

ECO-ASSET MANAGEMENT, LLC

WETLAND MITIGATION BANKING FOR AIRPORTS IN SOUTH DAKOTA



WETLAND MITIGATION BANKING OVERVIEW

GENERAL:

- ▣ What is mitigation
- ▣ Legal authorities
- ▣ Development process
- ▣ Forms of mitigation
- ▣ Mitigation timeframes and generalized costs
- ▣ Mitigation bank credit benefits, service areas and types

FAA GUIDANCE:

- ▣ 5050.4B
- ▣ FAA banking strategy
- ▣ FAA, USAF, Corps, EPA, USFWS, USDA Memorandum of Agreement
- ▣ Wildlife strike/hazard advisory circulars, guidance and directives

WHAT IS MITIGATION?

Mitigation is the restoration, creation, enhancement, or preservation of a wetland, stream, or other aquatic habitat area expressly for the purpose of compensating for unavoidable resource losses associated with human activity in such resource areas.

Stream mitigation is accomplished through reducing livestock pressure, re-establishment of natural stream geomorphology, riparian buffer planting, etc.



Wetland mitigation is accomplished through reducing livestock pressure, re-establishment of natural wetland topography and vegetation communities, establishment and planting of upland buffers, etc.

LEGAL AUTHORITIES

CLEAN WATER ACT

- **1972/1977** Clean Water Act (CWA) states that the wetlands program goal is “no net loss of wetlands”
- **1995** Memorandum to the Field. “Federal Guidance for the Establishment , Use and Operation of Mitigation Banks”
- **2008** – 33 CFR 332 “Compensatory Mitigation for Losses of Aquatic Resources”

FAA GUIDANCE

- Wetland Mitigation Banking Strategy for FAA (**1996**)
- 5050.4B, MOA’s and Advisory Circulars
- Wildlife Hazard Management Plans (WHMP)

□ Rearrange the landscape to suit airport projects – traditional process:

- Feasibility analyses and early planning;
- AIP development and budgeting;
- Environmental planning docs;
- Design, specifications
- PERMITTING
- MITIGATION
- LONG-TERM
LIABILITY



