Overview of Third Party Mitigation Session 1

Steve Martin

U.S. Army Corps of Engineers

Institute for Water Resources

What is mitigation?

Image: Jose Rosario-Fabregas

A sequence of:

- **Avoiding** impacts
- **Minimizing** impacts and if necessary
- **Compensating for unavoidable losses** of resources

Compensatory mitigation is **restoration, establishment, enhancement, or preservation** of aquatic resources to offset permitted impacts

Compensatory mitigation can be provided for Corps permits through

- **Mitigation banks**
- **In-lieu Fee (ILF) programs**
- **Permittee-responsible mitigation (PRM)**

What is a Mitigation bank or In-lieu Fee Program?

One or more sites

…where **resources** (e.g. wetlands, streams, riparian areas) are managed

…to provide **compensatory mitigation** for authorized impacts

…mitigation bank or ILF program sells or transfers compensatory mitigation credits to a permittee

…A permittee's mitigation **obligation is transferred** to the bank or ILF program

Operation of the bank or ILF program is governed by an **instrument**

Management of Risk & Uncertainty for Compensatory Mitigation

Mitigation Banks – Instrument, project approval, site protection, and financial assurances in place prior to use

- Credit releases tied to performance milestones
- Credit releases approved by Corps

In-lieu fee programs - Instrument approved prior to use as compensation

- Advance credits based on future project performance
- Limitations on use prior to project implementation
- Strategic site selection tool

PRM – restoration/establishment/enhancement generated in advance or concurrent with permitted impacts

Why third party mitigation?

On-site PRM often fails to develop desired structure or function

Many PRM projects are small, scattered replacement projects (“postage stamps”)

- Often poorly functioning and unsustainable

Most permittees do not have the resources to implement and manage a sustainable mitigation project including Long-Term Management (LTM)

Benefits of third party mitigation

- Reduced risk & uncertainty
- More efficient compliance
- Greater planning and scientific effort
- May streamline permitting, by reducing effort evaluating mitigation proposal

Specific Benefits

- Banks
  - Advance site identification
  - Credit release linked to performance
  - Compensation in advance of impacts
- ILFs
  - Mitigation when no banks
  - Compensation for a range of resources
  - IRT can direct site selection in a watershed approach
  - Sponsor interest in conservation

Image: Ruth Ladd

Drawbacks

Mitigation Banks

- Site selection in advance of agency review
- Less likely to be developed in small or weak markets

In-lieu fee programs

- Risk of mitigation not being provided
- Temporal lag between permitted impacts & project implementation

Brief History of Compensatory Mitigation

1934, 1958 Fish & Wildlife Coordination Act

- Habitat development/restoration to offset losses from federal projects or permitted actions

1970s – Mitigation bank concept develops

1980 – Clean Water Act 404(b)(1) Guidelines

1981 – US FWS Mitigation Policy

1986 – Corps regs 33 CFR 320.4(r)

1988 – National Wetlands Policy Forum Report

1990 – EPA-Army Mitigation MOA

1991 - Intermodal Surface Transportation Efficiency Act (ISTEA)

Brief History of Compensatory Mitigation

1992-1996 – National Wetland Mitigation Bank Study

1995 – Federal Interagency Banking Guidance

2000 – Federal In-Lieu Fee Guidelines

2001 – National Research Council report on CWA mitigation

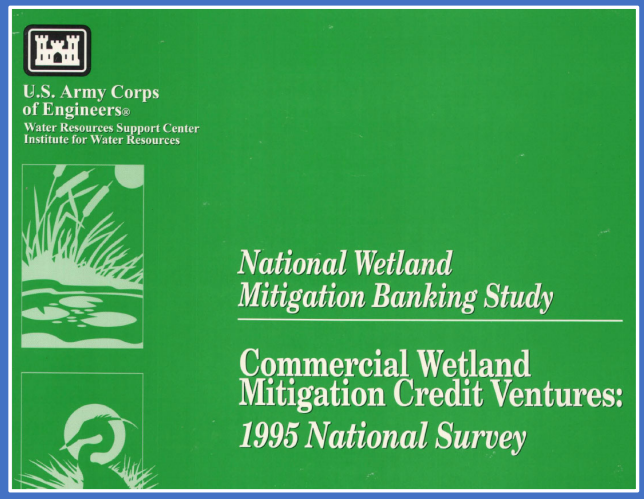
2002 – Corps Regulatory Guidance Letter 02-2

2003 – Nat'l Defense Authorization Act

2008 – Corps/EPA - Compensatory Mitigation for Loses of Aquatic Resources (the "Mitigation Rule")

Findings from National Wetland Mitigation Banking Study

- Problems with some early banks
  - Little Corps involvement in agreements
  - Long time to plan & receive approval
- No entrepreneurial banks at study start
- Identified important administrative elements



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Federal Mitigation Banking Guidelines

- Five agencies
- Encouraged banks to contribute to watershed goals
- Encouraged private sector financing
- Interagency Review Process – MBRTs & strive for consensus

Federal Mitigation Banking Guidelines

Why Banking?

- Consolidated compensation often more ecologically valuable than many small, or fragmented projects.
- Can bring together financial resources, planning, and scientific expertise not practicable for project-specific mitigation
- More efficient use of limited agency resources
- Typically planned & designed in advance of project impacts

Key Elements in 1995 Banking Guidelines

Banking Instrument addresses

- Initial Release of credits
- Use of financial assurances
- Site Protection
- Ecological performance standards
- Use of preservation
- Dispute resolution

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In-Lieu Fee Programs

First ILFs established in the early to mid 1980s

Concern with lack of consistent standards for reporting/accounting, oversight, and delays in project implementation gave rise to 2000 guidance

- **Federal In-Lieu Fee Guidance Characterization (2000):**

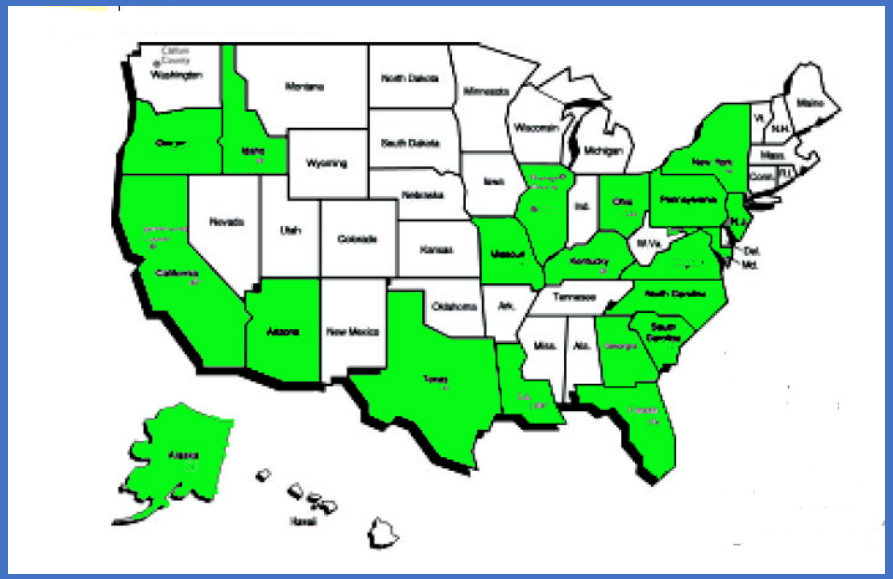
"In-lieu fee mitigation …where permittee provides funds to an in-lieu fee sponsor instead of completing …mitigation or purchasing credits from a wetland mitigation bank..."

