





US Army Corps
of Engineers®
Jacksonville District

2010 and beyond

FEDERAL SHORE PROTECTION FUNDING and FEDERALLY AUTHORIZED BEACH PROJECTS

Florida Shore and Beach Preservation Association • Amelia Island, Florida • September 18, 2009



Colonel Al Pantano



2010 and beyond

FEDERAL SHORE PROTECTION FUNDING and
FEDERALLY AUTHORIZED BEACH PROJECTS
2010 and Beyond

Agenda:

1. Program and Projects
2. Funding
3. Design
4. Policy
5. Communication



Environmental Operating Principles in a Nutshell....

- Strive for environmental sustainability
- Recognize the interdependence of life and the physical environment
- Seek balance among human development activities and natural systems
- Continue to accept corporate responsibility and accountability under the law
- Assess and mitigate for cumulative impacts to the environment
- Build and share knowledge
- Listen and learn from stakeholders





programs and projects

2010 AND BEYOND: FEDERALLY AUTHORIZED BEACH PROJECTS IN FLORIDA

Florida Shore Protection Program



2010 and beyond

2009

Construction Completed

Nassau County
St. Lucie County



Studies Ongoing

Brevard County
Broward County
Flagler County
Palm Beach County
St. Johns County
St. Lucie County



2010 and beyond

2010/2011 Construction Anticipated Pending Funding Availability

Brevard County South Reach

Dade County, Contract E and G

Duval County

Pinellas County Long Key and Treasure Island

Pinellas County, Sand Key

St. Johns County





American Shore and Beach Preservation Association Best Restored Beaches 2009 Award

