Week 3: Lake Michigan Natural Resources and Energy   
SCI 256: Environmental Science

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University of Phoenix

# Section I: Effects of Human Population

*NateB write 400 words here then repost*

# Section II: Management Practices for Sustainability and Conservation

Lake Michigan ecosystem has to be carefully managed. The sustainability efforts are led by individuals with LEED (leadership in energy and environmental design) certifications. This group of individuals are made up of research scientists, engineers, landscape architects, hydro geologists, and biologist. Sustainability refers to meeting the needs of the human population, while preserving the environment. There are two types of footprints: ecological and carbon. Ecological print refers to human consumption of food, and how much natural resources are used in the process. Carbon print refers to consumption based on how much water and food is used. You be able to preserve the ecosystems ability to regenerate and sustain itself (Lakeshore Environmental, Inc., 2015).

Lake Michigan provides drinking water along with agricultural irrigation. This lake has a vast supply of fish as well many recreational opportunities. The importance’s placed on wetlands have help focus efforts for conservation. Michigan wetlands help control flooding, water purification, support wildlife, and shoreline erosion. Hunting and fishing opportunities provide a billion dollar industry for Michigan (USA Today).

There not just a financial motive for protecting natural resources but ethical reasoning. Lake Michigan along with the rest of the Great Lakes are truly precious natural resources. Generations of families have enjoyed the great outdoors. These traditions are important and deserve to be protected.

Native fish communities changed dramatically in the Great Lakes (Hansen & Holey, 1999). This plays a very significant factor in these areas. The Great Lakes had an absence of top predators that led the way for alewife (alosa pseudoharengus) growth (Hansen & Holey, 1999). The alewife caused great harm fish species. There have been active measures to suppress the alewife populations. The Michigan Department of Natural Resources supplied eggs of Chinook and Coho salmon (Hansen & Holey, 1999).

Alewives were then reduced in number due to salmon feedings. The trout populations also grew with the salmon populations. Chinook salmon primarily feed on alewife.

The conservation and sustainability efforts continue not only in Lake Michigan but in the whole Great Lakes. There shall be many uphill battles to keep this ecosystem in balance. The greatest challenge to this whole process is man. As the human population grows it dependency on natural resources will follow. Man must protect and preserve all parts of nature.

# Section III: Risks and Benefits of Extracting Renewable and Non-Renewable Resources

Andrea write 400 words here and then repost back to the team forum

# Section IV: Asses Management Practices for Sustainabililty and Conservation

Jacqueline write 400 words here and then repost back to the team forum