Increased Use & Problems with In-Lieu Fee Arrangements

87 active ILFs (72 overseen by Corps) by 2000
Source: *Environmental Law Institute, 2002*

- Problems & Issues
  - Tracking in-lieu fee activity
  - Accrual of funds without project implementation
  - Accountability/responsibility for success
  - Use of preservation

Source: General Accounting Office Report on ILF Arrangements (2001)



Mitigation failures

Best known studies of mitigation success/failure in Florida

by Ann Redmond & Kevin Erwin

Problems included:

- Failure to implement
- Lack of oversight
- Prevalence of on-site wetland creation
- Low rate of ecologic success

Image: Ruth Ladd

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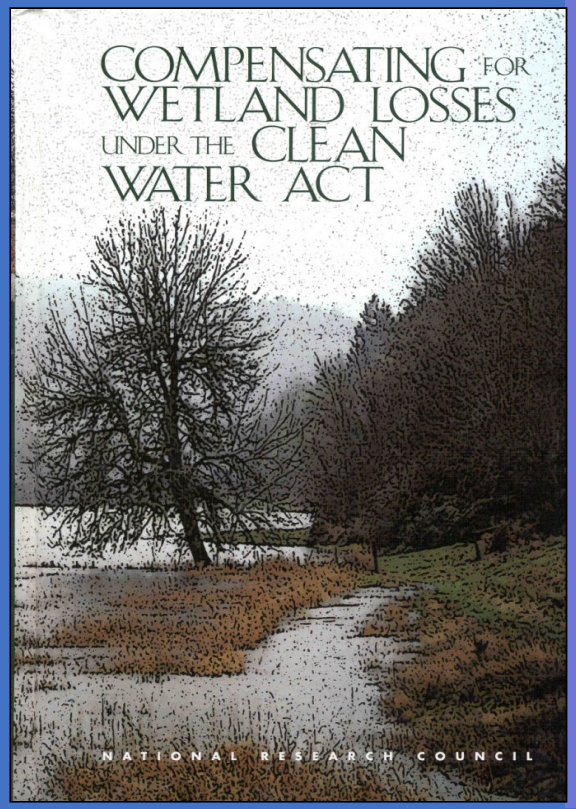
National Research Council 2001



Some Conclusions

- Goal of NNL of functions was not being met by mitigation, despite progress
- Performance expectations in 404 permits are unclear, compliance not assured nor attained
- Watershed approach: improves permit decision making
- Third-party compensation offers some advantages over PRM

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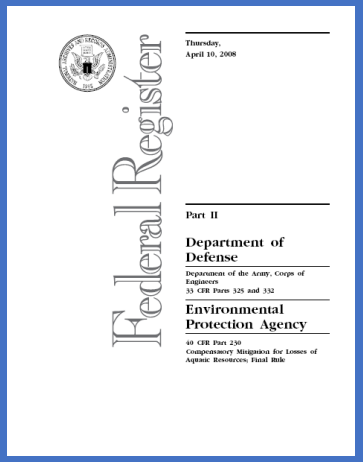
Federal Register

