

EarthComm Earth's Natural Resources: Water Resources and Your Community Storylines

Below are storylines that were designed by Cheryl Mosier, an Earth Science Teacher at Columbine High School in Littleton, Colorado.

An additional internet-based project is done to show students the following:

- where water is in Colorado
- how water is used in Colorado
- snow pack and drought information (4.3.2)
- graphing techniques with Microsoft Word

Big Idea:

10. In order to sustain the presence and quality of human life, humans and communities must understand their dependency on Earth resources and environments, realize how they influence Earth systems, appreciate Earth's carrying capacity, manage and conserve nonrenewable resources and environments, develop alternate sources of energy and materials needed for human sustenance, and invent new technologies.

	Activity 1 – Sources of Water in the World and Your Community	Activity 2 – How Does Your Community Maintain Its Water Supply?	Activity 3 – Using and Conserving Water	Activity 4 – Water Supply and Demand: Water Budgets	Activity 5 – Water Pollution	Activity 6 – Water Treatment
Key Evidence Learned	- where is fresh and salt water	- how changes in one part of a system affects other parts	- how much water is used at Columbine High School	- water budget	- pollutants in ground water	- key processes and stages in water treatment
Connection to:	- water sources for Littleton	- main ways to increase water supply	- analyze water statistics for Jeffco and surrounding counties	- influence of local climate on the water budget	- pollution due to road salt	- how and why water is treated
	- how could we collect the rain we receive	- surface water vs. ground water	- consumptive vs. nonconsumptive uses of water	- when is supply greatest and lowest	- how do humans affect surface and ground water quality	- water treatment used in Jeffco and Littleton
		- water supply system in Littleton	- water conservation at school and home	- quantity and availability of surface and ground water		
Big Idea	- where our water comes from to sustain life	- where our water comes from	- amount of water used for different things	- why different areas use different amounts of water	- human impact on water sources	- how we safely use water
				- water budget comparisons		

Real Life and Chapter Challenge	- where our water in Littleton comes from	- where our water comes from	- personal water use - county water use – Jeffco compared to other local counties - water conservation	- our local water budget - our local climate problems	- local water pollution problems	- water treatment process in Littleton
Geosphere	- location of dams and reservoirs	- surface and ground water	- conservation	- when we pull more ground water	- pollution in ground water	
Hydrosphere	- water cycle	- surface and ground water	- water uses - conservation	- water use from surface sources	- surface water pollution	- how to treat water
Atmosphere	- water cycle					
Cryosphere						
Biosphere	- water needs for human life					
State Stand.	4.3.a, 4.3.b, 4.3.c	4.3.a, 4.3.c	4.3.b	4.3.b	4.3.b	4.3.b
JeffCo Stand	4.3.d, 4.3.e	4.3.d	4.3.e	4.3.e	4.3.e	4.3.a, 4.3.e
CSAP Frame		4.3.2.c	4.3.2.c	4.3.2.c, 4.2.2.b	4.3.1.a, 4.3.1.b, 4.3.1.c, 4.3.2.c	4.3.2.c
Jeffco PE						