

NWSRI VIDEO SERIES

VIDEO 5 - CHANGES IN THE WATERSHED

This video gives a general overview of the changes to the environment within the Nechako River Watershed, and what factors have lead to these changes.

Total Length: 7:09 minutes. The video is broken into several sections. Below are some key questions to think about in each section of the video.

Changes in the Watershed: 00:00 to 02:12

This section explains some of the main reasons why the Nechako River Watershed is different now than it was 100 years ago.

- Refer to <u>Lesson 2-1 (Watershed)</u> for further learning.
- What two main changes to the Nechako River happened after the Kenney Dam was built?
- Name the five main ways the watershed has changed for sturgeon over the past 100 years.
- Are the changes to the watershed here in the Nechako Watershed unique, or do we see those changes in other watersheds around the world?

Exploring Habitat Restoration Options: 02:13 to 04:39

This section goes into some details about two gravel habitat restoration projects that happened on the Nechako River since 2011.

- How were the two gravel restoration projects different?
- Explain why gravel is important for sturgeon during each life cycle stage.

Seasonal Flow Management: 04:39-05:26

This section explains the Water Engagement Initiative.

• Using this website (<u>www.getinvolvednechako.ca</u>) and a map of the watershed, draw out how water flows from the reservoir to Prince George.

Keeping the River Clean: 05:26-7:09

This section explains the importance of keeping the river clean and why it is important to protect and restore the Nechako White sturgeon population.

- Name what actions you can take as an individual and as a class to help protect rivers from litter and pollution.
- In the video, students explain some reasons why sturgeon should be protected. Why do **you** think sturgeon should be protected?

FURTHER EXPLORING:

The video lists several land use practices that impact the watershed and river, and it lists HOW the river has changed over the past 100 years. Pick one type of change (eg. increase water temperature), and create a diagram or concept map that shows how the land and how we use it has created that change.

DEFINITIONS

Throughout the video, the narrator uses scientific language. Here are some definitions to many of the terms.

INQUIRY OPPORTUNITY:

Expand on these definitions to learn more about what they mean and how they relate to fisheries research.

Habitat Alteration: Changes to the amount of suitable habitat for a species. Habitat alterations can be negative or positive depending on the context.

Recruitment Pulse: When a large number of individuals from a cohort or particular year survive to join the population.

Infilling: Material (like sand or silt) that fills a space or hole.

Interdisciplinary: When individuals from a number of organizations, institutions (eg. universities) and governments work together on a project using their own expertise, knowledge and skills to find the answer together.

Other useful resources for review to support understanding of the Nechako Watershed and the work that happens within the watershed.

Go to: nechakowhitesturgeon. org > Education > Grade 4-7

Recovery and Rehabilitation (> Unit 2 Presentations)

Watershed Map

(> Watershed Map)

More available at:

www.nechakowhitesturgeon.org
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