## **Caring for Our Watersheds - Grades 7-9**



## Alberta Education Program of Studies Curriculum Connections

The following are the Alberta Education Program of Studies curriculum outcomes that Caring for our Watersheds meets for the varying grade levels.

	Science	Social Studies	Language Arts/English
Grade 7	<ul> <li>Unit A: Interactions and Ecosystems (Social and Environmental Emphasis)</li> <li>Investigate and describe relationships between humans and their environments</li> <li>Monitor a local environment, and access the impacts of environmental factors on its growth and health</li> <li>Work collaboratively on problems and communicate ideas, procedures, and results</li> <li>Unit B: Plants for Food and Fibre (Science and Technology Emphasis)</li> <li>Identify plant uses: identify needs, technologies, products and impacts</li> <li>Identify relationships among human needs, technologies, environments and the culture and use of living things</li> </ul>	<ul> <li>By studying the impact of water, water quality and physical geography on quality of life CFOW program satisfies several skill-based outcomes including: <ul> <li>Critical and creative thinking skills</li> <li>Decision making and problem solving</li> <li>Communicate in engaging and persuasive manner</li> <li>Research for deliberative inquiry</li> <li>Leadership and consensus building skills</li> </ul> </li> </ul>	<ul> <li>Throughout all grades the proposal-writing component satisfies several general outcomes including:</li> <li>Creating original text</li> <li>Summarizing ideas from multiple sources</li> <li>Use of oral, text, and media arts</li> <li>Analysis and critical thinking skills</li> <li>Justify own point of view through persuasive argument</li> <li>Determine inquiry or research requirements</li> <li>Work cooperatively and contribute to group process</li> </ul>
Grade 8	<ul> <li>Unit E: Freshwater and Saltwater Systems</li> <li>Understand local and global environments</li> <li>Identify the significance of water supply and quality to the needs of humans and other living things</li> <li>Analyze human impacts on aquatic systems</li> </ul>		
Grade 9	<ul> <li>Unit A: Biological Diversity</li> <li>Investigate how diversity contributes to species survival</li> <li>Identify impacts of human action on species survival and variation within species, and analyze related issues for personal and public decision making</li> </ul>		
	<ul> <li>Unit C: Environmental Chemistry</li> <li>Investigate and describe the role of different substances in the environment in supporting or harming humans and other living things</li> <li>Analyze and evaluate mechanisms affecting the distribution of potentially harmful substances within an environment</li> </ul>		

## **Caring for Our Watersheds - Grades 10-12**



## Alberta Education Program of Studies Curriculum Connections

The following are the Alberta Education Program of Studies curriculum outcomes that Caring for our Watersheds meets for the varying grade levels.

	Science	Social Studies	Language Arts/English
• • Sc	<ul> <li>Science 10 – Unit D: Energy Flow in Global Systems</li> <li>Investigate and interpret the role of environmental factors on global energy transfer and climate change</li> <li>Relate climate to the characteristics of the world's major biomes</li> <li>Science 14: Investigating Matter and Energy in the Environment</li> <li>Describe how the flow of matter in the biosphere is cyclical along characteristic pathways and can be disrupted by human activity</li> <li>Analyze a local ecosystem in terms of its biotic and abiotic components, and describe factors of the equilibrium</li> </ul>	<ul> <li>10-1 Perspectives on Globalization</li> <li>10-2 Understandings of Globalization</li> <li>International impact on land, culture, economy, human rights, and quality of life</li> <li>Evaluate the actions and policies associated with globalization that impact the environment</li> </ul>	<ul> <li>Throughout all grades the proposal-writing component satisfies several general outcomes including:</li> <li>Creating original text</li> <li>Summarizing ideas from multiple sources</li> <li>Use of oral, text, and media arts</li> <li>Analysis and critical thinking skills</li> <li>Justify own point of view through persuasive argument</li> <li>Determine inquiry or research requirements</li> <li>Work cooperatively and contribute to group process</li> </ul>
Grade 11	<ul> <li>Unit A: Energy and Matter Exchange in the Biosphere</li> <li>Understand that the cycling of matter through the biosphere perpetuates its steady state of equilibrium</li> <li>Unit B: Ecosystems and Population Change</li> <li>Explain how science and technology have both intended and unintended consequences for humans and the environment</li> <li>Unit D: Changes in Living Systems</li> <li>Analyze ecosystems and ecological succession in the local area and describe the relationships and interactions among subsystems and components</li> <li>Analyze and investigate the cycling of matter and the flow of energy through the biosphere and ecosystems as well as the interrelationship of society and the environment</li> <li>Analyze and describe the adaptation of organisms to their environments, factors limiting natural populations, and evolutionary change in an ecological context.</li> </ul>	<ul> <li>10-2 Understandings of Nationalism</li> <li>Examine competing non-nationalist loyalties such as ideology</li> <li>Accept responsibilities associated with global citizenship and develop strategies for responsible global citizenship</li> </ul>	
Grade 12	<ul> <li>Science 30 – Unit D: Energy and the Environment</li> <li>Analyze the sources of acids and bases and their effects on the environment</li> <li>Analyze the sources of organic compounds and their effects on the environment</li> <li>Analyze, from a variety of perspectives, the risks and benefits of using chemical processes in meeting human needs and assess technologies for reducing the impact of chemical compounds on the environment.</li> </ul>	<ul> <li>10-1 Perspectives on Ideology</li> <li>10-2 Understandings of Ideology</li> <li>Examine how citizens are affected by ideological principles such as relationship to and and environmentalism</li> <li>Examine relationship between individualism and collective good, including relationship to common good and quality of life</li> </ul>	