2010 and beyond

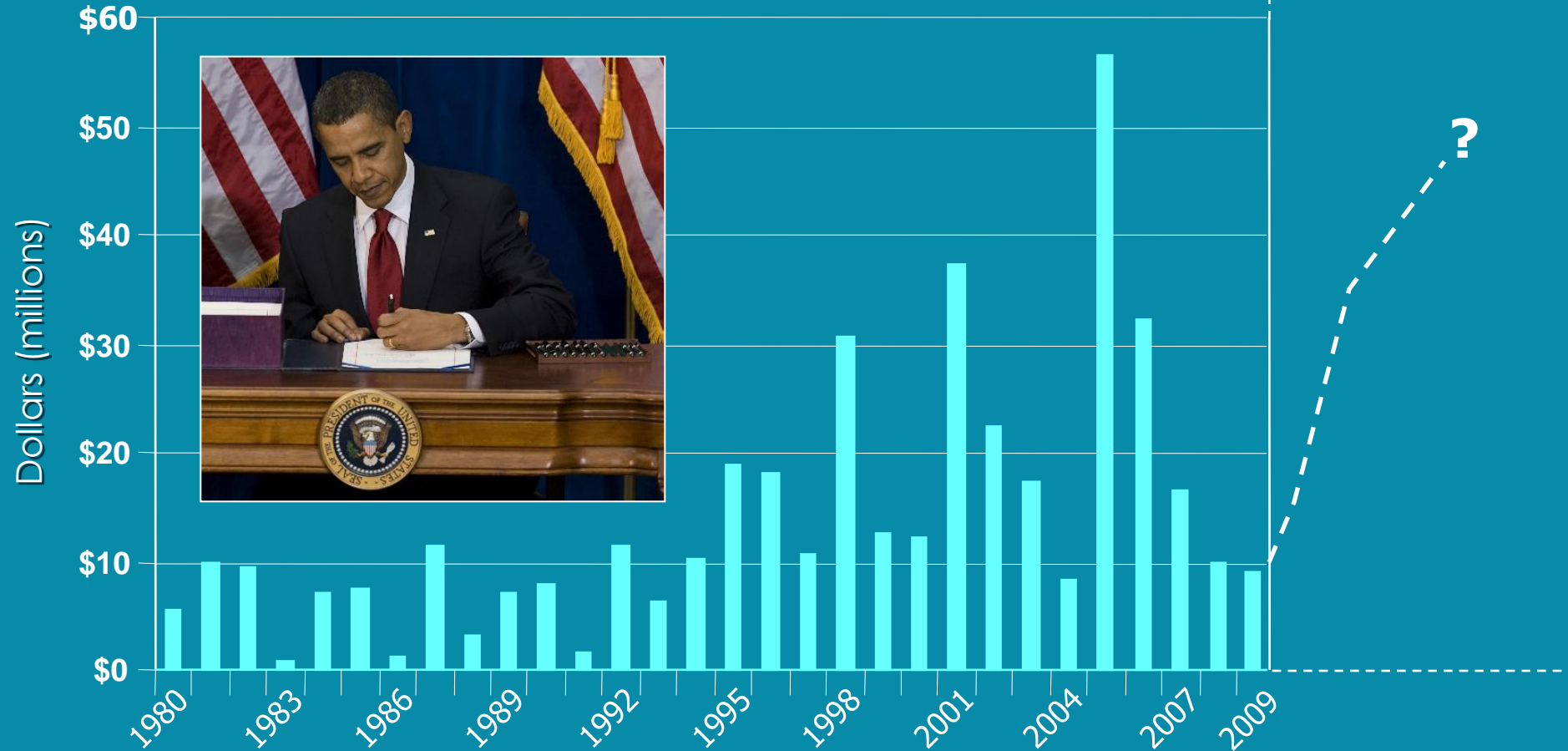


funding

2010 AND BEYOND: FEDERALLY AUTHORIZED BEACH PROJECTS IN FLORIDA

Allocated Funding for Florida Beach Projects FY 1980 – 2009

Needs
Projected
FY 2010-2015



Examples of Funding Variables: Completed Studies - Renourishment Cycles
Storms - Congressional Ads - President's Budget

2010 and beyond



design

2010 AND BEYOND: FEDERALLY AUTHORIZED BEACH PROJECTS IN FLORIDA

Research

Engineer Research and Development Center

NOTES:

- FLOODGATE MATERIAL TO BE ALUMINUM AS FOLLOWS
 - GATE 4" X 5" X 1/8" EXTRUSIONS - GRADE 6061-T5 MIN F_y = 35 KSI
 - GATE 2" X 2" X 1/4" TUBULAR - GRADE 6063 MIN F_y = 40 KSI
 - PAN 1/4" SMOOTH PLATE - GRADE 5052 MIN F_y = 35 KSI
 - FLAT BARS, STRUCTURAL ANGLES, HINGES - GRADE 6061-T5 MIN F_y = 40 KSI
