

The New Mitigation Rule

Understanding and Working with the New Regulations

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About Us

- Full-service natural and cultural resource consulting firm
- More than 500 cultural and natural resource scientists and planners company-wide
- Founded in Flagstaff in 1981, with 23 offices across the West, Southwest, Pacific Northwest and Pacific (including 3 offices in Texas – Houston, Austin, San Antonio – with a satellite office in DFW).
- We specialize in environmental science and compliance, cultural and natural resource analysis, planning, and management.
- Employee-owned

Only Three Things You Can Count On

1. Death
2. Taxes
3. Change



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Background

- **Federal Register Volume 73, No. 70 – April 10, 2008**
- **Long time coming**
 - 1990 - MOA between USACE and EPA
 - 1995 – Federal Guidance on Use of Mitigation Banks
 - 2000 – Federal Guidance on Use of In-Lieu-Fee Arrangements
 - 2001 – National Research Council Report
 - 2002 – Regulatory Guidance Letter (RGL) 02-02
 - 2004 – National Defense Authorization Act
- **New rule supersedes and replaces previous regulatory guidance**



Goals

- Improve overall success of mitigation using better science (2001 NRC)
- Create equality in requirements of three primary mitigation mechanisms (2004 NDAA)
- Increase efficiency and predictability
- Provide for more involved public participation in decision-making

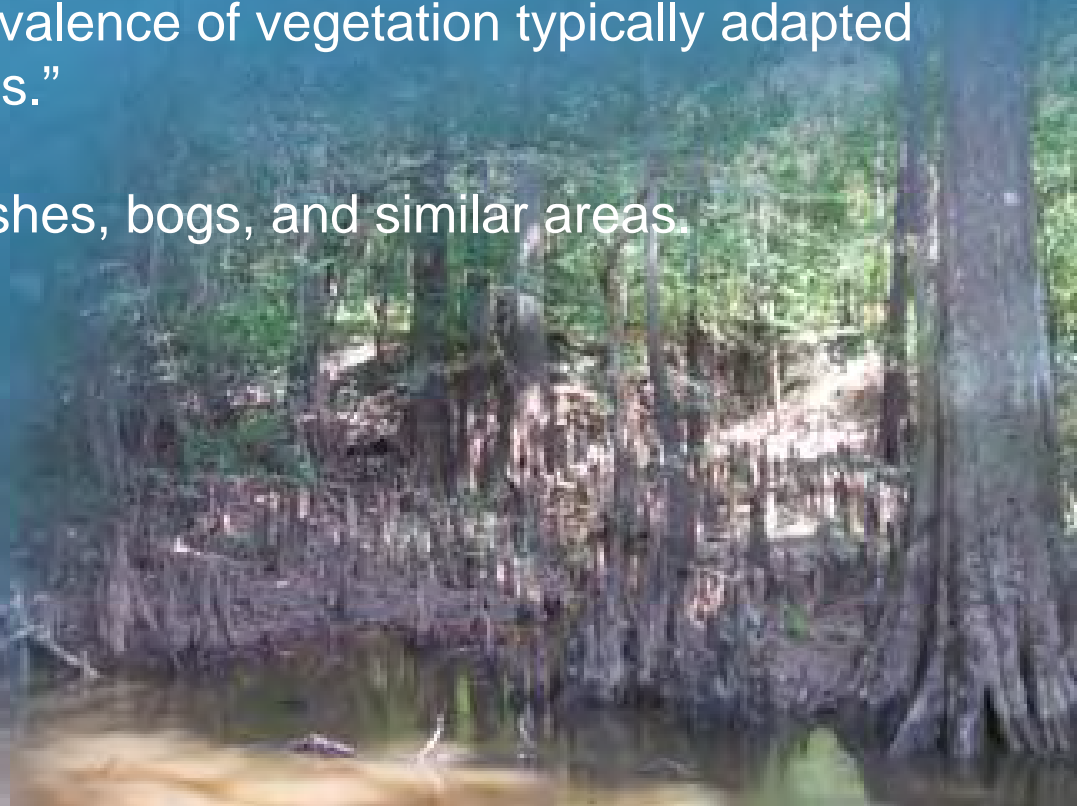


Definitions

Wetlands

“Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

Generally include swamps, marshes, bogs, and similar areas.



Definitions

Functions – the physical, chemical and biological processes that occur in ecosystems.

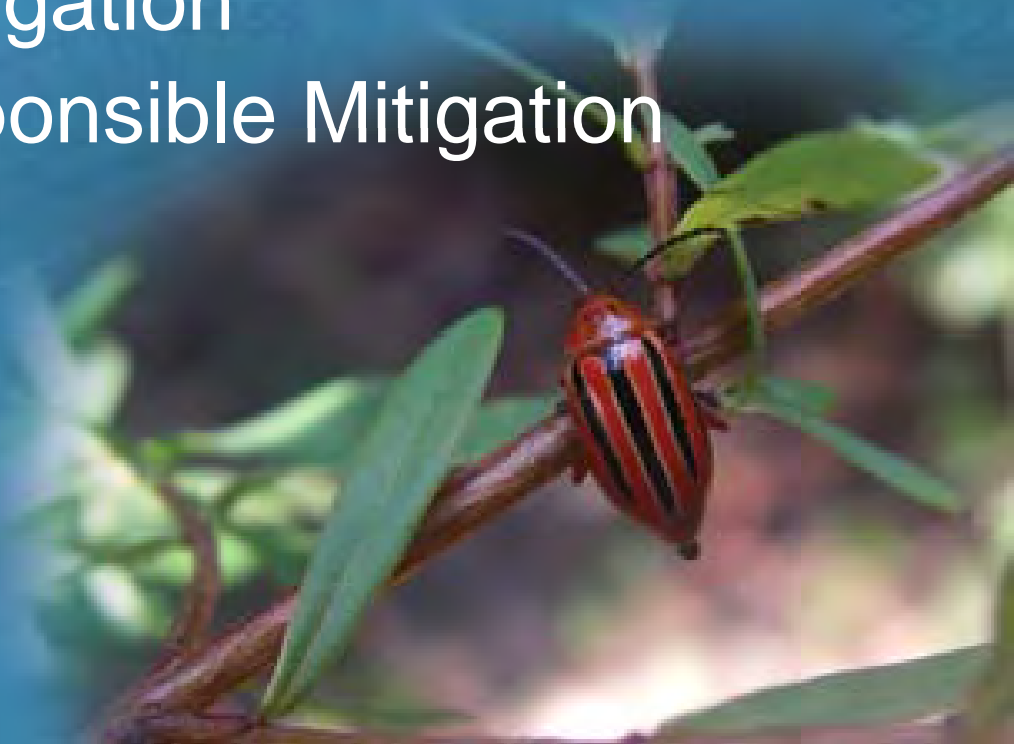
Services – the benefits that human populations receive from functions that occur in ecosystems.



Definitions

Three Mitigation Mechanisms:

1. Mitigation Banking
2. In-Lieu Fee Mitigation
3. Permittee-Responsible Mitigation



Definitions

Mitigation banking –restoration, enhancement, establishment, and/or preservation of aquatic ecosystems to offset expected adverse impacts in similar nearby (usually same watershed) ecosystems.

Mitigation banks sell “credits” to potential USACE permittees to offset anticipated impacts.

Mitigation banks are established ***prior to impacts taking place.***



Definitions

In-lieu fee (ILF) mitigation – practice of collecting fees from permittees to initiate specific aquatic ecosystem restoration enhancement, establishment, and/or preservation projects.

