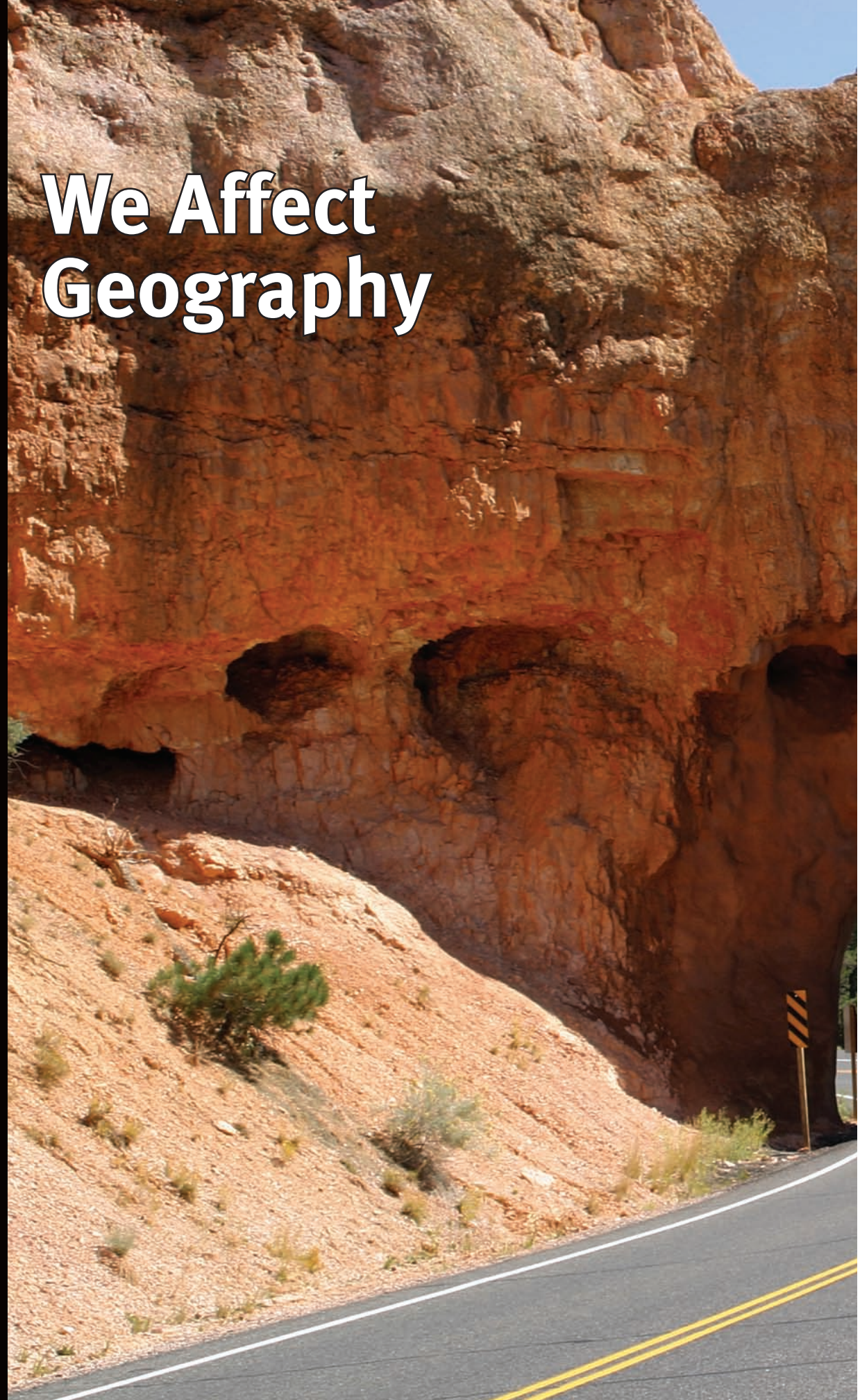
# We Affect Geography

**The BIG Question?**

In what ways have people changed the environment?



*Human features, like this highway, are built alongside physical features.* **How do we affect geography when we build roads?**

# 3

## Become a Better Reader

### Make Connections

*Good readers make connections as they read. You might connect the text to something you already know or something happening around you. Making connections helps you remember what you read.*

*In this chapter, you will learn about how humans use the land to meet their needs. The land affects us, and we affect the land. Look for connections between what you already know and what you learn in this chapter.*

# LESSON 1 People Use and Change the Land

## Key Ideas

- People have always used the land to meet their needs and wants.
- People's actions change the environment.

## Key Terms

canal
endanger
generator
hydroelectricity
interact
technology
transportation

**Become a Better Reader**

*Text-to-Self Connections*

## *People Change the Environment*

You have learned that natural events such as earthquakes can change the land. People change the land, too. Long ago, people traveled across the land to hunt animals. They gathered wild plants for food and looked for water. They cut down trees and moved rocks to build shelters. Over time, people began to plant crops. Sometimes they dug ditches to bring water from mountain streams to their crops.

Today, we still use the land to grow crops and raise animals. We cut trees to make houses, paper, and furniture. We build bridges, tunnels, dams, freeways, and shopping malls.

*Kennecott Copper Mine is in the Oquirrh Mountains. It is the largest open-pit copper mine in the world. Copper is used for cell phone parts, computer parts, water pipes, and many other things we use every day. Miners had to dig layers of ore from the mountain. Today, Kennecott is working to turn some of its land back to a more natural state.* **How did digging for copper change the land in this picture?**

*A combine harvester can cut wheat much faster than a hand tool. It let farmers manage more land. Today the trend is moving back toward smaller farms.*

***Technology*** has let us change the land in new ways. We have built railroad tracks and highways through rugged canyons. We have built machines to take oil, coal, copper, and silver out of the ground. We have created ways to move water longer distances. We have invented ways to control the insects that destroy crops.

These things can be important for people. They provide homes, food, fuel, and jobs. However, if people are not careful, they can harm the environment.

Many years ago, people and businesses did not always take care of the land. They acted as if there would always be fresh air, clean water, trees, animals, and open spaces. In time, people learned to have a greater respect for the environment. They passed laws to stop people and factories from polluting the air and water. They set aside areas to protect wild animals. Today, we are working to find a good balance.

Our impact on the land is often called our footprint. It is the trace we leave behind.

## Natural or Human Actions?

Some changes that seem natural were really caused by people. Landslides, mudslides, floods, and erosion do happen in nature. But sometimes they occur because people have cut down too many trees.

Droughts can be the result of human actions, too. People sometimes use too much of the water supply. Then there is not enough water left.

As you learned in Chapter 1, some climate change may be the result of people's actions.

*This is Jordanelle Dam and Reservoir on the Provo River. Water from the reservoir is moved to Utah County and Salt Lake County by aqueduct (a man-made pipe or channel).*

# *Building Dams and Reservoirs*

One way we have changed our physical environment is by building dams. Dams are huge structures built across rivers. Their job is to hold back the water in a river. Have you heard of Flaming Gorge, Mountain Dell, Jordanelle, Scofield, Deer Creek, Little Dell, or Pineview Dam?

