



Living Shorelines

Barriers and Opportunities

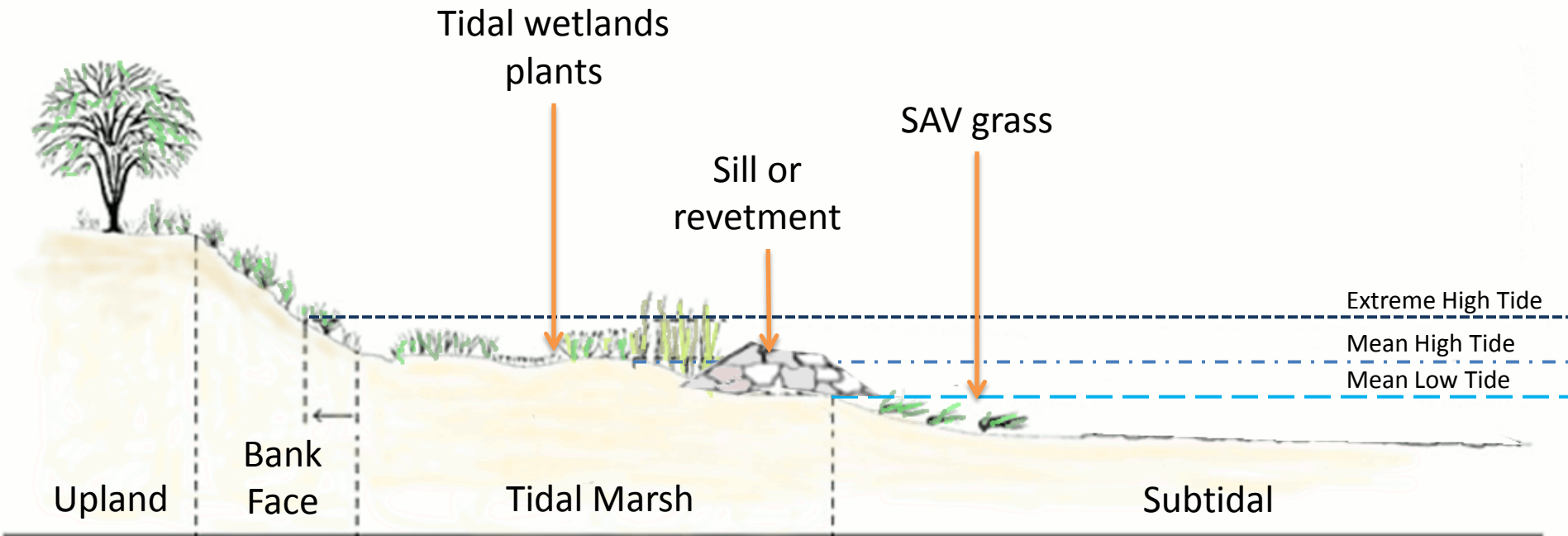
USACE Working Meeting:

Natural and Nature-Based Approaches to Support Coastal Resilience and Risk Reduction

