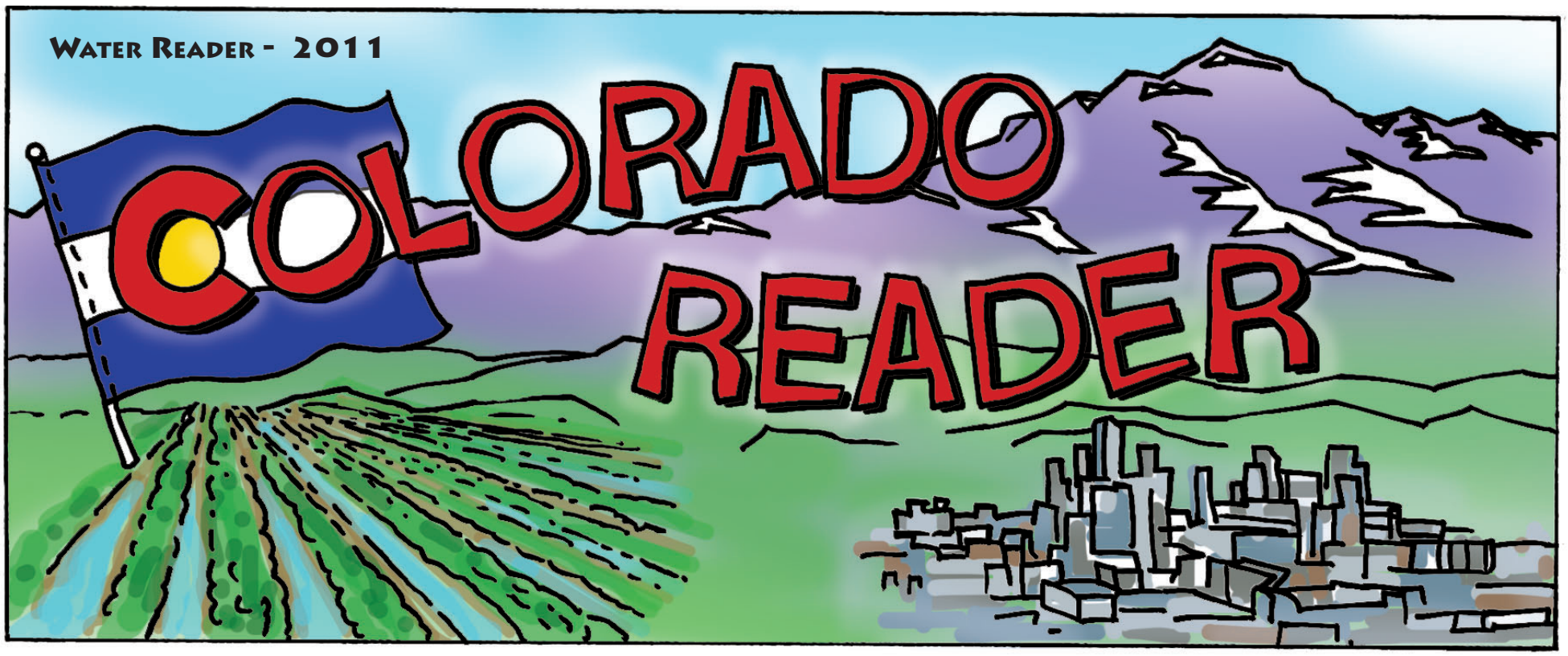


AG IN THE CLASSROOM - HELPING THE NEXT GENERATION UNDERSTAND THEIR CONNECTION TO AGRICULTURE

Reservoirs at Work

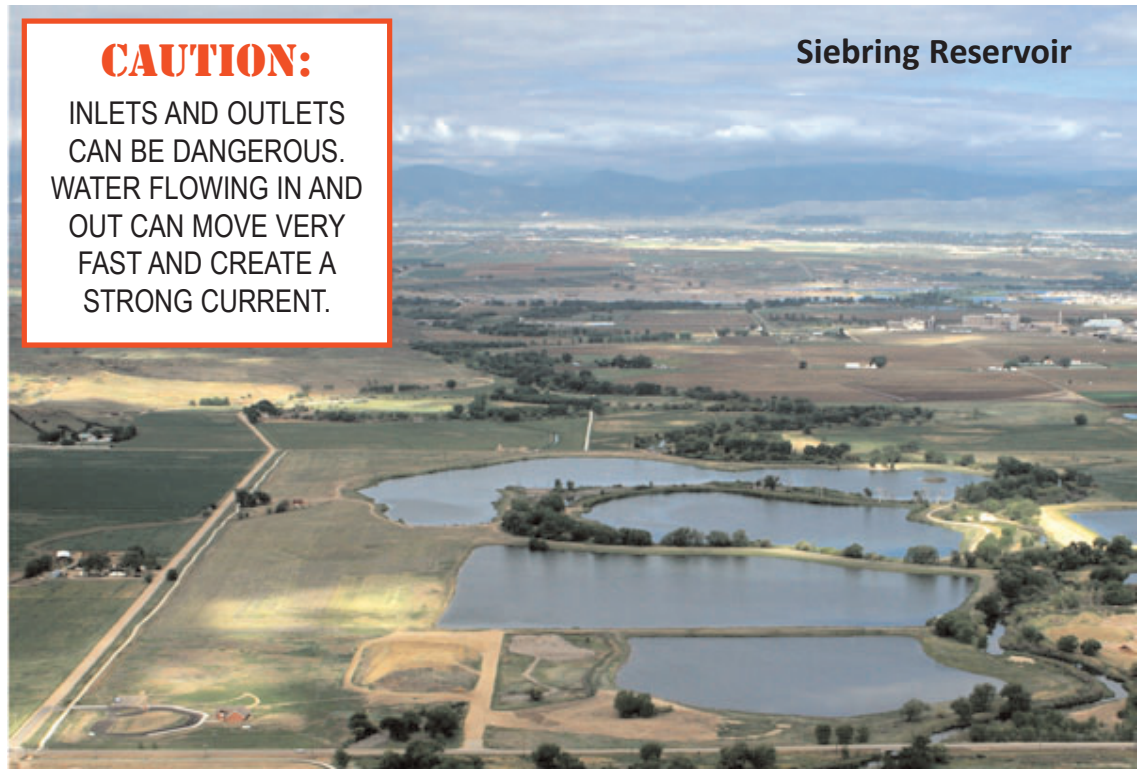
Do you know that almost all the lakes and ponds in Colorado are human made? The eastern United States has many natural lakes, but here in the dry west, we build our own.