## What Do You Think?

When Glen Canyon Dam was built, it formed Lake Powell. We gained a beautiful lake with fun things to do. We gained a way to make electricity. But we lost some important things, too. The water buried rock formations and American Indian rock art.

Some people think the lake should be drained. They want us to see the beauty of those rocks and cliffs. What do you think?

## Storing Water

The water that backs up behind a dam forms a reservoir. Reservoirs store water. Here is how it works: In the spring, melting snow flows into rivers. The rivers run into the reservoirs. Because this water comes from snowfall, there might be a lot of it one year and only a little the next. The reservoir lets us have a supply of water all year round.

Every city and farm in Utah depends on reservoir water. Farmers use it to irrigate their crops. People use it in their homes and businesses.

Reservoirs are also used for fun. People love to boat, water ski, and fish in them. Have you ever had fun at Lake Powell? It was formed when people built Glen Canyon Dam across the Colorado River.

## Controlling the Flow

By opening and closing parts of a dam, people can control the amount of water that passes through it. In the past, rivers often flooded towns along the banks. Dams can let out water at a more steady flow.

## Making Electricity

Moving water is powerful. Its energy can be used to make electricity. Inside some dams are large machines called ***generators***. They have turbines (blades) like a windmill. Rushing or falling water spins the turbines. The spinning turbines power the generator to produce electricity. Electricity produced by moving water is called ***hydroelectricity***.

Only a small portion of Utah's electricity is made by waterpower. Most of it is made by burning coal to produce steam. The steam turns the turbines to make electricity.

Glen Canyon Dam on the Colorado River produces the most hydroelectricity. The dam is in Arizona, but the river flows through Utah. The most important source of hydroelectricity within Utah is Flaming Gorge Dam. It stretches across the Green River. Deer Creek and Pineview dams also produce electricity.

*Flaming Gorge Dam produces hydroelectricity. It is one of the largest dams in the West.*

### Changes for Animals

People share the land with plants and animals. As we ***interact***, our actions affect each other.

When we dam rivers, we change the homes of plants, fish, and other animals. For example, the water in a river is about the same temperature from top to bottom. But the water in a deep reservoir can be too cold for some fish. Also, fish are used to the patterns of when the river is full or low. They lay their eggs when it is full. When humans disturb this cycle, the fish struggle.

Some fish must move upstream and downstream. What if a dam blocks their way? Sometimes people build fish ladders to help the fish climb above the dam. These are a series of stepped pools. The fish can jump from pool to pool. They come out on the other side of the dam. However, some young fish cannot "climb" the ladders or get back down from the dam.

Damming the Colorado River put many kinds of fish in danger. The Bonytail Chub, the Razorback Sucker, the Humpback Chub, and the Colorado Squawfish were ***endangered***. So were frogs and snails. Damming the Virgin River endangered six different kinds of fish. Why do you think it is important to keep these fish around?

*The Central Utah Project brings water to central Utah. The Northern Ute Indians agreed that the waters from the south slope of the Uinta Mountains, where they live, could be collected and piped to drier regions.* **In this picture, how does the water get from the canal to the fields?**

## Bringing Water to Dry Lands

In some parts of our country, farmers' crops grow just from the rain that falls. That is not true in a desert climate like Utah's. In order for crops to grow here, they have to be irrigated. They cannot just depend upon the rain.

American Indians in southern Utah used the Santa Clara River to irrigate their crops. When Mormon settlers first came into the Salt Lake Valley, they dug a ditch to get water from City Creek. As they built Salt Lake City, people put irrigation ditches along many of the streets. After that, the people who founded new towns built irrigation canals. A ***canal*** is a waterway made by people. They were able to grow things that had not grown there before.

In time, ditches and canals were carrying water all over Utah. Canals and reservoirs have to be kept in good repair. Otherwise, water leaking through cracks can cause mudslides, landslides, and flooding.

*The movement of people and goods is part of geography. In rural areas, there are only a few main roads. In urbarn areas, several freeways cross each other.*

# *Transportation Systems and Cities*

Early settlers wanted better ways to travel. They also wanted to take their goods to new markets. They turned trails into dirt roads, then paved roads. Workers laid railroad tracks across the land. When cars and trucks became popular, people built more lanes. Today, we have a light rail system. The wider and longer the freeways are, the more the land is affected. Animals have to find new places to live.

***Transportation*** is the act of moving people or goods from one place to another. As our cities grow, we build new types of transportation. These actions change the land in new ways.

When we build cities, we flatten some areas and fill others with dirt. Early settlers cut down trees to build forts and houses. They brought down granite and sandstone from the canyons. They cleared land for crops and dammed streams. Today, we clear land to build whole neighborhoods at a time.

## Linking the Past to the Present

How have people changed the land in your community? What examples can you find? How have the changes affected the people and animals living there?

## LESSON 1 What Did You Learn?

### Places to Locate

Colorado River
Green River
Lake Powell
Provo River
Salt Lake City
Santa Clara River

### Events to Remember

American Indians cut down trees, planted crops, and irrigated.
Settlers dammed rivers and built canals.
People built cities and transportation systems.

### Lesson Review Activity

Explain how people have used and changed the land in or near each of the Places to Locate.

# LESSON 2 Many Points of View

## Key Ideas

- People have different points of view about how to use the land.
- The government sets aside some land in order to protect it.
- We must work together to balance our needs and nature's needs.

## Key Terms

biofuel
conserve
mass transit
point of view
scarce
trust land

**Become a Better Reader**

*Text-to-Text Connections*

## *Who Gets to Decide?*

Who gets to use the land? Who decides how it can be used? Should it be kept in its natural state? These are not easy questions to answer. People have different ideas about how to live in our environment.

Each person has a ***point of view***, or way of seeing something. They often see events from their own experiences. People have different points of view about movies, sports, games—almost everything. They do not always agree on what is good for Utah.

In this lesson, we will explain some of the different viewpoints Utahns have about the land.

### Protecting the Animals

Fires, floods, and droughts can affect the animal population. So can people. You have learned how dams can affect fish. Another example is buffalo.

Buffalo once roamed all over the Great Plains and Utah. American Indians hunted the great herds. They only killed what they needed, and they used every part of each animal. Then more and more settlers hunted buffalo.

*Today, Utah has only a few herds of buffalo. There is a herd on Antelope Island and one in the Henry Mountains. The Utes on the Uintah-Ouray Reservation have a herd. So do the Skull Valley Goshutes.*

*Today, you must have a license to hunt deer and elk.*

In the late 1800s, railroad companies wanted to keep the buffalo off their tracks. They told passengers to shoot them. The dead buffalo were left to rot. Then hunters started killing buffalo just for their hides. The bones were sent east to be used in soaps and fertilizers. The hooves were used to make glue.

In the past, fur traders trapped beavers to get their fur. They sold the furs for money. Over time, they killed too many beavers. The beaver population became endangered.

Some people have tried to help animals, too. In harsh winters, government workers give food to elk in the foothills. Fishermen can take home only a certain number of fish. They must let the rest go. This is called "catch and release." Laws protect the bald eagle and desert tortoise. It is illegal to capture, sell, or kill them.

People disagree about whether or not such laws are a good idea. Here are the kinds of questions people disagree about. How would you answer them?