Generally administered by government agencies or non-profit organizations whose mission involves some level of landscape stewardship.

Mitigation projects are generally only initiated *after fees have been collected and impacts have occurred.*



Definitions

Permittee-responsible mitigation (PRM) – this is the new term used to describe project-specific mitigation (i.e. anything other than a mitigation bank or in lieu fee program).

Be careful,
you can get
bitten!!



Definitions

Four Mitigation Methods

1. Restoration
2. Enhancement
3. Establishment
4. Preservation



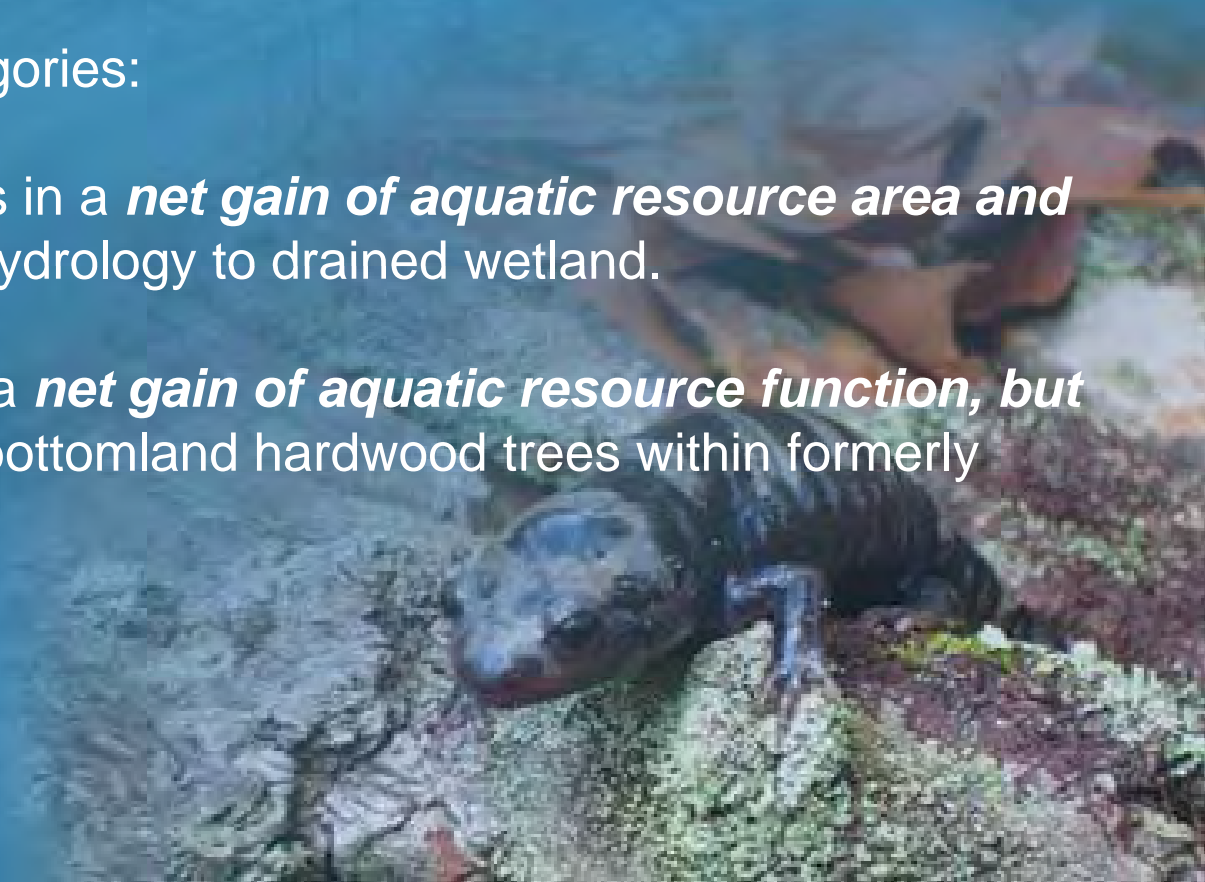
Definitions

Restoration – manipulation to return a site's natural/historic functions to a former or degraded aquatic resource.

Now divided into two categories:

Re-establishment – results in a ***net gain of aquatic resource area and function***. Ex. Restoring hydrology to drained wetland.

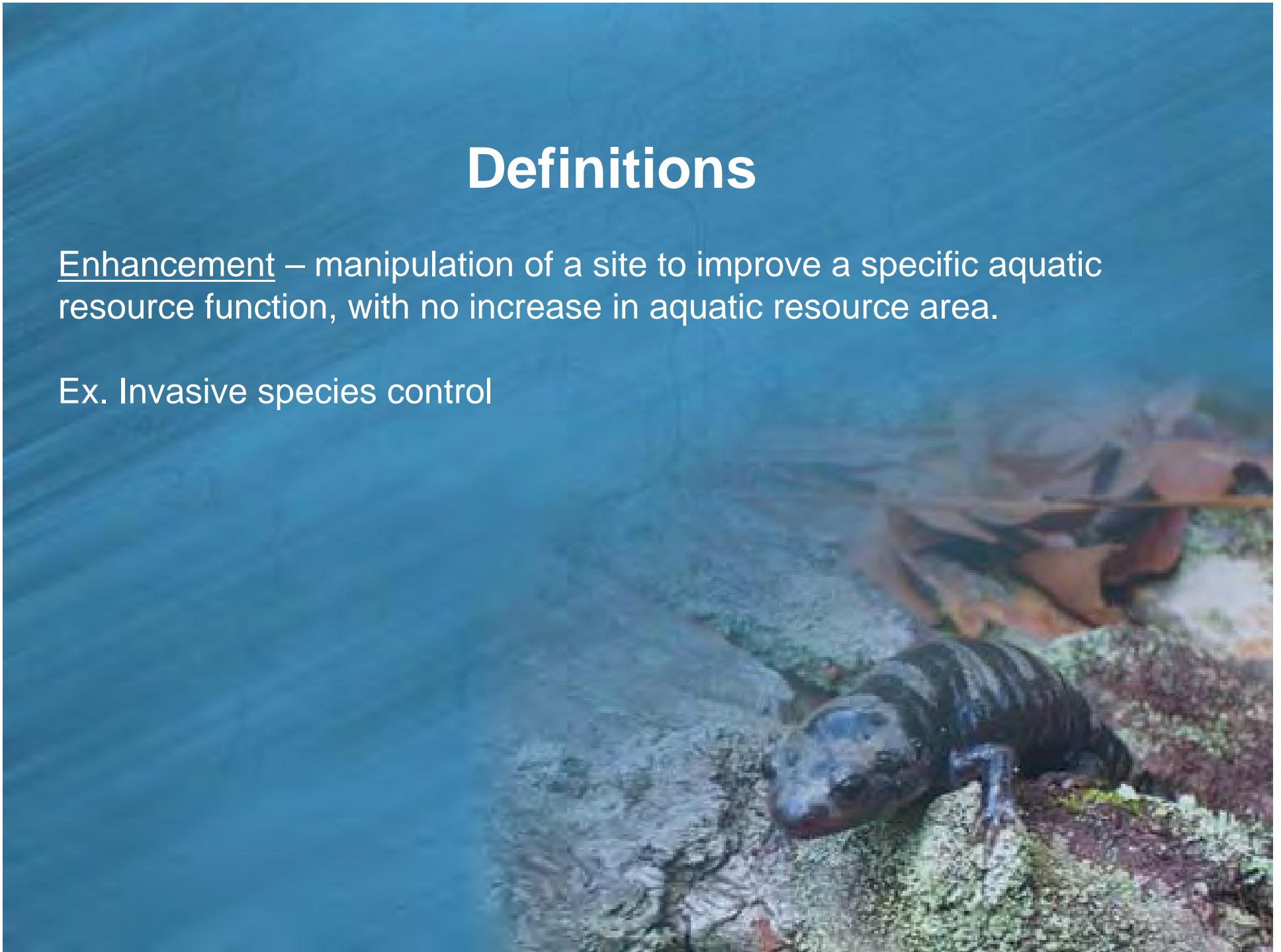
Rehabilitation – results in a ***net gain of aquatic resource function, but not area***. Ex. Replanting bottomland hardwood trees within formerly forested wetland.



