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Wooch.een: Together We Can



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**Goldbelt Heritage Foundation**  
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## **Where Does Your Drinking Water Come From?**



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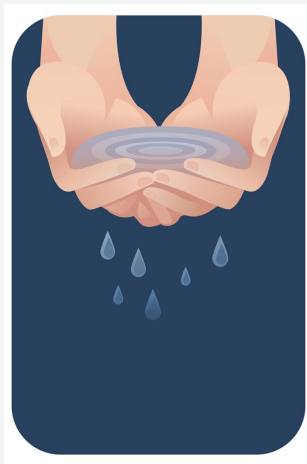
### Key Points

- Our drinking water comes from our watersheds.
- A watershed is an area of land that collects water in the form of rain and snow.
- Mountains are a part of a watershed.
- Most of Juneau's water supply is groundwater which comes from the Last Chance Basin well field.
- Juneau's water is disinfected with chlorine to kill any microorganisms.
- Drinking from creeks, streams and other surface water sources could make you sick.

water. We have just one step in the water treatment process— disinfection. Disinfection destroys the harmful microorganisms that can make us sick. Juneau’s water is disinfected using chlorine. The chlorine is added to the water to kill the microorganisms.

## **Our Water is Our Life**

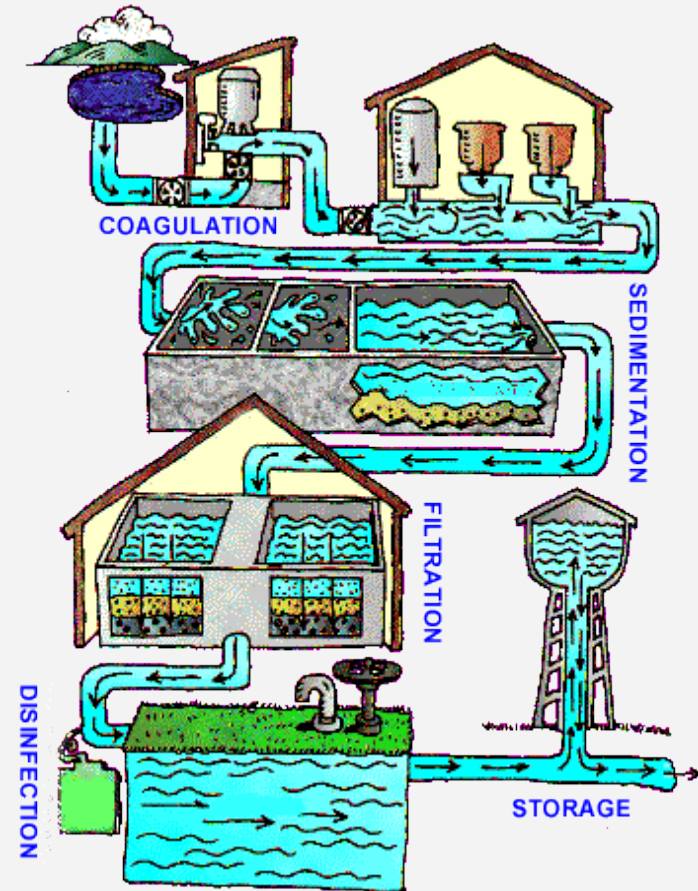
What happens along the watershed will affect what comes out of our faucet. For example, pollution above our reservoir may later end up in your cup. This is why it is important to be aware of where your water comes from and to take care of it. The health of our watershed directly influences the health of our environment and the health of our community. If we keep our water sources healthy, it will help keep ourselves healthy.



## **Where Does Your Drinking Water Come From?**

## Vocabulary

- watershed
- drainage basin
- groundwater
- surface water
- reservoir
- aquifer
- gravity system
- microorganisms
- water quality



[http://www.epa.gov/ogwdw/kids/watertreatmentplant/images/image\\_watertreatmentcycle.gif](http://www.epa.gov/ogwdw/kids/watertreatmentplant/images/image_watertreatmentcycle.gif)

In all cities water must be carefully cleaned before it can be used. The diagram above shows a common process for cleaning water. First, the water leaves the reservoir. Then it goes to the treatment facility. At the facility, the water is cleaned four times. Finally the water can be used or stored.

In Juneau, we do not need to do very much to our

## From the Reservoir to Your Home

Water travels to our homes through pipes. These pipes are under the ground. The water flows downhill through the pipes. This is called a **gravity system**. This means the water can reach our homes without the use of pumps. However, there *are* pumps in some areas in Juneau. This is because some areas are higher in elevation than the reservoir. Water cannot travel uphill without help from a pump.



## Is All Water Safe to Drink in Juneau?

In Juneau our water is pretty clean. However, it is not a good idea to drink from creeks or streams. Creeks, streams and other surface water may contain **microorganisms**. Microorganisms are very small living creatures. They are too small to see without a microscope. Some microorganisms can make us very sick. Surface water in Juneau must be cleaned so it is safe to drink.

## Water From Your Faucet

Faucets make it very easy to get drinking water. If you do not have a faucet, getting the water you need is hard work. People in many parts of the world get their drinking water from a deep hole into the earth. These holes are called wells. In Ethiopia, villagers must pump all their water from a well. Then they carry it home.



A well in Ethiopia provides water for more than 3,400 people. Photograph by U.S. Navy Equipment Operator 1st Class Timothy Finnicum.

In Juneau, you can find drinking water just about anywhere. All you have to do is find a faucet and turn it on. Your school probably has drinking fountains in the classrooms and in the hallways. Sometimes you can find drinking fountains in stores and even outside. People who have to pump and haul their water know where their drinking water comes from. Do you know where your water comes from?

## Where Does Your Drinking Water Come From?

Juneau is surrounded by mountains. Mountains rise up from the ocean. You can see mountains everywhere. So, what do mountains have to do with our drinking water? The answer is: everything!



Mt. Juneau & Mt. Roberts.  
Photograph by Robert Estremo,

Our mountains are part of a **watershed**. A watershed is an area of land that collects water in the form of rain and snow. In the winter, our mountains are often covered in snow. In the summer, the snow melts. These mountains also receive a lot of rain year round. All of this water needs a place to go. Some water may soak into the soil or be used by plants. Some water may travel overland as **surface water**. Some water will seep underground as **groundwater**.

Watersheds are also called **drainage basins**.

Eventually the rain and snow that falls into a watershed will drain into the same place. This water runs downhill in the form of creeks. Sometimes these creeks will form a large lake. These creeks and lakes can be used as **reservoirs**. A reservoir is a natural or man-made lake that cities use as a source of water. In most cities, water is stored in reservoirs.

In Juneau there are nine reservoirs. Two provide our water. Our main source of water comes from The Last Chance Basin Well Field. The wells were dug to get water from an **aquifer**. An aquifer is an underground layer of rock which is full of water. Another source of water is the Salmon Creek reservoir. Salmon Creek flows down a mountain near the hospital. This reservoir was created by building a dam. The dam holds the water back until it is needed.



Salmon Creek reservoir and dam.  
Photograph by Nwchar.