Thursday,
April 10, 2008

Part II

Department of Defense

Department of the Army, Corps of Engineers
33 CFR Parts 325 and 332

Environmental Protection Agency

40 CFR Part 230
Compensatory Mitigation for Losses of Aquatic Resources; Final Rule

2002 – Corps Regulatory Guidance Letter 02-2

2003 – Nat'l Defense Authorization Act

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Types of Mitigation Banks

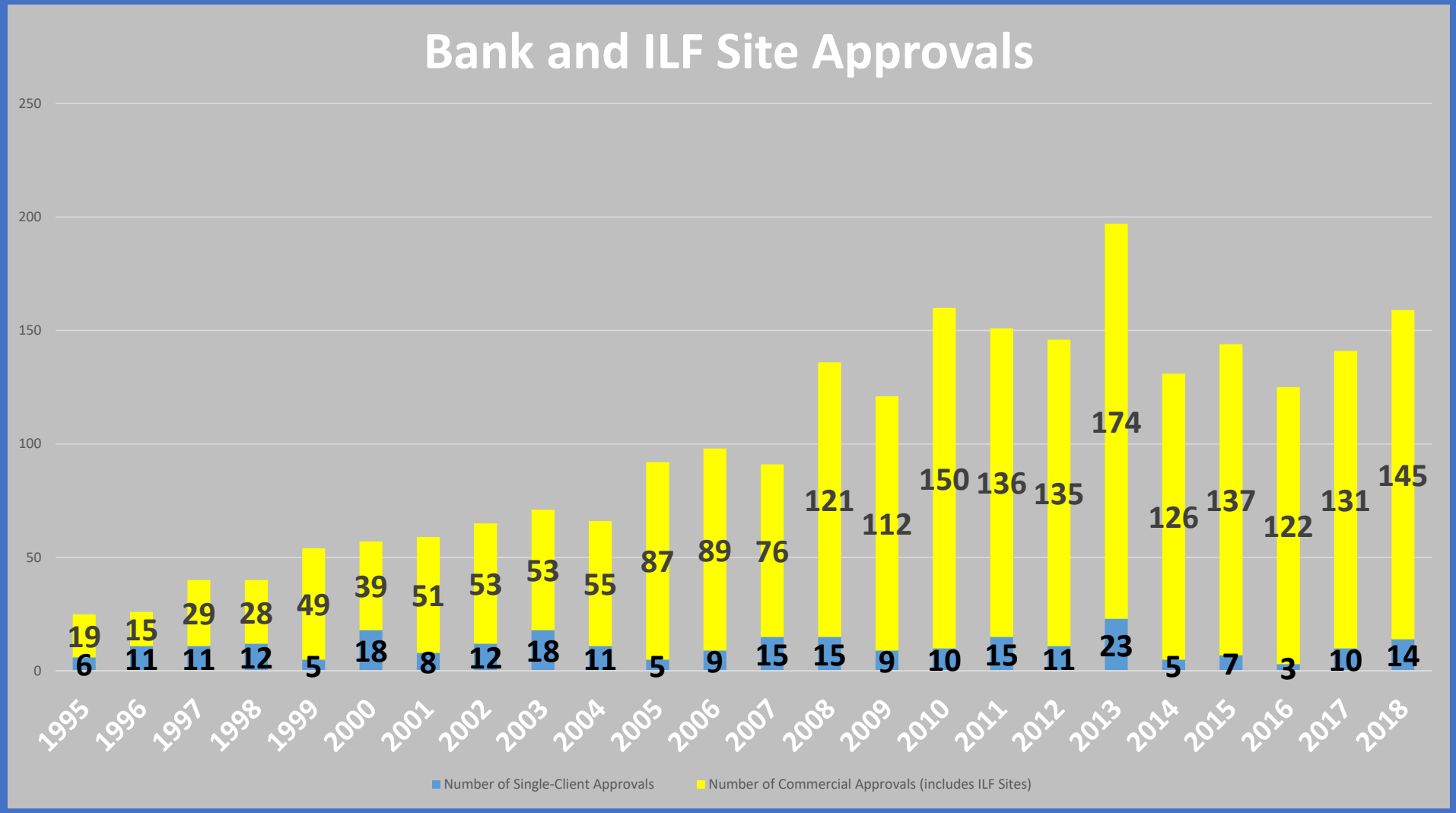
Commercial

- **Private Entrepreneurial**
- **Public**
- **Public/Private**
- **Non-Profit**

Single User/Single Client

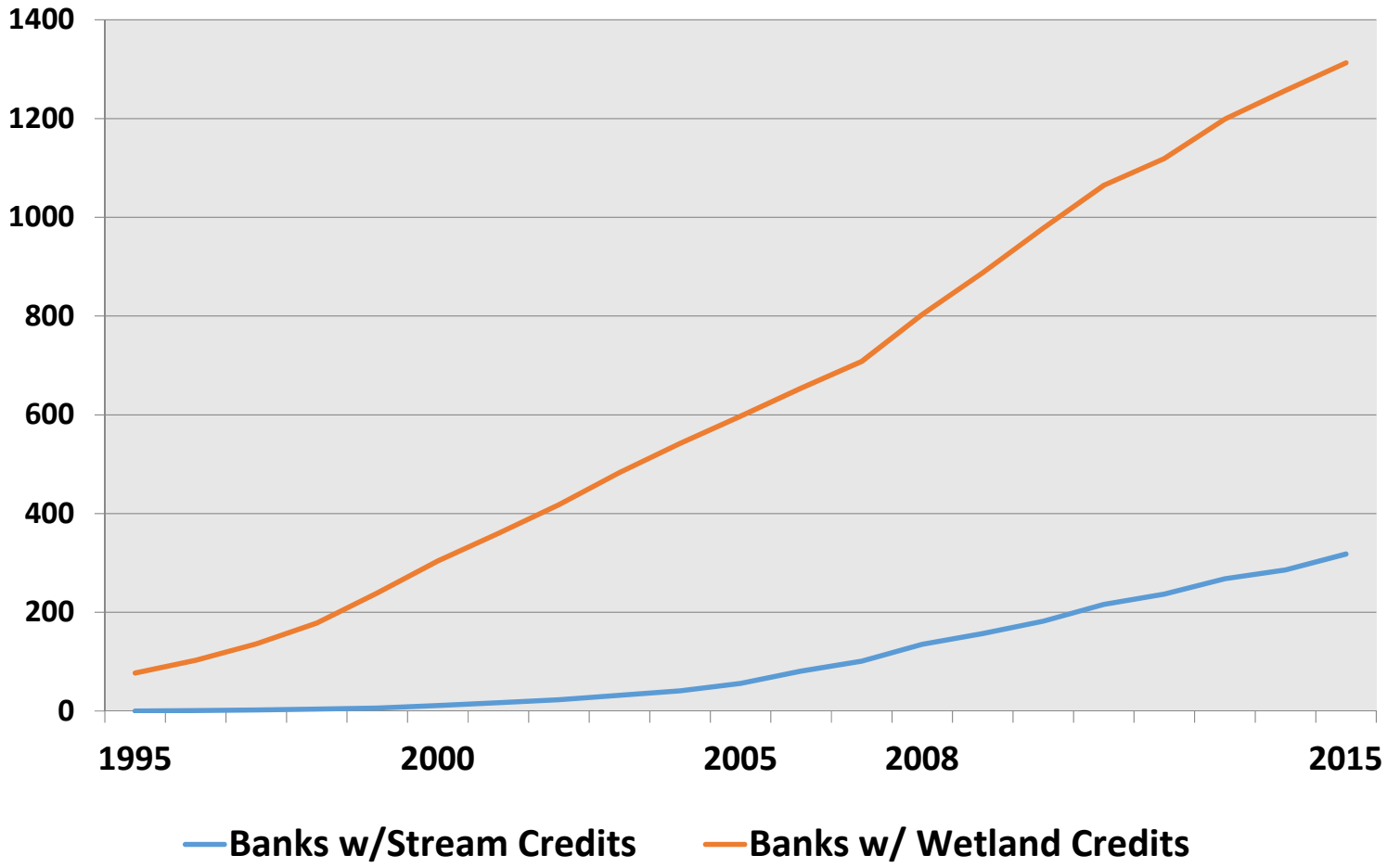
- DOTs, local government, DoD, Ports,
- Corporate (few)

Image: Sam Collinson



RIBITS 2019 data

Approvals of Banks with Wetland and Stream Credits



Source: IWR 2015

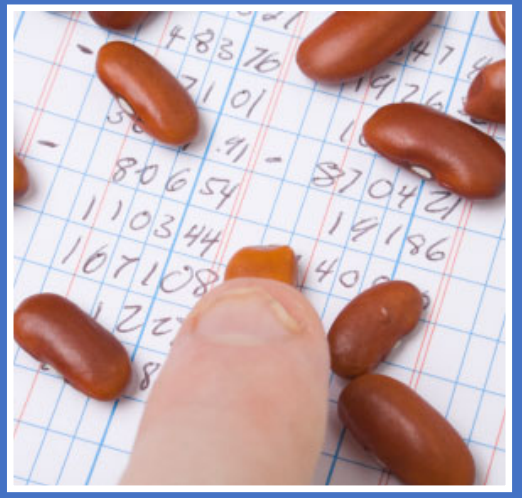
Principles of Third Party Compensatory Mitigation

- Must have instrument approved by the Corps & Sponsor
- Sponsor assumes mitigation liability of permittees
- Public review process before instrument can be approved
- Coordination of instrument development & operation with IRT
- Corps is decision maker for third party mitigation for DA permits
- Approved mitigation plans required
- Credit availability tied to performance
- Ledgers for all credit transactions
- Suspension/termination if not fulfilling mitigation obligations

What is a credit?