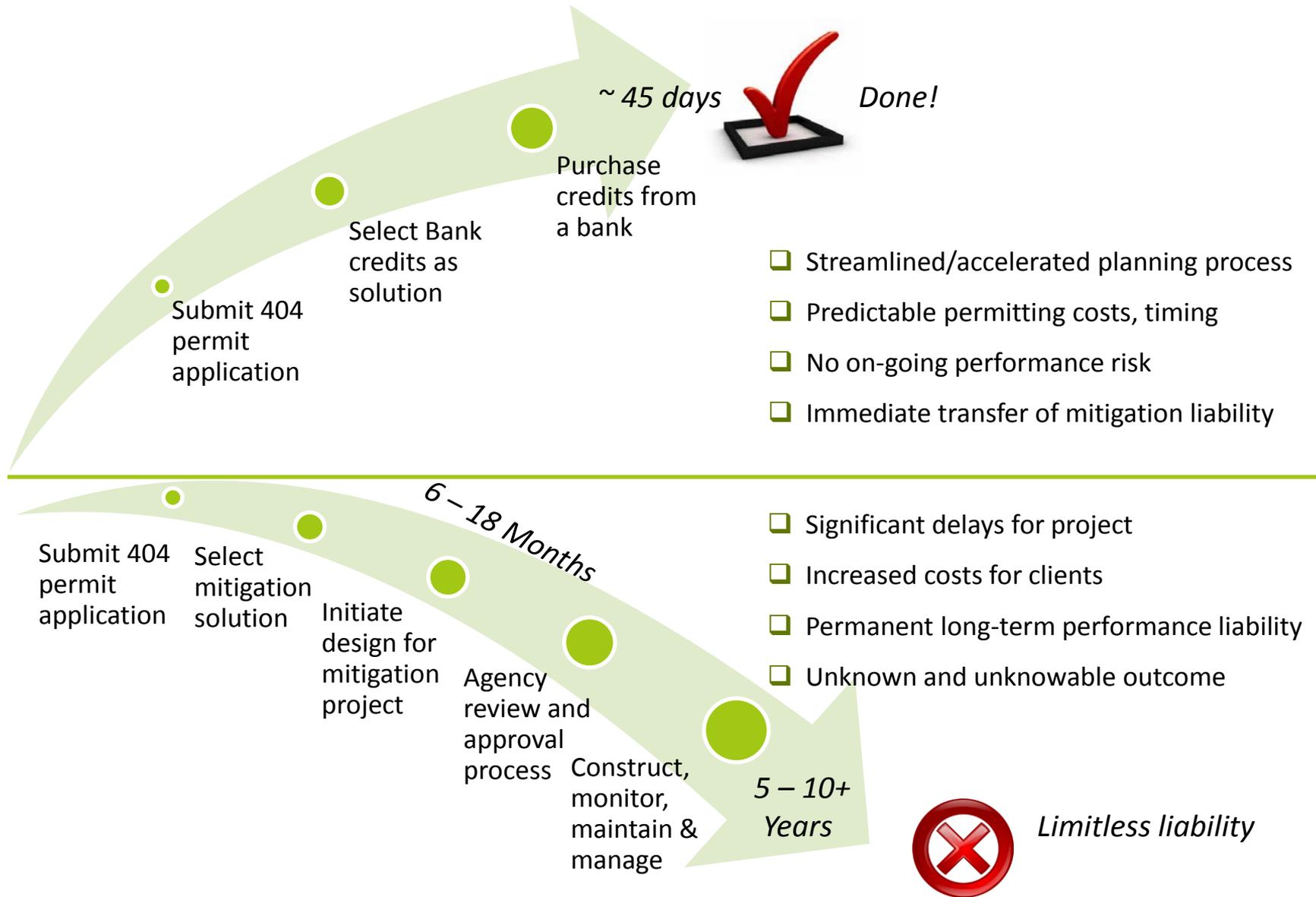
AQUATIC RESOURCE MITIGATION UNDER CWA

▣ Forms of Mitigation Under Section 404 of CWA (in order of preference):

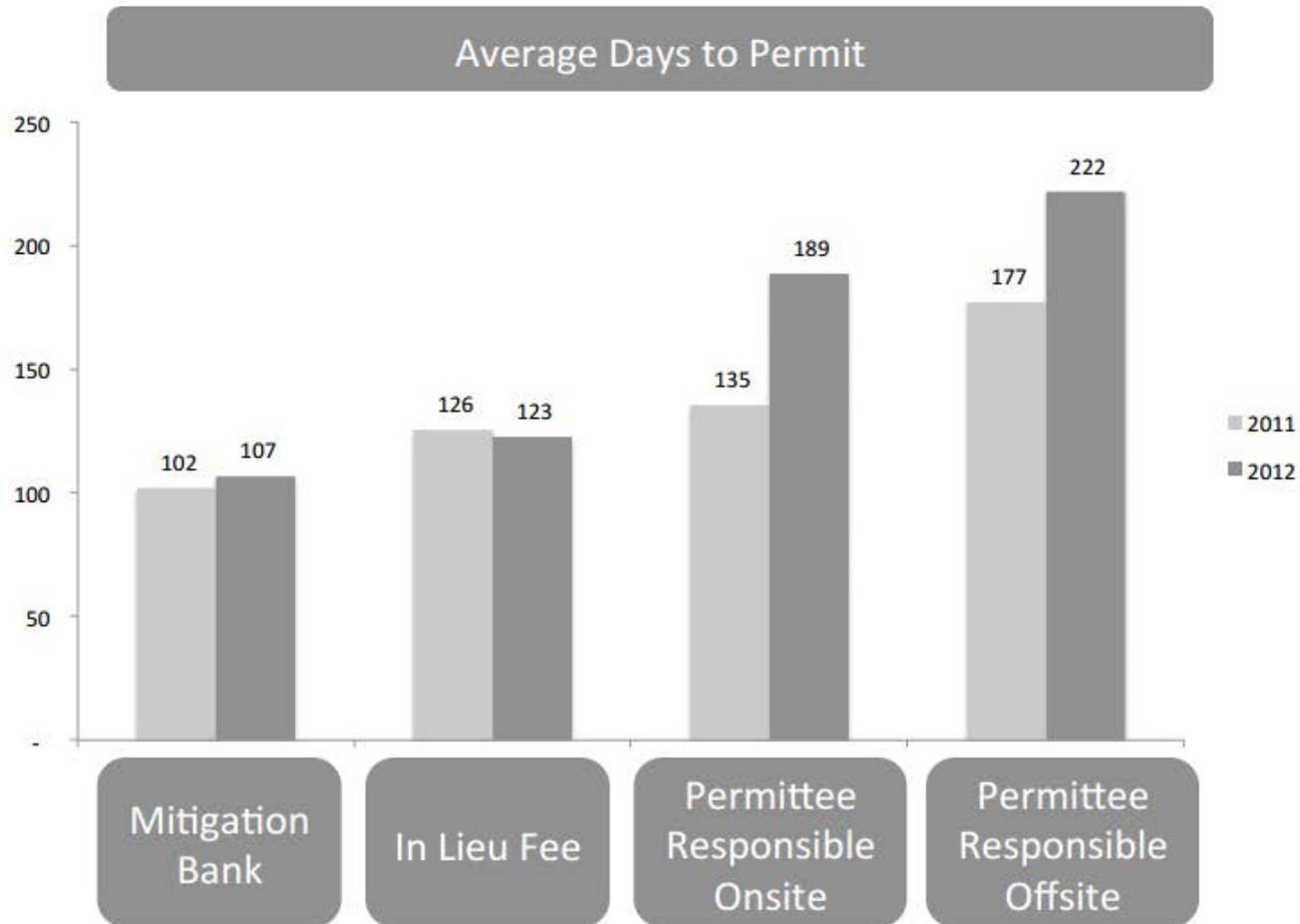
- ▣ Mitigation Bank Credits;
- ▣ Fees Paid In-Lieu of Mitigation;
- ▣ Permittee-responsible (watershed context, restoration/enhancement)
- ▣ Permittee-responsible (on-site, in-kind)
- ▣ Permittee-responsible (off-site and/or out-of-kind)



