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# Regulatory Program

## Third Stakeholder Forum On Federal Wetlands Mitigation

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# Regulatory Program Authorities

- Section 404 of the Clean Water Act
  - Discharge of dredged or fill material into “waters of the US”
  - “Waters” include streams, lakes, wetlands
- Section 10 of the Rivers and Harbors Act 1899
  - All work in, over, or under navigable waters
    - Includes dredging, docks, marinas, pipelines, etc.

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# Regulatory Program Goals

- Protect the aquatic environment
- Enhance regulatory program efficiency
- Make fair, reasonable, and timely decisions



# Regulatory Permits

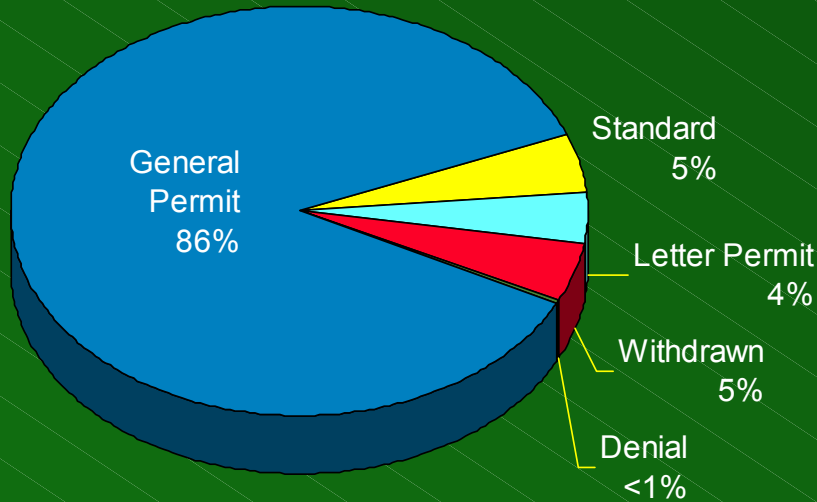
- **Standard Permits (Individual Permits)**
  - Evaluation and authorization project-specific
  - Involved process (public notice, agency review, alternatives analysis, public interest review, environmental assessment or EIS)
- **Letters of Permission**
  - Less controversial, minor impacts, Sec 10 primarily
  - Limited agency review, no public comment
- **General Permits**
  - Regional General Permits
  - Nationwide Permits



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# Regulatory Program

## ALL PERMIT DECISIONS FY 2002



### TOTAL NUMBER EVALUATED

	<b>FY01</b>	<b>FY02</b>
Standard Permits	4,159	4,023
Nationwide	37,088	35,768
Regional	38,759	38,125
Letter of Permission	3,066	3,258
Denials	171	128
Withdrawn	3,791	4,143
<b>TOTAL</b>	<b>83,243</b>	<b>81,302</b>

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# Regulatory Program

- Sequencing
  - Avoidance
  - Minimization
  - Compensation

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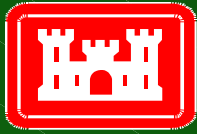
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# Mitigation Policy

- Mitigation is critical to Regulatory Program
  - Corps requires mitigation to offset impacts to the aquatic environment – replace the aquatic functions
  - Corps policy is to offset impacts authorized at a one for one ratio on an aquatic functional basis
    - High functioning wetlands may require more than 1:1 acreage mitigation
    - Low functioning wetlands may require less than 1:1 acreage mitigation



# Mitigation Conditions

Corps includes permit conditions that require applicants to  
mitigate project impacts permitted

Clear enforceable permit conditions are critical

- Permit conditions need to be in plain English
- Conditions must have success criteria
- Permit conditions will normally have monitoring requirements normally 5 or more years