Definitions

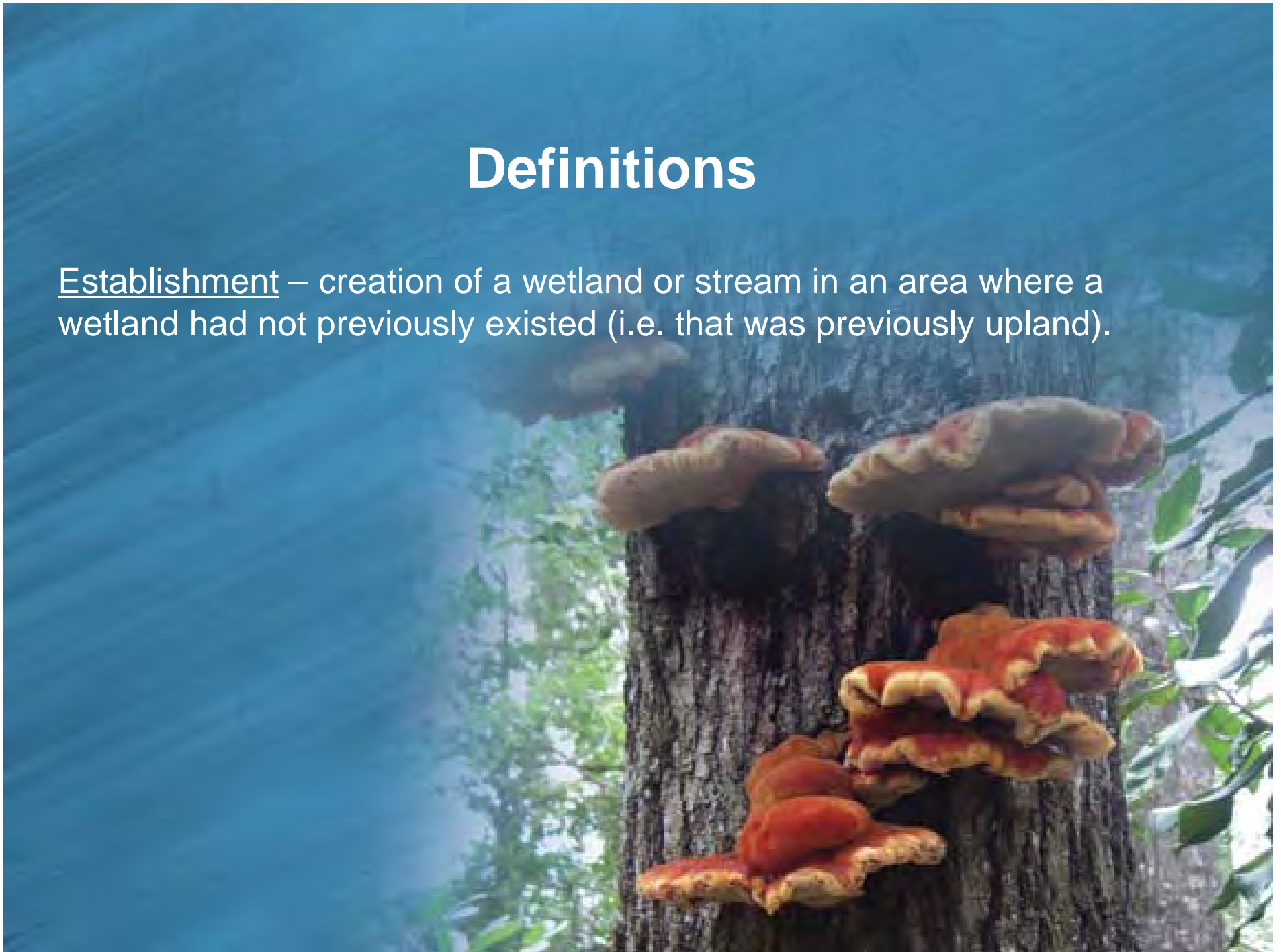
Enhancement – manipulation of a site to improve a specific aquatic resource function, with no increase in aquatic resource area.

Ex. Invasive species control



Definitions

Establishment – creation of a wetland or stream in an area where a wetland had not previously existed (i.e. that was previously upland).