CWA BANK CREDITS VS. PERMITTEE RESPONSIBLE MITIGATION



Time to Permit by Mitigation Method, 2011 - 2012

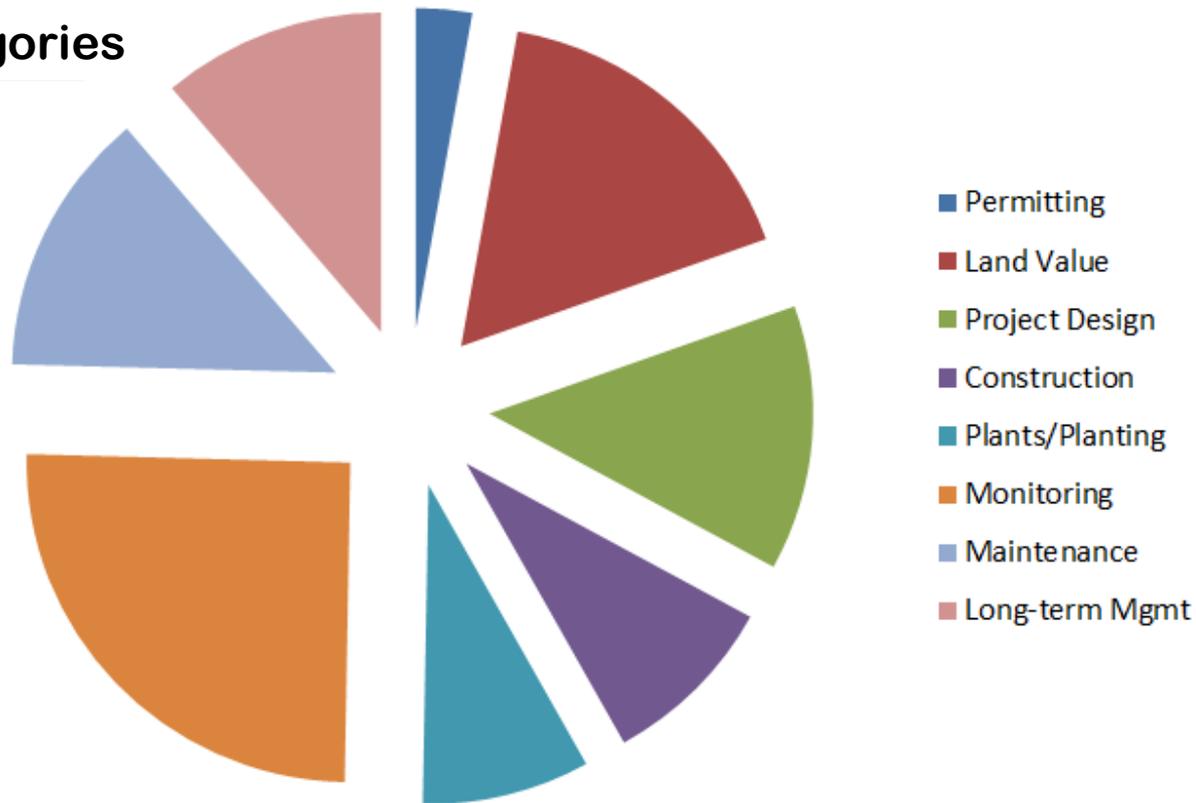


Ecosystem Investment Partners

Birnie, Katherine (Ecosystem Investment Partners). May 9, 2013. "State of the Market: National Market Analysis and Overview." Presentation at 2013 National Mitigation & Ecosystem Banking Conference. New Orleans, LA.