Lakes and reservoirs are used to store water. Water gets into reservoirs when it rains and snows. Melting snow in the high country flows into rivers and streams. Rivers and streams carry the water to lower elevations. Water is diverted from rivers into ditches and canals so the flow of water can be directed to specific reservoirs. Groundwater is another source of water for lakes and reservoirs.

Water can be carried for many miles in rivers or canals to reach a reservoir. Water gets from the canal or river into the reservoir at an “inlet”. Water is released at the reservoir’s “outlet” when it’s time to use the water or move it downstream.

CAUTION:

INLETS AND OUTLETS CAN BE DANGEROUS. WATER FLOWING IN AND OUT CAN MOVE VERY FAST AND CREATE A STRONG CURRENT.



Siebring Reservoir

Why do we want to store water? Swimming, boating and fishing are fun. Some lakes and reservoirs are used for these and other recreational activities. Stored water can be used for irrigation. Irrigation is how farmers get water to crops so they can grow. Additional reasons to store water are for flood control, to benefit wildlife and aquatic life or to produce electricity. A reservoir can help clean water before it flows to a city's water treatment plant where it's cleaned even more before it becomes your drinking water.

Colorado's Bathtubs

Picture your bathtub at home. *Reservoirs are like your bathtub.* You have turned on the water faucet to fill it. Oops! You have filled the tub so full that some water drains out of the tub from the little hole near the faucet. Think of this as a "spillway". *Reservoirs have spillways too. If reservoirs get too full, the extra water flows out the spillway and into a river.* Now you get in the tub. You had played in dirt and mud (that's why you are taking the bath!) Gravel, clumps of dirt, and sand settle to the bottom of the bathtub. *This is how a reservoir helps clean water naturally. Things like dirt and sand, called "sediment", will naturally settle out - just like the gravel and dirt in your bathtub.*

So you splash and play in tub a while. The water has gotten cold. You open the drain and let some of the water out. The drain is an outlet. Now that you've drained some water out, the water in the tub is lower. You can let it stay that way, or if you want to add more hot water, you now have the room! *Reservoirs have outlets. The outlet can be connected to pipes or canals that carry water to a treatment plant or to a farmer or to another reservoir downstream.* The dirt and gravel stayed in your tub even with some of the water rushing out. *Stored water can be released from reservoirs. Releasing water lowers the level of the reservoir and makes room for different water. This becomes a form of flood control and managed water use. A reservoir can hold water when we've had a lot of rain. Water can be released back into the river later on during a dry period. A reservoir will have some kind of gate or panel that can be opened and closed to let water out in carefully controlled amounts.*

Your bathtub is made of porcelain. It won't leak. *How do you suppose they build a reservoir so it doesn't leak? If you guessed that they build it of material that won't let water leak out, give yourself a gold star! Some reservoirs are built using concrete, others use a substance that's like clay.*

Colorado has over 1,900 reservoirs! The largest is Blue Mesa Reservoir on the Gunnison River. Reservoirs are alike in that they all have a structure or dam to hold the water, an outlet to release water, at least one side with a slope, and the purpose of storing water. Reservoirs are also all different because of their size, shape, location and water use.

Do you live near a reservoir? You can learn about the history of your local reservoir by visiting your library or doing an Internet search. Is it used for drinking water or irrigation? Maybe it's there for flood control. Who owns the reservoir? It could be a city, a water district, the U.S. Government, or a ditch company. Is recreation allowed?

And the next time you take a bath, you can be in charge of your own reservoir. Just make sure that any water you release goes into the drain and not on the floor!

Construction at Shores Lakes, near Firestone

The Colorado Reader publication and Ag in the Classroom are projects of the Colorado Foundation for Agriculture. Educational projects are produced in cooperation with the Colorado Department of Agriculture, other state and federal agencies, Colorado commodity groups, Colorado agricultural associations, state universities and colleges and interested individuals. Colorado Readers are provided free to educators requesting them. For more information contact: Bette Blinde, Director, Colorado Foundation for Agriculture, P.O.Box 10, Livermore, CO 80536 or phone (970) 881-2902. Financial support for this reader has been provided by:
Central Colorado Water Conservancy District, Denver Water, Colorado Lakes & Reservoirs Management Association, Colorado Department of Public Health and Environment ~ Water Quality Control Division

Reservoir - n. a place where anything is collected and stored, generally in large quantity; especially a natural or artificial lake or pond in which water is collected and stored for use.