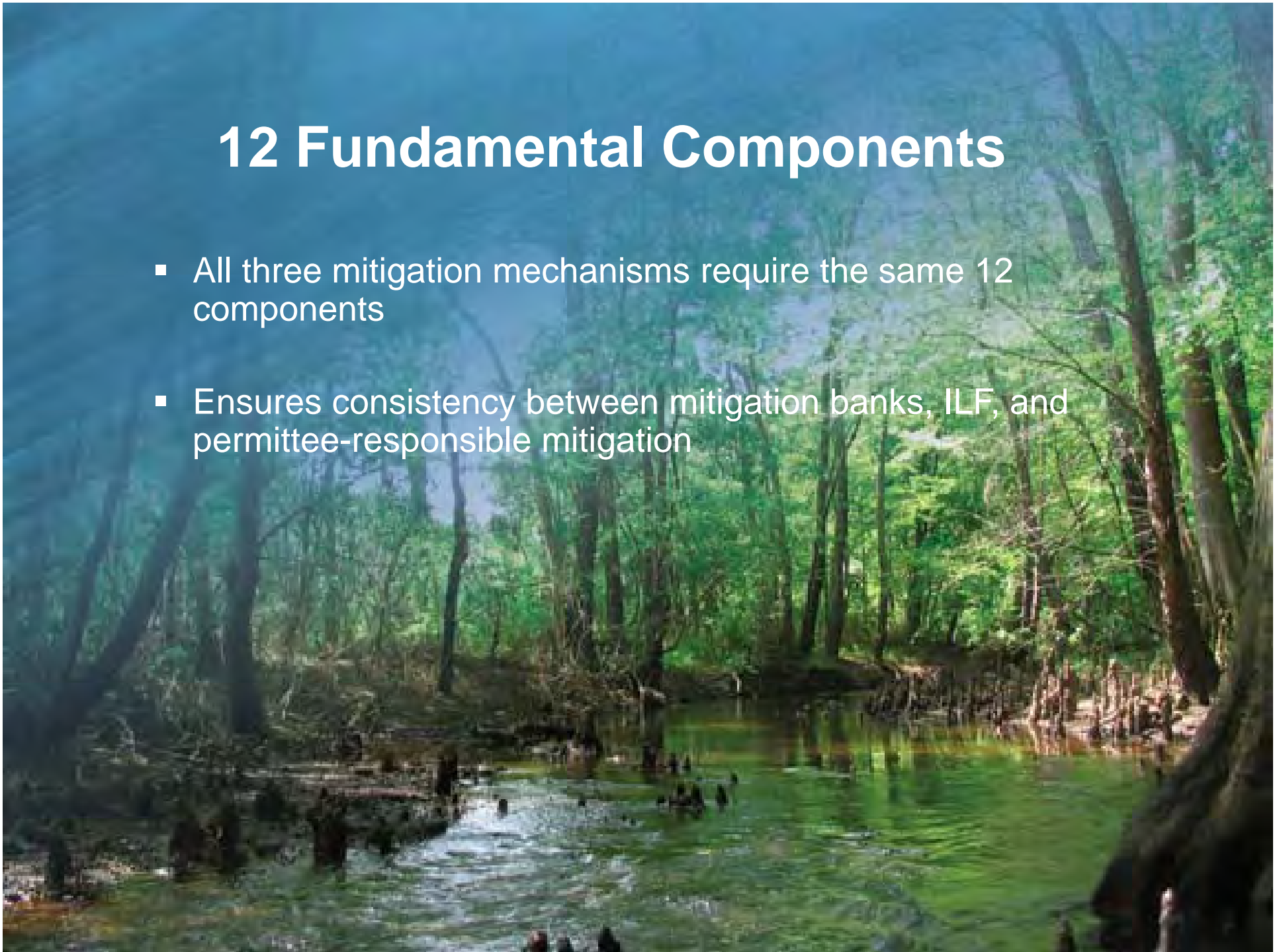
Definitions

Preservation – Removal of a threat to aquatic resources by implementing long-term (e.g. perpetual) legal and physical protection of the site. Preservation does not result in a net gain in wetland area or function.



12 Fundamental Components

- All three mitigation mechanisms require the same 12 components
- Ensures consistency between mitigation banks, ILF, and permittee-responsible mitigation



12 Fundamental Components

Shared by All Three Mitigation Options

- 1) Objectives
- 2) Site Selection Criteria
- 3) Site Protection Mechanism
- 4) Baseline Site Assessment
- 5) Credit Determination Method
- 6) Mitigation Work Plan
- 7) Maintenance Plan
- 8) Ecological Performance Standards
- 9) Monitoring Requirements
- 10) Long-term Management Plan
- 11) Adaptive Management Plan
- 12) Financial Assurances

Permittee Requirements

- Avoidance, Minimization, then Compensation must be documented
- Permits can no longer be issued using “conceptual” (unplanned) mitigation mechanisms
- Draft mitigation plan must now be addressed in initial permit application in order to be considered “complete”
- After draft mitigation plan reviewed and commented on, final mitigation plan must be approved before permit issued or work can commence



Permittee Requirements

For Mitigation Bank or ILF, mitigation plan simply needs to:

- Identify name of bank/program
- Detail baseline ecological information of permit site
- Provide number and resource type of credits to be secured
- Explain how number of credits was determined



Permittee Requirements

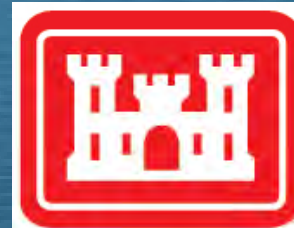
If project site outside service area of mitigation bank or ILF, then Permittee Responsible Mitigation is the only option.

- Greatest challenge
- Can be expensive
- Can cause delay



USACE Considerations

- Order of Preference for Mitigation Mechanisms
 - Mitigation Banks
 - In-Lieu Fee Programs (ILF)
 - Permittee Responsible mitigation (PRM)
- Major Considerations
 - Likelihood of success
 - Location relative to impact site
 - Significance of mitigation to watershed
 - Cost



**US Army Corps
of Engineers.**

USACE Considerations

- Public comment on mitigation plans
- Providing most detailed plan up front best option



USACE Considerations

- Preferred Mitigation Method = Restoration
 - Above establishment, enhancement, or preservation
- Highest potential for success



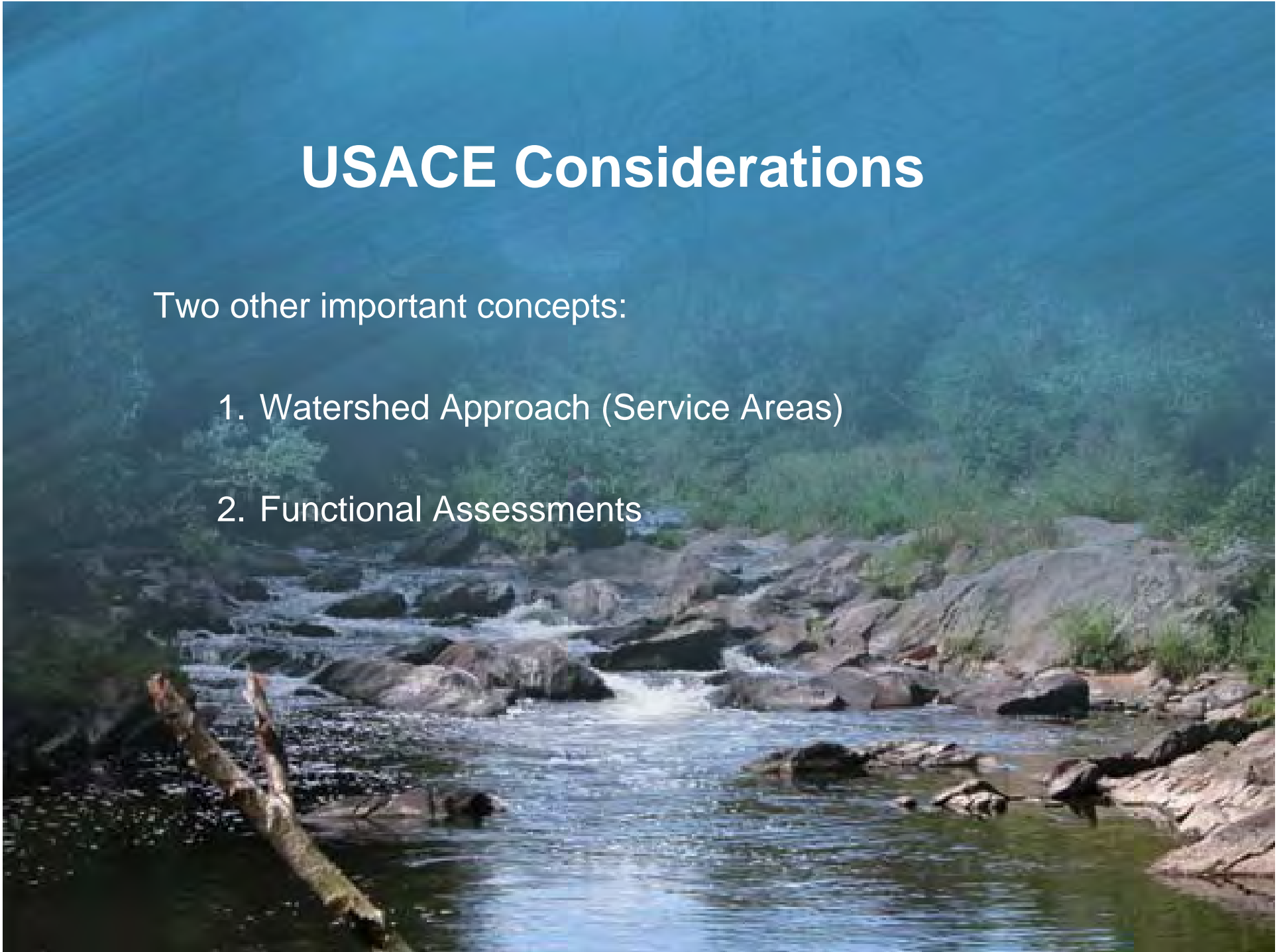
USACE Considerations

- Preservation can only be used when resource to be preserved contributes significantly to ecological sustainability of watershed (must be documented)
- Must be under demonstrable threat
- Should be done in conjunction with other mitigation methods
- USACE can require higher ratios when using preservation

