

Carolina Bays: Unique Habitats, Big Benefits



Tunstall Bay

© Jeffrey Marcus

Carolina Bays are natural, shallow wetlands with sandy rims found across the **Coastal Plain**! Some look like lakes, while others look like pine forests. These unique habitats play a key role in supporting a variety of rare species while also protecting our communities!

WHAT DO THEY DO?



STORE WATER

Hold rainfall and stormwater, helping reduce flooding after heavy rain.



FILTER WATER

Trap sediment and pollutants before they reach rivers and streams.



SUPPORT WILDLIFE

Provide habitat for rare plants, amphibians, birds, bats, and more.



PROVIDE RECREATION

Offer opportunities for hunting, birdwatching, paddling, and nature photography.

Carolina Bays: Protection Against FLOODING

During heavy rain and hurricanes...

Carolina Bays act as massive, natural stormwater reservoirs and flood buffers.

Instead of all rainwater rushing immediately into streams, ditches, roads, and neighborhoods, it's held in these elliptical depressions and released more slowly.

WITHOUT BAYS



Heavy Rain

↓
Little Water Storage

↓
Rapid Runoff

↓
SEVERE FLOODING

WITH BAYS



Heavy Rain

↓
Increased Water Storage

↓
Slow Runoff

↓
LESS FLOODING

WHY THIS MATTERS IN NORTH CAROLINA

Weather events like Hurricane Floyd (1999), Hurricane Matthew (2016), and Hurricane Florence (2018) show how vulnerable eastern North Carolina can be to flooding.

Carolina Bays and their surrounding forests work together to protect communities along the Coastal Plain. Bays store stormwater like huge sponges, while nearby forests help buffer strong winds and hold soil in place, reducing erosion during storms.

NATURAL INFRASTRUCTURE

Carolina Bays reduce the need for, supplement, or lower costs associated with some forms of engineered infrastructure.



By acting as natural stormwater ponds, bays reduce flood damage and the need for costly repairs, while providing an alternative to expensive flood-control structures such as retention ponds and culverts.

The Nature
Conservancy



North Carolina

Visit our Website for More Info:

carolinabayconservation.org