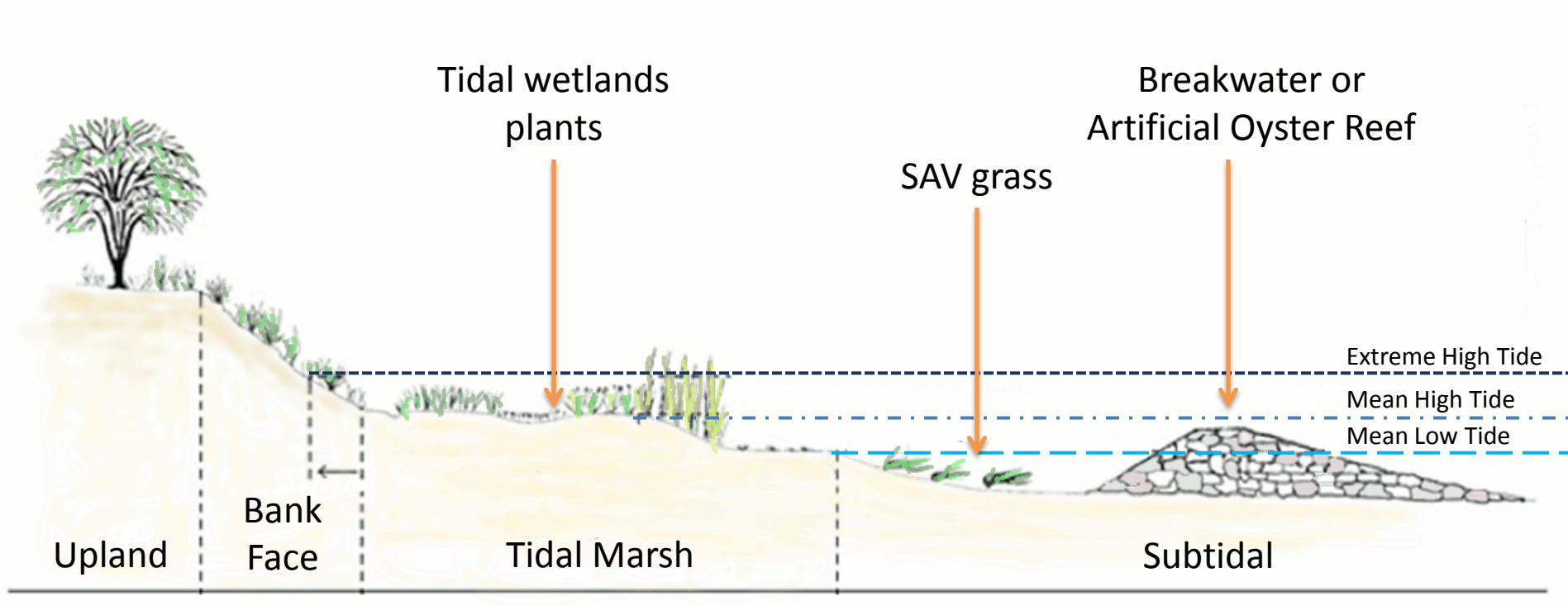
November 21, 2013

GEORGETOWN CLIMATE CENTER

What is a living shoreline?



What is a living shoreline?



The background of the slide is a dense field of tall, green grasses, likely a coastal species like Spartina patens, with some brownish seed heads visible. The grasses are slightly out of focus, creating a soft, natural texture.

1. Why living shorelines?

2. Regulatory barriers

3. Long-term solutions



Regulatory Authority

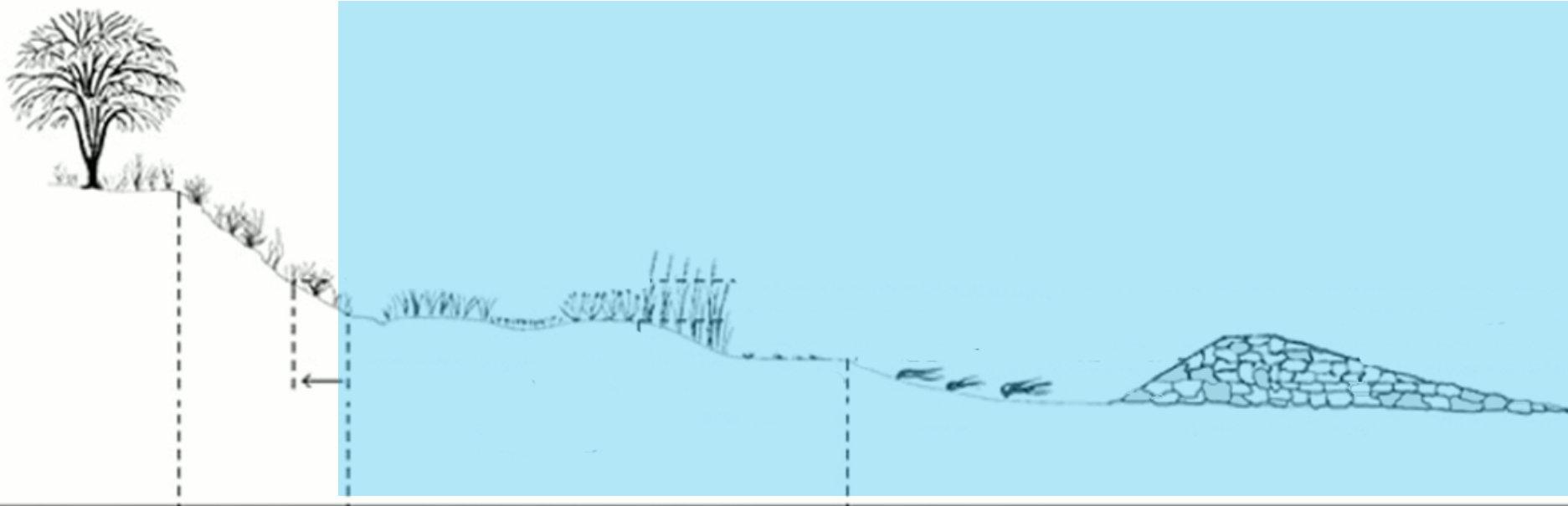
Local (in some states)
Land-Use Powers



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



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

Army Corps Permitting



Nationwide
General Permit (NWP)