USACE Considerations

Two other important concepts:

1. Watershed Approach (Service Areas)
2. Functional Assessments



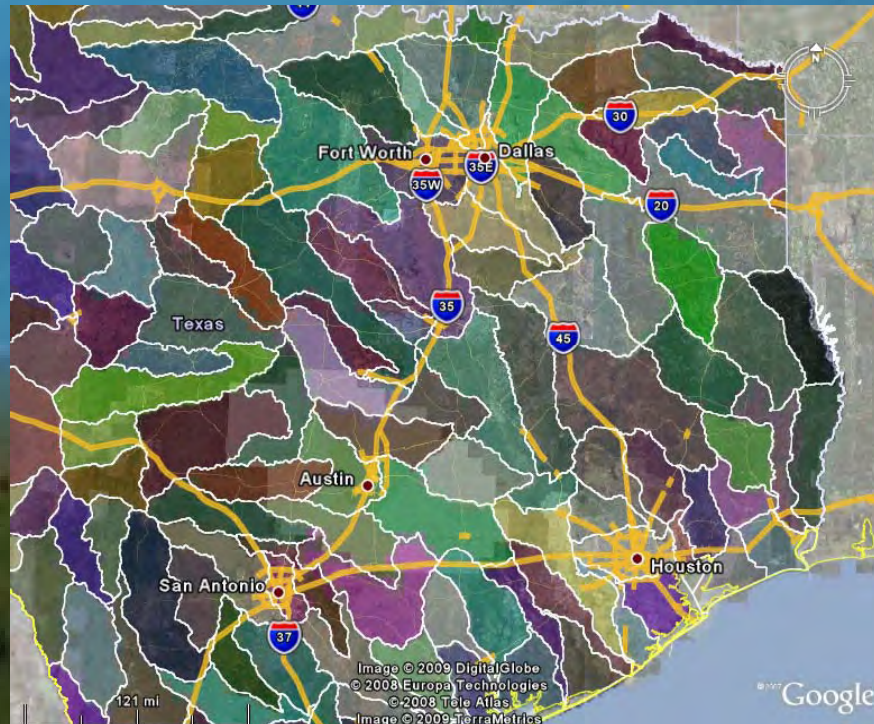
Watershed Approach

- Mitigation should be in same watershed as original impact
- Watershed = USGS Hydrologic Unit Code (HUC) boundary



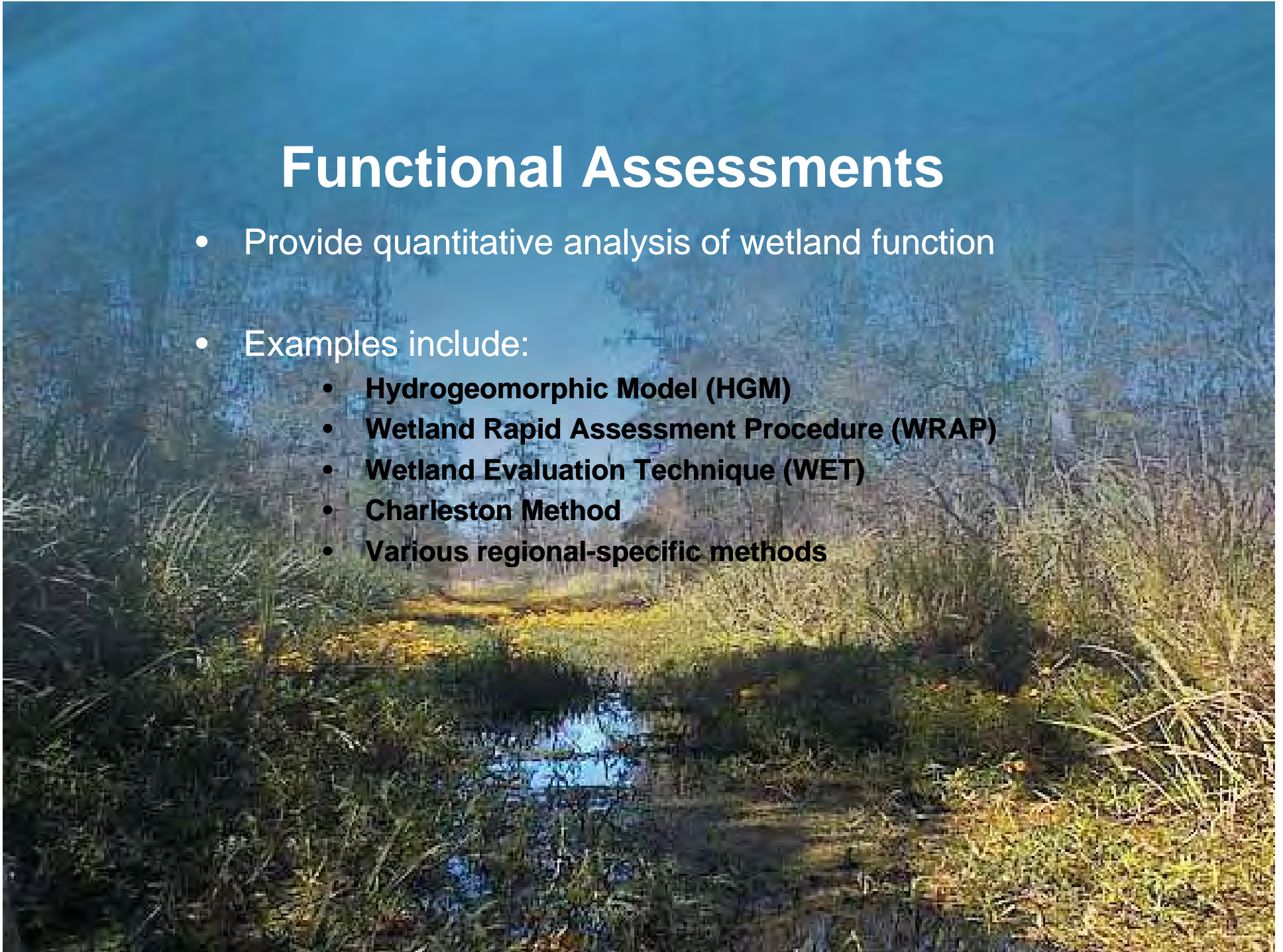
Watershed Approach

- Mitigation Banks and ILF Service Areas usually established based on HUCs (6 and 8 digit)
- PRM must generally be within same HUC at minimum



Functional Assessments

- Provide quantitative analysis of wetland function
- Examples include:
 - **Hydrogeomorphic Model (HGM)**
 - **Wetland Rapid Assessment Procedure (WRAP)**
 - **Wetland Evaluation Technique (WET)**
 - **Charleston Method**
 - **Various regional-specific methods**



