



# WELL WATCH PROGRAM



## WATERSHEDS



Students will gain an understanding that a watershed is an area where all water drains towards a common point like a river, lake, or ocean. They will see that what happens on land affects the water quality and the health of everything in the watershed.

## COLORADO WATER LAW



Students will learn about how gold miners of 1858 were the first to introduce the "First in Time - First in Rights" concept of distributing water in Colorado and what that means today. Students will see first hand what happens when there is not enough water.

## WATER FILTERING



Students will experience the difficulties of removing pollution from water, and learn about other processes that might make removal more effective. Students will make their own filters using natural and man-made materials.

## THINK LIKE A BEAVER



Students will learn the history of beavers and create a model beaver dam and hypothesize about changes that they would expect to see to the ecosystem after the beaver dam is built.

## IRRIGATION



Students will be able to identify and explain key factors that impact irrigation and water management decisions. Students will learn the different types of irrigation and build a model of a center pivot irrigation system.

## WATER SCARCITY



This activity teaches students about different types of water scarcity using a "resource" that students know in a relay to fill their bucket.

## WATER CYCLE



The purpose of this lesson is to build upon the knowledge students already have about the water cycle and to further educate them on where their water comes from and where it goes once they have used it.

## AQUIFER / GROUNDWATER



In this lesson, students will learn about aquifers, the source of their drinking water, and the effects of groundwater pollution. The Groundwater model identifies saturated & unsaturated zones, and the surface water & groundwater connection.

## TO POINT OR NOT TO POINT



Students will learn about point and non-point pollution using our Enviroscope neighborhood model and test for phosphates and nitrates in water from the South Platte.

## GOLD PANNING



The gold panning activity touches on the history of placer mining, how to tell if its real gold, the roll the gold rush had on Colorado Water Law, and harm to the environment from abandoned mines.

## INTRO TO WELL WATCH



Students will be able to identify geological formations 50 to 60 feet below the surface and why these formations are important to our water supply. Where does our water go?

## RIVERS AND STREAMS



In this lesson students use stream tables to investigate variables that affect the way water erosion alters landforms. To educate school children and their communities about the ways streams behave and how people can live in harmony with streams.

## WATER QUALITY



Students will investigate the quality of water by collecting data on parameters including pH, dissolved oxygen, nitrates, and phosphates. They will determine what it means for water to be "safe," and identify what causes can alter water quality.

## MACROINVERTEBRATES



Student activities with macroinvertebrates can be engaging and educational, allowing students to explore aquatic ecosystems and learn about water quality.