Coastal Green Infrastructure for Resilient Communities

Emma Melvin Green Infrastructure Coordinator Sustainable Jersey Sustainability Institute at TCNJ



Participating Communities



- Program start: February 2009
- 428 (76%) NJ municipalities participating
- 87% of NJ's population lives in these communities
- 176 municipalities certified:
 - 148 towns at bronze level
 - 28 towns at silver level



Creating a vibrant resilient coastal community



Coastal Green Infrastructure

Eco-based strategies protecting communities from coastal flooding



New way of thinking

Grey meets green

Coastal Grey Infrastructure	SeawallsBulkheads	Breakwaters Groins and jetties
Coastal Green Infrastructure	 Dunes & beaches Living shorelines Restored maritime forest Channel shallowing 	onstructed or restored wetlands Constructed oyster reefs Green stormwater infrastructure
Greening Grey Infrastructure	 Ecologically enhanced bulkheads Ecologically enhanced breakwater islands 	



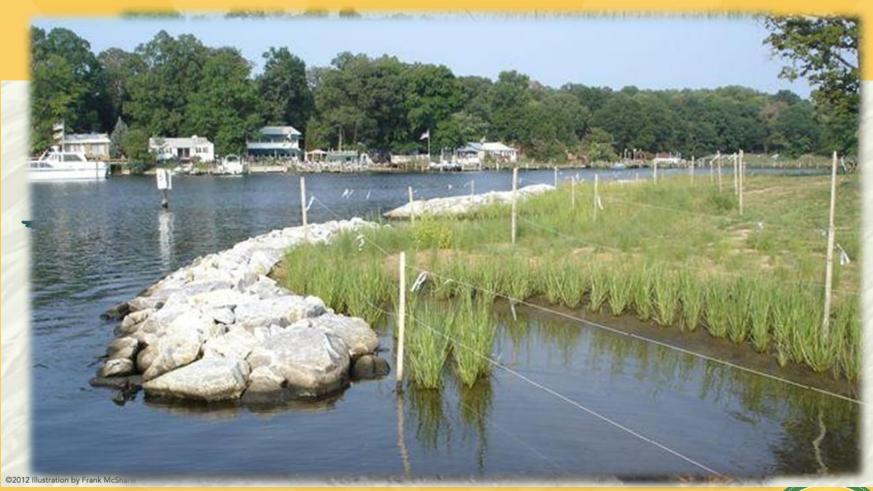
Coastal Green Infrastructure: constructed dunes



Coastal Green Infrastructure: constructed wetlands



Coastal Green Infrastructure: living shorelines





Coastal Green Infrastructure: constructed oyster reef



Coastal Green Infrastructure: maritime forest



Coastal Green Infrastructure: green stormwater management



Coastal Green Infrastructure: enhanced bulkheads & seawalls



Coastal Green Infrastructure: enhanced breakwaters



Final thoughts for CGI

- 1. Understand your assets and vulnerabilities
- 2. Use in conjunction with management and protection of natural systems and municipal ordinances, policy and plans
- 3. Treatment train approach most effective
- 4. Education and training needed for municipal staff







Emma Melvin, Green Infrastructure Coordinator Sustainable Jersey Sustainability Institute at The College of New Jersey melvine@tcnj.edu



Thank You



SustainableJersey.com info@sustainablejersey.com 609-771-2831



