

Current Environmental Issue Learning Objectives for the NCF-Envirothon Guidelines for Colorado Envirothon¹

How do we balance quality of life with the quality of the environment? What impact do humans have on nature, and how can we protect it for future generations? How can we think critically about the issues facing our world today, and develop creative solutions for conservation and growth? Through examining a different Current Issue each year, students will apply their knowledge to real-world environmental problems, answering these difficult questions and more as they work together to build a more sustainable future.

Just like the ecosystems we study, human society and culture are incredibly diverse. In the same way that biodiversity makes ecosystems more resilient, these differences in human perspective and experience make us stronger as a global community. Every person's story and relationship with the environment is important, and we must work together to ensure that everyone's stories are heard, including the historically marginalized and economically disadvantaged. We invite you to seek out stories from your own communities – to discover the unsung conservation heroes, to learn the histories that aren't typically taught in classrooms, to highlight local environmental issues, and to explore what types of natural resource conservation are occurring in your local community, state/province, and nation.

Students will be able to:

General Current Issue

1. Identify credible sources of scientific information.
2. Differentiate between facts and opinions.
3. Explain the science behind the current issue.
4. Think critically about all aspects of the issue.
5. Describe the environmental impact of the current issue and potential solutions.
6. Approach the current issue from a holistic viewpoint.
7. Recognize and predict the impact of different aspects of the current issue on various stakeholders.
8. Describe the economic impact of the current issue and potential solutions (including cost/benefit analysis, cost of doing nothing, economic impact on local and global resources, costs of management strategies and recommendations, et cetera).
9. Explain the social and cultural impact of the current issue and potential solutions (including private property rights, traditional land use practices, right to farm, Indigenous communities, right to a clean and healthy environment, underrepresented communities, underserved communities, urban issues, et cetera).
10. Explain the relationship of the current issue to the four main natural resource areas (Soils and Land Use, Aquatic Ecology, Forestry, and Wildlife).
11. Evaluate the effectiveness and sustainability of different solutions or approaches to address the issue.
12. Identify major legislation (local and national) and international agreements pertaining to the current issue and understand how they provide protection for natural resources.
13. Analyze the local and global impacts of the current issue.
14. Make management recommendations about the issue in a variety of settings (for example: national parks, farmland, urban settings, industrial sector, et cetera).

15. Explain how other environmental issues are related to the current issue, and how these relationships impact the viability of potential solutions.
16. Demonstrate a solid understanding of political topics related to the current issue (including regulations, mandates and impact on political system and community).
17. Engage others in productive discussion about the current issue.
18. Articulate opposing viewpoints surrounding the issue.
19. Formulate informed opinions about the issue and articulate opinions with supporting evidence to others.
20. Constructively engage with local communities about the current issue.

Oral Presentation

21. Work collaboratively in a team to synthesize scientific information, create inventive solutions to real-world problems, prepare a comprehensive presentation about the Oral Presentation scenario, and present the proposed plan to an audience.
22. Organize information from credible sources and apply it to a specific scenario.
23. Speak clearly and confidently in front of a group.
24. Prepare and perform the presentation in the allotted amount of time.
25. Create visual aids using Microsoft PowerPoint or similar presentation software.
26. Answer questions about the presentation content accurately and thoroughly.

¹ Adapted for Colorado Envirothon 2023, B. Berlinger