Delaware Inland Bays and Delaware Bay Coast

Coastal Storm Risk Management Feasibility Study

Also known as: The Back Bay Study

A partnership between the Delaware Department of Natural Resources and Environmental Control (DNREC) and the U.S. Army Corps of Engineers (USACE)

Source: DNREC Official Website | dnrec.delaware.gov/watershed-stewardship/beaches/back-bay-study/

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Current Status — Study Resumed May 2024

ACTIVE — Study resumed as of May 2024

The Delaware Inland Bays and Delaware Bay Coast Coastal Storm Risk Management Feasibility Study has resumed following the procurement of additional federal and non-federal funding. As of May 2024, both USACE and DNREC identified additional funding to restart the feasibility study.

The goal of the restart is to revisit the study scope and perform detailed cost estimating. The new scope will be the basis for formal requests for additional funding in the future. The focus areas will be Delaware's Inland Bays.

Study Timeline

Original Study

- Study initiated as a continuation of the North Atlantic Coast Comprehensive Study (NACCS)
- Initial budget: approximately $2 million
- Work completed: screenings of flood vulnerability, critical infrastructure assessments, evaluations of environmental justice and equity

Study Paused — July 2023

During scoping in late Spring 2023, USACE's cost estimate increased significantly beyond the initial $2 million budget — primarily due to complexities in analyzing structural measures (physical barriers designed to protect specific geographic areas from flooding). USACE and DNREC paused the study in July 2023 to re-evaluate the best path forward.

Study Resumed — May 2024

Both study partners identified additional funding to resume the feasibility study. The study restarted in May 2024 with cost-shared funding from both USACE and DNREC. The preliminary work completed before the pause may be applied to other federal and state authorities and programs.

What the Study Will Do

The study will explore potential storm risk management problems and flood risk reduction solutions for Delaware's Inland Bays and Delaware Bay Coast. It will recommend solutions that increase community resilience to coastal storms.

The study includes three overarching efforts:

- Define and assess the study area's coastal flood problems
- Identify and evaluate possible flood risk management solutions — including structural measures such as physical barriers
- Compare solutions and recommend those that are most effective and appropriate

Why This Matters for Mallard Lakes

The Delaware Inland Bays and Delaware Bay Coast study area encompasses much of Sussex County including the inland bay communities where Mallard Lakes is located. This study is directly relevant to Mallard Lakes' long-term flood mitigation planning for several reasons:

- Mallard Lakes sits on the tidal lake adjacent to Little Assawoman Bay — within the study's geographic scope
- The study may identify and recommend funded flood risk management solutions applicable to Mallard Lakes and similar inland bay communities
- Solutions identified through this study may come with more favorable non-federal cost-share requirements than other programs — potentially as low as 10% non-federal
- The preliminary vulnerability and infrastructure assessments already completed may include data relevant to Mallard Lakes
- USACE and DNREC have indicated they may continue to pursue joint funding opportunities and work under other authorities and programs to increase flooding protection for residents and businesses — which could benefit Mallard Lakes

Context — Why Coastal Storms Are Increasing

Delaware's Inland Bays and Delaware Bay Coast have endured many coastal storms. Storms have brought flooding, power outages, and safety risks with long-lasting impacts including infrastructure damage, marsh and sand dune degradation, habitat impacts, and road closures.

Climate change is increasing the frequency of destructive coastal storms and causing sea level rise — both of which will further increase flood risk for coastal Delaware communities including those on the inland bays.

Relationship to USACE CAP 205

The Inland Bays Back Bay Study and the USACE Continuing Authority Program (CAP) 205 are separate but complementary programs. Key differences:

- CAP 205: Mallard Lakes has already been determined eligible through a 2016 Federal Interest Determination. It requires a non-federal government sponsor (such as Sussex County) and can be pursued independently of the Back Bay Study. Cost share: 50% federal / 50% non-federal for feasibility study; 65% federal / 35% non-federal for construction.
- Back Bay Study: A broader regional study covering all inland bay communities. May ultimately result in funded construction projects with potentially more favorable cost-share requirements. Expected completion several years from now. Does not require separate community-level eligibility determination.

Both programs are available to Mallard Lakes and are not mutually exclusive. Pursuing CAP 205 now does not preclude participation in Back Bay Study outcomes, and vice versa.

Source Information

This reference document summarizes information published on the official DNREC website. All content is drawn from publicly available government sources.

Official DNREC page: dnrec.delaware.gov/watershed-stewardship/beaches/back-bay-study/

USACE North Atlantic Division: nad.usace.army.mil

North Atlantic Coast Comprehensive Study: nad.usace.army.mil/CompStudy/

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