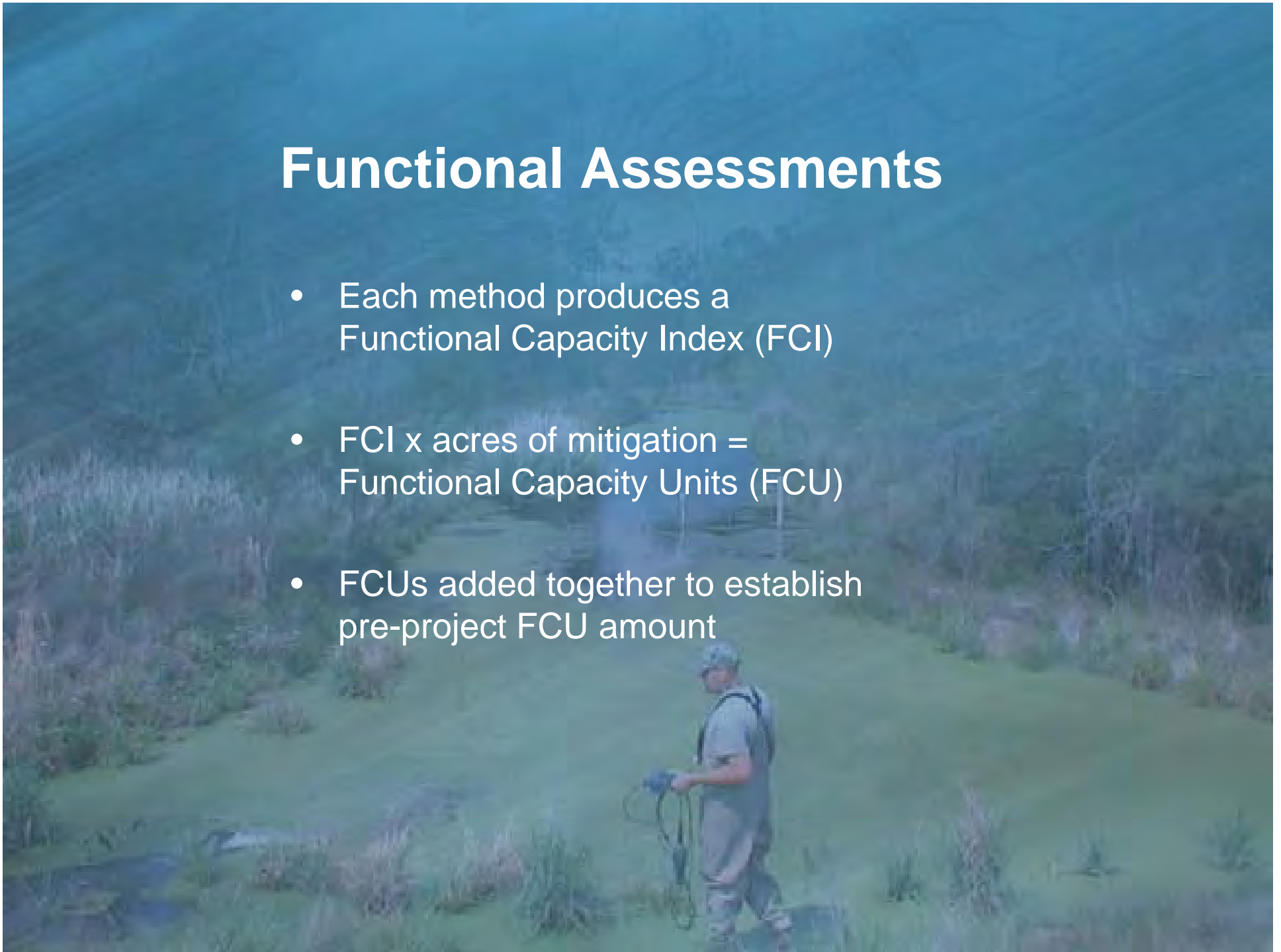
Functional Assessments

- Provide ways to compare different quality wetlands
- Measure multiple functions
 - Physical
 - Chemical
 - Biological



Functional Assessments

- Each method produces a Functional Capacity Index (FCI)
- $\text{FCI} \times \text{acres of mitigation} = \text{Functional Capacity Units (FCU)}$
- FCUs added together to establish pre-project FCU amount



Functional Assessments



- Analogous to Stock Value
- $FCI = \text{Value of Individual Share}$
- $FCUs = \text{Value of Entire Portfolio}$
(share value x number of shares)

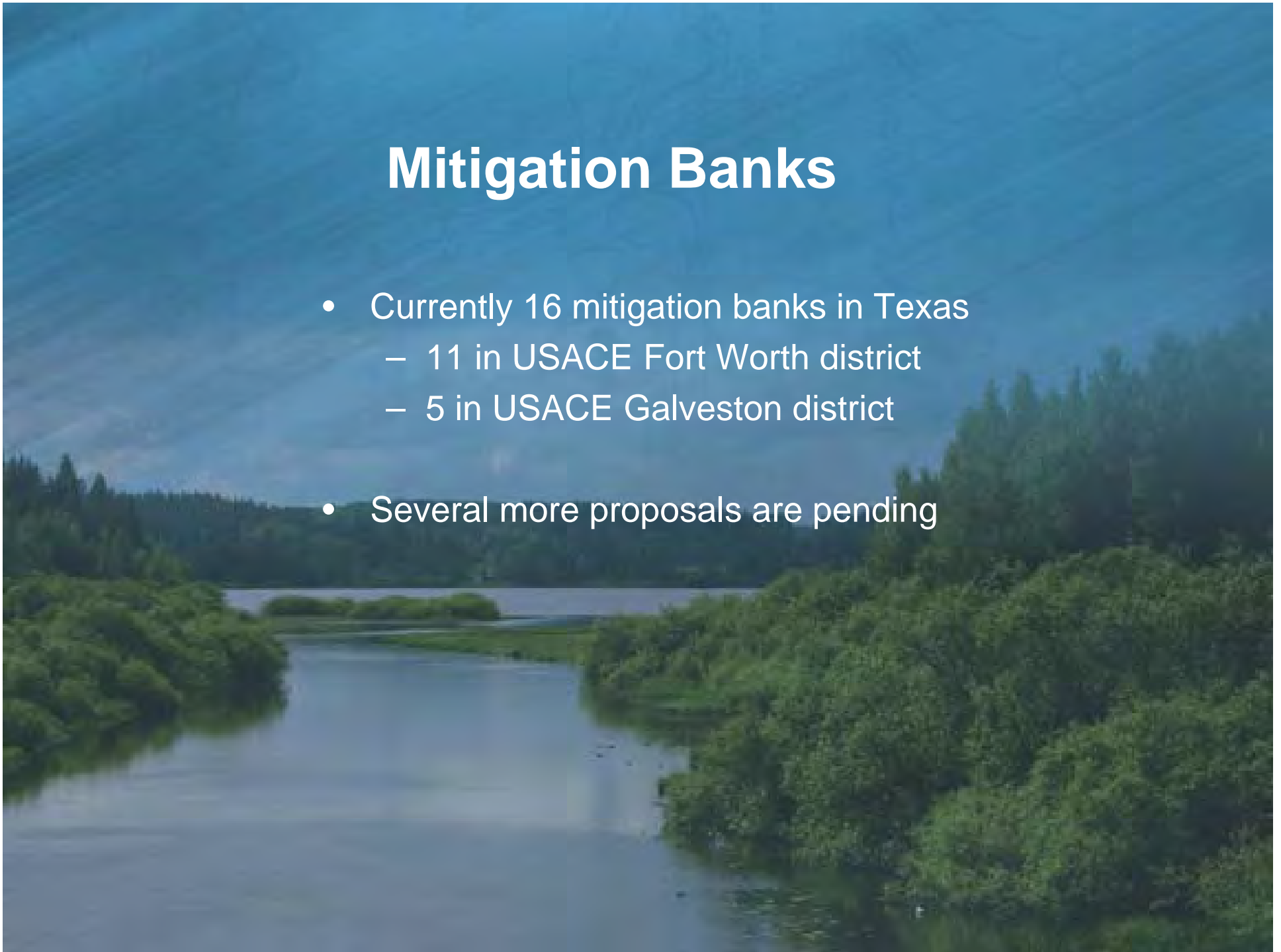
Mitigation Banks

- Establishment follows standardized federal requirements
 - rigorous approval process with formal timeline
- Culminates in Mitigation Banking Instrument
 - “Contract” with Interagency Review Team (IRT)