- **Army Corps** does administrative work



Individual Permit (IP)



- **Landowner** does administrative work



Army Corps “administrative work”

Environmental Review

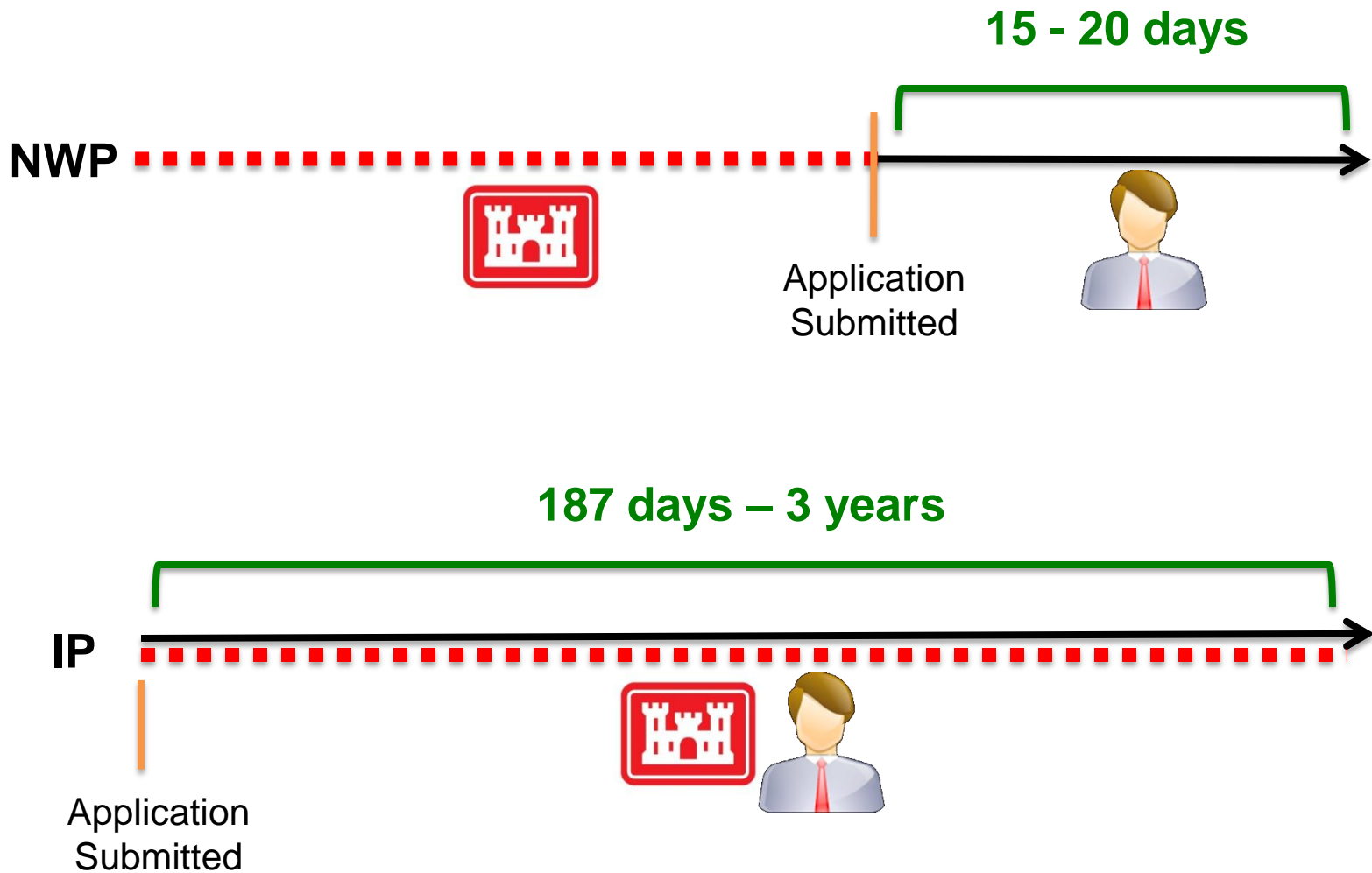
Public Interest Review

Endangered Species

State Certification



Permit Comparison



Regulatory Barriers



Easy for landowners to obtain permits for an armoring project



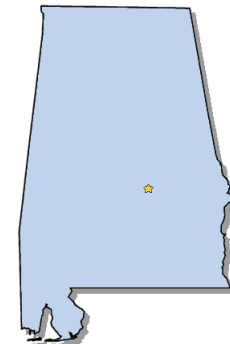
Difficult for landowners to obtain permits for a living shoreline project

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?

Programmatic General Permit

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





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