



# OGDEN DUNES SEAWALL REHABILITATION

The Town of Ogden Dunes is located in the littoral shadow of the Burns Harbor Port complex. For years it has suffered shoreline retreat due to blockage of the natural sand transport along its lakefront. Although the sand beach has sometimes been renourished, between the cumulated sand deficit and the recent ultra-high lake water levels, the fronting seawall bulkhead protecting the community is now exposed to the direct brunt of the wave action and is failing in some areas. This is leading to loss of the backing dune bluff face, erosion of property and creating a life safety concern.

Edgewater Resources is tasked with developing a rehabilitation design of the seawall to both stabilize the existing sheetpile bulkhead and increase its protective capabilities. The design involved building an armored berm in front of the bulkhead to both act as a buttress against wall failure and absorb some of the wave energy. The buttressing revetment crest is raised to accommodate the overtopping associated with the higher water levels. To address any residual wave overtopping, a French drain system is implemented to capture the overwash and prevent further penetration back to the dune face. As a final defense, the foot of the backing dune is also being armored to prevent any scour.

Edgewater is developing the seawall rehabilitation design in three phases: emergency repair, seawall raising, and seawall downdrift extension. Edgewater is responsible for creating a Basis of Design, developing the geometries of the solution, addressing the permitting of the design solution, creating final design documents, and overseeing construction. Edgewater is also tasked with providing expert services related to any litigation that may ensue from the need to perform this mitigation. Edgewater will serve as the Engineer-of-Record and seal the documents for construction

**SERVICES:** SHORELINE PROTECTION, SHORELINE STABILIZATION, DEVELOPMENT, PLANNING, COASTAL ENGINEERING, CONSTRUCTION OVERSIGHT



**CLIENT**  
TOWN OF OGDEN DUNES

**LOCATION**  
OGDEN DUNES, INDIANA