- Is it okay to kill animals if people find them annoying?
- Do animals have rights?
- Should we spend money to protect plants and animals?
- What should be the relationship between people and animals?
- Does it matter that some animals—like grizzly bears, wolves, and wolverines—no longer live in Utah?


## Desert Tortoise

I am a Utahn just like you. I live near Ivins in in the Red Cliffs Desert Reserve. It was set aside to protect Mojave desert tortoises like me. We are "threatened" animals. That is not as bad as being endangered, but it means there are not very many of us anymore.

The reserve has low gates around it. They keep us from crossing the roads so we do not get hurt by cars. People can hike, bike, or ride horses inside the gates.

We love the desert and the red dirt. When it gets really hot, we dig burrows. It is cooler under the ground. We eat grasses, herbs, wildflowers, and the fruit and flowers of cactus plants. Some of us live to be 100 years old.

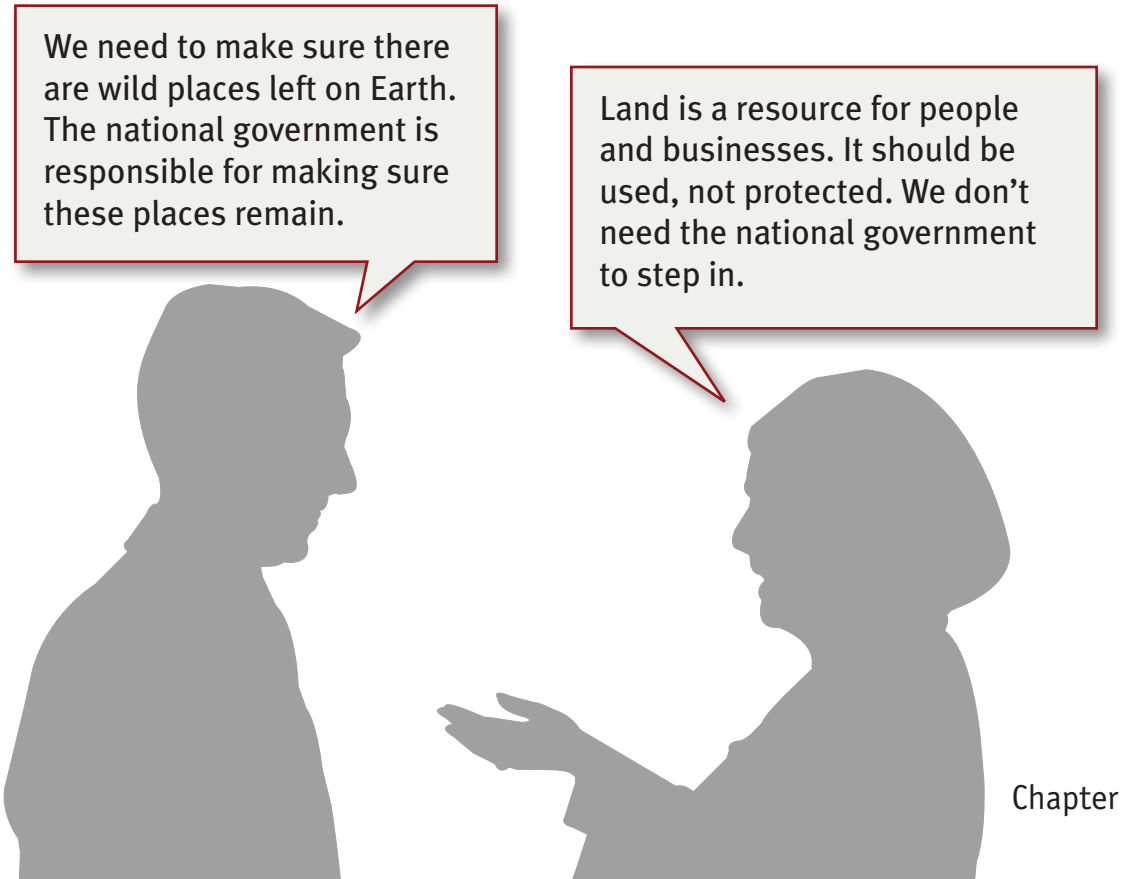
## Land Use

Who owns the land, and who gets to use it? Some of Utah's land is for everyone to enjoy. Some is owned by people, businesses, or other groups. Some is owned by American Indian tribes.

**Public Land:** The U.S. government owns more than half of Utah's land. Utah's state government also owns much of the land. The government owns the state and national forests, parks, and monuments. It also owns the reservoirs. These public lands are for everyone in the country to enjoy.

Some public lands have strict rules about how they can be used. That is so we can preserve them as wilderness areas. People can walk, hike, ride horses, camp, fish, and hunt in wilderness areas. However, they cannot mine, build dams, harvest trees, pave roads, or build. They cannot use cars or machines with motors. They can't farm there.

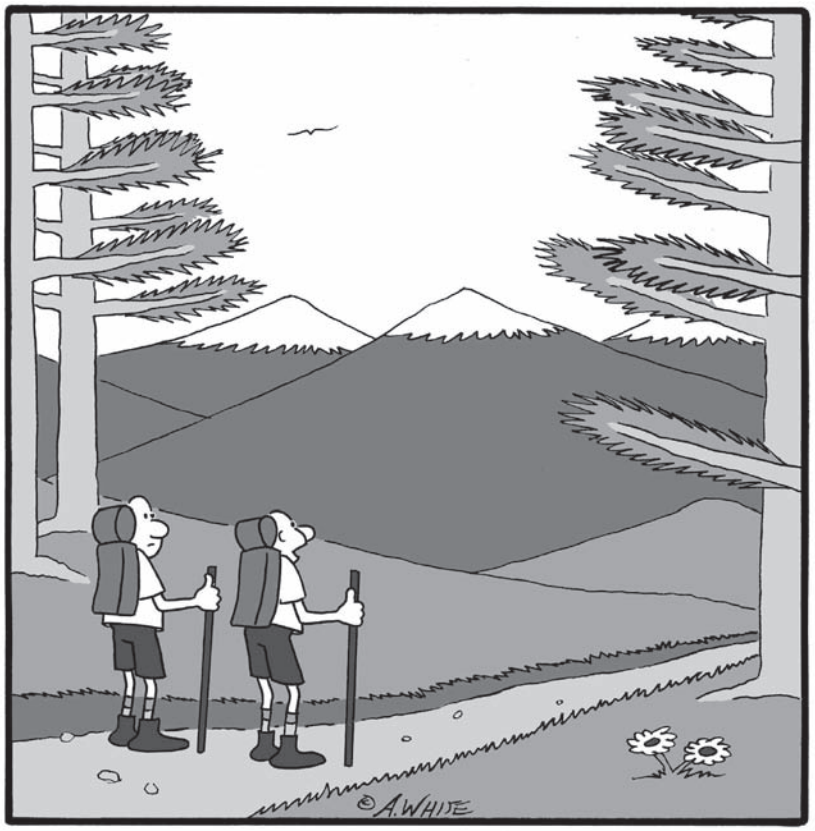
**Private Land:** Individuals can also own land. Anyone can buy the land that is not owned by the government. They can build a house, business, or farm on it. They can keep their land or sell it. It is their private property.



