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Museum and Aquarium

Part I: Overview of Workplace

- NMRM&A is an organization that strives to preserve our River’s history and create a more global, knowledgeable and engaged citizen.
- Their mission is to inspire stewardship by creating educational experiences where history and rivers come alive. And to be the world leader in climate change education.

Part II: Workplace Focus

A multitude of resources are available to educate visitors about climate change but to date, they lack a specific program which ties it all together. Two large maps occupy the Southern wall in the freshwater building. A map illustrating the vast area known as the Mississippi River watershed. The other, a satellite image of the Mississippi River from the headwaters to the mouth in the Gulf of Mexico. The educational unit involves 3, 45 minute experiences for visiting students to learn about climate change. First is a tasked free roam of the museum where students are challenged to answer questions on a handout related to the 3 local freshwater biomes in our tri-state area, (Iowa, Illinois, and Wisconsin). Second, a detailed informational experience will be lead by Jared McGovern as he explains how more frequent and heavier precipitation events due to climate change. Third experience will involve a staff narrated video presentation supported by data and images courtesy of NOAA.

Part III: Introduce the Problem

Creation of an educational unit for the NMRM&A. The unit educates visitors on climate change and the impact it is having on community resiliency. Students will learn about mitigation practices that slows down the runoff and greatly increases the infiltration of water through the restoration of prairies and wetlands.

Part IV: Background

Students need to have a working understanding of ecosystems, food webs, species interactions, and how matter and energy cycle through an ecosystem. Specific focus must be given to the water, carbon, nitrogen, and phosphorus cycles.

The workplace was made aware that preloading of basic vocabulary and “normal environmental processes” is necessary for visitors to understand the message being presented in the museum program.

Part V: Workplace Solution

Creation of an educational unit to make public aware of the impacts climate change has on community resiliency.

Unit involves 3 station experiences on a 45 minute rotation to include the use of Enviroscope materials, Climate Change 101 presented in one of the theaters, and a guided free roam of the museum.

Part VI: Educational Pathways

The role of curator for living collections requires a Bachelors of Science with coursework in biology, chemistry, physics, environmental science, and geology.