Unit of measure representing accrual or attainment of aquatic functions at a mitigation site. *33 CFR 332.2*

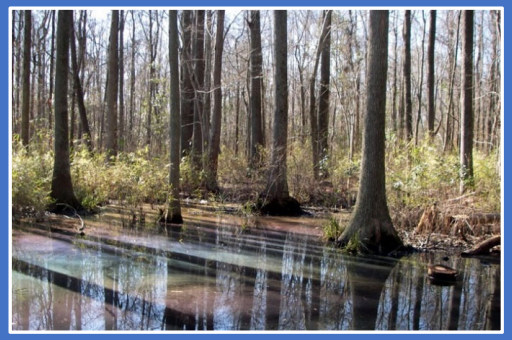
Currency



- Examples:
  - Acre of restored wetland
  - Linear foot of restored stream
  - Unit of Functional capacity or performance

- **Basic types:**
  - **Advanced Credits** – ILF credits that are associated with service area NOT a project
  - **Released Credits** – Credits based on projects meeting performance milestones (bank & ILF projects)

Examples of mitigation credits



Forested wetlands

Vernal pool

Brackish marsh

Seagrass

Perennial stream

Sediment remediation

Some costs of third party mitigation

Aquatic compensatory mitigation (stream & wetland compensation) is estimated to be the largest offset market in the world at **$3.25 billion** in 2016*

Sample Credit Types	Average Price per Acre
Wetlands (Georgia)	**$142,000**
Bottomland Hardwoods (Louisiana)	**$40,000**
Tidal Marsh (Virginia)	**$635,000**
Wetlands (Arkansas)	**$91,200**
Pine Savanna (Louisiana)	**$17,500**
Fresh Wet Meadows (Minnesota)	**$29,400**
Riparian Wetlands (North Carolina)	**$56,176**

* Source: State of Biodiversity Markets 2017

Credit Bundling

Mitigation bank or ILF program credits may offset impacts to 1 or more resources such as:

- Wetlands, streams
- Threatened or endangered species
- Other at risk species
- Water quality
- Carbon

Credit bundling - Credit representing spatially overlapping ecosystem functions or services treated as a *single* commodity

A **bundled credit** cannot be unbundled to offset impacts to different resources at different projects

Once debited, a bundled credit cannot be debited for other impacts

Mitigation Credit Drivers

Application of **mitigation sequence**:

- Avoid, minimize , and then compensate for unavoidable impacts

Corps 1986 mitigation policy (33 CFR 320.4(r))

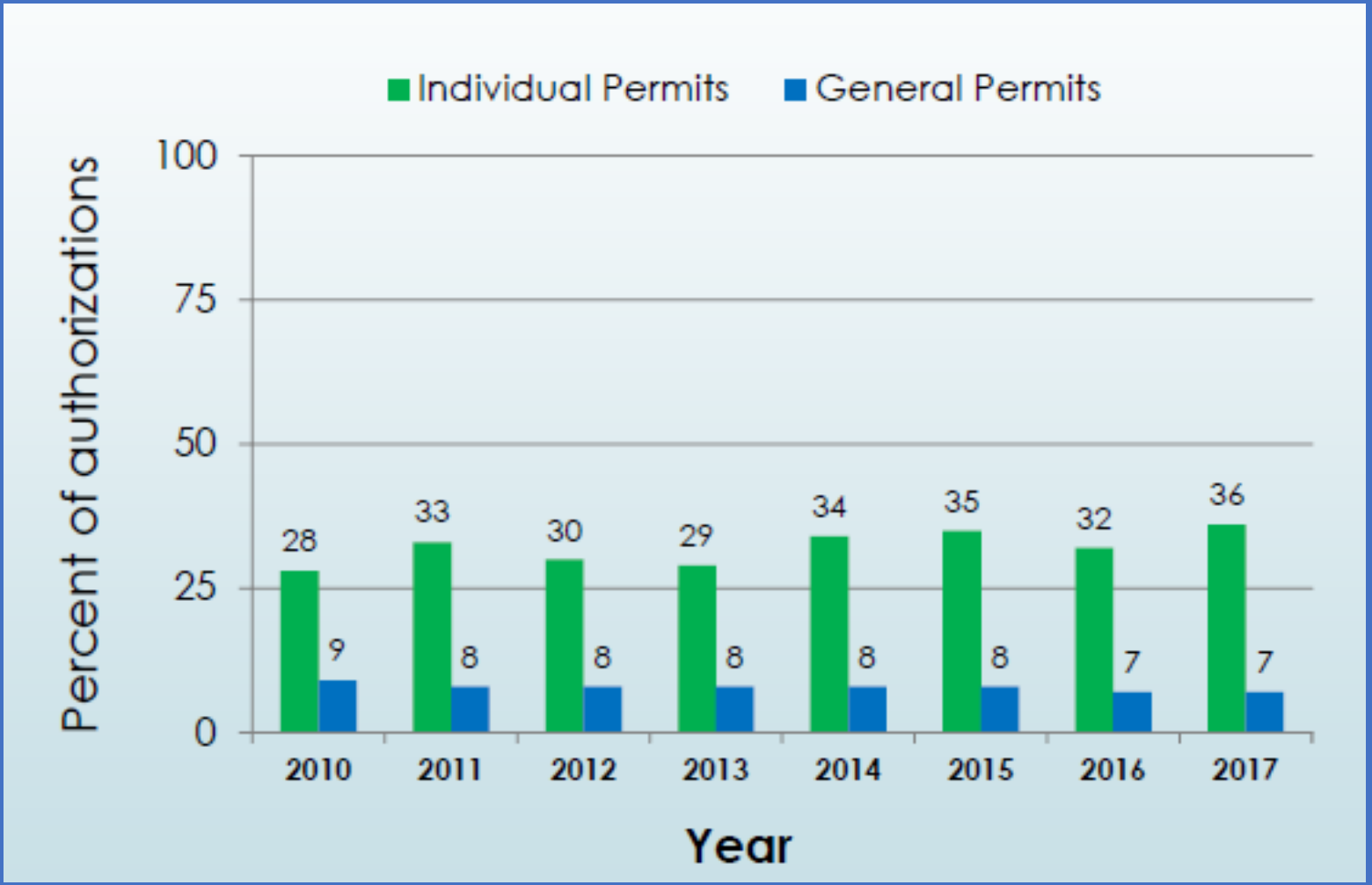
- Compensatory mitigation may be required for **significant resource losses** that are …of importance to the human or aquatic environment

Corps 1991 Nationwide Permit Mitigation Policy (33 CFR 330.1(e)(3))

- …Compensatory mitigation may be required to ensure that nationwide permit activities result in no more than **minimal** individual and cumulative adverse environmental effects

