Living Shorelines
Barriers and Opportunities

USACE Working Meeting:
Natural and Nature-Based Approaches to Support Coastal Resilience and Risk Reduction
November 21, 2013

GEORGETOWN CLIMATE CENTER
What is a living shoreline?

Image adapted from Burke Environmental Associates
What is a living shoreline?

Image adapted from Burke Environmental Associates
1. Why living shorelines?

2. Regulatory barriers

3. Long-term solutions
Local (in some states)
Land-Use Powers

State
State Water Quality Program
State Coastal Management Program

Army Corps of Engineers
Sec. 404 Clean Water Act
Sec. 10 Rivers and Harbors Act

Regulatory Authority
Regulatory Authority

Army Corps of Engineers
Sec. 404 Clean Water Act
Sec. 10 Rivers and Harbors Act
Army Corps Permitting

- Nationwide General Permit (NWP)
- Individual Permit (IP)

• **Army Corps** does administrative work

• **Landowner** does administrative work
Army Corps “administrative work”

Environmental Review

Public Interest Review

Endangered Species

State Certification
Permit Comparison

NWP
Application Submitted
15 - 20 days

IP
Application Submitted
187 days – 3 years
**Regulatory Barriers**

- **Easy** for landowners to obtain permits for an armoring project
- **Difficult** for landowners to obtain permits for a living shoreline project
Policy Options for States

1. Programmatic General Permit

2. Regional General Permit
Policy Options for States

1. How does it work?

2. How does it reduce the barriers to living shorelines?

3. What is the effect on Army Corps, states, and landowners?
Army Corps issues PGP

State given authority to issue federal permits for living shorelines

Category A
- Minimal impact
- Only need state review

Category B
- More significant impact
- Reviewed by Army Corps
Effect of PGP

- Reduces work for Army Corps
- Increases discretion of states
- Responsive to state adaptation goals
- Reduces work for landowners
Regional General Permit

Army Corps issues RGP for living shorelines

Individual permits no longer necessary for living shorelines

Army Corps issues RGP for armoring

Armoring permitted only if no feasible alternative
Effect of RGP

- Increases work for Army Corps
- Levels the playing field
- Reduces work for landowners
- Allows for flexible design standards
Workshops  Federal programs to support state and local adaptation
urban heat toolkit

sea-level rise toolkit