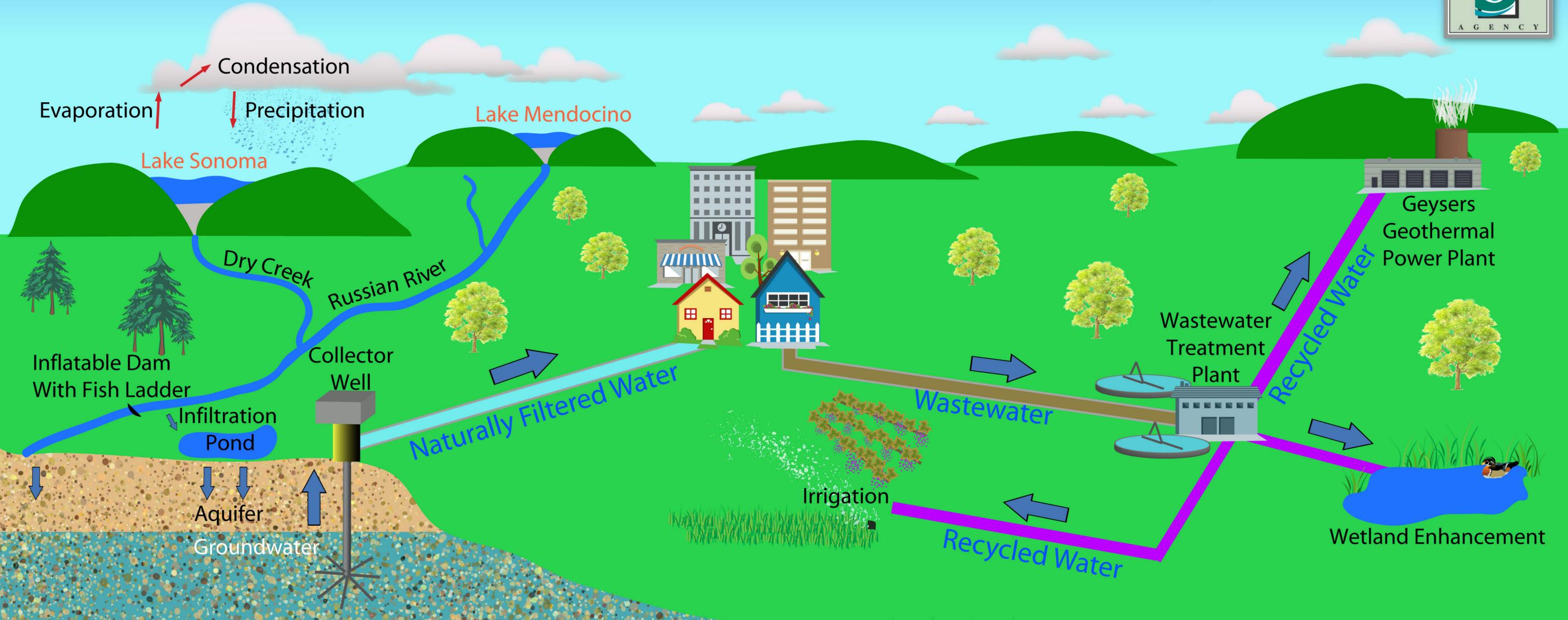


Water in Sonoma County



Where does our water come from?

There is no new water on Earth. The water cycle has been recycling the water on our planet for about four billion years. Liquid water that is heated by the sun changes to invisible water vapor through **evaporation**. The water vapor rises into the air and as it cools forms clouds through **condensation**. In the clouds, water drops are formed and then fall to earth as **precipitation** in the form of rain, snow, or hail.

Rain that falls within the boundaries of the Russian River Watershed flows downhill creating creeks and streams that join the river which flows to the Pacific Ocean. Lake Sonoma and Lake Mendocino are **reservoirs** that capture water during the rainy season to be used in the dry summer months. Some of the water will also soak into the earth and become **groundwater**.

The groundwater is naturally filtered through the sand and gravel of the **aquifer**. The Sonoma County Water Agency has six collector wells near the Russian River that pump millions of gallons of water each day from 60-80 feet underground. Then the water travels through large pipes called **aqueducts** to our homes, schools, and businesses. Every day, the Sonoma County Water Agency pumps enough water for 600,000 people.

How does the water get recycled?

Water that has been used inside homes, schools, and businesses goes down the drain and flows through underground pipes to a **wastewater treatment plant**. At the wastewater treatment plant the water gets cleaned and filtered until it is clean enough to be used again as "**recycled water**."

Purple pipes carry recycled water from the wastewater treatment plant for use in our communities. Recycled water is a valuable resource that can be used to water parks, vineyards, golf courses, and playing fields, to restore wetlands, and to make electricity at the Geysers Geothermal Power Plant.

Nature recycles water. People recycle water too when they treat wastewater and use that water over and over again. Since there is no new water on Earth, it is important that we use our water wisely.

For more information on the Sonoma County Water Agency, visit www.sonomacountywater.org.