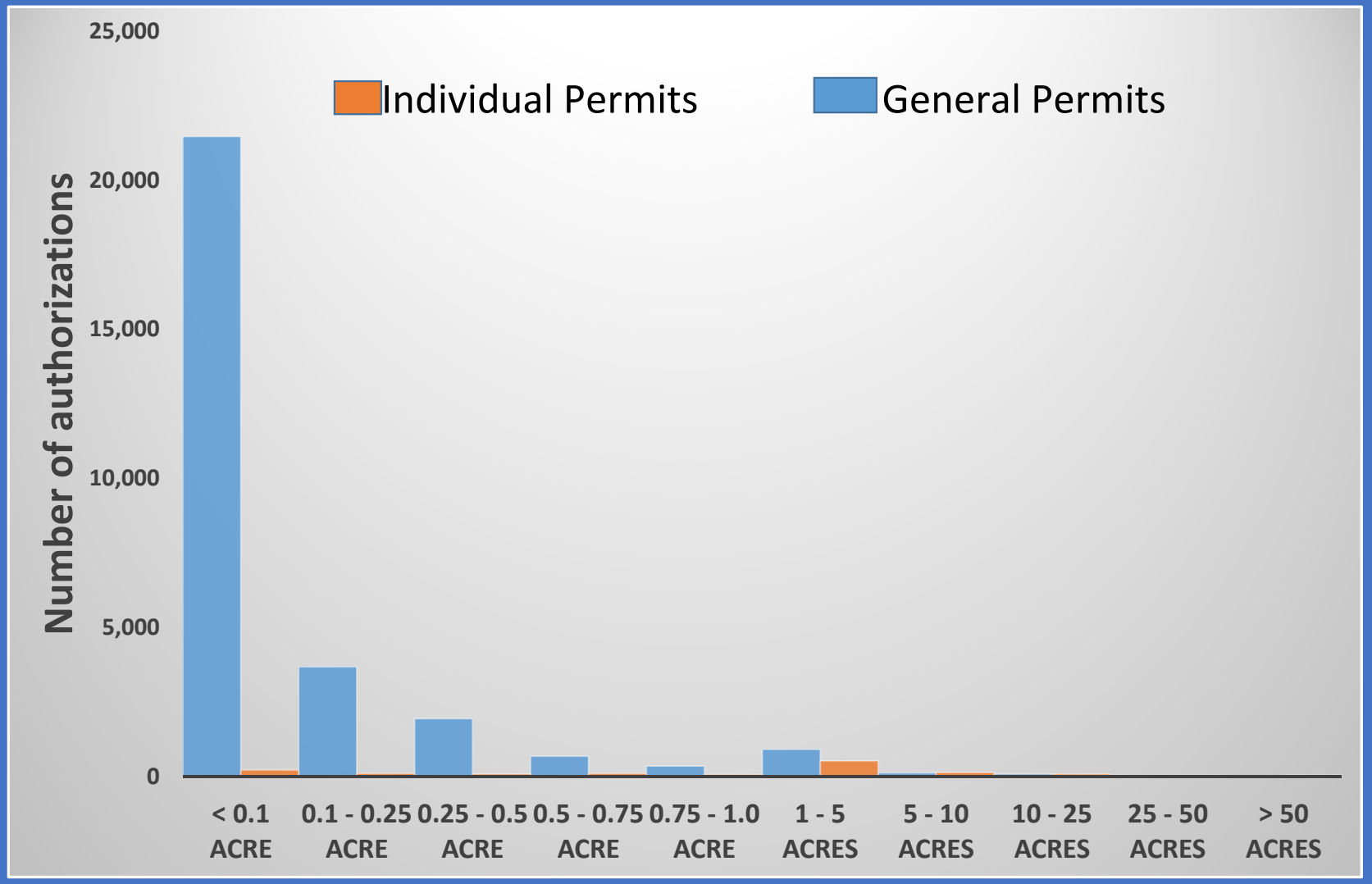
State and Local government permit requirements

How often is compensatory mitigation required for Corps permits?



Source: USACE OMBIL Regulatory Module (ORM) in Olson 2018

Authorized 404 CWA Fill Impacts in 2015



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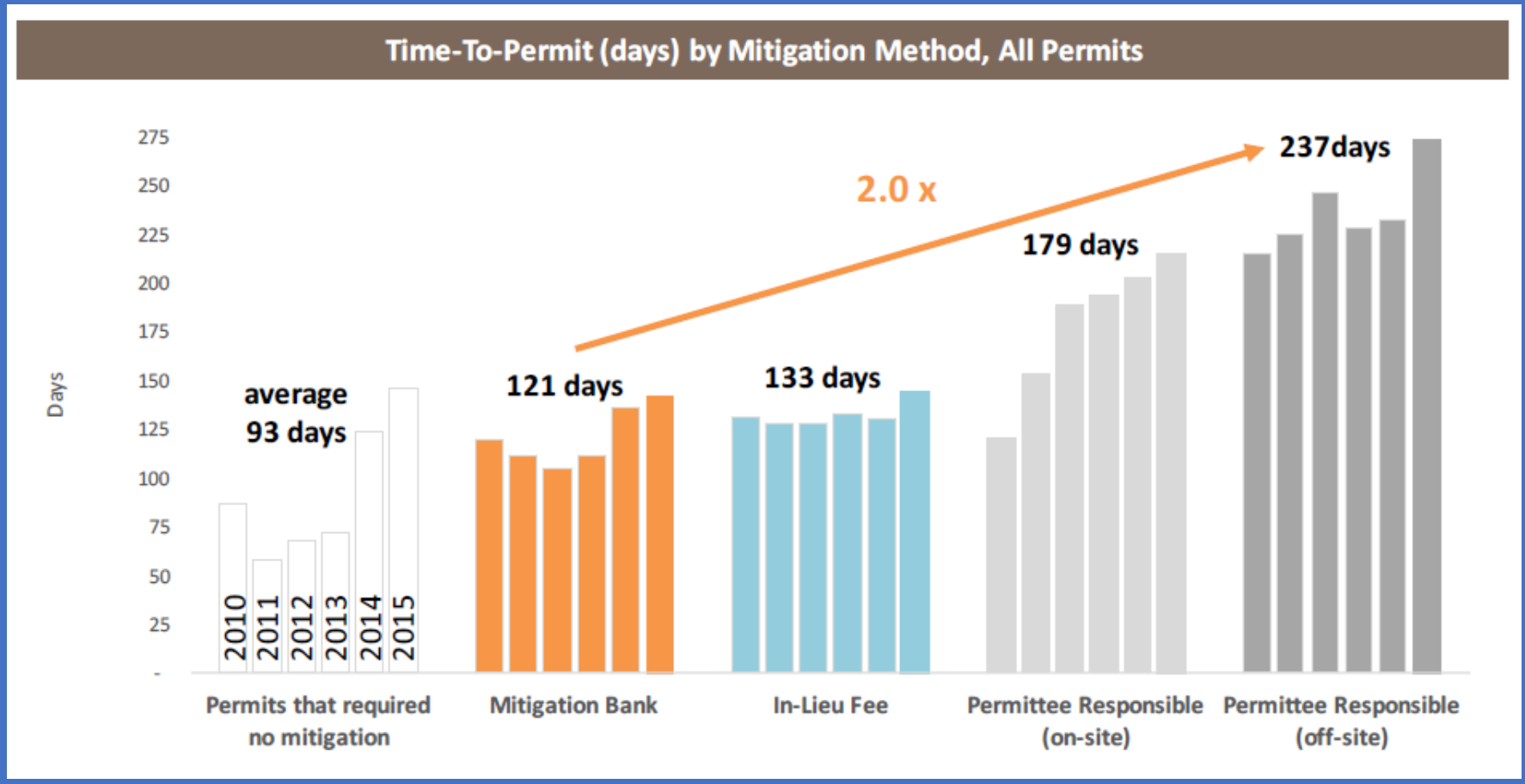
Third Party Mitigation Reduces Permitting Time



