The politics of water
The use of applied geography in predicting international conflict

Background Information

International conflicts over water resources threaten regional stability in many areas, including the Middle East, Asia and North America. "A United Nations report has predicted that access to water may be the single biggest cause of conflict and war in Africa in the next 25 years". Four of the five fasting growing states in the US lie in the Colorado River basin and the population of northern Mexico dependent on this water is growing at a rate of 5% per year. Similar conflicts can be found in many regions of the world.

A tremendous body of geographic information is now available on the web. ArcGIS Explorer is a free download that will allow you to explore many aspects of a region and work to identify potential water resource issues. Google Earth provides similar information and is again available as a free download. Because the web sites for both of these projects changes, use a search engine like Google to find the site and download the necessary software.

While water resource issues exist on most continents, they are frequently most severe in the arid regions of the world. Select one such region and identify a river that flows from one country to another. Alternatively, use the search engines built into the mapping to software to look for a river that is known to be a source of tension. Examples include the Ganges, the Nile, the Jordan or the Colorado River.

Identify the major cities that lie along the river and record their populations. From this information determine the total number of people in urban areas that depend on the river as a water supply and as a waste disposal facility. Zoom in on the cities and look for evidence of dams or barrages: are there areas where the river is quite wide upstream and narrows rapidly at a specific point? Are there straight channels running alongside the river or leading away from it that suggest that the population is extracting water at a rate that exceeds the normal flow rate, forcing them to store seasonal waters for later use?

Using the British Broadcasting Site below as a source of information, search for the river that you are analyzing to determine if there are currently conflicts over the water supply.

How would a requirement that a certain minimum flow remain in the stream affect upstream users? Are there agricultural lands that depend on irrigation from the river that would be lost if the water flowed through? What are the likely effects of a reduction in the total amount of water available to an urban center?

The answers to the questions above provide represent the first step in understanding the critical role of water in national security. Do you feel that water shortages currently threaten relationships between the affected countries? What would the affects of global climate change be on these countries should less precipitation fall in the region?

Additional Resources:

The Worldwatch Institute (http://www.worldwatch.org/) has many publications available discussing conflicts associated with the management of water resources. Their annual "State of the World" publication frequently contains information relevant to the consideration of water supply issues, and they have put out several topic specific publications on water resources which are still available from on their web site.

The British Broadcasting Corporation (http://news.bbc.co.uk/2/hi/in_depth/world/2003/world_forum/water/default.stm#) hosted a forum in 2003, discussing whether water, and not oil, would be the basis of the next major war fought on the planet. In this discussion, many specific examples of conflicts were identified and the critical importance of the issue of water allocation discussed.