# GO TO THE SOURCE!

## Study a Political Cartoon

Sometimes cartoonists use humor to show their point of view on a topic. Study this political cartoon about land use and answer the questions.




"Just stop for a minute. Smell that pine scent. Drink in the view. I don't think we could pick a better site for our 'Mega-Mall'!"

| LOOK | THINK | DECIDE |
|---|---|---|
| Without reading the caption, what would you guess the two hikers are talking about? | How do you think the cartoonist makes his point? | Do you think it is okay to use beautiful land to build something like a Mega-Mall? Explain your answer. |

## Trust Lands

When Utah became a state, the U.S. government gave it millions of acres of land. These are called school trust lands. They are scattered all over Utah.

***Trust lands*** are a way to make money for education. People have to pay to use the lands. They can rent them for farms, movie sets, industry, and ski resorts. They can pay to graze cattle or cut Christmas trees on the land. Companies must pay to take oil, gas, coal, and other minerals from the ground. Sometimes small pieces of the land are sold to builders.

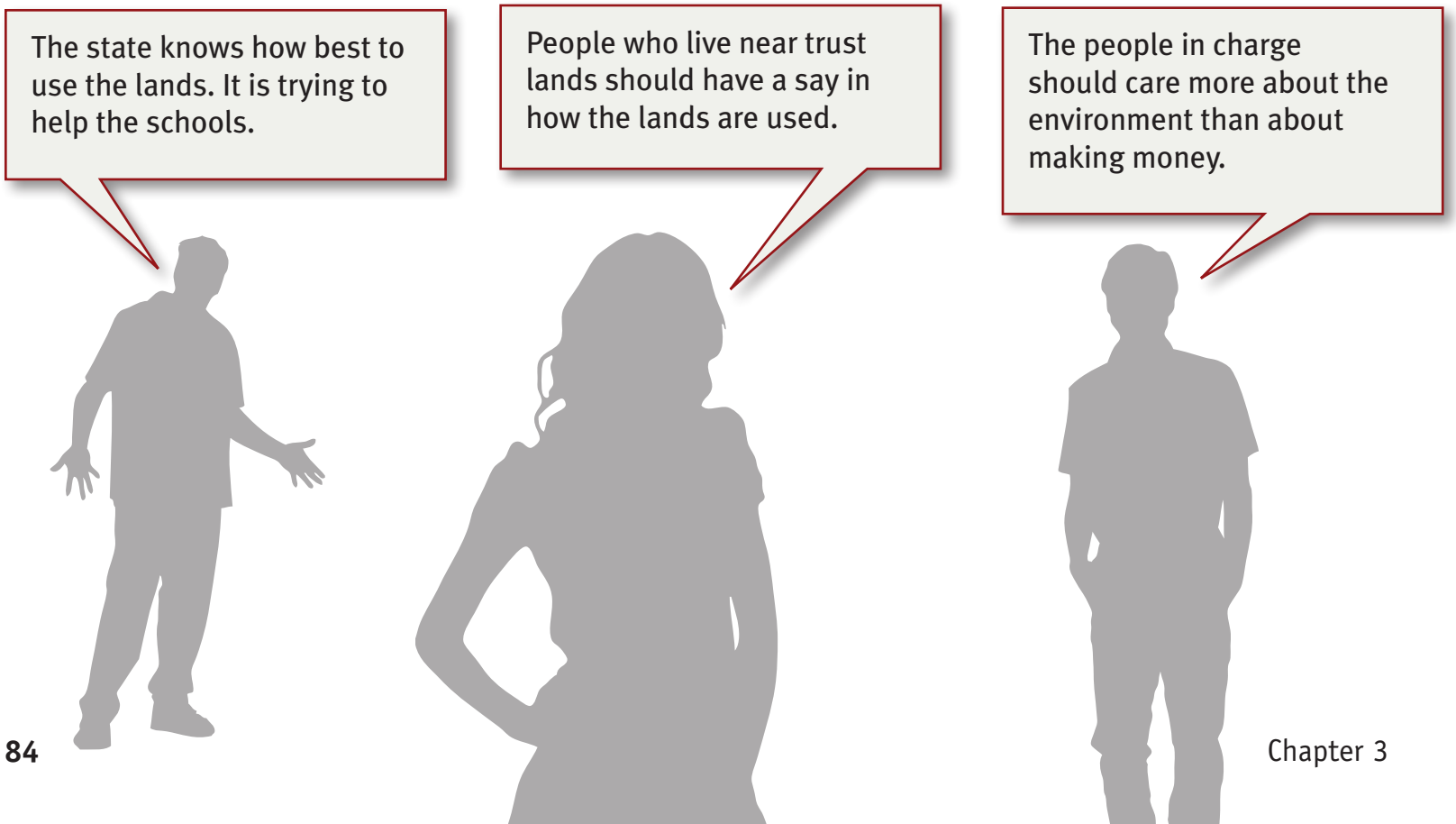
The money made from trust lands is put in a savings account. The money it earns while it is being saved goes to the schools.

Indian reservations are another type of trust lands. When the government moved Indian people off their lands, it promised to use the money from those lands to help the Indian people. The government manages the money from resources on those lands.

A special office in Utah decides how to use the trust lands. It is called the Trust Lands Administration. Read some of the points of view people have about this.

### What Do You Think?

If something that makes money for schools also harms the environment, should it be done? What do you think?



## Water Rights

In Utah, water is ***scarce***, or in short supply. People do not always agree about how to use the water we have. They think about questions like these:

- If there is not enough water for everyone, who should get it?
- Who should decide who gets it?
- For what purposes should water be used?
- How much water should cities take from a stream or reservoir?
- Water needs to be safe to drink. Who should make sure that it is?

One of the big questions is whether or not the U.S. government has the right to make laws about how water should be used in Utah.

*The next time you turn on the faucet, think about where your water comes from.* **How many ways do you use water?**

## Mass Transit

It used to be that if people in the Salt Lake Valley wanted to go downtown, they had to drive a car. Maybe they could take a bus. Salt Lake decided to build a ***mass transit*** system. This is a way for a lot of people to get around. It reduces the number of cars on the road. It also reduces air pollution.

TRAX is a light rail system. It is powered by electricity. Nearly 50,000 people ride it each day.