- HINGE BOLTS TO BE STAINLESS STEEL - GRADE 304, MIN F_y = 90 KSI
- ALUMINUM TO BE WELDED WITH ALUMINUM WIRE - ER-4043 AWS AS 13.3/32
- CONCRETE TO BE 4000 PSI MINIMUM 28 DAY STRENGTH.
- REINFORCING BARS TO BE ASTM - A615 MIN F_y = 60 KSI
- ALL WELDS REQUIRED FOR STRUCTURAL STRENGTH OF THE GATE OR PAN ARE CALLED OUT ON THESE DRAWINGS. ALL OTHER WELDING, NOT SHOWN OR CALLED OUT ON THESE DRAWINGS, ARE ESSENTIALLY NON STRUCTURAL. WELDS OR WELDS WITH NEGLIGIBLE LOADS AND RESULTING STRESSES. EXAMPLES OF SUCH WELDS ARE AT SEAMS, SIDES, STIFFENERS AND TROUGH OF THE PAN, AND TRIM ANGLES OF THE GATE. THESE WELDS ARE TO BE SELECTED BY THE FABRICATOR, TAKING INTO CONSIDERATION ASSEMBLY, TRANSPORT AND CONTINUITY REQUIREMENTS, AND MUST BE APPROVED BY FLOODBREAK.

NOTE: ALUMN. WELDER WALL EACH END NOT SHOWN FOR CLARITY PURPOSES.

