EXPLORING DOWNSTREAM: WATER RESOURCES By Kristin Collins

The Pulitzer Center on Crisis Reporting

OVERVIEW

Water issues affect us all. Most Americans have access to plenty of clean water, and we don't give a passing thought to our own use of this vital natural resource. But water, and access to it, plays a significant role in the daily lives of nearly 1 billion people across the globe. Several journalists, sponsored by the Pulitzer Center on Crisis Reporting, set out to examine the impact of water resources on a wide-range of communities. Through this webquest, students will use several different projects on the "Downstream" web portal to examine the impact of water around the world.

STUDENT PREPARATION

Prior to delving into the stories contained within this web portal, ask your students to think about the following:

- a. How many times a day do you use water? In what capacity?
- b. How might your day be different if you didn't have safe, clean drinking water at your disposal? Where would you get your water? How would you ensure that it was safe to drink/use in your cooking?

Read or play the video introduction to this project, http://pulitzercenter.org/downstream, for your students.

***Special note: These videos are linked to the web portal through Youtube. If you do not have Youtube access at school, you may request a copy of the video from the Pulitzer Center on Crisis Reporting, or assign your students to view the video at home. You can also download a Windows Media Player (wmv) file through the "Download Video" link. The files are approximately 40mb so may take a few minutes to download depending on your connection speed.



Alex Stonehill, Ethiopia 2008

THE LESSON Procedures

Part 1: Water Wars: Ethiopia and Kenya

- 1) Click on the following link to the Pulitzer Center on Crisis Reporting's "Downstream" web portal: http://pulitzercenter.org/downstream
- 2) Scroll through the thumbnail images until you find the project titled "Water Wars: Ethiopia and Kenya." Click on "launch project."
- 3) Have your students read the introduction to this project, or read it to them aloud.
- 4) To the right, under "Recent" there are two articles for your students to read. One is titled "Diminishing Water Resources Threaten Peace" and "Kenya Seeks Cheap Power at the Expense of Turkana." You may wish to print these out and divide them among your class to read. Then, have each group summarize their article and discuss how the need/desire for water is fueling conflict.
- 5) To the right of the introduction there are six menus from which you can choose. Click on "Articles" and scroll down to "Africa's Growing Water Crisis" and click it on. Then click where it says "See their multi-media presentation..." Have your students read the article and answer the following questions:
 - a. Many of the people of southern Ethiopia are pastoralists, meaning that their livelihood is based on moving their herds in search of fertile pastures. Because there has been so little rain, what is happening to their livestock?
 - b. Why is there such a water shortage?
 - c. How has the scarcity of water fueled conflicts between the tribes?
- 6) After students have read the article, you will find a video titled "Lake Victoria: Troubled Waters"* on the right. Play this for your students and have them answer the following questions:
 - *Note: this video is NOT through Youtube
 - a. What is happening to Lake Victoria? (Explain the reason for this.)
 - b. What countries are involved in the dispute over loss of water in Lake Victoria?
 - c. What, politically, is the potential impact of this dispute in this region?
- 7) Scroll down and click on "Ethiopia: Living Without Lake Haramaya." Play this audio slideshow for your students and ask them to answer the following questions:
 - a. Describe Lake Haramaya in 1987, 2004, and then in 2008. What are 2-3 reasons cited for the loss of this lake?
 - b. Why should the rest of the world take notice when lakes such as this one disappear?
 - c. What has been the impact of the loss of this lake on the local population?
- 8) Go back to the "Water Wars: Ethiopia and Kenya" project main page. To the right, click on "Audio" and then click "Water Walker." Have your students listen to this story and answer the following questions:
 - a. Describe a day in the life of a "water walker."
 - b. How would not having easy access to water impact your daily routine?
- 9) Go to the radio program titled "Clean Water for Kenya." Have your students listen to the story (or they can read the transcript) and answer the following questions:
 - a. Why is the water in the Kibera slum of Kenya so expensive?
 - b. Even if you buy the water, is it guaranteed to be safe? Why or why not?
 - c. How does Solar Water Disinfection (SODIS) work?
 - d. Since the inception of the SODIS program in 2004 there has been a 20% decrease in diarrhea in the slum. How else might access to clean water help to enhance the lives of people in the Kibera slum (other than not having to contend with being sick)?