Background

Reservoirs have been a part of Colorado's landscape for centuries. These human-made lakes are found throughout the state and provide water for a population that has recently grown to more than 5 million.

There are over 1,900 reservoirs in Colorado that can hold more than 100 acre-feet of water. An acre-foot is about the size of a football field with a foot of water on top. An acre-foot of water is 326,000 gallons. An acre-foot of water is enough water for two families to use for an entire year – both inside and outside their homes.

If you fly over the eastern plains or over the Rocky Mountains you can see many of these reservoirs. Let's find out why they were built and for whom.

Earliest reservoirs

The earliest reservoirs in Colorado date back to when the Pueblanos or "the ancient ones" settled near Mesa Verde in southwestern Colorado. These people built small holding ponds as early as 750 A.D. for drinking water supplies to sustain them through dry periods. These storage ponds provided more water for the Indians than was available from natural springs.

For more than 500 years these Indians occupied the region and survived because they were experts at building reservoirs. However, a decades-long drought in the late 13th century forced these people to abandon the Mesa Verde region. It took another 500 years before the modern phase of reservoir building began.

Modern reservoir construction

The beginnings of modern reservoir building had its roots in the 1859-60 gold rush when the first mass migration to Colorado occurred. While most of the gold seekers came away disappointed and many returned home, a few stayed and tried their hand at farming along the river valleys of eastern Colorado. They learned early on that Colorado's precipitation was not enough to grow their crops.

They also learned that Mother Nature provided most of their much-needed water supply during a three-month snowmelt runoff period. This runoff began sometime in mid to late March when the mountain snows began melting and filling the rivers and streams. Usually by late July or early August those same streams and rivers had lost much of their flow, often becoming mere trickles of their former selves.

Yet Colorado's growing number of farmers needed water later in the year to finish growing their crops to produce food for the miners and others. They turned to the construction of reservoirs as a solution.

Beginning in about 1890 and continuing for 20 years these 19th century farmers built most of the reservoirs that dot Colorado's landscape today. They did so for a very basic reason - to preserve water when it is available in storage reservoirs - so it could be used late in the growing season when river flows were not enough to irrigate crops. They also built reservoirs to hold water from one year into the next to protect against future dry years and droughts.

These farmers organized themselves into ditch and reservoir companies. The formation of ditch companies provided the money needed to start building the elaborate water supply systems Colorado citizens are utilizing and benefitting from today.

Photo of Horsetooth Reservoir being constructed west of Fort Collins, Colorado.

GEOGRAPHY ACTIVITY: Using a map of Colorado, locate the reservoirs you are reading about in this issue of the Colorado Reader.

Study where you are located on the map. List two reservoirs or lakes near where you live.

Federal involvement

With the creation of the Bureau of Reclamation in 1902, the federal government became involved with reservoir construction in Colorado. The Bureau of Reclamation was established to help develop water projects throughout the 17 western states - those lying west of the Mississippi River. A huge part of their efforts involved building reservoirs and many were located in Colorado.

The federal government provided money to assist states in developing their water supplies. The first such project in Colorado was in the Uncompahgre Valley near Montrose and began in 1905. It was the Montrose and Delta canal. In the 1950s Reclamation began construction on Blue Mesa Reservoir which was to become Colorado's largest reservoir storing 940,000 acre feet when full.

Reclamation also helped build the Grand Valley Project near Grand Junction and the Colorado-Big Thompson Project in northeastern Colorado. The C-BT, for short, was begun in the 1930s and involved construction of Colorado's second largest reservoir - Lake Granby near the headwaters of the Colorado River.

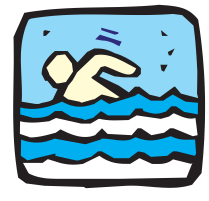
In the 1960s, Reclamation built the Fryingpan-Arkansas project in southeastern Colorado which included Pueblo Reservoir - Colorado's 6th largest.

Denver system

Denver's system of storage reservoirs dates back to 1905 when Cheesman Reservoir was constructed as the first substantial city water supply in Colorado. Built by the Denver Union Water Company and later purchased by Denver Water on its creation in 1918, Cheesman was the world's highest dam at the time, measuring 221 feet.

The growing city of Denver also built Eleven Mile Canyon Reservoir in the 1930s and built its largest reservoir - Dillon - in the early 1960s. Completed in 1963, this reservoir has an interesting history. The entire town of Dillon was moved before water could be stored in Dillon Reservoir. The town was relocated to a site above the high water line on the northeast side of the reservoir. Some of the original old Dillon residents moved to the new Dillon location although many chose to move elsewhere. The reservoir began filling in September 1963 and the old town of Dillon was covered with water.

Beginning in the mid-20th century, many of Colorado's larger cities built or acquired reservoirs to meet the needs of their growing populations. From Colorado Springs to Fort Collins and Boulder to Pueblo, communities faced with rapidly growing populations added reservoir storage to their water mix in order to meet their ever growing water demands.



