Unit 1: WATERSHEDS-MY WATER ACTIVITY 1 (CONTINUED)









BACKROUND INFORMATION

WHERE DOES OUR DRINKING WATER COME FROM?

In Colorado, we rely heavily on snowmelt for our water supply, but from year to year, it can be difficult to predict how much will be available. In Aurora, through the combined use of reservoirs, the natural river system, pipes, tunnels and pumps, water is transported from as far as 180 miles away to ensure a reliable water supply for Aurora residents and businesses. Most of our water comes from three of the seven major river basins: the Colorado. Arkansas and South Platte. Aurora also receives a small percentage of water from aquifers, which are essentially underground rivers. That water is then stored in 12 reservoirs: Aurora, Homestake, Turquoise, Twin Lakes, Spinney Mountain, Jefferson, Strontia Springs, Rampart, Quincy, Pueblo, Henry and Meredith.

To protect the city in drought years, we recently added a new water system that will ensure an ample water supply for years to come. The latest addition, Prairie Waters, begins in Brighton, where water from the lower South Platte is piped 34 miles to the Peter D. Binney Water Purification Facility, a state-of-the-art, 70-acre campus that has some of the most advanced purification processes available today. For more details on Aurora's Water Supply System visit our website at www.auroragov.org, click on Information and then "Aurora Water Supply Fact Book."

HEY- HOW ABOUT A LITTLE WATER MUSIC?

Ask one of your students to write down everyone's chosen song from the "Watersheds-My Water" activity described inside. Download everyone's water song to make a "My Water" Playlist CD which can be played in class to add some personal fun to the H2O Go! activities.

Adapted from H2O Go! materials developed by the City of Boulder.

TEACHER GUIDE

Unit 1:

WATERSHEDS-MY WATER

ABOUT THE UNIT

By reflecting on their own lives and activities, students start to recognize their place in the watershed—how they depend on water and the impact their activities may have on water around them. Students explore their own power to reduce their impact on the watershed.

objectives

- Learn what a watershed is and how it collects and stores
- Assess what water means to the students' lives.
- Explore activities students enjoy and discover the effect these activities have on the watershed.
- Discover local water sources.

teacher preparation

- Review all information provided in both the Teacher Guide and the Student Guide.
- Make necessary copies or overheads of the Watersheds
- Make necessary copies of the watershed map to allow for one map per 3 to 4 students.
- Make room on your classroom wall to post watershed maps and "Water Profile" sheets. (See graphic in activity summary.)

CHECK OUT THESE WEBSITES!

Information about Aurora Water:

www.aurorawater.org

Surf your Watershed: http://cfpub.epa.gov/surf



My impact

snow-making uses up to 109 gallons of water per person per day.

Unit 1: WATERSHEDS-MY WATER ACTIVITY I



WATERSHED-MY

ACTIVITY DESCRIPTION

Students place themselves at the center of their watershed world through a collection of pictures, songs and actions. By observation, critical thinking and discussion, they learn to understand their personal impact on their watershed.

Discussion: 15 minutes; Activity: 45 minutes

my materials

"Watersheds – My Water" in the Watersheds Student

Watershed map String, push pins, available wall space

essential questions

What is a watershed?

- Where does water in streams and lakes come from?
- Where does tap water come from?
- What outdoor activities take place within the watershed?

lifeskills

Students are often not aware of their impact on the world around them. Through this activity, students discover, by looking at their own activities the effect they have on water resources and what they can do about it.



TEACHER GUIDE

Unit 1: WATERSHEDS-MY WATER ACTIVITY I (CONTINUED)



Visit us online at www.youtube.com/aurorawatercolorado



Visit us online for videos on Aurora's water supply system.

- Discuss essential questions. Identify activities students do in Colorado that affect or involve water. Brainstorm specifically about water locales in the area that your students may have visited with family or friends, such as Aurora Reservoir or the South Platte River.
- Go over instructions for "My Watershed-My Life" activity, including reviewing some of "My Water Facts."
- Talk with students about collecting pictures (photo or magazine), songs and facts for their "Water Profile."

DAY 2

MY WATER

- Divide the students into groups of 3 or 4.
- Distribute one watershed map per group.
- Review the map, discussing what watershed they live in and the flow of water through it. Note the waterways highlighted in dark blue, which represent primary waterways.
- Ask each group to share their "Water Profiles" (song, photo, fact) amongst themselves.

MY IMPACT. MY ACTION

- Brainstorm with your students some possible impacts their activities may have on water. What do they think has the greatest impact on their watershed?
- Have each student review the "Water Impact Chart."
- Discuss together the impacts that result from their activities.
- Have each student select an impact that applies to their lives and write it down on the "My Impact" section of their "Water Profile."
- Brainstorm possible actions they can take to reduce their impact on the watershed.
- Invite students to write down an action in the "My Action" section of their "Water Profile."

MY WATERSHED. MY LIFE

• Have the student's decide together as a group where each student's "Water Profile" most appropriately fits on the watershed map. (This could be where the student lives, where the pictured activity takes place, etc.) Have each group post their map and water profiles by putting a pin in the location and running a string to their "Water Profile." This should look as follows:

Profile #1

For a classroom presentation on Aurora's water supply system call 720-427-6029.



• Have each group select their favorite song, water fact, photo, impact and action from their group and present how they affect the watershed as a group.

SEND IT!

 Have each student identify a water protection action they think is most practical to implement. Ask them to email/text the action to three friends and/or family members. If possible, get special permission for the students to bring their cell phones to class. Let them share phones with those that don't have them and let the students text straight from class!