Part 2: South Asia's Troubled Waters

- 10) Go back to the "Downstream" main page. Click through the thumbnail images until you come across the project titled "South Asia's Troubled Waters." Click on "Launch Project."
- 11) Have your students read the introduction to this project, or read it aloud to the class.
- 12) Click on the "Articles" tab and then click on the story titled "Bangladesh Fights for Survival Against Climate Change." Have your students read this story and discuss the following questions:
 - a. What is a char? How are chars proving helpful to the people of Bangladesh? Why is life in the lowlands, where chars form, so precarious?
 - b. How is climate change affecting Bangladesh?
 - c. What is the government of Bangladesh trying to do to combat the country's water problem? Go back to the main page for "South Asia's Troubled Waters" and click on the video titled "Fleeing Catastrophe, Stuck in the Slums of Bangladesh."* This story is connected to "Bangladesh Fights for Survival Against Climate Change" because many Bangladeshis have been displaced from their homes and villages as a result of rising waters. This video is about a young couple that fled to Dhaka's slums to escape the rising waters, but they, like so many others, face terrible conditions and the lack of opportunities in the city *Note: this video is NOT through Youtube
 - d. Ask your students to ponder what options people like those highlighted in this video might have for a better life.

Part 3: Desertification in China

- 13) Go back to the "Downstream" main page. Click through the thumbnail images until you come across the project titled "Desertification in China." Have your students read the introduction, or read it to them aloud.
- 14) Go under the "Articles" menu and click on the story titled "Desertification: On the Trail of Abandoned Cities" (you may wish to help students locate, approximately, where in China journalist, Sean Gallagher, was reporting using a classroom map). Have your students read this article and answer the following questions:
 - a. What is desertification?
 - b. How has desertification been affecting parts of western China?
 - c. What was the significance of the city of Yinpan, and what led to its demise?
 - d. Why is important to protect historically significant places like Yinpan? Why is China unable to provide this protection?
- 15) Go back to the "Desertification in China" main page and click on the BBC World "Interview about Desertification in China." Click on "listen to the interview on BBC World," and fast forward to 16:56. Have your students answer the following questions:
 - a. What is the Chinese government doing to help people that are fleeing desertification?
 - b. What is an "environmental refugee"?
 - c. According to Sean Gallagher, how did most of the people that he interviewed feel about living in these fabricated cities?
 - d. When Gallagher stayed with the farmer and his family, what did he say the farmer was doing that was in violation of government policies concerning desertification?
 - e. If you were a farmer that raised animals in this part of the world, what options might you have to ensure the survival of your flock?
 - f. Why are tourists now heading out to the edge of the desert?

- 16) Go back to the "Desertification in China" main page and click on "Showcase: Shifting Sands." Then click on "View the slideshow as it appeared in *The New York Times*." Have your students examine the images of desertification in China and the photo captions. After viewing these images ask them to discuss the following:
 - a. What stood out to you about these photos?
 - b. What do you think it would be like to be caught in a sandstorm like the ones you just saw?
 - c. In your opinion, what ways of life do you think this environment could support?

EXTENSION ACTIVITIES

- 1) These three projects have looked at water issues in various parts of the world. Divide your class into three different groups, with one group examining each project. Have students share what they discovered about their assigned projects or region of the world with their classmates. This could be done through a class discussion, a poster project, or a powerpoint.
- 2) Hold a class debate on the international community's responsibility related to the issue of water.
- 3) Have your students research some of the innovations working to make water safe for people to consume.
- 4) Have your students create an awareness campaign at school to publicize the plight of people around the world without access to clean water. This could be done through posters, a short video, or a "public service announcement" over the PA system.
- 5) Have your students research water issues in the United States. What cities/states are most affected by water issues? How are they coping with water shortages/too much water?
- 6) Have your students calculate how much water they use on average on a daily basis. Then, have them compare this to people living in other parts of the world.
- 7) Have your students research ways that they can conserve water.