FloodBreak
Revolutionary Flood Control

SCALE: 1/4" = 1'-0"	FLOODBREAK SERIAL #
DRAWN BY: CLKD	GENERAL ISOMETRIC LAYOUT
CHECKED BY: JK-OSI	DATE:
	SHEET: 1 OF 7

NOTE: ISOMETRIC VIEW MAY NOT BE PHYSICAL OF ACTUAL GATE



New materials to stabilize rock structures



Retractable Seawalls

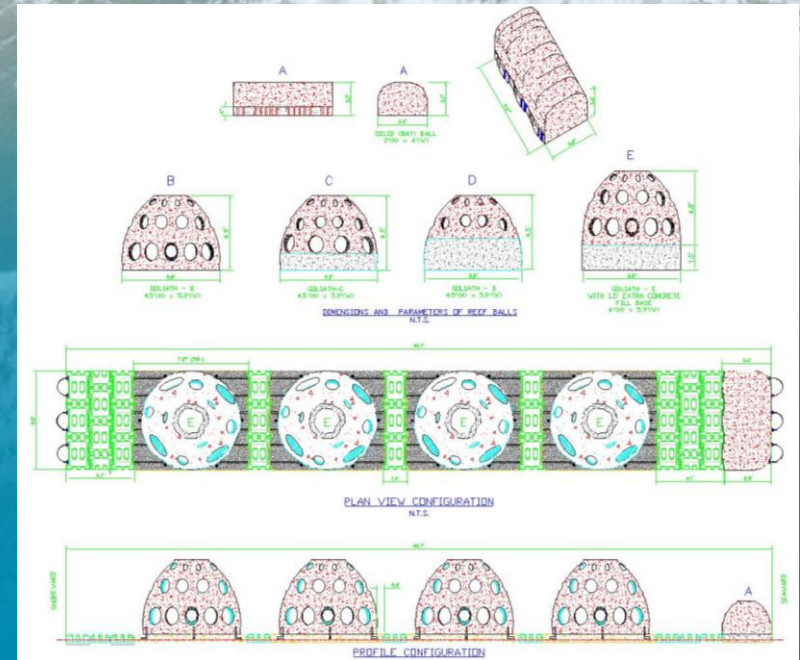


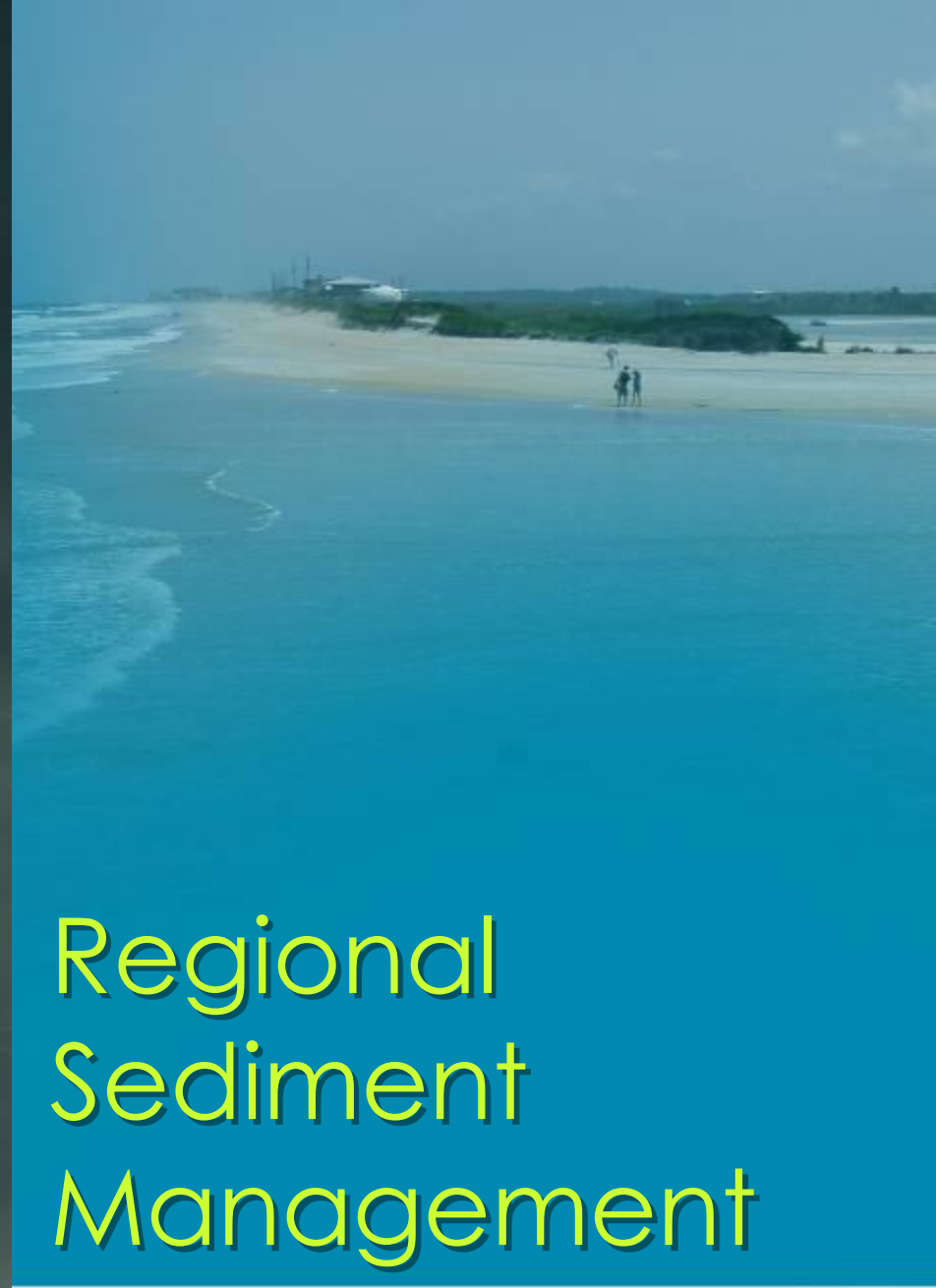
Physical Models: simulating coastal processes