How well did you read?

1. Why would people want to store water in reservoirs?

_____

_____

_____

_____

2. What is a spillway on a reservoir?

_____

_____

_____

3. Who were the first people to build reservoirs in Colorado?

_____

4. What federal agency is mentioned as being involved with reservoir construction in Colorado?

_____

5. List three uses of water stored in reservoirs:

_____

_____

_____

GEOGRAPHY ACTIVITY:
Locate your school on a map. Next locate any streams, rivers or reservoirs near your school. Find out who provides the water to your school. Does your water provider use water from a reservoir? If so, which reservoir?

A Look at One Reservoir

Located nine miles northeast of the City of Craig Colorado is Elkhead Reservoir. It was constructed in 1974 by the Colorado Division of Wildlife. In 1990, the City of Craig acquired the dam and reservoir. Elkhead Reservoir was created by building earthen-fill dam. Elkhead Reservoir is located on Elkhead Creek, a tributary of the Yampa River.


Aerial picture of Elkhead Reservoir

The State of Colorado's Water Quality Control Division classifies Elkhead Reservoir for the following uses: aquatic life, recreation, water supply and agricultural. Beginning in 2004, the reservoir was made larger by increasing the height of the dam by 25 feet, creating 11,956 acre-feet of new water storage. It took two years and $31 million dollars to complete and was paid for by the Colorado River District and the Endangered Fish Recovery Program.

The improved dam allows better management of the water flowing down the Yampa River. Controlling the water flow helps protect the endangered fish like the Colorado pike minnow, humpback chub, bonytail chub and razorback sucker.

The varied ownership and uses of water stored in Elkhead Reservoir creates management challenges. One of the most significant is the varied interests between the resident sport fish (those fish people like to catch) within the reservoir and the endangered fish that live downstream. Resident sport fish in Elkhead are northern pike, smallmouth bass, rainbow trout and crappie. Sport fishing at Elkhead is a major attraction and considered economically valuable to the area.

When the sport fish enter the river downstream from the reservoir they prey on the endangered fish in the river and compete for habitat. Thus the pike and bass in the river hurt efforts to restore the endangered fish populations and displace other native fish.

In order to solve the problem between the sport fish and the endangered fish, a system to contain the bass and pike within the reservoir was developed. Stainless steel fish screens (see photo below) on the outlet was developed. The construction of the fish screens added $750,000 in costs to the dam.


Elkhead Reservoir spillway


Fish screens

ACTIVITY:

1. Who built Elkhead Reservoir?

_____

_____

Elkhead Reservoir continued:
Managing fish are not the only concern at Elkhead Reservoir. Like most reservoirs in the state, Elkhead Reservoir operates a boat inspection program to prevent the spread of the invasive Zebra and Quagga mussels. These mussels could clog the fish screens and require divers to scrape the mussels from screens. Mussels from Elkhead could end up in the Yampa River causing problems for other water transporting structures.

2. What are the four identified uses for Elkhead Reservoir?

_____

_____

_____

_____

Operating and maintaining reservoirs requires cooperation and teamwork to find workable solutions to the varied challenges.

ACTIVITY: Listed are Colorado's 10 largest reservoirs by active capacity. Active capacity is the amount of water available that can be removed from a reservoir and sent to cities, farmers and other uses

Reservoir	acre-feet
Blue Mesa	748,400
Granby	465,568
John Martin	333,912
Dillon	249,525
McPhee	229,000
Pueblo	228,828
Horsetooth	149,732
Green Mountain	146,779
Vallecito	126,300
Turquoise	120,490

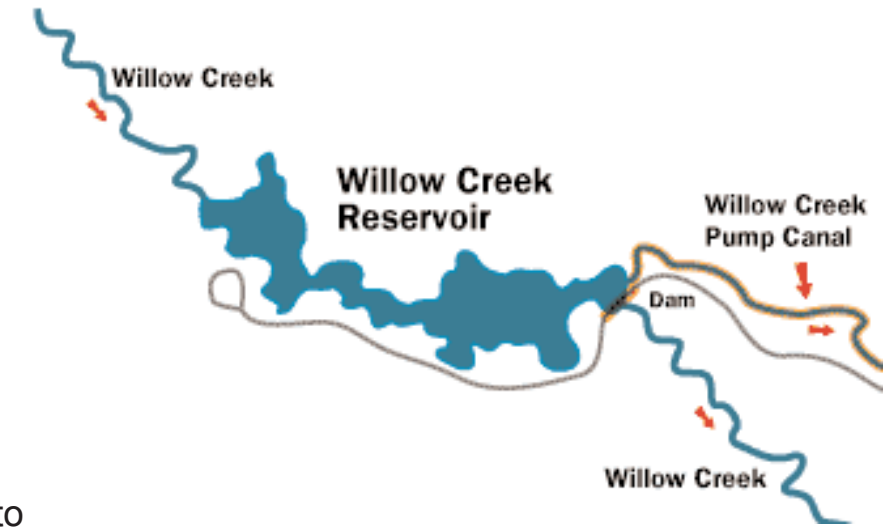
Choose one of these reservoirs and research it on the Internet. Write a report on the reservoir you chose. Be sure to include in your report where it is located, who built the reservoir, who owns the reservoir, how is the water used in the reservoir and what activities would you find happening in, on and around the reservoir.

