

# Governmental Influence on the Construction of Dams

## **Standard V: Geography**

### **Substandard D – Interconnections**

**Standard Topic:** The student will be able to describe how humans influence the environment and in turn are influenced by it.

**Benchmark 1:** Students will provide a range of examples illustrating how types of government systems and technology impact the ability to change the environment or adapt to it.

**Grade level:** 9/12

**Overview:** The lesson is designed to help students understand how the type of government system affects the country's ability to change the environment by construction of large projects like dams.

**Time:** Five (5) 45-minute class periods, extension activity requires extra time.

**Subjects:** Geography

**Required Materials:** Internet access

[KWL Chart](#) (Day 1)

[Country Comparison Chart](#) (Day 1)

[Project Comparison](#) (Day 2)

[Bureau of Reclamation](#) (Day 3)

[Glen Canyon Controversy](#) (Day 3)

[China's Perspectives](#) (Day 4)

[Assessment](#) (Day 5)

**Optional Technologies:** If computer access is not available copies of the articles can be used. In addition, an almanac may be used in place of the CIA World Factbook.

**Objectives:** After completing this lesson students will be able to:

- \* explain how the type of government a country has can determine the ability construct major projects that affect the environment
- \* similarities and differences between dam construction in the United States (Hoover Dam) and China (Three Gorges Dam)
- \* explain how the Sierra Club and the Bureau of Reclamation affect major water projects in the United States
- \* explain the perspectives of various groups in China on the Three Gorges Dam

**Day 1: Introduction to Three Gorges and Hoover Dam:** Use the [KWL Chart](#), to assess what students already know about these dams and the effect that the type of government a country has on the planning, construction, and implementation of the project.

Topics on the chart could include definitions, reasons to build, issues/resolutions. This chart can also be used as a pre-test.

Using the on-line CIA World Factbook, <http://www.odci.gov/cia/publications/factbook>, fill in the Country Comparison Chart [Country Comparison Chart](#) with the appropriate information.

**Day 2: Project Comparison** [Project Comparison](#)

The following sites have specific information on each of the dams. These sites have some duplicate information, however, they are great, and each has its own perspective. Depending on time students can complete this information individually, or can jigsaw filling out the chart. To jigsaw, assign individual students parts of the worksheet based on topics. Using this method, students can read more information and become “experts” at it. After students have completed their part of the chart, have them meet in small groups and share what they have learned.

**Three Gorges Dam:**

<http://cnn.com/SPECIALS/1999/china.50/asian.superpower/three.gorges/>

<http://www.travelchinaguide.com/attraction/hubei/yichang/dam.htm>

<http://www.coxnews.com/washington/GORGES.HTM>

<http://www.pbs.org/itvs/greatwall/yangtze.html>

There is also a great video entitled, “Great Wall across the Yangtze” put out by PBS that matches the PBS site above. It is well worth the price of the video. It can be ordered through PBS video. The PBS site has ordering information on the Resources link on the left side of the page.

Photos about the Three Gorges Dam can be found on many sites including:

[http://www.threegorgesprobe.org/tgp/panos\\_page2.html](http://www.threegorgesprobe.org/tgp/panos_page2.html)

**Hoover Dam:**

<http://www.pbs.org/wgbh/amex/hoover/filmore/transcript/index.html>

<http://www.usbr.gov/lc/hooverdam/History/articles/articlesmain.html>

Like the Three Gorges video, PBS has also made a video about the Hoover Dam. Again it is well worth the investment. Ordering information is on the above site under the button on the left titled – The Film and More.

The following site has some great picture about the Hoover Dam

<http://www.c1b.com/hooverdam.htm>

### **Day 3: Dam controversy in the United States**

#### **Bureau of Reclamation [Bureau of Reclamation](#)**

The Bureau of Reclamation is world known as the expert on water projects. Although its main focus is the Western United States, countries around the world seek their advice.

Using the Bureau of Reclamation site answer the 5 W's <http://www.usbr.gov/>

#### **Glen Canyon Dam Controversy [Glen Canyon Controversy](#)**

Using the Sierra Club <http://sierraclub.org/sierra/199703/brower.asp> and Glen Canyon National Recreation Area site <http://nps.gov/glca/damindx.htm> analyze the Glen Canyon Dam controversy in the Western United States. The project was completed in 1963 and has impacted the environment in the area.

### **Sierra Club and the Three Gorges Dam**

Go to <http://www.sierraclub.org/human-rights/china/dragon.asp>. What tells you the Sierra Club is in opposition to the Three Gorges Dam?

### **Day 4: China's Perspectives on the Three Gorges Dam**

Use the Perspectives worksheet, [China's Perspectives](#), to analyze the perspectives of the people and the government in China about the status of the Three Gorges Dam? Look for things that are the same and different than what you have read about for the United States

### **Day 5: Closing: (Assessment)**

**Questions to consider individually or in small groups as students analyze the information from the readings:**

1. Compare the goals or benefits of the two dams.
2. What were the differences in the planning stage by the two governments?
2. What impact did the building of the dams have on the environment in both China and the United States?
3. Which of the dams had/has the greater impact on the environment?
4. Which of the dams had/has the greater impact on the human population?

After comparing the above information, explain how the type of government a country has can affect the planning, construction, and implementation of large controversial projects that affect the interaction between the environment and the people?

## **RESOURCE BAR**

**Definitions:** See Day 1

**National Geography Standard:**

**Standard 14** How human actions modify the physical environment

**Supplemental Web Links for Teachers and students:** See extension activity below

**Extension:** Students can do a perspectives study of the people involved in the Three Gorges controversy. Using <http://pbs.org/itvs/greatwall> have students identify the

perspectives of Environmentalists, Historians, peasants being relocated, and the Chinese government. (the government perspective is found on the “Three Gorges Dam” link on the left.) Use the list on the left to link to the “Controversy” readings for all others.

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