PERMITTEE RESPONSIBLE MITIGATION

Cost Categories

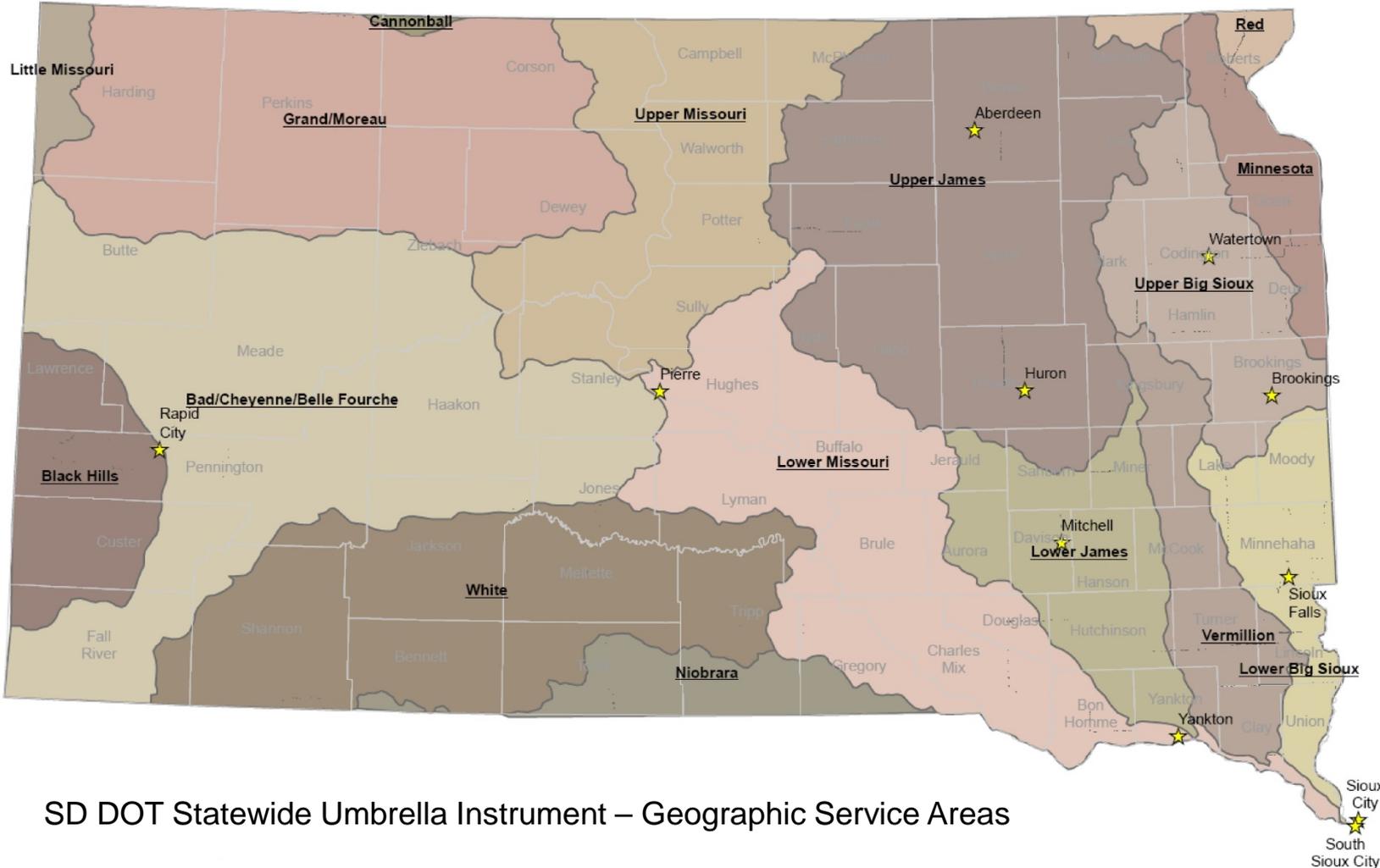


- ❑ Corps requires that permittees complete lengthy mitigation checklist and provide documentation for anticipated costs: 6 – 18 months; complete mitigation, monitoring, reporting: 5 – 10+ years
- ❑ Permittee-responsible wetland mitigation: up to \$45,000/credit (acre-based) or \$15K/credit (HGM-based) + limitless liability
- ❑ Failure to meet performance standards can mean additional mitigation, monitoring and extended liability

WHY CWA CREDITS ARE SO BENEFICIAL

- ❑ 1:1 credits:debits (other forms of mitigation at least DOUBLE – 2:1 or more (credits:debits))
- ❑ Agency endorsements in advance
 - ✔ US Army Corps of Engineers
 - ✔ US EPA
 - ✔ US Fish and Wildlife Service
 - ✔ South Dakota DENR
 - ✔ South Dakota Game, Fish and Parks
 - ✔ Federal Aviation Administration (/USDOT)
- ❑ Time efficiencies: Reduce permitting to 45 days on average
- ❑ Cost effectiveness: Credits developed at scale, so 20% - 30% lower cost than permittee-responsible
- ❑ 100% successful every time
- ❑ ALL liability and risk transfers to Mitigation Bank immediately and permanently

GEOGRAPHIC SERVICE AREAS FOR CREDITS IN SOUTH DAKOTA



SD DOT Statewide Umbrella Instrument – Geographic Service Areas

ISSUES OF WETLAND TYPE

▣ Hydrogeomorphic (HGM) Types

- ▣ Depressional (prairie pothole wetland model)
- ▣ Riverine (linear, flowing wetland model)
- ▣ Other models

▣ Cowardin Types

- ▣ Palustrine emergent, scrub-shrub and forested
- ▣ Lacustrine fringe
- ▣ Riverine
- ▣ Minor types

▣ Unclassified Types

- ▣ Mesic areas, upland areas

WETLAND MITIGATION FOR AIRPORTS

□ Guidance under 5050.4B

- Airport impacts to wetlands and other aquatic resources, typically EA required
- Affected Environment, Environmental Consequences, MITIGATION
- Bank credits will contribute to FONSI per FAA guidance

□ Guidance under 1996/1997 FAA Banking Strategy

- Purchase bank credits as “proven, cost-effective way to compensate successfully for unavoidable wetland impacts
- Guidance for purchasing credits, NOT building a bank for FAA use
- Primary mission of the FAA and airport sponsors is AVIATION – purchase of credits frees FAA and sponsors to concentrate on complex issues of airport management

□ Guidance under Multi-agency MOA (2002/2003)

- Addresses risks posed by aircraft-wildlife strikes, elimination of wildlife attractants
- Mitigation should avoid contributing to strike risk, be located outside of siting separations
- **“MITIGATION BANKS OFFER AN ECOLOGICALLY SOUND APPROACH TO MITIGATION”** (emphasis added)

WETLAND MITIGATION FOR AIRPORTS

- ❑ Identify mitigation bank credits in early planning process
- ❑ Solicit input from mitigation bank Sponsor on pricing for AIP budgeting
- ❑ Specifically name mitigation bank in EA/FONSI or EIS
- ❑ Direct consultants to coordinate with mitigation bank during permitting process
- ❑ FAA (as well as FHWA, FEMA and others) provides funding for mitigation bank credit purchase, including in bulk and/or in advance
- ❑ ***Corps of Engineers, EPA, WRDA, FHWA, FEMA and FAA (among others) prioritize the use of MITIGATION BANKS when available***

QUESTIONS