ACTIVITY:

Study the map of this reservoir. From what you have read about reservoirs, you should be able to identify different parts of the reservoir system.

The inlet is the place where water comes into the reservoir. Mark the inlet with the letter A.

The outlet is the place water travels out of the reservoir. Mark the outlets with the letter B.



What is the structure that holds the water in the reservoir?

_____

Mark it with the letter C on this map.

Where would you expect to find the spillway on this reservoir?

_____

_____

Mark the spillway with the letter D.

Did you Know?

Colorado's State Engineer must approve all new reservoir construction. He or she also has the authority to have water levels lowered in any reservoirs that are considered to be unsafe.

Water stored underground is groundwater. The place that holds the water underground is called an aquifer.

Approximately 75 % of Colorado boaters and fisherman utilize reservoirs for their recreation.

Fire and Water

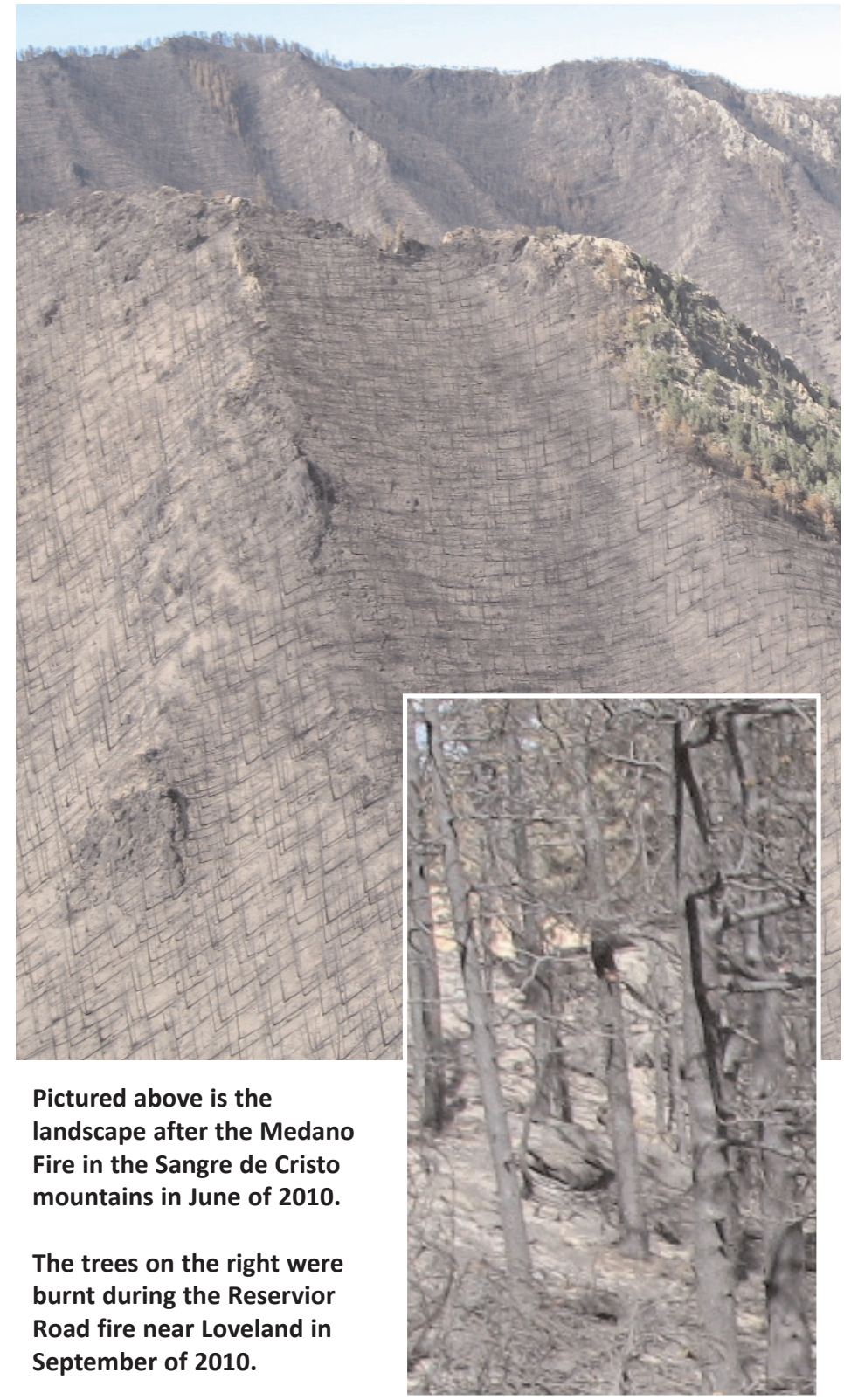
This last summer there were several large fires in Colorado. What is the effect of these fires on our reservoirs?

Fire serves many positive purposes in natural ecosystems, but it can also damage plant and animal communities. Perhaps the most damaging consequence of fire is soil erosion. Intense fires can burn the vegetation down to the roots. When the soil is not protected by vegetation cover, it can be eroded by the force of rain storms. Soil, rocks, sand and debris can be transported to nearby streams, creeks and rivers. When that happens, the streams will become turbid (dark with sediment) which can negatively impact aquatic life.