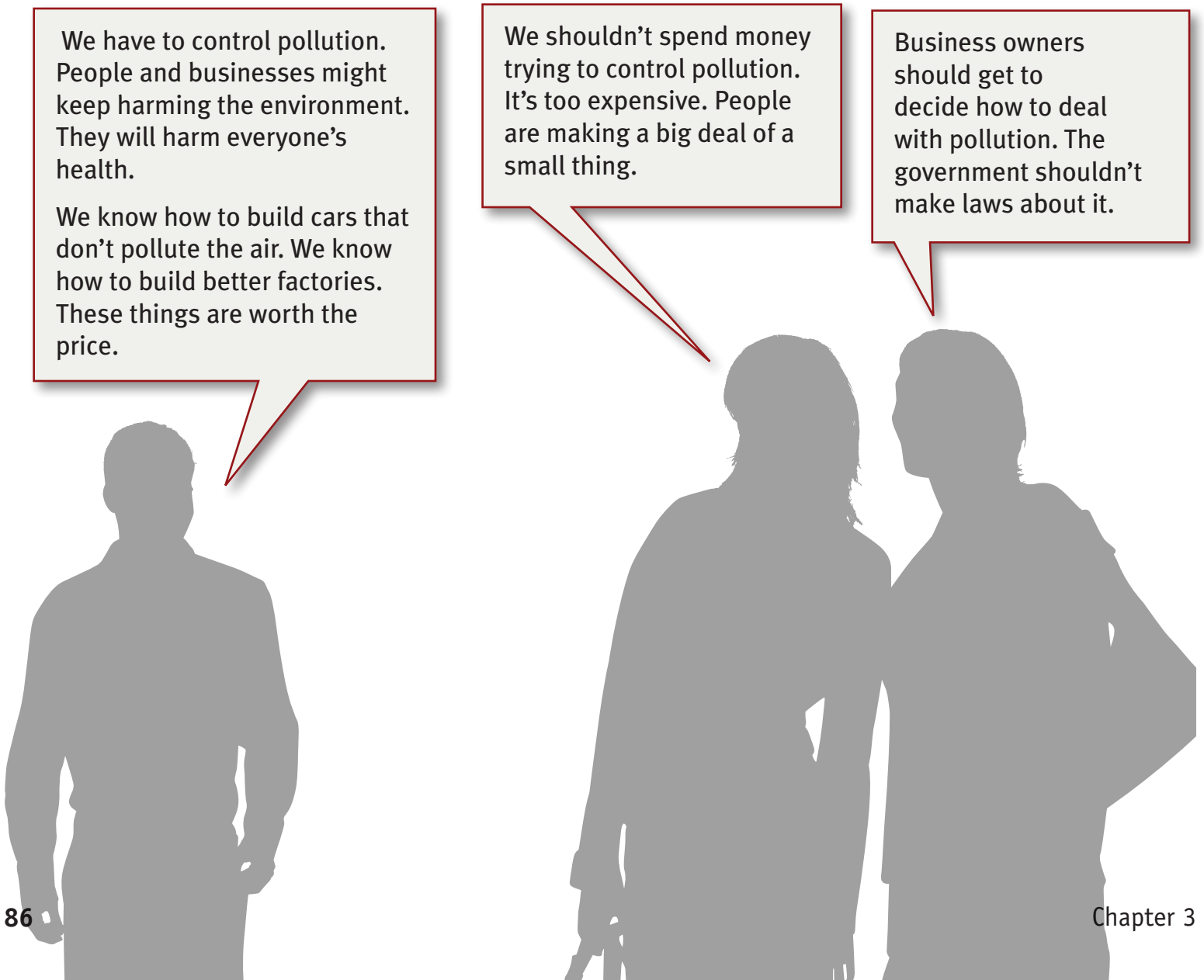
New lines will go to the airport, West Jordan, and other parts of the valley. People disagree about whether to spend money to build more TRAX lines. What do you think?


*TRAX carries people from Sandy to downtown Salt Lake City and back. The first streetcars were pulled by mules. Later, streetcars ran on electricity. Then buses began running. A commuter train ran all the way from Ogden to Orem. It closed down as cars became more and more popular. Today, more people are using light rail instead of driving their cars so much.*

## Pollution Control

Polluted air, water, and soil can make people and animals sick. It can even cause them to die. Poor air quality can cause lung disease, heart disease, swelling of the throat, chest pain, and congestion.

Cars are one of the main causes of air pollution. They put harmful gases and fine dust into the air. Some soaps, chemicals, pesticides, and greases pollute the water. They get into streams, lakes, and reservoirs. Gasoline from streets and parking lots washes into rivers. Even dirt from building sites can cause harm. Pollution can make the soil infertile. That means it is hard for anything to grow on it. People do not always agree about what to do.



# *Finding a Balance*

Do you take care of your clothes and toys? Why? You probably want to continue to use them. We ***conserve***, or protect and save, things for future use.

People today are finding new ways to keep things in balance. For example, we are creating new kinds of fuels for cars and trucks. ***Biofuels*** are fuels made from living plants or things that were recently living. Manure and garden waste can make cleaner fuels. Some biofuels come from corn, switchgrass, soybeans, sugar cane, sugar beets, palm oil, and hemp.

Biofuels are renewable. They also burn cleaner than oil and coal. They can be used to power vehicles, heat homes, and cook food.

Waste from landfills (where our trash goes) gives off a gas. This gas can be burned to create heat or make electricity. Using what we throw away to make energy is a good example of recycling.

What are you already doing to make the Earth a better place? How else can you reduce, reuse, and recycle?

*Garbage trucks take our trash to landfills like this one. People are working on ways to turn waste into energy.*

### Turning One Resource into Another

The June sucker fish in Utah Lake were in danger. Long ago, people had added carp to the lake. Soon, there were too many carp for the sucker fish to survive.

People wanted to bring back balance to the lake. What would they do with all the carp?

As many farmers know, fish make great fertilizer. Some of the carp were turned into fertilizer and spread over nearby fields. Now they will help the farmers grow better crops.



## LESSON 2 What Did You Learn?

### Places to Locate

Great Plains
Salt Lake City
Utah Lake

### Events to Remember

People passed laws to protect land and animals.
The U.S. government gave Utah trust lands.
Salt Lake City built a mass transit system called TRAX.
People are working on biofuels to replace gasoline.

### Lesson Review Activity

For each of the Places to Locate, give details about how people and the environment are interacting there.

# LESSON 3 The Growth of Recreation

**Key Ideas**

- Over time, recreation in Utah has grown and developed.
- Many things we do for fun are connected to the land.

**Key Terms**

develop
impact
recreation
resort

**Become a Better Reader**

*Text-to-World Connections*

## *Nature's Playground*

Utah is a great place to have fun! Many of our beautiful natural features have become recreation areas. ***Recreation*** is what people do for fun when they are not working.

Over time, the things we do for fun have grown and expanded. Some of them have ***developed*** into big businesses. Let's find out how these activities are connected to the land.

