

## *Fragile Waterways: Discussion Questions*

- 1. Superfund—good or bad?** In the public television documentary *Fragile Waterways*, community residents in Brooklyn, NY disagree on whether or not having the Gowanus Canal declared a Superfund site is a good or bad thing. If you lived in an area with a polluted site, would you want it to be designated as a Superfund site? Why or why not?
- 2. Exploring the Clean Water Act:** In *Fragile Waterways*, the Clean Water Act is referenced. Conduct research to find out the changes that have been implemented due to the Clean Water Act. For more information about the Clean Water Act, go to:  
<http://www.epa.gov/oecaagct/lcwa.html>.
- 3. Re-introducing eelgrass:** *Fragile Waterways* highlights efforts to re-introduce eelgrass into the Long Island sound in order to help increase numbers of fish in the water. What do you think of such human efforts to actively change an ecosystem? Should public dollars support such an initiative? Why or why not?
- 4. To drill or not to drill?** Issues related to water can be very complex and people on both sides of the issue can have strong, valid reasons for their opinions. As highlighted in *Fragile Waterways*, neighbors in upstate NY dispute the potential benefits of selling the rights to their property to drill for natural gas, using a method called Horizontal Hydraulic Fracturing, commonly known as “Fracking.” Through this process, millions of gallons of water, drawn from local lakes and rivers, are mixed with sand and chemicals. The fluid is then shot in at high pressure to fracture the shale and release the gas. Here are some potential benefits and drawbacks of Fracking:
  - **Benefits:** Fracking can result in more available natural gas, which can provide a transition to greener energy technology that would mitigate the effects of climate change. Increasing our access to natural gas could lead to a decrease in the nation’s energy costs and reduce the nation’s dependence on foreign oil. The process of Fracking could generate new jobs and provide royalties to landowners.
  - **Drawbacks:** Drilling and leakage from drill well casings and wastewater tanks could potentially contaminate the groundwater and lead to contaminated drinking water.

Each state now sets its own standards about Fracking regulations. There are, however, several bills proposed to create strict federal Fracking guidelines. Do you think there should be federal regulations about Fracking or should this remain a state-controlled issue? If you had land that potentially had a natural gas source beneath, would you sell the drilling rights to companies to conduct Fracking on your property? Why or why not? Currently companies do not have to disclose the chemicals they use to conduct Fracking, as this is considered a “trade secret.” Do you think this information should be disclosed to the public? Why or why not?

- 5. Making a Positive Impact on our Waterways:** *Fragile Waterways* highlights ways in which humans can positively and negatively impact nature’s waterways. Identify a problem/need with a body of water in your community and explore possible actions you could undertake to positively impact a body of water. For help in launching your project, go to the “Giving Water a Hand” section on the Environmental Resource Center’s website at:  
<http://www.uwex.edu/erc/gwah>.
- 6. Exploring Zebra Mussels and other invasive species:** *Fragile Waterways* illustrates some unintended consequences of cleaning up waterways. As a result of decreasing the pollution in waterways, some invasive species such as the zebra mussels are able to thrive. Conduct research to find out some of the effects that zebra mussels have on their environment and try to identify other invasive species that benefit from clean water.