The effects of fire erosion can last for years following a fire. After the Sleeping Child fire in a Montana lodgepole forest in 1961, it took two years for vegetation to cover 2% of the land, and six years for plants to cover 25% of the landscape.
Fire affects water quality negatively by 1) increase in sediments, 2) increase in stream temperatures, and 3) increase in nutrients. These are all forms of water pollution.

Stream temperatures increase after a fire because the vegetation that usually hangs above the banks, shading the water, is no longer there. The sun heats up the water. These higher temperatures cause problems for fish and other species whose habitat is normally cold water. The increased nutrients in the water can lead to algae blooms. This can also harm aquatic wildlife living in the streams by reducing the amount of oxygen dissolved in the water and available for them.

Reservoirs catch the erosion from these forest fires for years after they occur. This results in the reservoirs filling with sediment. It can cost millions of dollars to clean the sediment from these reservoirs.



Pictured above is the landscape after the Medano Fire in the Sangre de Cristo mountains in June of 2010.

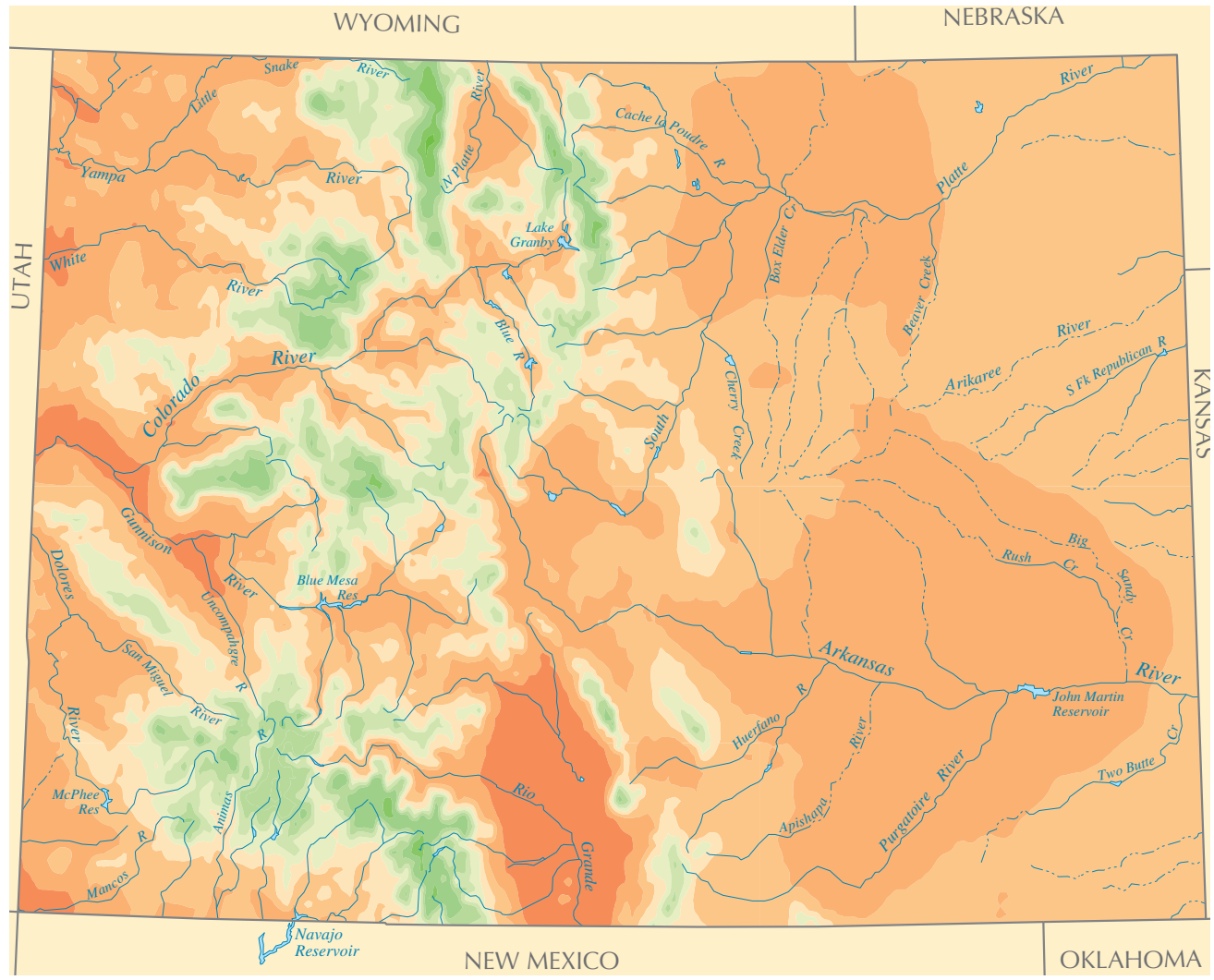
The trees on the right were burnt during the Reservior Road fire near Loveland in September of 2010.

WRITING ACTIVITY:
If streams from a large burned area of a forest flow into a reservoir, what would you predict the impact to be on the reservoir? On a sheet of paper write three paragraphs describing your predictions.