Source: Birnie 2016 data analysis using ORM data

Third Party Mitigation and Federal Water Resource (Civil Works) Projects

WRDA* 2016 section 1163 Implementation Guidance

During feasibility studies Corps considers potential in-kind credits available at approved banks & ILF programs

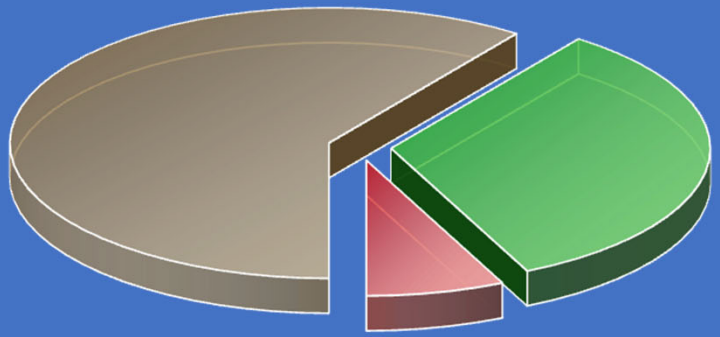
Credits need to be released before they can be purchased to offset Civil Works project impacts

Functional analysis of potential credits using a Corps-certified habitat assessment method

May differ from approved credit determination method

* Water Resources Development Act

Types of Compensatory Mitigation, 2005



Source : IWR 2005

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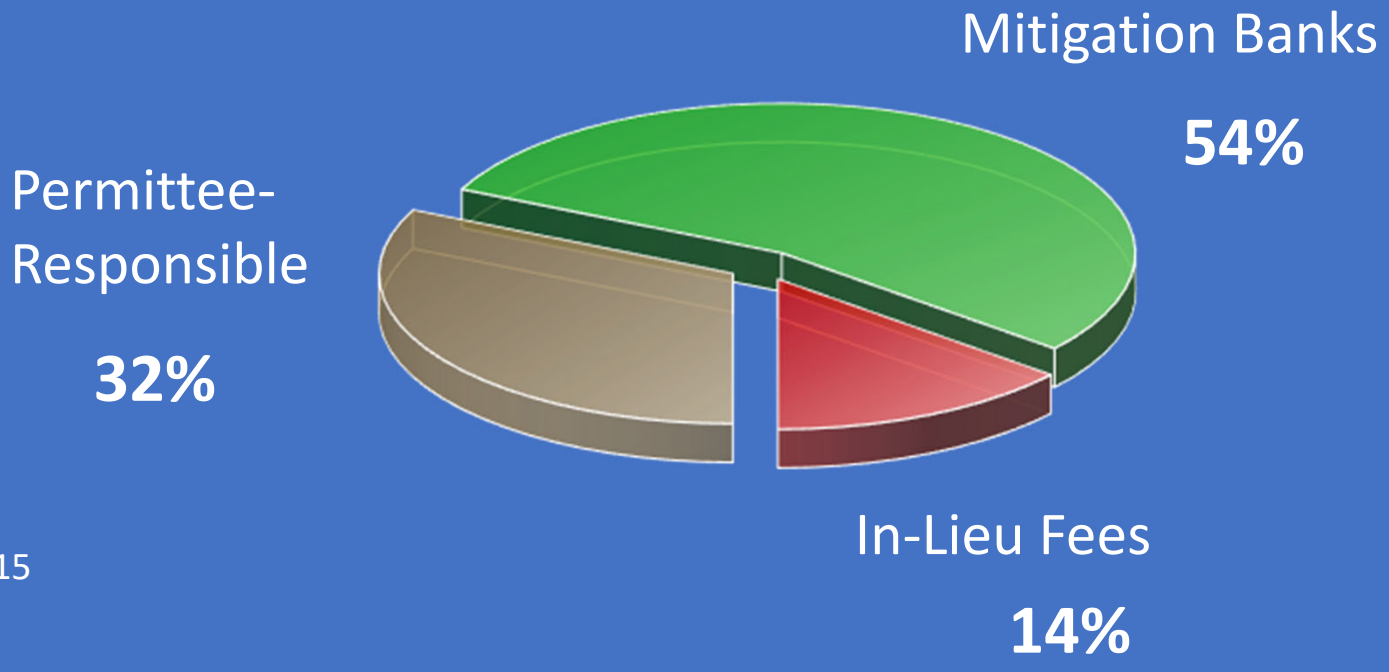
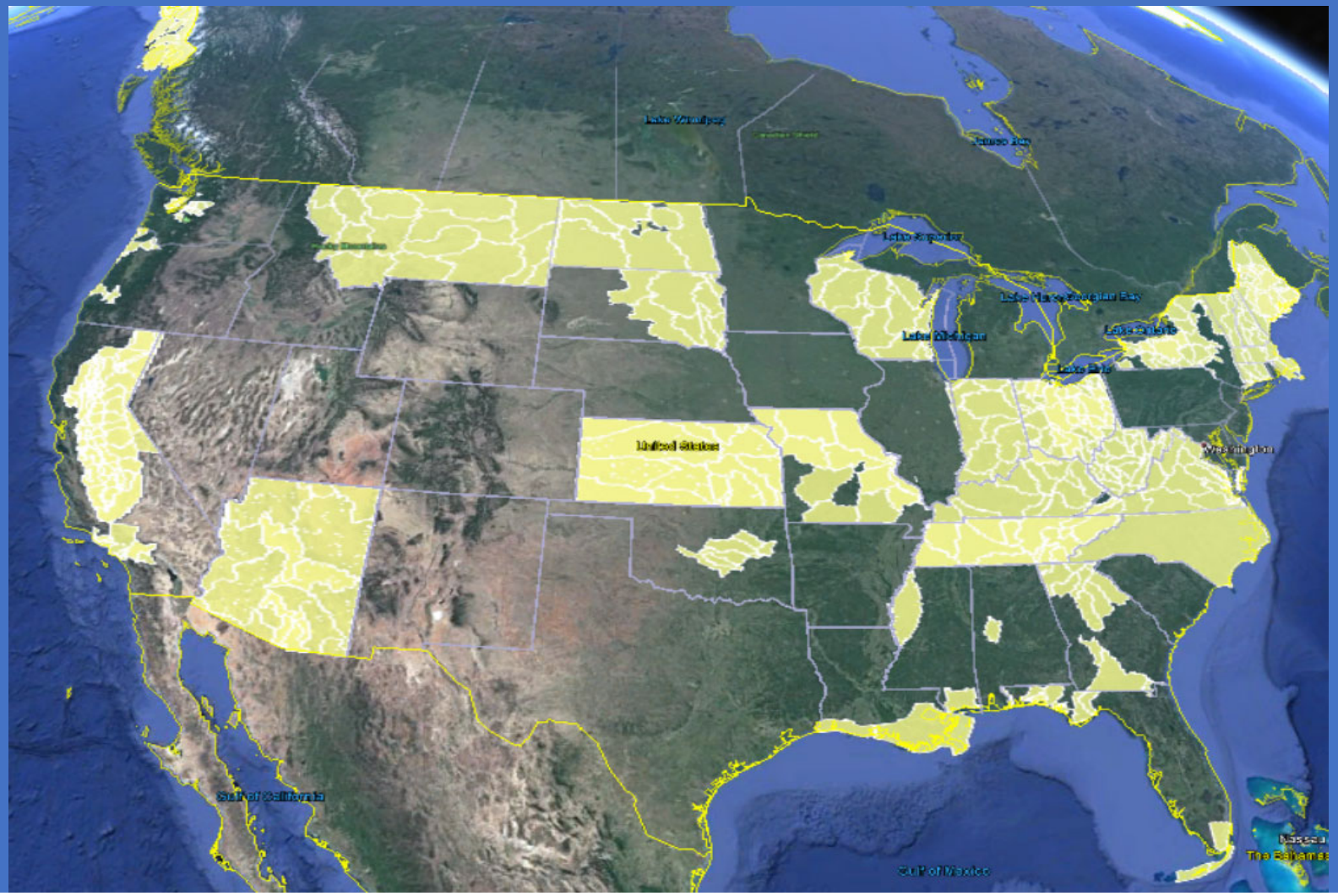


