

Sea Level Rise and Delaware's Natural Resources

Wetlands

- Wetlands benefit communities by providing:
 - Storage for flood waters
 - Storm surge protection
 - Critical habitat for plants and wildlife
 - Reducing water pollution
- Up to 99% Delaware of tidal wetlands may be affected sea level rise.
- A loss of wetlands will result in greater impacts from coastal storms and reduced water quality for recreation and commercial activities.



Tidal gut near St. Jones River

Delaware Coastal Programs



Snow geese at Bombay Hook National Wildlife Refuge

K.C./USFWS

Protected Lands

- Protected lands in Delaware provide:
 - Recreational opportunities (hunting, fishing, bird watching, and more)
 - Critical habitat for plants and wildlife
- Forty-two percent of the state's 168,000 acres of protected lands are within areas that could be inundated by 3.3 feet (1.0 meter) of sea level rise.
- A loss of protected lands such as state and federal wildlife areas, parks, refuges and forests could negatively affect the quality of life enjoyed by many residents of the state.

Agriculture

- Agriculture in Delaware is :
 - A major component of the state's economy,
 - Part of the social and cultural heritage of the state
- Two percent of the almost 500,000 acres of actively farmed land in the state is within an area that could be inundated by 3.3 feet (1.0 meter) of sea level rise.
- Additional negative impacts include the contamination of shallow wells by saltwater leading to decreased crop yield due and domestic livestock health issues.



Soybeans ready for harvest

USDA



Rehoboth Beach

Tony Pratt

Beaches

- Delaware beaches provide:
 - Recreational opportunities (swimming, fishing, sunbathing, and more)
 - Tourism dollars
 - Storm surge protection
 - Critical habitat for plants and wildlife
- Currently, beach nourishment projects offer short term protection from erosion and rising waters.
- Increased sea levels may make it more difficult and costly to maintain beaches.

Biodiversity

- Biodiversity is the variety and abundance of different types of plants or animals which inhabit an area.
- Unique environments, such as freshwater tidal wetlands, are becoming increasingly rare not only in Delaware but in the Mid-Atlantic.
- As the size or function of different habitat types affect by SLR, the biodiversity they support may be affected by decreasing the number of species present or the overall number of individuals an area can support.



Horseshoe Crabs spawn on a Delaware Bay Beach

David Schrichte

Additional Resources Analyzed

Highly Productive Soils
Agricultural Land Preservation Districts
Agricultural Conservation Easements
Protected Lands

Non-Tidal Wetlands
Impoundments
Habitats of Conservation Concern
Shellfish Areas

Undeveloped Groundwater Recharge Areas
Tidal Wetlands
Upland Forest
Natural Heritage Program Native Vegetation