## *Tourism Becomes Big Business*

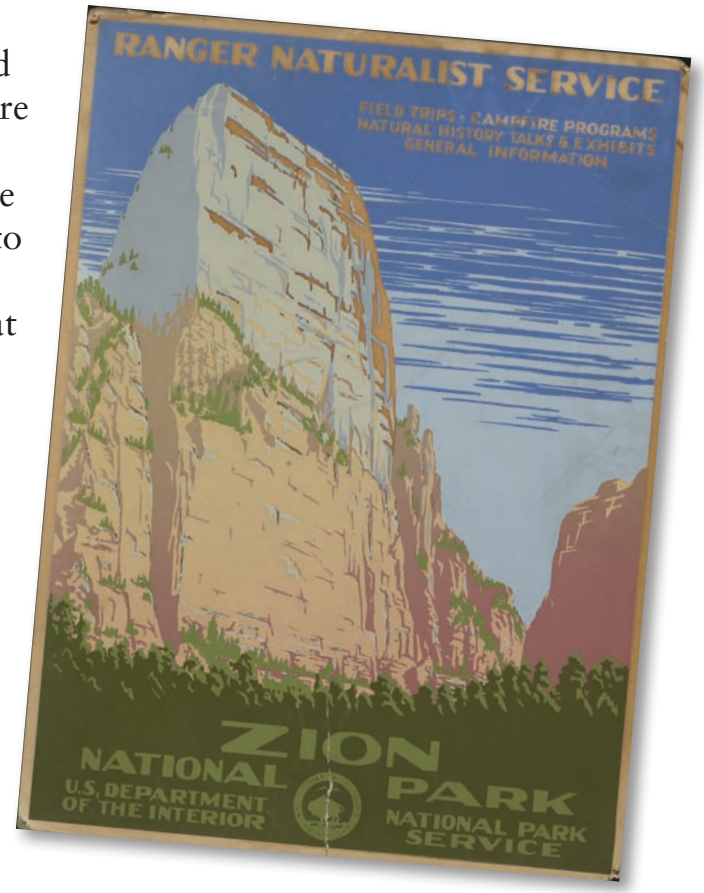
For over 100 years, people have come to Utah for vacations. In fact, just days after the Mormon pioneers entered the Salt Lake Valley, they traveled to the Great Salt Lake for a picnic. For many years, people had Fourth of July parties at the lake. According to one person, "no person could possibly sink in it, [but] would roll and float on the top of the water like a dry log." Many "pleasure resorts," were built on the lake. People could go dancing or swimming. They could ride the Ferris wheel and the merry-go-round.

*Utah has many views to enjoy!*
**Which are your favorites?**

At first, it was a long journey to Utah. Not many visitors came. Then the railroad came, and the trip did not take so long. By 1900, more and more visitors were coming. Many of them wrote about their adventures. Newspapers in other parts of the country printed these "traveler's accounts." People who read them wanted to see Utah for themselves.

Since then, people have come here to be in the great outdoors. They love our mountains, canyons, deserts, rocks, lakes, and rivers. They go downhill skiing or cross-country skiing. They hike, fish, and hunt. They go backpacking and camping. They go biking and horseback riding. They go river rafting, boating, sailing, and canoeing. They go rock climbing. They take pictures of birds, wildlife, and Utah's beautiful landscape.

The people who live here also enjoy the great outdoors. You might ride a bike on the pathway along the Jordan River. You might take pictures of woodpeckers, quail, ducks, Canada geese, or deer. You might float on the Colorado River or hike in the Uintas. You might visit dinosaur footprints in Price.




*This poster is from the 1930s. It was an ad for Zion National Park.* **What services are offered on the poster?**

*This is an early picture of Lagoon.* **Have you ever been to Lagoon? What has changed since this picture was taken?**

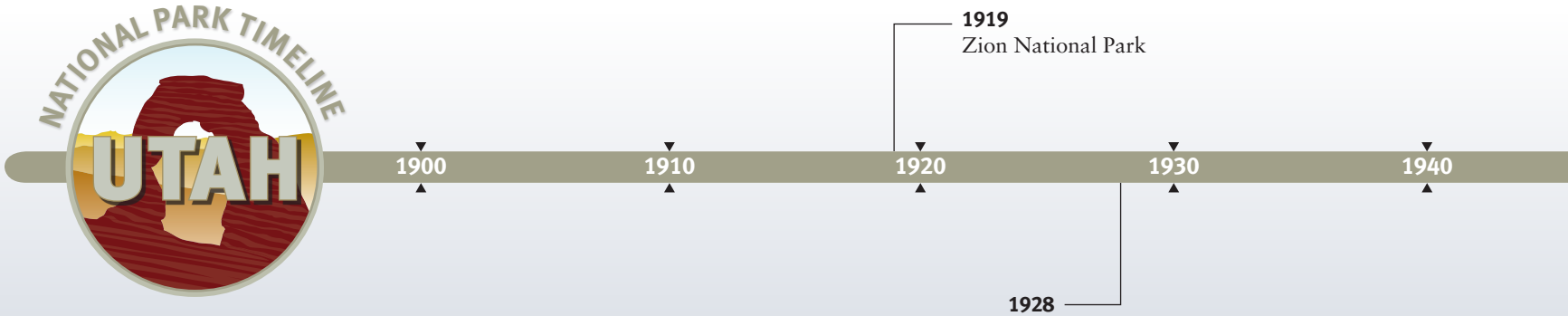
## State and National Parks

More than half of the tourists who travel to Utah come to visit our national parks. Can you remember all five of our national parks from Chapter 2? We also have more than 40 state parks. That is a lot of beauty for one state!

In the early 1900s, people were changing the land in many ways. There were more and more cities, factories, railroads, and mines. Some people wanted to save some of the most beautiful places. They began to set aside areas of land in order to protect them. People were not allowed to buy, sell, or build on national park land.

People also wanted to protect the plants and animals living on those lands. Zion National Park has more than 300 different kinds of birds. More than 75 mammals call it home. That includes 19 types of bats and nearly 3 dozen reptiles. Three endangered species live in Bryce Canyon National Park. They are the Utah prairie dog, the California condor, and the southwestern willow flycatcher.

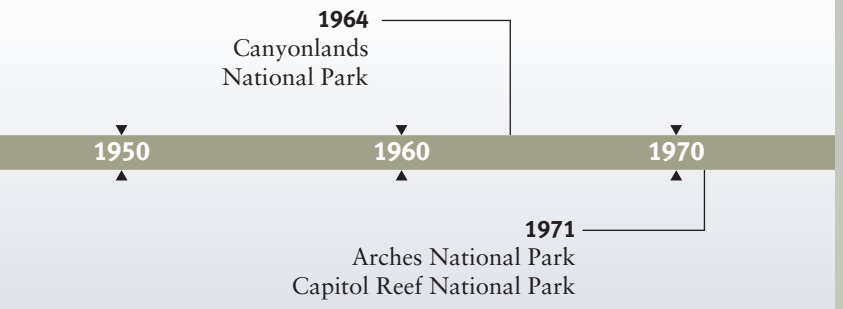
Bryce also has a 7.5-magnitude night sky. That means that at night, people can see 7,500 stars with the naked eye



