NOAA’s National Estuarine Research Reserve System

Our coastal communities are home to over 126 million people, support 58.8 million jobs, and contribute $8.3 trillion to the U.S. economy, accounting for 46 percent of the nation’s economic output. Recognizing the importance of our coasts, Congress created the National Estuarine Research Reserve System to protect and enhance this important resource and coastal communities through research, stewardship, education, and training. This program consists of voluntary partnerships between NOAA and coastal states and territories. The 29 research reserves cover over 1.3 million acres.

In fiscal year 2017, NOAA invested more than $23 million, allocated through the Coastal Zone Management Act, to implement the program. Federal funding was matched by more than $6.6 million from the state and university reserve partners.

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National Estuarine Research Reserve System
The Year in Review

When Disasters Strike, Reserves Respond
When a devastating event occurs, special resources become available. But what happens in the months and years afterward? The research reserves are there. Each reserve is an integral part of its community, working hand-in-hand with local leaders and residents to see solutions through and ensure a resilient future. Examples are provided below.

New Jersey, Delaware, Mississippi, Texas, and Puerto Rico STRONG
Research reserves provide the science, methodology, and know-how needed to make communities stronger before and after a storm.

- New Jersey’s research reserve helped create a customized mitigation plan that is making the state’s coast safer, and as a result, helped homeowners receive a break on FEMA flood insurance rates.
- In Delaware, the reserve-sponsored Resilient Community Partnership is improving community safety through focused mitigation plans and a variety of training and public outreach efforts.
- Mississippi’s Grand Bay Research Reserve’s hurricane-resistant construction and disaster response plan proved to be a model approach. The wetland preservation effort lessened storm surge impacts, and the pre-storm planning, which included moving boats and making them available for on-water emergencies, saved lives.
- There’s also the human connection to the community. Hurricane related activities included the Texas reserve protecting threatened animals, and the Puerto Rico facility becoming a shelter for displaced residents.

Providing Community Services
Disasters aren’t limited to storms, and neither are the contributions of the research reserves.

- In Alaska, the Kachemak Bay Reserve’s potentially lifesaving shellfish toxin alerts are provided to state officials, area commercial oyster farms, and thousands of shellfish harvesters.
- In Rhode Island, the Narragansett Bay Reserve’s water quality data are used by a state rapid response team for environmental incidents, such as downpours that overtop a water treatment plant or a sinking vessel that leaks oil.
- Reserve scientists developed the first methodology used to document climate change impacts on marshlands. This “do it yourself” resilience calculator goes a long way toward standardizing the approach used throughout the coastal zone.

2017 Round Up
- Visitors: 519,189 people
- Education: 2,500 teachers trained and 87,800+ students
- Training: 276 programs reaching 2,452 communities
- Published Science: Over 200 peer-reviewed publications since 2011
- Environmental Data: 4,500 monitoring data downloads

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