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Discourse 300
Final Presentation
Humans and Nature

- 1. Introduction
  - a. A brief history
    - i. Rise of man
      - 1. From a tribal and survival standpoint, we relied on nature
      - 2. In harmony with nature
    - ii. Rise of machine
      - 1. Industrial revolution, man invents machine
      - 2. Need for fuel begins
    - iii. Rise of technology
      - 1. Electricity
      - 2. Science and medicine
      - 3. Communication
      - 4. Circuit boards and computing
      - 5. Automation

### b. Thesis Statement

- i. Human impact is the largest contributor to the destruction our own environment and in turn our planet, through the impact of...
  - 1. Consumer
  - 2. Suburban sprawl
  - 3. Plastic planet
  - 4. Possible solutions (closing)
- 2. Consumer impact
  - a. Introduction
    - i. If everyone on earth lived like the average American
      - 1. we would need 4.6 planets to support us.
      - 2. 2.4 for Japanese and
      - 3. about 2.3 for Europeans. And the number of people in the consumer class is growing

## b. Technology Waste

- i. Toxic materials from improperly disposed of e-waste can make its way into ground water supply if improperly disposed of
- ii. According to a United Nations Environment Program report titled "Waste Crimes," up to 50 million tons of electronic waste—mainly computers and smartphones—are expected to be dumped in 2017. That's up 20 percent from 2015, when about 41 million tons of electronic waste was discarded, mostly into third world countries serving as global landfills.
  - 1. PHOTO LEFT improperly disposed electronics near water supply
  - 2. RIGHT Ghana man burning circuit boards for recyclable copper
    - a. Ewaste not just a US problem

b. Out of sight, out of mind.

# c. Smartphone

- i. Smartphones are manufactured to have an average lifespan of only 3 years
- ii. The fastest growing consumer electronic devise, and potential environmental hazard
  - 1. Recycling programs in place, not properly monitored or utilized
  - 2. Screens, circuit boards, and batteries contaminate water supply
  - Increased data usage means more server space, device charging, and all around Energy needs

# 3. Suburban sprawl

- a. Appeal of more space and better schools
  - i. Gated communities, less crime, a better way of life
- b. Drive time commute (traffic)
  - i. More vehicles increased co2
  - ii. Harder on engines, decreasing life of automobile
  - iii. More fuel spent on going nowhere

#### c. Destruction of farmable land

- i. Destruction of forest and usable farmable
  - Many deeds bought from farmers struggling to keep up with low yields due to pollution caused by urbanization
- ii. Replaced with non-native sod and asphalt
  - 1. Soil erosion from pollution
  - 2. Chemical fertilizer runoff into water supply
  - 3. Clearing land for roads creates warming
    - a. Asphalt on a hot summer day vs a grassy field
- iii. Just two examples
  - 1. energy, human waste, and materials

### 4. Plastics

- Plastics in oceans
  - i. Plastics take up to 500 years to decompose
    - 1. Almost all plastic ever made still in existence
    - PHOTO man searching for recyclables in Sri Lanka
  - ii. "Over 300 million metric tons of plastics are produced in the world annually and about 50% of this volume is for disposable applications, products that are discarded within a year of their purchase"
- b. Marine life are being suffocated by our waste
  - i. PICTURES L (turtle adapting to life in a 6 pack ring) R (contents of birds stomach after it dies from ingesting plastic)
- c. Gyres in ocean float plastic that breaks down over time
  - i. Finding its way into our food chain
    - 1. Fish eating plastic

### Fracking

a. Fracking is extraction of oil and natural gas

- i. Pumping liquids into shale rock
- ii. Liquid pushes oil and gas from deep below earth
- Groundwater can mix with fracking liquids when not properly surveyed or monitored
- c. Byproduct is difficult to sore and contains radioactive isotopes
  - i. Generally stored by fracking sites
    - 1. Sites prone to earthquakes damaging rock that holds waste
  - ii. Increased concentrations of methane in local water supplies
- d. Flammable water
  - i. Fracking reaches water supply of fracking town
    - 1. Residence told not to be concerned

# 6. So What Now?

- a. We need to take responsibility, admit there is a problem, and work together to find solutions.
- b. Find one thing per week you can do to help reduce your impact on the problem.
- c. Ask yourself, do you really need it?

# 7. Conclusion