

## **ENS 1010 Teacher Guide for Timeline Activity**

**1872 - March - President Ulysses Grant signs Yellowstone National Park Act to form the world's first national park. Grant was no friend of wilderness though, as is clear with his veto of an 1875 wildlife protection bill.**

**1885 – Canada's first national park, now know as Banff National Park was established.**

**1890-1920 - Progressive Movement: President Teddy Roosevelt and Sierra Club founder John Muir represent the two major approaches to environmentalism in this period. Roosevelt advocates a “wise use” of natural resources and an approach that takes the future into account while accommodating some present needs. Muir opposes the “wise use” idea and fights for outright preservation of unspoiled wilderness.**

**1891 - Forest Reserve Act passes Congress. Over 17.5 million acres set aside in the USA by 1893.**

**1900 - Wild buffalo population drops to fewer than 40 animals from an estimated 30 million a century beforehand.**

**1901 - In the Smithsonian Annual Report of 1901, Robert Thurston compares wind, tidal and solar power as replacements for coal. Since wind was intermittent and tidal power remote, solar attracted the most interest, he said.**

**1907 – Jasper Forest Reserve, now called Jasper National Park was established. First Nation and Metis settlers were paid a pittance to leave their land. Many headed to Hinton and Grande Cache.**

**1937, March 18 - Leaking natural gas from nearby oilfields devastates a school in New London, Texas, killing at least 295 students and teachers. One lesson learned: natural gas needs “odorants” so that people can tell when gas is leaking. Regulations requiring natural gas suppliers to add odorants are quickly adopted in the wake of the tragedy.**

**1947 - At request of Mohandas Gandhi, Jawaharal Nehru writes into the Constitution of India – Article 51-A[g] that *“It shall be the fundamental duty of every citizen of India to***

*protect and improve the Natural Environment including forests, lakes, rivers and wildlife, and to have compassion for all living creatures.”*

1953, May 4 — Gilbert N. Plass presents paper on global warming at American Geophysical Union. The Washington Post story (May 5) says:

World Industry, pouring its exhausts into the air, may be making the earth's climate warmer, a Johns Hopkins physicist, reported here yesterday. Releases of carbon dioxide from burning coals and oils, said Dr. Gilbert N. Plass, blanket the earth's surface 'like glass in a greenhouse.' So much carbon dioxide has been released in this industrial century that the earth's average temperature is rising 1 1/2 degrees (F) a century, he said.

1956 — Echo Park dam proposal defeated in Congress. The dam would have covered a national park area of magnificent sandstone gorges in southern Utah that have become Dinosaur National Park. This was the first such proposal since the Hetch Hetchy of Yosemite was dammed in 1913.

**1962 - Silent Spring's Noisy Summer - Reaction to Silent Spring by Rachel Carson, first published in the New Yorker on June 22, 1962, is immediate and nationwide. Some agronomists ask whether Carson is intending to starve people by banning pesticides. By 1970 DDT is banned in the US for agricultural use, but other far more toxic chemicals are not. Silent Spring is often seen as a turning point in environmental history because it opened a larger national dialogue about the relationship between people and nature and merged public health and conservation movements. Although it was not the beginning of the "environmental movement," it was a major accelerator.**

**1970 - April 22 - The first nationwide Earth Day celebration is organized by Sen. Gaylord Nelson and Dennis Hayes. It creates a national political presence for environmental concerns. Millions of Americans demonstrate for air and water cleanup and preservation of nature.**

**1973 – The Chipco Movement: A group of Himalayan villagers stop loggers from cutting down a stand of hornbeam trees. Dozens more protests followed where people would hug or stick (chipko) to the trees. Sometimes the protests involved groups of people holding up lanterns in daylight so that the officials could "see the light." The Chipcos, affiliated with Mahatma Gandhi's non-violent resistance movements, were trying reclaim their traditional forest rights that were threatened by the contractor system of the state forest department.**

**1979 — March 28 — Three Mile Island nuclear power plant loses coolant and partially melts down. This is a telling blow for the nuclear power industry, already under fire for safety problems in other plants, construction cost overruns and lack of planning for radioactive waste disposal.**

**1981 – March 21 — Inspired by author Edward Abbey and his book *The Monkey Wrench Gang*, activists unfurl a large roll of black plastic down the face of the Glen Canyon Dam, depicting a symbolic crack in the dam. The controversial dam had changed the ecosystem of a large stretch of the Colorado River. The event spawns the group Earth First!**

**1984 — Start of a 10-year suspension of the Atlantic Canada offshore seal hunt. The hunt resumed in 1995, after the failure of the depleted cod fishery to recover from overfishing left the Canadian and Newfoundland governments looking for someone or something to blame, and by 2002 was back up to near-peak levels. (M. Clifton, 2007)**

**1986 — April 26. Chernobyl nuclear reactor explodes and goes into a full-scale melt-down in Ukraine following an experimental procedure. Over two thousand square miles of land are contaminated and enormous amounts of radiation are released worldwide. (In 2006, A German physicians organization, IPPNW, said Between 12,000 and 83,000 children were born with congenital deformations in the Chernobyl region, and around 30,000 to 207,000 children were damaged worldwide.)**

**1988 Dec. 22 — Assassination of Chico Mendes , leader of Brazil's rubber tappers (Taperos) movement to save the Amazon rain forest. Like Vincente Cañas(murdered in 1987) and Wilson Pinheiro (murdered in 1980), Mendes stood in the way of Amazon developers. Dorothy Stang was assassinated under the same circumstances in 2005.**