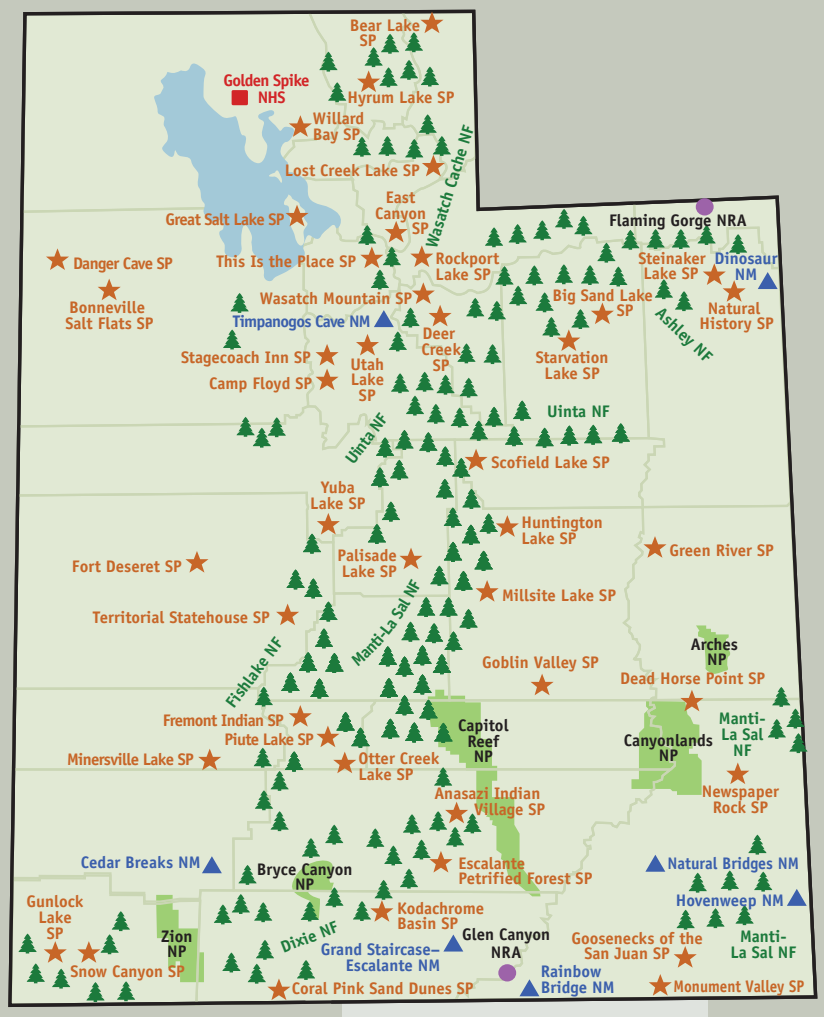

*This is Monument Valley State Park. It is public land in southern Utah.*

(without telescopes). That is thousands more stars than people in the cities can see. The parks also have sites where ancient people lived. These sites are more protected in a national park.

In national parks, a goal is to reduce the ***impact***, or effect, people have on the land. People can go camping there but only in certain places. They must get permits first. They can only drive cars in certain areas. This helps to reduce air pollution. In Arches National Park, people cannot climb on the arches and natural bridges. This rule protects the delicate arches from damage.




## Utah's State and National Parks




*State and national parks and monuments are public land. So are national forests.* **Study the map and legend. Do you think the state or national government owns most of our parks, monuments, and forests? How might this affect Utah's people?**

# National Parks


Many places in Utah are unusual and beautiful. They have been made into special parks and monuments. The government pays park rangers to take care of the state and national parks.

**Zion National Park** was Utah's first national park. It was set aside as protected land in 1919. For thousands of years, the Virgin River has flowed through the rock. It has carved beautiful canyons. The first people to live there were Ancestral Puebloan Indians. Later, Southern Paiutes moved in. They were living there when the Mormon pioneers arrived in Utah.

**Canyonlands National Park** is the largest of Utah's parks. It has deep gorges and huge rock towers. Our three major rivers run through it—the Green, the Colorado, and the San Juan. Fremont Indians once hunted in Canyonlands. Later, the Ancestral Puebloans farmed there. You can see ruins and rock art on the canyon walls.

**Bryce Canyon National Park** is one of the most colorful parks in the world. White, yellow, red, orange, and purple rocks blend together. Wind, ice, and water carved the rocks into many shapes. The park was named after Ebenezer Bryce, an early rancher. He once looked into the deep canyon and said, "This is no place to lose a cow!"

**Arches National Park** is named for its stone arches. The rocks are mainly pink sandstone. A stream of water can wear a hole in this soft rock. Blowing sand can also wear a hole through the rock. This takes thousands of years, and it is still going on. Long ago, American Indians lived among the arches and painted rock art there.

**Capitol Reef National Park** has red sandstone cliffs. Water has cut strange shapes in the rocks. Rock art shows us that American Indians lived there for many years. Robbers Butch Cassidy and the Sundance Kid used Capitol Reef as a hideout.

# *Sports*

Along with tourism, sports have developed since 1900. Even sports can affect the natural environment. Bulldozers cut down trees and plow the mountainside to make ski runs and lifts. They clear land to build lodges and hotels. When people go boating, some of the gas and oil used to run the boat gets in the water. ATVs kill plants and pollute the air. This does not mean we should not have fun. It just means we need to try harder to make our impact as small as we can.

## Skiing Takes Off

People have used skis as a means of travel in Utah's mountains for many years. Miners used skis to travel to the mines when the snow was deep.

Skiing soon became something people did for fun. In 1912, the Wasatch Mountain Club was established. The club took groups of people on ski trips to explore the mountains. One man and his wife met every Saturday night in the winter when they got off work. They drove their car to Park City, then skied through the night from Park City to Big Cottonwood Canyon. They slept for a few hours, then skied all day in the canyon. Then they skied back to their car in Park City. "We wanted to get in as much skiing as possible," they said.

*By the 1940s, ski competitions were popular. Alta began its Snow Cup Tournament. Snow Basin hosted a national championship. In this picture, ski jumpers show their stuff in 1941.*

In the 1930s, companies began to build ski resorts. ***Resorts*** are places where people stay on vacation or go for a day of fun. The first ski resort was Alta. It was built in Little Cottonwood Canyon where a mining town had once been.

Today, there are 13 ski resorts in Utah. Every year, more than 3 million people ski in them. That includes people from Utah and other places. Since the 2002 Winter Olympics, even more people have come here for winter sports.

## Winter Olympics 2002

In February 2002, more than 2,000 athletes came to Utah. They came from all over the world for the Olympic Winter Games. They competed in many winter sports. Skiing, ski jumping, ice skating, ice hockey, and bobsledding are just a few.

The Olympic Games brought attention and money to Utah. Thousands of people from around the world came to watch the athletes. Millions watched on television. More people knew about Utah than ever before. Visitors spent money on hotels, food, and gifts.

The Olympics brought people together. Many Utahns got in the spirit of the event. The games also affected the environment. To get ready, workers built new roads. They made the freeways wider. They built new ski jumps, a bobsled track, restaurants, and parking lots. The people in charge of the Olympics had to decide what to do with the waste that the athletes and visitors left.

## Baseball—the First Popular Team Sport

The first popular team sport in Utah was baseball. People began to organize teams in the late 1800s. Many towns had their own teams, often more than one. Sometimes almost everybody in the town would go to see them play. One team in Ogden was called the Red Sash. Early Salt Lake City teams were the Alerts, the Eurekas, the Red Stockings, and the Deserets. The Salt Lake Bees team was started nearly 100 years ago. It has been in Salt Lake ever since.

Besides baseball, there were also cricket and lacrosse games. There were track meets and special events, including a "Grand English and Cornish Wrestling Tournament."

## Sports Reflect Who We Are

People have always come to Utah from other places. They bring the sports they love with them. In the 1800s, people from Ireland, Wales, and England brought a game called soccer. When people come from Central and South America, Iran, and other places, they bring their love of soccer. Italians brought a game called bocce [BOH chay]. It is a type of lawn bowling. People from India and Pakistan have brought cricket.

