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Redesigned Storm Water Management System for the Portage Lakefront

Nicholas Adams
Valparaiso University

Agustin Perez Maldonado
Valparaiso University

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Authors: **Nicholas Adams & Agustin Perez Maldonado**

Department: Chemistry

Faculty Sponsor: Thomas Goyne

Title: *Redesigned Storm Water Management System for the Portage Lakefront*

Abstract:

The work described here was carried out at the Indiana Dunes National Lakeshore, located near Gary, Indiana. The goal of the reported project was to fix an incorrectly designed storm water management system located at the Portage lakefront. Because the original design could not handle peak water flows, there has been erosion of the sand dunes. The erosion of the sand dunes has led to the collapsing of stairs, and the exposure of water mains. To fix these problems, a new design was made that incorporated additional water inlets, as well as a pipeline to take water to a different location. After completing these initial ideas and calculations, the project is being sent to a contracting company for construction.