

# ENVIRONMENTAL ENCOUNTERS

## Lesson Plans for the Science of Water



### Climate, Natural Resources, and the Human Experience in Utah

**Suggested grade level:**

High school geography

**Objective:**

Students will research and report on the factors that affect the region of northern Utah (or the region where you live) and how people affect and adapt to these factors.

**Curriculum ties:**

- √ High school Geography Standard 2 Objective 1 a-c, Objective 3 a-b, Standard 3 Objective 1 b-c, Standard 4 Objective 1 d, Standard 5 Objective 1 a, c-d, Objective 2 a-c, Standard 6 Objective 1 a-d, Objective 2 c

**Time needed:**

- √ Prep: 1-2 hours
- √ Pre trip: 2-3 hours
- √ Garden 1-2 hours
- √ Post trip: 6 hours

**Materials needed:**

- √ Books, articles, or web sites that students can use to research Utah's natural resources, climate, and culture. Utah's official state web site has a variety of short articles on the history of some of the peoples of Utah, <http://historytogo.utah.gov/>
- √ The Jordan Valley Water Conservancy District web site, <http://www.jvwcd.org/>, has information about water resources and climate in Utah
- √ An atlas of Utah
- √ Census material, available at <http://quickfacts.census.gov/qfd/states/49000.html>
- √ Resources that discuss technologies affecting the environment

**Teacher notes:**

In this activity students will learn how climate and natural resources affect humans in Utah. Students should understand what natural resources and climate are and how they affect where and how people live. They should also understand the concept of "everyday culture," or how people live and interact as a society, including traditions and religion, versus "high culture," or the fine and performing arts. They should know that every group and region has a culture not necessarily related to high culture as the students may understand it.

**Procedures:****Preparation**

Call 801-565-4314 to schedule your visit to the Conservation Garden Park at Jordan Valley.



### In the classroom

The class will describe the region of northern Utah, including its natural features and resources and its people and cultures. Divide the class into groups that can research topics such as:

- √ Water resources and how people use them
- √ Energy resources and how people use them
- √ Mineral resources and how people use them
- √ Resources of open space and scenic beauty and how people use them
- √ The ethnic backgrounds of major groups in Utah and where these groups came from originally, including a little bit of their culture (i.e. Shoshone, Utes, early Scandinavian and British pioneers, Latino immigrants, etc.)
- √ Northern Utah's climate and how it affects life in Utah including recreation, jobs, clothing, etc.

They should gain an understanding of the importance of natural resources in both historic and modern people's decisions and ability to live in Utah. Also, they should find that natural resources and climate are important in Utah's culture, providing recreational opportunities and careers, as well as extraction and agricultural industries, which are a major part of Utah's economy and lifestyle. Have the students report what they find to the class.

### Field trip

The Garden guide will tell students more about northern Utah's climate and water resources. Start at the "Water Story" sign and have the students look for examples of factors that affect the earth's surface in our region, such as water, temperature, and erosion. Ask students how people affect water, temperature, and erosion.

- √ What impact does this have on Utah?
- √ How do people positively and negatively affect water resources in Utah?
- √ How might culture determine how people have adapted to the region, in regards to their homes, landscapes, and recreation?
- √ How do the choices people make about water use in northern Utah affect the larger climate?

### Follow up

Have students research and write about technologies that are being used to change the environment, and how this technology or an alternative might be used to conserve natural resources. As a class, plan and carry out an activity that helps the local and/or global environment based on what you learned at the Garden.

### **Assessment:**

The students' reports and environmental activity will indicate their success at understanding the connection between human activities, the climate, and natural resources.