Mitigation Banks

- Currently 16 mitigation banks in Texas
 - 11 in USACE Fort Worth district
 - 5 in USACE Galveston district
- Several more proposals are pending



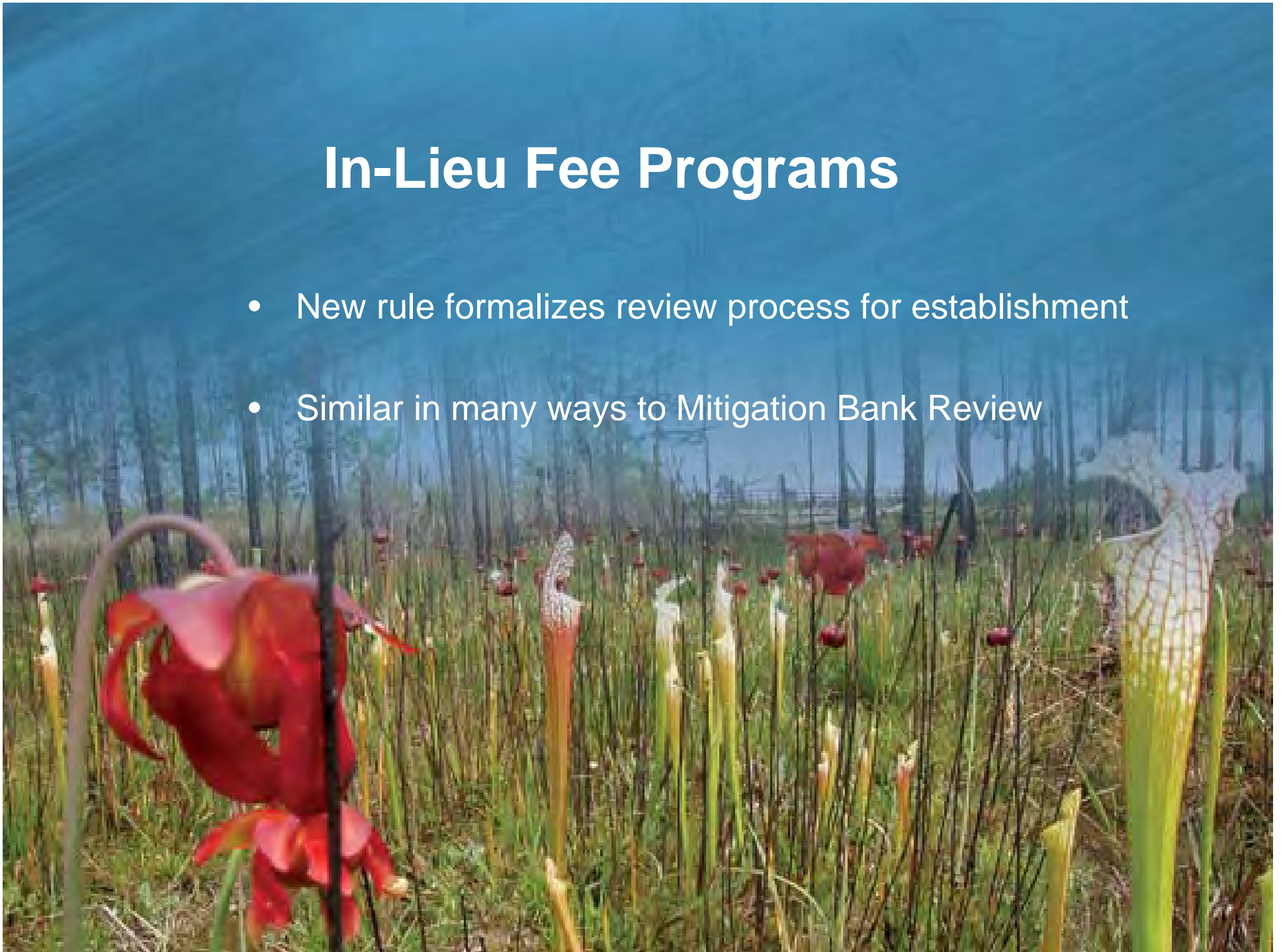
In-Lieu Fee Programs

- ILF programs – similar to mitigation banks
- Permittee required to pay a fee to established trust IN-LIEU of project-specific mitigation
- Cost generally based on replacement cost impacted aquatic systems



In-Lieu Fee Programs

- New rule formalizes review process for establishment
- Similar in many ways to Mitigation Bank Review



ILF Differences

- Required to include watershed-based compensation planning framework to select, secure, and implement resource mitigation activities
- Must include:
 - Description of the threats to aquatic resources within service area
 - Analysis of historic aquatic resource loss
 - Current conditions of proposed service area
 - Goals and objectives
 - Prioritization strategy for selecting and implementing activities
 - Description of public and private stakeholder involvement

In-Lieu Fee Programs

- 1 program exists in USACE Fort Worth district
 - Nature Conservancy – founded 1998, currently suspended
- 1 program active in USACE Galveston district
 - Spring Creek ILF program – along Spring Creek between Harris and Montgomery Counties (service area)
 - Katy Prairie Conservancy – ILF mitigation on limited basis, with no projects in recent past
 - Service Area – Harris, Waller, Austin, and Fort Bend Counties

Permittee-Responsible Mitigation

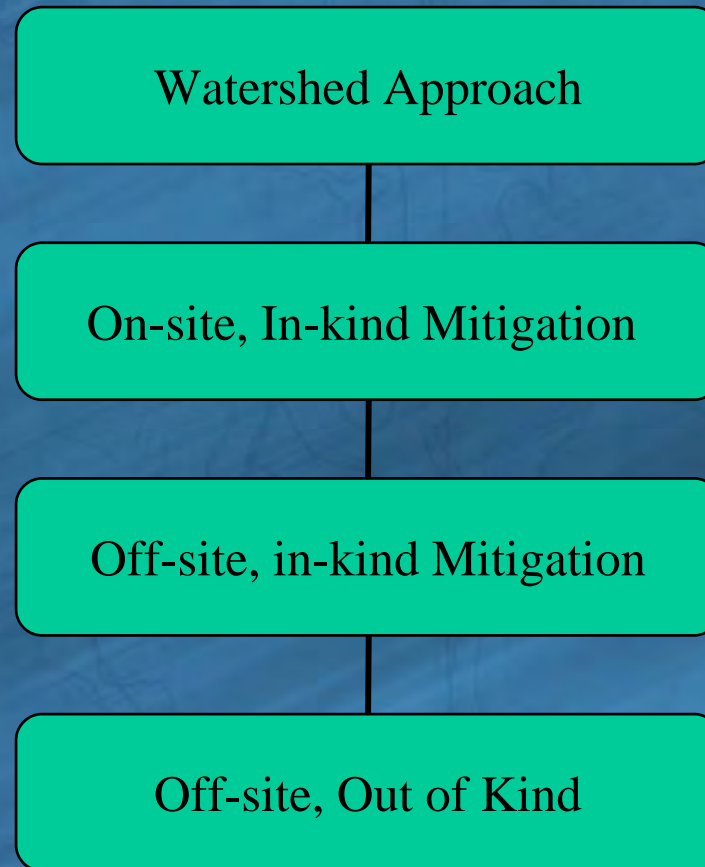
- Only option available to permittees outside of mitigation bank/ILF service areas or in service area without appropriate credits available
 - Either sold out or inappropriate type (out-of-kind, wetland to stream, etc.)



