

RESTORING BISCAYNE BAY

and the economic value of rehydrating coastal wetlands

AS A NATURAL CAPITAL ASSET, **BISCAYNE BAY'S COASTAL WETLANDS PROVIDE ESSENTIAL ECOSYSTEM SERVICES** THAT CAN BE VALUED.

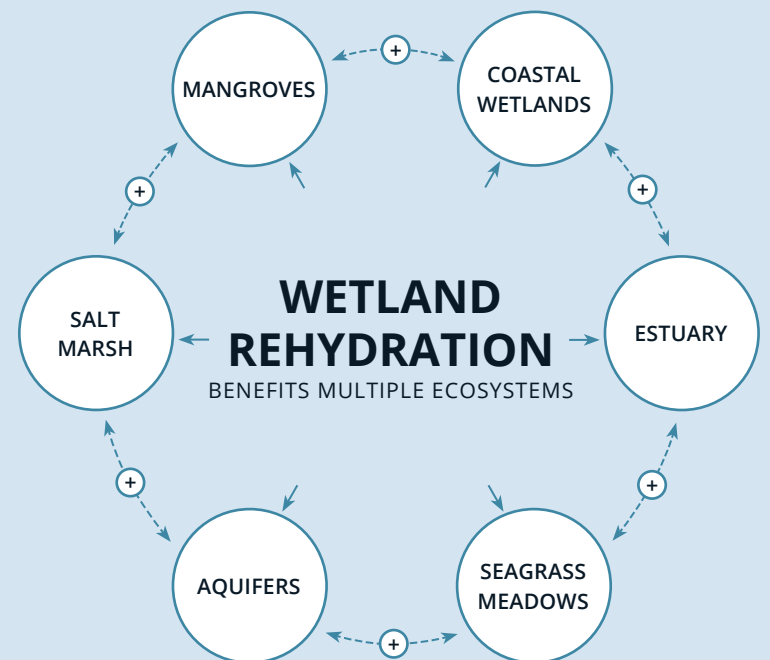
FOR ALL ECOSYSTEM SERVICES VALUED AND MORE ON THE ECONOMIC VALUE OF BISCAYNE BAY, GO TO EARTHECONOMICS.ORG/BISCAYNEBAY

HEALTHY ECOSYSTEMS RESILIENT COMMUNITIES

In addition to aquifer protection and strengthening the overall flow of wetland ecosystem services to communities, rehydration helps surrounding marine ecosystems function by:

- Lowering salinity levels
- Reducing nutrients that feed algal blooms
- Improving fish and wildlife habitat
- Managing sediment loads
- Increasing carbon storage capacity

Enhancing Biscayne Bay's health leads to improved resilience for the region. Building resilience includes, but isn't limited to, increasing protection from storms, ensuring reliable drinking water, enabling continued recreational and commercial fishing, and buffering sea level rise.



BISCAYNE BAY'S NATURAL CAPITAL

As natural capital, the ecosystems of Biscayne Bay form the foundation of our lives and economies. Ecosystem functions produce goods and services we depend on everyday - including clean water and air, thriving fisheries for food and recreation, protection from storms, and beautiful views. Placing economic value on the flow of ecosystem goods and services is one way to highlight the importance of natural capital to our communities.



VALUING REHYDRATED COASTAL WETLANDS

Examples of annual ecosystem service benefits produced by project area wetlands.



WATER QUALITY

Avoids \$9M per year in water treatment costs.



CARBON SEQUESTRATION

Prevents \$140,000 per year in emissions impacts to surrounding communities.



WILDLIFE HABITAT

Reduces the need to spend \$9.5M per year in restoration costs.



FLOOD-RISK REDUCTION

Complements built infrastructure that may otherwise cost an additional \$22M per year.

HEALTHY REHYDRATED WETLANDS ARE WORTH MORE THAN \$3.3 BILLION IN ECOSYSTEM GOODS AND SERVICES

Cumulative value over 50 yrs. at a 2.75% discount rate

LIVABLE COMMUNITIES THRIVING ECOSYSTEMS

Historically, rainfall and overland freshwater flows kept the waters of Biscayne Bay at low salinity levels, which enabled healthy ecosystems to thrive. Over the last 50-100 years, the Bay has become increasingly salty and has suffered lost productivity. Rehydrating Biscayne Bay's wetlands is a critical link in restoring its ecosystem health and function.

OPPORTUNITY FOR RESILIENCE

Resilience strengthens a community's ability to adapt and endure when faced with challenges of multiple scales - **threats to drinking water, major storms, aging infrastructure, coastal erosion, and rising oceans.**

Wetland rehydration is an important step toward coastal resilience. Increasing freshwater flows will provide critical aquifer protection. Additional restoration benefits extend far beyond project area wetlands, enhancing Biscayne Bay's broader ecosystems and the communities they support.

The value of nature means many things to many people, but we know when it comes to decision making that an economic approach is key.

Rehydrated coastal wetlands would provide **\$120M** in ecosystem services annually, amounting to **\$3.3B** when treated as an asset.

AS A WHOLE, A HEALTHY BISCAYNE BAY IS WORTH MORE THAN \$60 BILLION IN ECOSYSTEM GOODS AND SERVICES

Cumulative value over 50 yrs. at a 2.75% discount rate



ECOSYSTEMS OF BISCAYNE BAY

We need your help to safeguard South Florida's waters for our health, our livelihoods, and our clean water economy. Together we can protect our waters and coastal communities. A healthy Bay is worth the investment.