## ARE YOU TRUE TO RED OR BLUE?

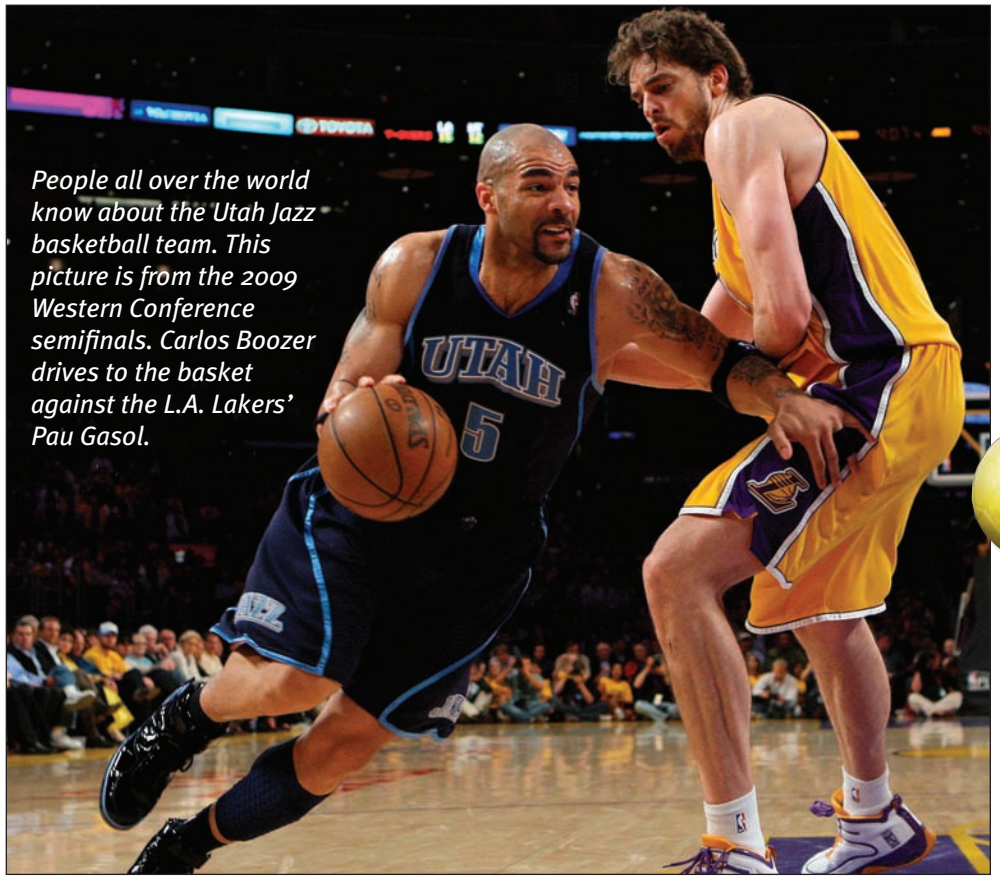
Are you a U of U fan or a BYU fan? If you have lived in Utah for very long, you have probably picked a side. When these two teams face each other in any sport, it's a battle. In football, it's "war"! To the fans, this game is a huge event each year.

It all started with a baseball game back in 1895. Stories say neither team scored, and the game ended in a pretty rough fight. From then on, the teams have been rivals.

## Sports Have an Impact

The sports industry has a big impact in Utah. When fans of the Utah Jazz or Real Salt Lake pay for tickets and t-shirts, they bring money into the state. Sports can bring attention from people in other parts of the United States and the world.

Camping and boating bring in money for some communities. Bear Lake has grown as a place to have fun on the water. People spend more than $2 million a day to hunt and fish there. That is more than $700 million a year.




*People all over the world know about the Utah Jazz basketball team. This picture is from the 2009 Western Conference semifinals. Carlos Boozer drives to the basket against the L.A. Lakers' Pau Gasol.*

*Utahns have a chance to play or watch almost any sport they want. There are boys' and girls' teams in almost every town.*

# LESSON 3 What Did You Learn?

### Places to Locate

Alta
Big Cottonwood Canyon
Central America
England
India
Ireland
Italy
Pakistan
Park City
Salt Lake City
Utah's National Parks
Wales

### Events to Remember

1919 to 1971: Five national parks were set aside in Utah.
2002: Utah hosted the Winter Olympic Games.

### Lesson Review Activity

Explain how each of the Places to Locate has played a role in the growth of recreation in Utah.

## Analyze Data

Every 10 years in our country, a census is taken. A census is an official population count. From the census we learn how many people live in Utah. As we study census numbers from years past, we can learn how Utah's population has changed. We can also make predictions about how the population will change in the future.

People in Utah gather other information. Scientists at the Utah Division of Water Resources gather information on how much water Utahns use over a year. This information is measured in acre-feet per year. It is estimated that one acre-foot of water is enough for one household for one year. This is important information. We live in an area where water is sometimes in short supply.

Study the information on Utah's population change and water usage to make predictions about the future needs of Utahns.

| Total Population in Utah | |
|---|---|
| 1990 Census | 1,722,850 |
| 2000 Census | 2,233,169 |
| 2030 Projected | 3,485,367 |

*Source:* U.S. Census Bureau

| Total Water Usage in Utah | |
|---|---|
| 1995 | 907,648 acre-feet/year |
| 2000 | 852,623 acre-feet/year |
| 2005 | 951,901 acre-feet/year |

*Source:* Utah Department of Natural Resources Division of Water Resources

1. What pattern do you see in Utah's population since 1990?
2. By how many people is Utah's population projected to change by the year 2030?
3. What pattern do you see in Utah's water usage?
4. Why might Utah's water usage have gone up from 2000 to 2005 even though people were working hard to conserve and use less water?
5. What do you think will happen to Utah's water usage in the year 2030?
6. What problems might we run into if Utah's population and water usage continue to grow?

# Chapter 3 Review

## Become a Better Reader

### Make Connections

Good readers make connections when they read. As you read, think about how the text is like something you already know. You might connect the text to your life. You might connect it to another text. You might even connect it to events happening around you.

Choose a picture book from the library. Use sticky notes to mark connections you make as you read. Label the sticky notes T-S for text-to-self, T-T for text-to-text, and T-W for text-to-world connections. Share one of your strongest connections with a partner.

## Technology Tie-In

### Time for a Vacation

Imagine you are planning a vacation to one of Utah's National Parks. Research the park online at sites like www.utah.com/nationalparks or nps.gov. From your research, create a schedule of what you will do on your vacation, a packing list of supplies you will need, and a list of natural features you will see while there. Then draw a picture of some of the landforms you will see at the park. Share your vacation plan with the class.

## Review What You Read

### Lesson 1

1. In what ways do people change the land to meet their needs?
2. What are some of the different points of view about how to use the land?

### Lesson 2

3. What are some ways in which people have different points of view about how to use the land?
4. Why does the government set aside some land?
5. Share your opinion on the importance of working to balance our needs and nature's needs.

### Lesson 3

6. Why has Utah become such a popular spot for recreation?
7. How do people use the land for fun and recreation?