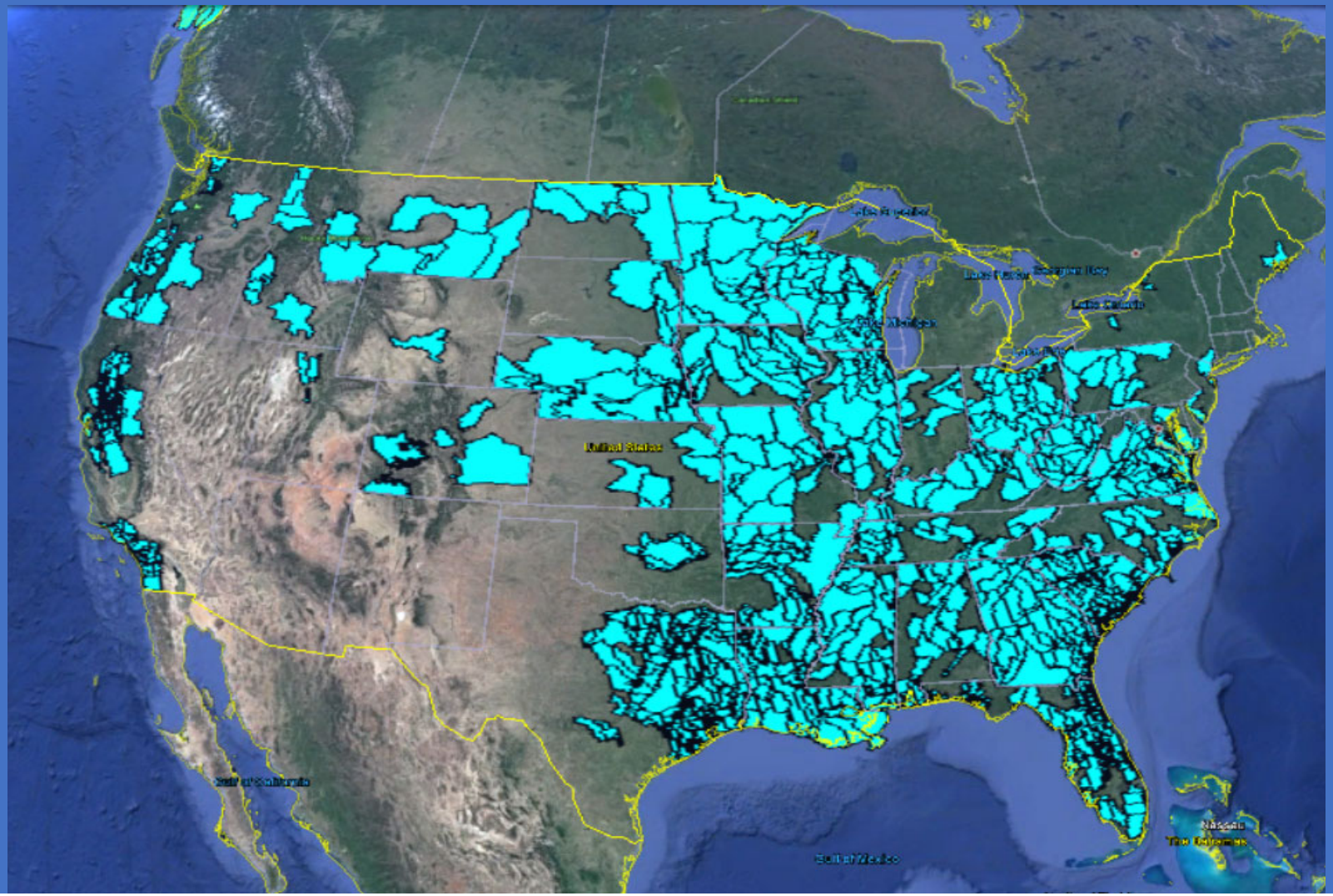
Source: IWR 2015

ILF Service Areas (12/31/2018)