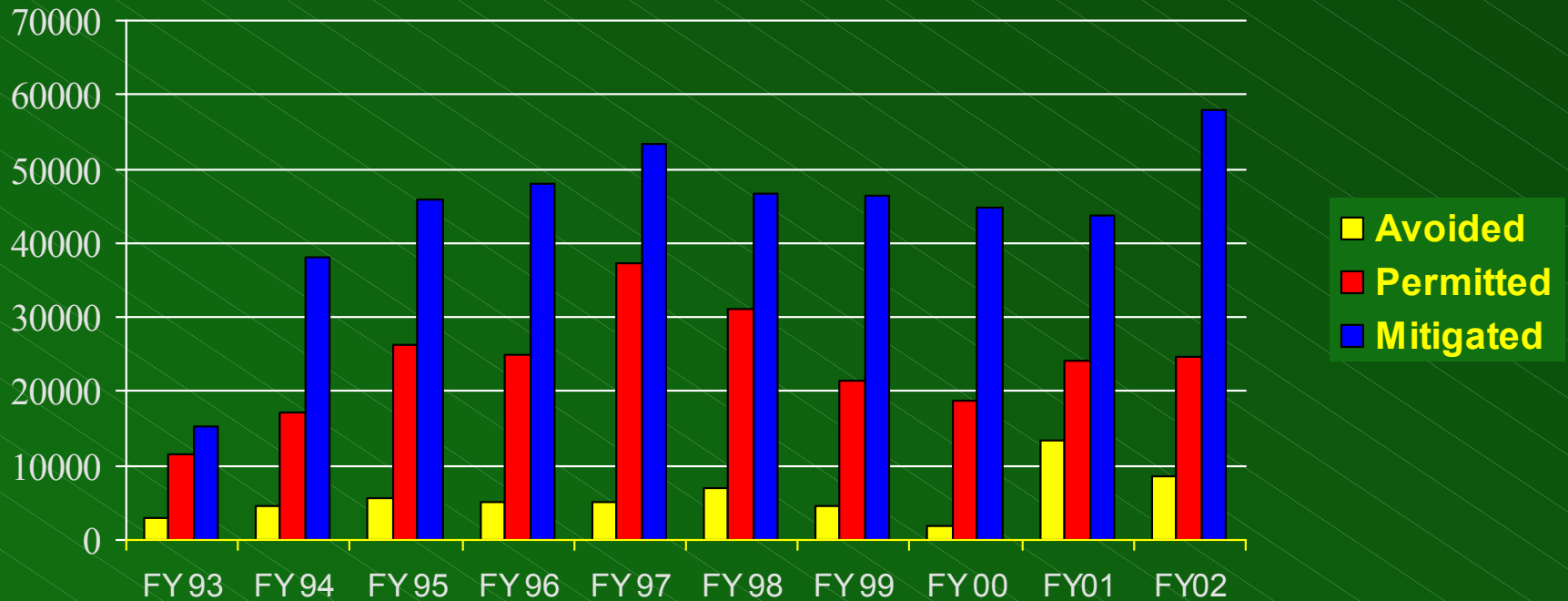




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# Summary of Wetland Impacts and Mitigation

Wetland Acreage Avoidance, Impacts, and Mitigation  
Includes Verified General Permits



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# Regulatory Program Mitigation

- National Academy of Science (NAS) Report
  - Mitigation is not successful
    - Either not built or fails to offset impacts permitted
    - Needs to take a watershed approach
    - Mitigation construction sites failed

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# Regulatory Program Mitigation

- CORPS issued Regulatory Guidance Letter (RGL)  
October 31, 2001
  - RGL 01-1
    - Improve watershed approach to mitigation
    - Establish need for success criteria and mitigation plans
    - Provide basis for improved mitigation compliance
    - Help improve mitigation success

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# Mitigation RGL 02-02

RGL 02-02 replaces RGL 01-01

No significant changes but good revisions to 01-01

## Major Issues

- Watershed approach
- Functional assessment
- Stream mitigation
- Definitions of mitigation
- Preservation and buffers as mitigation
- Mitigation plans
- NRC Guidelines

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# Watershed Approach

- Watershed based approach to impact assessment and mitigation
  - Watersheds identified by HUC code
  - Mitigation determined through assessment of impacts at watershed level
    - Assess wide variety of impacts (corridors, hydrology, etc)
    - Incorporate these additional impacts in mitigation plans
    - Mixed habitat for mitigation
- GIS needed for true watershed approach



# Functional Assessment

- RGL encourages increased use of functional assessment methods for impacts and mitigation
  - Functional assessments used when available
  - Same method should be used for both impact assessment and the determination of mitigation requirements
  - When FA not available, use acreage surrogate
- Functional replacement
  - Objective is to provide, at a minimum, one-to-one functional replacement with an adequate margin of safety
  - No overall net loss may not be achieved for every permit but on a cumulative basis.



