CASE STUDY | CS-10

East Preston Recreation Centre Bioswales

NOVA SCOTIA FEDERATION OF MUNICIPALITIES

Context

The East Preston Recreation Centre is a 14,000-square-foot community hub and a designated emergency comfort centre during extreme weather events. Serving the historic African Nova Scotian community of East Preston, the facility provides essential spaces for fitness, community meetings, youth programs, and seniors' groups.

The Challenge

At the East Preston Recreation Centre, intense rain runoff from the roof and paved parking lot regularly overwhelmed the local drainage system. During severe storms, such as the historic July 2023 floods, flash pooling turned the parking lot into an unmanageable 'pond', cutting off safe access to the building's entrances. This fast-moving runoff also picked up sediment and pollutants along the way, carrying them into nearby lakes and streams. Relying on overburdened drainage systems increased the risk of accessing the community centre during storm events.

The Response

In the fall of 2024, the Halifax Regional Municipality (HRM) installed two bioswales at the facility. Bioswales are shallow, plant-filled channels designed to capture and manage runoff using nature-based engineering.

Instead of forcing water away, the bioswales invite it in. As stormwater flows off the pavement, specialized soil mixtures and native plants work together to trap sediment, filter out pollutants, and slow the water down so it can safely soak back into the ground. This decentralized approach was chosen to build localized flood and climate resilience at a prominent community gathering space.

Key Insights

Working with Nature

Bioswales represent actionable, localized interventions that work with natural systems to increase flood and climate resilience.

Stacking Community Benefits

Beyond just managing floods, these green spaces act as a natural filtration system to protect local water bodies while creating habitats that boost local biodiversity for birds and insects.

Equitable Climate Action

Building this project at a vital African Nova Scotian community hub successfully blends climate adaptation with social equity. It demonstrates how municipal funds can be actively deployed to build resilience and improve well-being in communities that were historically underserved by municipalities.

LEARN MORE: View the full Guidance Document at FloodAdaptNS.ca

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