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| **Case Study** | **What happened?** | **Why does it matter?** |
| Ebola | Emergent disease in West Africa. High mortality rate | 2 US citizens contracted the disease, brought to the US. |
| Bhopal India | In this case study a chemical plant exploded leaving thousands of the Indians (not Native Americans) blinded, dead, or otherwise harmed. | Stricter controls over safety in US owned factories abroad. |
| Yellowstone/wolves | In this location all the wolves were killed off leading to an increase in the elk, moose, and deer populations and a decrease in the willow, song bird, and insect populations. | Predators were found to be a vital part of the food chain, otherwise ecological disruption occurs in many ways. |
| Passenger pigeon |  This animal was driven to extinction by hunters. It was sold for food.. | Their absence has eliminated an important source of fertilizer for the United States |
| Kudzu | This invasive species was introduced to control erosion but has taken over many ecosystems killing trees and ground plants alike. | Invasive species disrupt the ecosystem. |
| Lake Victoria | Water diversion project within the Nile River | Ecological degredation. |
| 3 Gorges Dam | Along the Yangtze river in China largest dam in the world was built it misplaced thousands of rural citizens but supplied power to the growing cities. | Individual vs community rights. |
| Aral Sea | This body of water is rapidly drying up killing the 20 species of fish living in the water. Its water has been rerouted to irrigate the Soviet Union’s cotton fields. | Example of negative effects of water diversion and cultural eutrophication. |
| Mono Lake | This bBody of water is drying up because water upstream is being used for California’s growing population. | Class action suit stopped the water diversion. Fored Los Angeles to introduce Recycle, Reduce, Reuse campaign. |
| ANWR | Drilling for oil in the Arctic National Wildlife Refuge (ANWR) | To drill or not to drill ?Gas prices soar to record high levels |
| BPA | Carcinogen found in certain types of plastics | Regulations require that plastic companies no longer use BPA. |
| Pacific Garbage Patch | Pacific Gyre, major problem for water pollution and marine wildlife. The size of Texas | Pollutes water and kills marine wildlife. |
| Chesapeake Bay | The Chesapeake Bay water quality deteriorated from a variety of pollutants during a time of population growth and more intensive agricultural practices during the 1960s, 1970s and continuing to the early 1990s | As a result of the Clean Water Act of 1972, various pollution control measures were instituted resulting in measurable improvements in the water quality. |
| Love Canal | Niagara Falls area. school/community being built on top of a toxic waste dump. Many people got sick and/or died as a result of the radiation. | Class action lawsuit. EPA set up Superfund to monitor toxic waste dump sites and cleanups. |
| Electronic Waste | Lots of toxic metals and chemicals can be found in e-waste.If they are not treated properly or not recycled in a properway even disposed off in landfills they can cause adverseeffects on human health and environment as they can leachinto the surrounding soil, water and the atmosphere. Wastecontains poisonous substances like Pb, Sn, and Hg etc. | In the beginning of the 1990ies, Switzerland was the world’s first country to introduce a national e-waste management system |
| Mexico City | This city was once the most polluted city in the world Many of its occupants suffer from respiratory (breathing) diseases. | now ranks 7th in the world due to changes in pollution laws and regulations. |
| Curitiba, Brazil | World leader in green public transit | Other countries can learn from their success. |
| Death of the Streetcar | In this conspiracy truck makers and oil companies destroyed mass transit systems to increase the sales of their products | Said to have begun the decay of Urban America due to sprawl. |
| Easter Island | In this location fisherman arrived and took over the island using up all its resources eventually leading to their own demise. (much like *The Lorax but way more graphic*) | Real world example of Tragedy of the Commons  |
| Cane Toads | Invasive species of toad brought to Australia to eat sugar cane loving caterpillars | Poisonous toads kill domestic livestock and pets. High reproduction rate. |
| Exponential Growth | Human population is doubling every few years. The graph is a J curve representing  | How will the Earth’s resources be able to support exponential growth? |
| Desertification | Overuse of farmland can result in a desert like environment. Example..the dust bowl | Overuse of farmland changes the landscape in a negative way. |
| Frogs |  15. This “canary in the coal mine” is decreasing in numbers because of increased pollution levels around the world | An indicator species used to determine overall healthiness of the environment. |
| Overfishing | Fish are caught faster than they are able to reproduce. | "We are in the situation where 40 years down the line we, effectively, are out of fish." *—Pavan Sukhdev, UN Environment Programme* |
| Northern Spotted Owl |  16. This bird was nearly driven to extinction by logging in the Northwest United States. | Logging companies must reseed after lumber is harvested. |
| DDT & Eagles | This insecticide DDT is linked with severe declines in bald eagle populations due to thinning eggshells. | Also shows how pesticides can biomagnify in the ecosystem.  |
| Chernobyl | This nuclear explosion resulted in the deadly release of radiation on the agricultural lands of the Ukraine and surrounding European nations. | Stricter regulations on design of the plants and awareness of effects.  |
| 3-Mile Island | In this case study there was a small explosion in the United States in a nuclear reactor. | No one died of radiation exposure but the country was too scared to build new nuclear power plants for many years. |
| Yucca Mountain | The U.S. government has set aside an area of the Western Shoshone Nation, Yucca Mountain, as a final repository for high level nuclear waste from the U.S. nuclear industry. | A class action suit has resulted in the halt of dumping nuclear waste at Yucca Mountain. This case is still pending at the Supreme Court. |
| A Civil Action | A court trial in Woburn, Massachusetts. W.R. Grace Company and several other companies were accused of contaminating the drinking water, which in turn lead to a cluster of leukemia cancers | A class action suit found in favor of the citizens. 39th worst on the list, based on EPA’s evaluation system, and monitored by the EPA Superfund. |
| Everglades and K. River | Water diversion project is shrinking the everglades.  | Today, half of the original Everglades have been drained. Large quantities of fresh water have been diverted to drain land for agriculture and to provide flood control for coastal cities. |
| Mississippi River Flood | This epic flood resulted in the intentional flooding of a predominately poor, African American community | Many African Americans left Mississippi to move north. |
| Exxon Valdez | An oil spill in Alaska from an oil tanker that ran aground on a reef.  | The local ecosystem was devastated by one of the worst spills in US history. |
| Gulf Oil Spill 2010 | This recent oil spill occurred when a drilling rig had an explosion.. | The oil spill increased the prices of gas and fish and decreased revenue from tourism |
| Zebra Mussels | These are an invasive species brought from China in the bottoms of boats to the St. Lawrence Seaway into the Great Lakes | They clog water pipes and boats. |
| Frogs: Our Canary in the coal mine | Indicator species for the environment. Lots of frogs=healthy ecosystem. | Many species of frogs are vanishing from the environment.  |
| Fukushima | Partial nuclear poweplant meltdown in Japan in 2010 due to a massive tsunami | Stricter regulations in building the plant.  |