**1991 — Sweden is the first nation to impose a carbon tax to curb CO2 emissions. By 2010 the tax per ton was 128 euros, and the country's economy had grown 44%.**

**1995 — Nov. 10. Nigerian government executes journalist and environmental activist Ken Saro-Wiwa and eight other environmentalists. They had been active in fighting pollution from Shell Oil Co. in the Ogoni homeland. International protests of Shell activities continues. See Ogoni and Nigeria Conflict over Oil and also the Movement for the Survival of the Ogoni People page by the Sierra Club. Many outraged people in the developing world have not forgotten the oil company's role in this tragedy. Sara-Wiwo's last words: *"Lord, take my soul, but the struggle continues."***

**1995 — Wolves reintroduced to Yellowstone National Park in the US.**

**1997– Dec. 10 – Julia Butterfly Hill climbs a 180 foot California Coast Redwood tree in defiance of loggers. She spends two years in the tree as a protest against redwood logging.**

**1997, Dec 11 — Kyoto Protocol adopted by US and 121 other nations, but not ratified by U.S. Congress. American industry predicts "disaster" if CO2 reductions are enforced, but environmentalists are dissatisfied with weak goals of the treaty.**

**1999 — Earth's population exceeds six billion. Half are living in cities. Almost half (2.8 billion) live on less than \$2 a day. UN agencies note that while globalization of trade has helped in some countries, the poor are becoming poorer both in absolute and relative terms.**

**2000 — August — Rain forest logging banned in New Zealand following a 30 year campaign by environmental groups.**

**2000 — May 15 — Walkerton, Ontario — Residents of this small town simultaneously experience serious symptoms of E. coli infection. The Walkerton Public Utilities Commission insists that there are no problems with the water, even though they have lab tests confirming contamination. Seven people die and 2,500 — about half the town — becomes ill. Finally, after regional medical officials step in, the extent of the problem is uncovered. Two untrained city water system managers are briefly jailed in the aftermath of the Walkerton tragedy.**

**2004 — Oct. 8 — Kenyan environmentalist and human rights campaigner Wangari Maathai wins the Nobel Peace Prize. She is the first African woman to be awarded the peace prize since it was created in 1901. The prize committee says Mrs Maathai, Kenya's Deputy Environment Minister, is an example for all Africans fighting for democracy and peace. Mrs Maathai is best known for a campaign called the Green Belt Movement that began in the 1970s and planted tens of millions of trees across Africa to slow deforestation. The movement grew to include projects to preserve biodiversity, educate people about their environment and promote the rights of women and girls.**

**2007 February 9 — UK — Billionaire businessman and philanthropist Richard Branson of Britain sets a \$25 million prize for anyone able to devise a way to reduce the amount of so-called greenhouse gases from the Earth's atmosphere by one billion tons (900 million metric tons) per year.**

**2007 July 7 — Live Earth concerts by Madonna, the Black Eyed Peas, the Red Hot Chili Peppers, Metallica, Pharrell Williams and the Beastie Boys raise awareness of climate change. Concerts were held in London, Tokyo, Shanghai, Sydney, Johannesburg, Hamburg, Rio de Janeiro, and in the US, East Rutherford, New Jersey.**

**2010 Jan 14 – Sea Shepherd’s racing vessel, the Ady Gil, is rammed by Japanese whaling ship the Shonan Maru 2, during an action designed to protest and interfere with whaling.**

**2011 May — Germany decides to phase out nuclear power, while Switzerland said it would build no new nuclear reactors.**

**2013 July 6 — Over 50 dead in Lac-Megantic, Quebec, as an oil train races out of control and explodes in a small town. The train disaster raises questions about the safety of trains versus pipelines, and also about the safety and wisdom of a petroleum economy in the first place.**

This year that reporters, environmental groups and community organizations caught up to the fact that shipping oil by rail is 1) a growing practice that 2) poses a real threat to public safety and 3) is frightfully under-regulated. The sudden burst of attention was due, in large part, to spate of oil-by-rail accidents in late 2013 and 2014. In November 2013 a train carrying 2.7 million gallons of crude oil from the Bakken fields exploded near Aliceville, Alabama. A month later, a train collision in Casselton, North Dakota spilled 400,000 gallons of petroleum. And then on April 30, 2014, an oil train derailed and caught fire in Lynchburg, Virginia, forcing the evacuation of 300 people. People began waking up to the fact that, as Adam Federman wrote in our Summer issue, “Each day million of gallons of highly combustible oil are moving through major metropolitan areas.”

## **Keystone Pipeline**

**Swathes of blue-green algae in Lake Erie made big news in 2013.**

**The Enbridge Northern Gateway pipeline has been proposed for nearly 10 years, but is also essentially dead after Prime Minister Justin Trudeau came to power on a promise to implement a ban on oil tankers on the north coast of B.C. The B.C. Supreme Court also ruled early in 2015 that the province of B.C. had failed to adequately consult affected First Nations.**

**Alberta has committed to phasing out coal-fired electricity generation by 2030.**

**BC Hydro Tells Farmers Fighting Site C Dam to Vacate Property By Christmas**

**2016 BC Hydro Apologizes for Bennett Dam's 'Profound and Painful' Impact on First Nations at Gallery Opening**