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PRM Hierarchy



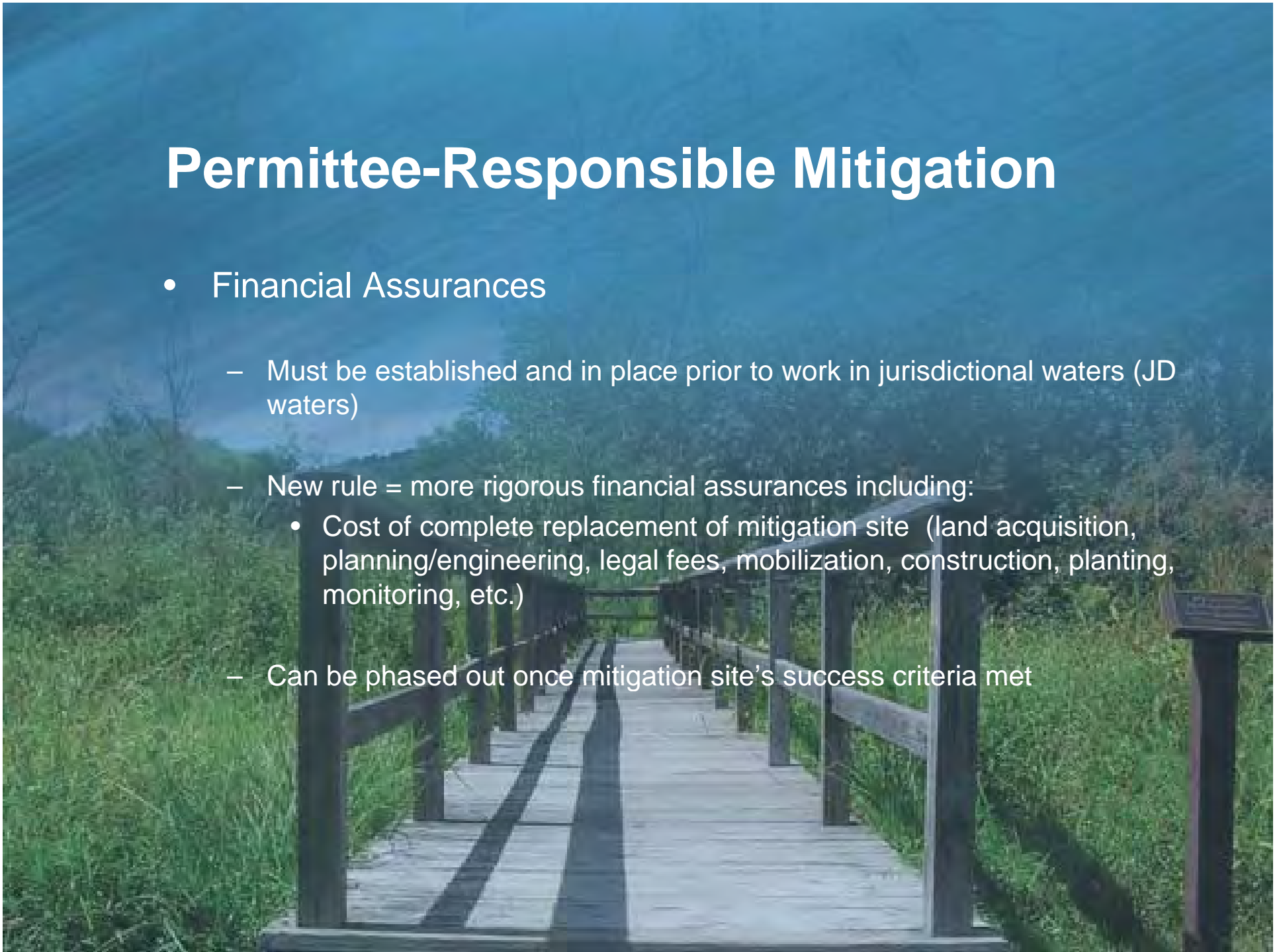
Permittee-Responsible Mitigation

- Draft Mitigation Plan
 - Must include:
 - Detailed Functional Assessments of both impact & mitigation site
 - Wetland Delineation of proposed PRM site
- Adaptive Management Plan
 - Details how unexpected challenges will be addressed
 - Provides formal process for addressing changes
 - » Mitigation Plan
 - » Mitigation Plan Instrument
 - » Monitoring
 - » Long-term management of mitigation site



Permittee-Responsible Mitigation

- Financial Assurances
 - Must be established and in place prior to work in jurisdictional waters (JD waters)
 - New rule = more rigorous financial assurances including:
 - Cost of complete replacement of mitigation site (land acquisition, planning/engineering, legal fees, mobilization, construction, planting, monitoring, etc.)
 - Can be phased out once mitigation site's success criteria met



Permittee-Responsible Mitigation

- Long-term Protection Instrument
 - Must be approved by USACE before construction
 - Conservation Easements (CEs) preferred method
 - Preference given to CEs over deed restrictions, etc.
 - Considered less risky due to third party involvement



Permittee-Responsible Mitigation

- Third Party contractors can provide turn-key mitigation
- USACE doesn't recognize agreements between Permittees and Third Party contractors
- Ultimate responsibility for success or failure and financial assurances lies with Permittee



Permittee-Responsible Mitigation

- Close in size and scope to abbreviated mitigation banking agreements
- Cost of PRM plan expected to increase relative to mitigation bank/ILF credits
- Takes longer to develop than simply buying credits from Mitigation Banks or paying fees to ILF programs
 - **SWCA anticipates site utilizing PRM plans in TX may have to wait**
 - 9 months to 1 year for Individual Permits
 - 6 to 9 months for General Permits
- Permittee cannot eliminate risk of responsibility/failure

Conclusions

- Overall - rule well written and fair
- Mitigation requires much more rigorous scientific analysis
- Watershed approach can save time
- Several functional assessments required
 - Functional value of impacts
 - Baseline data for mitigation area
 - Final state of mitigation area



Conclusions

- Short Term
 - Increased mitigation costs
 - Longer USACE permitting schedules until we figure out the system
- Long Term
 - Increased consistency
 - Entrepreneurial opportunity
- Best Option – Buy Mitigation Bank Credits
 - Relatively few banks currently operating with credits for sale
 - Owners trying to expand
 - Entrepreneurs trying to start new banks



Questions, Comments, Concerns?

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