

DredgeSOX also aids in the removal of contaminants and nutrients from surface water runoff. By providing a permeable, vegetated ground cover on the mitigated slope and adjacent top slope areas, DredgeSOX reduces flow velocity, allowing sediments to filter out flowing water. Additionally, water percolates into the vegetation root zone and underlying soil, where nutrients and contaminants are removed via adsorption to soil particles and plant uptake.

EXHIBIT 1: Typical DredgeSOX Installation
(Source: SOX Erosion Solutions)



The DredgeSOX Erosion Control product (DredgeSOX) is a geosynthetic that is used to stabilize shorelines, hillsides and other earthen environments and prevent soil bank erosion. The DredgeSOX product consists of a double layer of knitted high-density polyethylene (HDPE) mesh. When installed, the polyethylene mesh is filled with approved or appropriate organic materials, often obtained from dredging shallow sediment, blown-in compost mix, or other situationally appropriate fill material.

SOX EROSION

SUMMARY OF ENVIRONMENTAL BENEFITS ACROSS SEVERAL DIMENSIONS

Across the assessed environmental dimensions, the DredgeSOX product presents a superior alternative to the use of a “hard-edge” alternative, such as the considered steel sheet pile bulkhead and concrete deck alternative, while both offer a range of advantages over a “do nothing” alternative (Table 1). The following table provides a summary of the performance of the considered alternative across the assessed dimensions. Of course, the do-nothing alternative could likely result in project failure (see below).

EXHIBIT 2: Summary of Carbon Emissions per Linear Foot of “Hard Edge” vs. DredgeSox and Turf

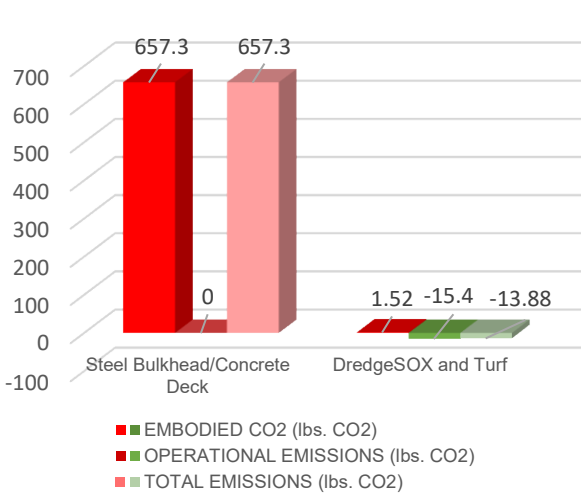


EXHIBIT 3: Site Prior to Erosion Control (Source: SOX Erosion Solutions)



TABLE 1: Summary of Alternatives Analysis

DIMENSION	ALTERNATIVE 1: Do Nothing	ALTERNATIVE 2: Bulkhead/ Deck	ALTERNATIVE 3: DredgeSOX and Turf
Reduction of Runoff Velocity/Erosion	—	—	+
Reduction of Contaminant Loading	—	—	+
Embodied Carbon/Sequestration	—	—	+



<http://www.automotivesectors.com/auto-parts/what-are-exhaust-smoke-stacks.html>

For concrete, the manufacture of Portland cement is a major contributor of carbon emissions. Portland cement manufacturing is responsible for 8 to 11 percent of global CO₂ emissions; if the concrete industry were a country, the concrete industry would be the third-highest emitter of CO₂ after China and the United States.