Polluted runoff, sometimes called nonpoint source pollution, results when precipitation interacts with pollutants to carry them over the surface of the ground or leach them into the ground water. It is pollution that cannot easily be “turned off” by technology. Rather, people must change habits and practices that affect the quality of our water. The key to controlling nonpoint source pollution is prevention: wise use of fertilizer and pesticides, controlling what flows into the gutters and storm drains, not over-watering gardens and fields, disposing of pet waste away from water sources, and other preventive measures.

PRECIPITATION Map of Colorado

Source:
U.S. Department of the Interior
U.S. Geological Survey
nationalatlas.gov



Average Annual Precipitation (in inches) 1961-1990

- 180.1-200
- 140.1-180
- 120.1-140
- 100.1-120
- 80.1-100
- 70.1-80
- 60.1-70
- 50.1-60
- 40.1-50
- 35.1-40
- 30.1-35
- 25.1-30
- 20.1-25
- 15.1-20
- 10.1-15
- 5.1-10
- 5 and less

Precipitation is the moisture an area receives. It can come from rain, hail, snow and sleet.

Study the above precipitation map of Colorado and answer the questions.

1. What color is the majority of the state of Colorado on this map?

_____

2. What is the range of precipitation this color represents?

_____

3. What other color do you see on the map?

_____

4. What precipitation range does this represent?

_____

5. Where you see the green color, what topographical feature do you see in these areas?

_____

6. Are these areas in green a good place or a hard place to grow crops? Why?

_____

_____

_____

_____

_____

7. Are these areas in orange on the east side of the state a good place or a hard place to grow crops? Why?

_____

_____

_____

8. What might make them a good place to grow crops?

_____

_____

_____

_____

Teacher's Guide

AG IN THE CLASSROOM–HELPING THE NEXT GENERATION UNDERSTAND THEIR CONNECTION TO AGRICULTURE

Web Resources

Denver Water's website at http://www.denverwater.org/EducationOutreach/
They offer supplemental curriculum materials, classroom guest speakers, and tours of water treatment plants. Contact: Rob Buirgy, Community Relations, Youth Education Consultant Denver Water ~ t: (303) 628-6076 c: (970) 690-4655 rob.buirgy@denverwater.org

Colorado Division of Wildlife: http://wildlife.state.co.us/WildlifeSpecies/Profiles/InvasiveSpecies/ZebraandQuaggaMussels.htm

National Invasive Species Inormation Center: www.invasivespeciesinfo.gov/unitedstates/co.shtml

100th Meridian Initiative: http://www.100thmeridian.org/

Protect Your Waters: http://www.protectyourwaters.net/

Colorado State Parks: http://parks.state.co.us/NaturalResources/ParksResourceStewardship/AquaticNuisanceSpecies/

United States Federal Aquatic Nuisance Species Task Force: http://www.anstaskforce.gov

NPS Web Resources

Nonpoint Source Colorado http://www.npscolorado.com/

CDPHE Nonpoint Source Program
http://www.cdphe.state.co.us/wq/nps/

CFA's Water Pollution: Problems & Solutions To Nonpoint Source Pollution
http://www.growingyourfuture.com/lessonPlans/hs_nps.html

CFA Comic: Watershed Defenders
http://www.growingyourfuture.com/programs/comix/index.html

Colorado Water Protection Project
http://www.ourwater.org

Reservoirs are like banks. When we have extra water it is stored in reservoirs until we need it. Then it is taken out and used. The reservoir system was originally developed by farmers to supply water to their crops. Now municipalities are requiring more water for the growing Colorado population. Water ownership is being transferred from agriculture to city use. Water is owned. It is a property right, therefore it can be sold.

Many of the activities in this reader require the student to reference a map of their area of the state. You will need to use a map that shows the water resources in your area. You may want to check with your local water supplier for more detailed maps of the water resources. There are also numerous water conservation districts that can assist you.

Page 4: How well did you read?

1. Why would people want to store water in reservoirs? They would store water for: recreation, irrigating crops, wildlife and aquatic life, flood control, drinking water and producing electricity.
2. What is a spillway on a reservoir? Place where water leaves a reservoir.
3. Who were the first people to build reservoirs in Colorado? Pueblanos or "the ancient ones" near Mesa Verde in southwestern Colorado.
4. What federal agency is involved with reservoir construction in Colorado? Bureau of Reclamation was established to help develop water projects throughout the 17 western states.
5. List four uses of water stored in reservoirs:
   For wildlife and aquatic life,
   For recreation - swimming, boating and fishing,
   For water supply for drinking and manufacturing,
   For agriculture - irrigating for crops and for livestock,
   For produce electricity, and
   For flood control.

Comments, questions, suggestions and feedback about the *Colorado Reader* are welcome.
Contact: Colorado Reader Publisher:
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Phone (970) 881-2902
bblinde@growingyourfuture.com

Page 6

1. Who built the Elkhead Reservoir?
   Colorado Division of Wildlife
2. What are the four identified uses for Elkhead Reservoir? aquatic life, recreation, water supply and agricultural

Page 8

1. What color is the majority of the state of Colorado on this map?
   orange
2. What is the range of precipitation this color represents? 10.1 to 15 inches and 15.1 to 20 inches
3. What other color do you see on the map?
   green
4. What precipitation range does this represent?
   31.1 to 50 inches
5. Where you see the green color, what topographical feature do you see in these areas?
   Mountains
6. Are these areas in green a good place or a hard place to grow crops? Why? Hard places, because they are too rough, too steep and too rocky to grow crops
7. Are these areas in orange on the east side of the state a good place or a hard place to grow crops? Why? Yes, it is much flatter, but they are dryer
8. What might make them a good place to grow crops? They would be good places to grow crop if their was enough moisture for the crops during the dry part of the year.

