

The purpose of the lab is to determine the human impacts on the sustainability of...

[Environment](#), [Water](#)



Part I:

Part II:

- Purpose

- Introduction:

Human activity has greatly affected ground water levels over the last 200 years. Ground water has been an important aspect of human, plant and animal survival. However, human activity is quickly depleting ground water reserves through the digging wells. Water from wells is being used for industrialization, farming, settlement, and deforestation. This depletion of fresh water aquifers has led to the ocean water moving into the underground water reserves. This has greatly reduced the amount of fresh water available.

- Hypothesis/Predicted Outcome

Human activity has impacts on the sustainability of groundwater

- Methods

The M. U. S. E. link was used for this experiment. Instructions on how to use the interactive learning platform were followed and background information was collected. After collecting background information, the time progression of industrialization and human development was, used to analyze how human activity has affected ground water levels.

- Results/Outcome

Data collected indicated that forest cover and ground water levels from 1800s to 2000s have been reduced by 90% due to human activity. There has

been an increase in farming activity from 1800s to 1900s. The same number of farms has been present from 1900s to 2000s. Growth of cities, industrialization, and settlement has also increased from 1800s to 2000s.

- Discussion/Analysis

Based on the data collected it is clear that human activity has greatly affected ground water levels. According to the information collected, forest cover and ground water levels have decreased by 90%. This coupled with the increase in land for farming, industrial development and population has led to an increase in ocean water movement into ground water reserves.

References:

- Environmental and Water Resources Institute (U. S.), & Chang, N.-B. (2010). Effects of urbanization on groundwater: An engineering case-based approach for sustainable development. Reston, Va: American Society of Civil Engineers.
- Hobbes, M. (2010). Figuring Rural Development. New York: Sage
- Moran, E. F. (2010). Environmental social science: Human-environment interactions and sustainability. Malden, Mass: Wiley-Blackwell.
- Taniguchi, M. (2011). Groundwater and subsurface environments: Human impacts in Asian coastal cities. Tokyo: Springer.
- Webb, B., (2006). Sustainability of groundwater resources and its indicators. Wallingford: IAHS.