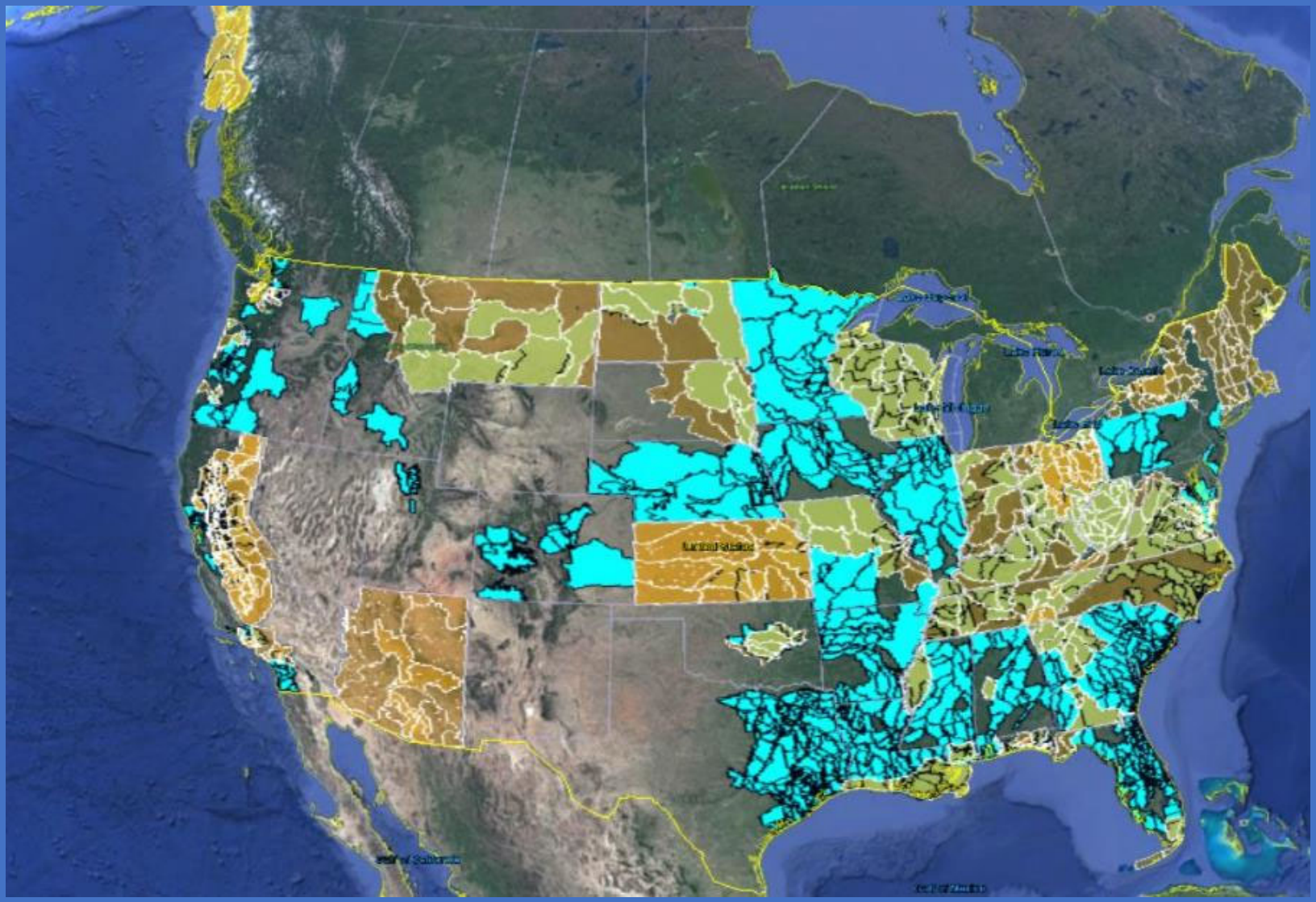
RIBITS Data 2018

Mitigation Bank Service Areas (12/31/2018)

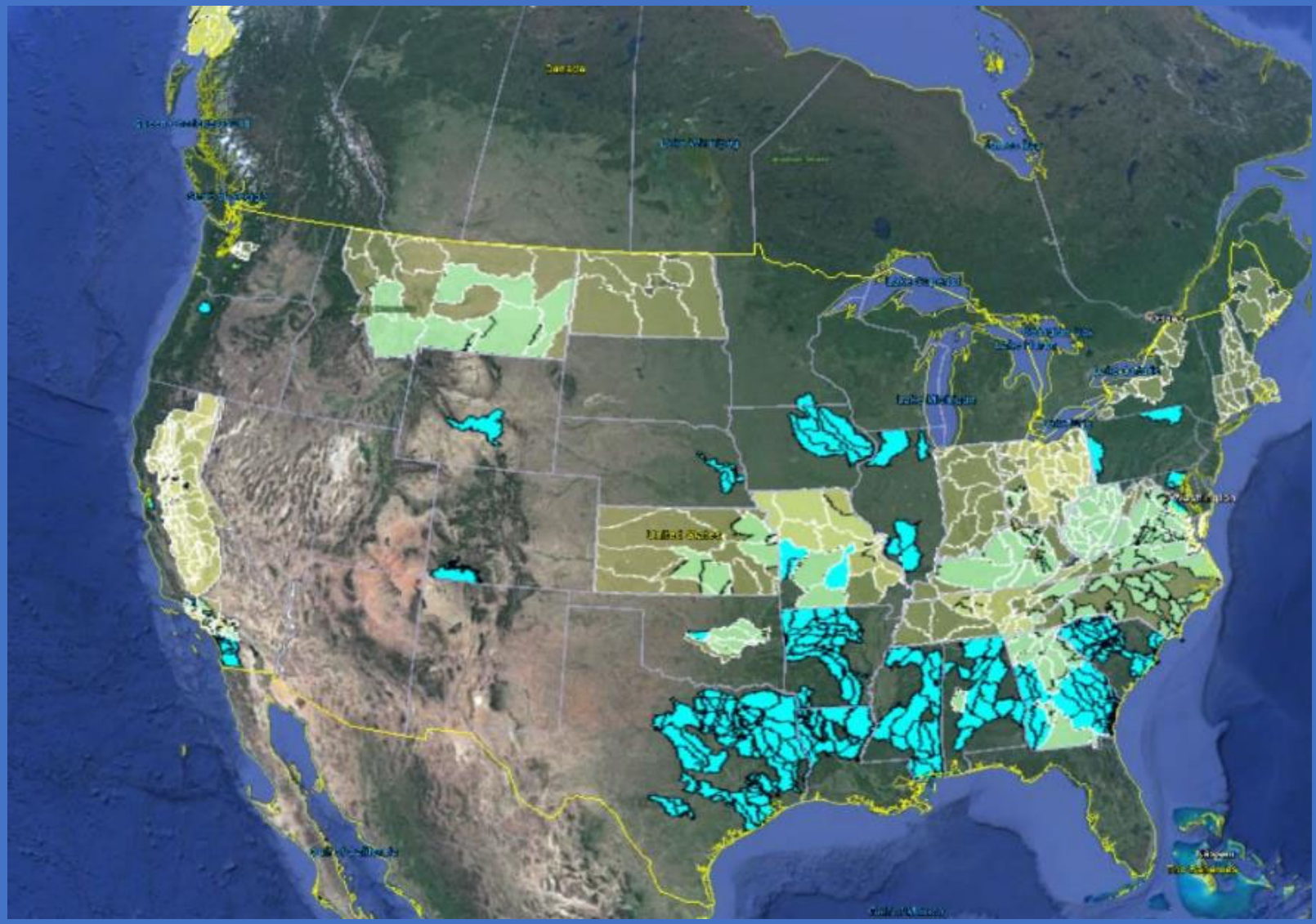


RIBITS data 2018

Operational Banks & ILFs providing wetland credits 2018



Banks & ILFs providing stream credits 2018




Questions?