Page 5 Aquatic Nuisance Species were addressed in the February 2010 Colorado Reader by that same name. You may want to refer it. To summarize:

Zebra and quagga mussels are a great ecological threat to the state. The invasion of these mussels can affect every Coloradan in some way even if you don't live near a lake or reservoir. The impacts could be harmful because: They grow and reproduce quickly Zebra and quagga mussels reproduce exponentially. A single female mussel can produce up to one million eggs a year! As the mussel population explodes and grows quickly, they cover the bottom and sides of the waterway.

They clog water infrastructure, impacting water supply and quality. Zebra and quagga mussels can attach via byssal threads to underwater structures. They can form dense clusters that impair facilities and impede the flow of water. They clog intake pipes and trash screens, canals, aqueducts, and dams and can disrupt water supply to homes, farms, factories and power plants. Zebra and quagga mussels can hurt or degrade water quality and can alter the taste and smell of drinking water. Zebra and Quagga mussels eat what's good in the water and leave what's bad. They eat the good algae and leave the not so good bluegreen algae that can make the water taste and smell bad. Other ANS plants such as Eurasian watermilfoil can grow better when there are Zebra and Quagga mussels in a lake. Eurasian watermilfoil, like many of the other plant ANS, can cause taste and odor problems and lower dissolved oxygen when the plants die and decay.

They have recreational impacts. Zebra and quagga mussels can cover or encrust docks, boats, ropes, buoys and any object. Attached mussels increase drag on boats. Young, small mussels can get into engine cooling systems causing them to overheat. Boats that are in the water for long periods of time can have more damage and cost more money to fix. The weight of attached mussels can sink navigational buoys. Zebra and quagga mussels also impact fish populations and can reduce sport fishing because they can cover the bottoms of the lakes and streams where the fish like to live and spawn. Their sharp shells can cut the feet of unsuspecting swimmers and beach goers.

They have significant economic impact.
Zebra and quagga mussels cost everyone money because they increase the maintenance costs for power plants, water treatment facilities, ditches, dams and pumps. They also increase the cost of food production and utilities. In the Great Lakes area, maintenance costs in water treatment plants, power plant intakes and dams have been in the billions of dollars annually. The destruction of native fisheries also has a wider economic impact in terms of tourism and recreation dollars not spent. Tourists and fisherman do not go to areas where the mussels have destroyed the native fisheries. Marinas and watercraft dealers could suffer business declines.

They have significant ecological impact. Invasive species can make it hard for the native plants and animals to live and can change the aquatic ecosystems and native plant and animal communities. Zebra and quagga mussels eat such large amounts of food and produce such large amounts of waste that they can alter or change the ecosystem and can harm fisheries. The mussels are filter feeders, meaning they pull the water through their shells and eat the microscopic plants and animals (plankton) that are in the water. The plankton that they filter and eat form the base of the food chain, leaving little or nothing for native aquatic mussels or fish species to eat. Also, Zebra and quagga mussels can attach to and encrust native organisms (crayfish, native mussels), essentially smothering them and removing more animals from the food chain.

WORKING RESERVOIRS EVALUATION ~ 2011

Colorado Reader

Agriculture in the Classroom

Please take a few minutes to evaluate your students' knowledge of this topic. We have placed a line below each section for additional comments. Your comments help us improve future Colorado Reader issues. Thank you.

How many students used this reader?

_____

How many of your students understand that reservoirs store water for future use?

_____

Comments:

_____

How many of your students can identify three uses for reservoirs?_____

Comments:

_____

How many of your students know the name of a reservoir located close to where they live?

_____

Comments:

_____

How many of your students can identify one reason why wildfires might cause water quality problems?

_____

Comments:

_____

_____

How many of your students can identify Colorado as being a semi-arid state based on the amount of precipitation it receives?

_____

Comments:

_____

Return this evaluation for a chance to win a $100 visa card.

Please rate:	**Good**		**Average**		**Poor**
Student Activities Throughout Reader	5	4	3	2	1
Teacher's Guide	5	4	3	2	1
Reading Level	5	4	3	2	1

I would like to see more activities like _____

Additional comments_____

_____

Grade Level _____ Number of Students _____ Subject Area _____

Name _____ Phone _____

Fold with the mailing/postage panel on the outside, tape and drop in the mail to CFA. Thank you!

Learning about our food system can be fun!

Food, Fiber & More—Agri-CULTURE in the Classroom Summer Institute is a 2-credit courses held in June. Institute participants come away from the course better prepared to help their students understand their connection to agriculture. This a relaxed in and out-of-the classroom course. It's a great way to learn creative ways to integrate agriculture and natural resource topics into the curriculum while reinforcing Colorado Content Standards. You even get to spend a day working on a farm or ranch. Scholarships are available.

Connecting Land & People is an E-newsletter keeps you informed on resources, programs and grants available to Colorado educators. It is distributed three times a year— September, December and March. Sign up to receive this newsletter at **www.growingyourfuture.com**.

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