

## **Cleaning Up the Bay – The Rain Garden Way**

Aug. 4, 2016

In this short video, we learn how the Village of Suttons Bay has embraced green infrastructure to remove pollution from the storm water runoff – before it enters the Grand Traverse Bay. Given the increasing frequency of severe rain storms, “on-demand” green infrastructure such as wetlands and rain gardens may be one our best answers to climate change.

The Village of Suttons Bay joined with the Watershed Center Grand Traverse Bay to find better way to manage and clean all that storm water. With a grant from the Great Lakes Restoration Initiative operated by the U.S. EPA, they developed a plan to install new green infrastructure, including a large number of rain gardens throughout the village. This was new territory for the Village and a substantial commitment to a new way of doing things.

### **Topics Covered**

Water Quality; Climate Change; Wetlands; Green Infrastructure; Pollution

### **Next Generation Science Standards**

- MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.
- HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth’s surface can create feedbacks that cause changes to other Earth systems.
- HS-ESS2-5. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
- HS-ETS1-1. Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
- HS-ETS1-3. Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.