Inner core sandbag testing

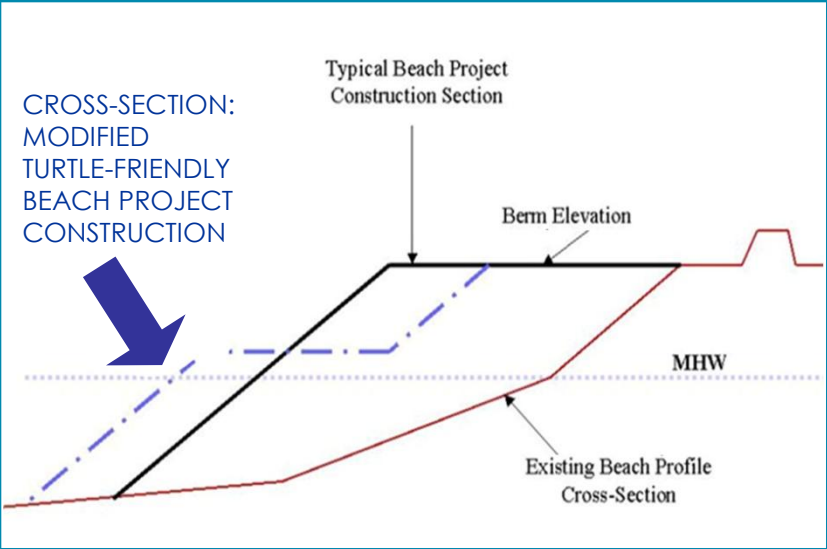
Innovative Technology





Regional Sediment Management

2010 and beyond



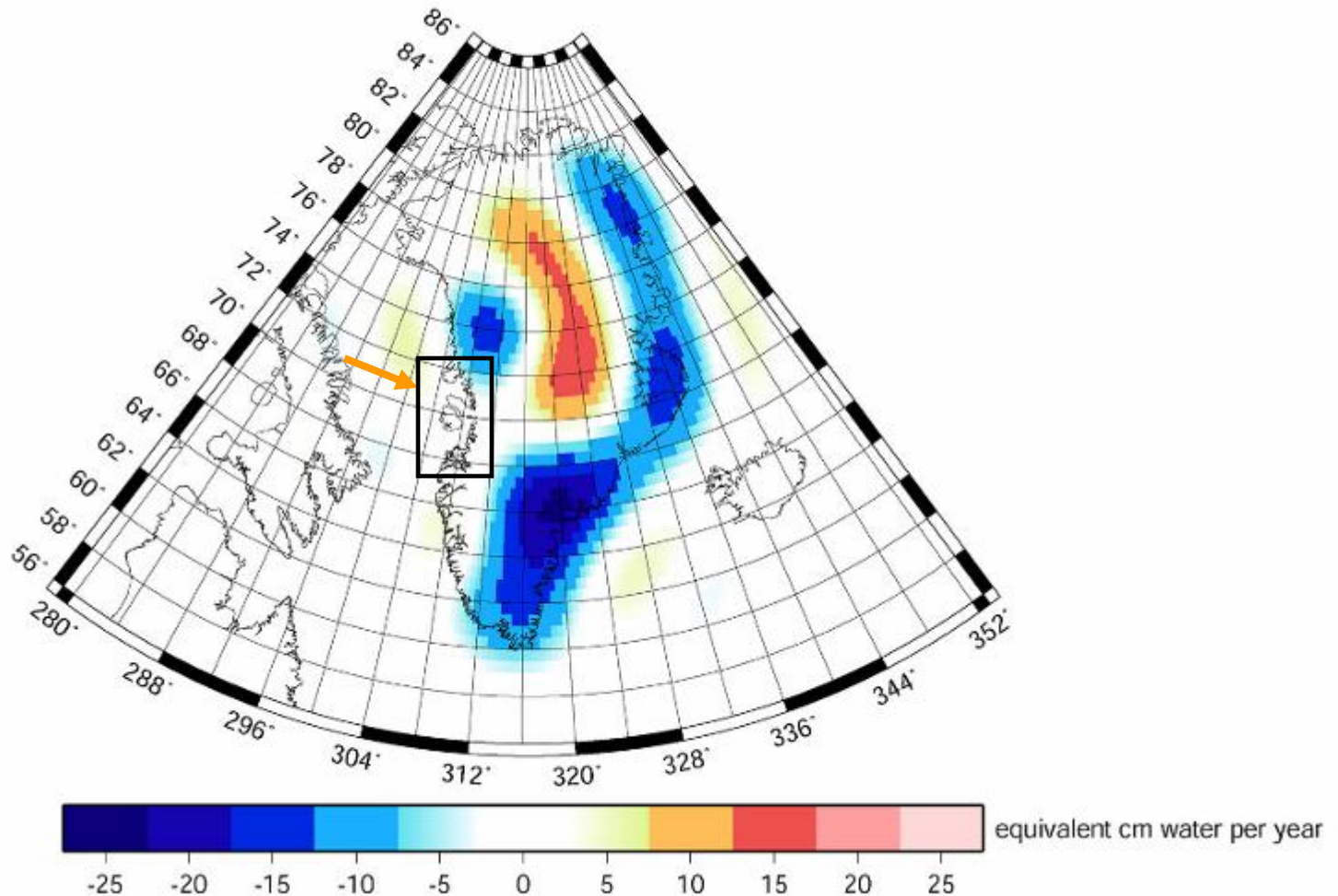


policy

2010 AND BEYOND: FEDERALLY AUTHORIZED BEACH PROJECTS IN FLORIDA

Policy: Climate Change

Greenland Mass Trend from GRACE



2010 and beyond



Policy Development

2010 and beyond



A photograph of a sea turtle on a sandy beach. The turtle is positioned in the upper right quadrant, facing away from the camera towards the ocean. A series of tracks leads from the turtle towards the bottom left of the frame. The ocean waves are visible at the top of the image, with white foam washing onto the shore.

Benefits:

Storm Damage Reduction
and So Much More...



communication

2010 AND BEYOND: FEDERALLY AUTHORIZED BEACH PROJECTS IN FLORIDA

In sum...



2010 and beyond

Thank you

Many thanks to Natasha Jensen
for the use of her sea turtle images

2010 and beyond