you are going to say by filling in the blanks and be on the lookout for when to add your thoughts.

NAME: _____ PRD: _____

Essential Question: How do wheat farms benefit from dams on the Lower Snake River in Washington? Would Rep. Simpson's proposal to improve salmon habitat by removing those dams outweigh the benefits?

Reflection Think about what you read and what others said in the group discussion to answer the following questions.

1. Rate your participation during the discussion by checking the ways you participated below:

→ Shared information by stating (at least 1)

- My article's claim, quoted directly from article**
- My analysis of the claim
- Relevant connection or background information**
- Evidence, quotes directly from article

→ Responded to others ideas by (at least 1)

- Pointing out a counterclaim
- Asking for examples
- Asking for evidence
- Saying more about others' ideas**
- Prompting someone else to respond

→ Showed respect for others' ideas by (at least 1)

- Paying attention to people who are talking**
- Staying on-topic
- Re-engaging the group after a period of silence or if you go off-topic
- Monitoring time

→ Answered the essential question by (at least 2)

- Saying my ideas about the essential question**
- Using evidence to back up my ideas**
- Providing a different answer or idea
- Giving OR asking for a summary

2. What did you get out of this activity?

- | | | | |
|---------------------|--------------------------------|-----------------------------------|-------------------------------------|
| I learned | <input type="checkbox"/> a lot | <input type="checkbox"/> a little | <input type="checkbox"/> nothing |
| I participated | <input type="checkbox"/> a lot | <input type="checkbox"/> a little | <input type="checkbox"/> not at all |
| My thinking changed | <input type="checkbox"/> a lot | <input type="checkbox"/> a little | <input type="checkbox"/> not at all |
| I enjoyed it | <input type="checkbox"/> a lot | <input type="checkbox"/> a little | <input type="checkbox"/> not at all |

3. How would you answer the essential question in 2-3 sentences? Consider the claims and evidence from your article, along with connections, background information, and counterclaims and evidence brought up during the discussion. Use the graphic organizer on the previous page to help you with your writing.