

Episode 2

ELK RIVER ALLIANCE

MONITORING WATER TEMPERATURE IN ELK RIVER TRIBUTARIES

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Background: GLOWS (Growing & Learning Opportunities With STEAM) provides opportunities to help youth ages 5-19 find inspiration about their post-secondary education in a variety of STEAM (Science, Technology, Engineering, Art and Math) disciplines. BiodiversiTV is a multimedia learning experience showcasing biodiversity in the Kootenay region.

This year's Science Literacy Week theme is biodiversity. Canada is a country rich in biodiversity, and this year we're celebrating that diversity. From lakes to oceans, prairies to boreal forests, marshland to tundra, our country is brimming with science. We're encouraging Canadians to explore what makes these environments unique and so amazing and why we need to conserve them for future generations.

Objectives:

- Describe the purpose of the Lizard Creek water monitoring project.
- Understand the impact of water temperature increase due to climate change on the Elk River and its tributaries.
- Make the connection between healthy river habitat and biodiversity.
- Question and predict the impact of climate change on the local watershed.
- Recognize the importance of academic diversity, personal passion, and hard work that goes into career selection.
- Expand knowledge of diverse career possibilities and understand career clusters.

Key Questions:

- What will monitoring the temperature of the creeks that flow into the Elk River tell the scientist?
- What significance does the health of the insects play in the observations the Elk River Alliance (ERA) team is making?
- How does the technology available to the team support the monitoring they are conducting?
- Why is long term data important to identify the impact of climate change on Lizard Creek?
- What similarities in educational background do Beth, Ayla and Chad share?



ACTIVITY 1 - NOTE TAKING

Supplies: Legal Size (8.5x14) Paper for NOTES PDF

Educator Tasks: Print [NOTES PDF](#) and hand out to learners.

Visit the [KAST website](#) and play Episode 2 of BiodiversiTV for your learners.

Prompt: Have learners take notes using the NOTES PDF. If your learners participated in the note-taking activity for Episode 1, they will be intentionally taking better notes. There is no pop quiz today - instead the focus will be on the learning objectives and self assessment for a career in Environmental Science.

ACTIVITY 2 - THE MORE YOU KNOW

READING + WORKSHEET

Supplies: Paper to print the worksheet provided below.

Activity: Elk River Alliance supports a local education program called [Know Your Watershed](#), for Grade 9 students. The Lesson 3 activity, [Climate Change and Our Watersheds](#), is a wonderful supplement to the material covered in this episode of BiodiversiTV, for its objective of questioning and predicting the impact of climate change on the local watershed.

ACTIVITY 3 - EXPLORE A CAREER IN NATURAL OR APPLIED SCIENCE!

In the [worksheet provided](#), learners will review two key definitions (career & career cluster) to support their exploration of a career in natural or applied science. Following the definitions, is a link to the WorkBC Career profiles where learners are asked to filter the search by applied & natural sciences and identify careers available that would be relevant to the work the ERA team is conducting on Lizard Creek.

ACTIVITY 4 - OPEN DISCUSSION

Ask the key questions recommended in the introduction to gauge if your learners have met the learning objectives outlined for this episode of BiodiversiTV.

FEATURED FAVES

Optional - Explore the apps and/or borrow the books recommended by Ayla Bennett.

Featured Faves Apps:

[Seek by iNaturalist](#)

Featured Faves Books:

**[Handbook of the Canadian Rockies](#)
by Ben Gadd**

**[Raven's End](#)
by Ben Gadd**