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# Stream Mitigation

- Impacts to streams will require mitigation
  - Use of functional replacement is encouraged
  - When FA is not available, use one-to-one minimum for linear feet of impacts
  - Evaluate these types of mitigation projects carefully because past experience has been questionable

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# Mitigation Definitions

- **Establishment (Creation):** The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site, where a wetland did not previously exist. Establishment results in a **gain in wetland acres**.
- **Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:
  - **Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Re-establishment results in rebuilding a former wetland and **results in a gain in wetland acres**.
  - **Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Rehabilitation **results in a gain in wetland function** but does not result in a gain in wetland acres.





# Mitigation Definitions

- **Enhancement:** The manipulation of the physical, chemical, or biological characteristics of a wetland (undisturbed or degraded) site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in wetland function(s) and can lead to a decline in other wetland functions, but **does not result in a gain** in wetland acres. This term includes activities commonly associated with enhancement, management, manipulation, and directed alteration.
- **Protection/Maintenance (Preservation):** The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes the purchase of land or easements, repairing water control structures or fences, or structural protection such as repairing a barrier island. This term also includes activities commonly associated with the term preservation. Preservation **does not result in a gain** of wetland acres and will be used only in exceptional circumstances.



# Preservation

- Preservation
  - Generally used in conjunction with establishment or restoration activities to augment functions of these wetlands
  - May be used as sole basis for mitigation in exceptional circumstances
  - Generally, very high quality wetlands, important in the watershed, and/or under severe threat from development



# Upland Buffers

- Buffers as mitigation
  - Buffers defined as upland or riparian areas that separate wetlands or other aquatic resources from development or agricultural areas.
  - Buffers should be used as mitigation when they protect or enhance functions of the adjacent wetlands or aquatic areas
  - May be used as sole basis for mitigation in limited circumstances
  - Generally use buffers as a part of mitigation strategy



# Mitigation Plans

- RGL provides a general list of issues that should be covered in mitigation plans
  - List of mitigation issues include temporal loss, goals and objectives, site selection, contingency plans, financial assurances, etc.
  - Issues should be included in nearly every mitigation plan except for only those very small sites
  - Concentrate on success criteria



# Success Criteria

- Use functional assessment (HGM) as a start
- Include physical factors in success criteria
- Don't use the common adage: "If you build it they will come"
- Another falsehood: "If you grow the trees, the habitat is good"
- Our long-term goal: ecological driven, mitigation success criteria in every permit

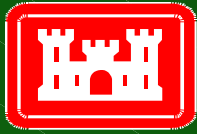


# NRC Criteria

- **Criteria found as Appendix B to RGL**
  - *Consider the hydrogeomorphic and ecological landscape and climate*
  - *Adopt a dynamic landscape perspective*
  - *Restore or develop naturally variable hydrological conditions.*
  - *Whenever possible, choose wetland restoration over creation*
  - *Avoid over-engineered structures in the wetland's design*
  - *Pay particular attention to appropriate planting elevation, depth, soil type, and seasonal timing.*
  - *Provide appropriately heterogeneous topography*
  - *Pay attention to subsurface conditions, including soil and sediment geochemistry and physics, groundwater quantity and quality, and infaunal communities.*
  - *Consider complications associated with creation or restoration in seriously degraded or disturbed sites.*
  - *Conduct early monitoring as part of adaptive management.*

**All I want is a place to lay my head down.**





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# Regulatory Branch

Questions?

Contact Information

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# National Wetlands Mitigation Action Plan

- Purpose of the MAP:
  - Further achievement of “no net loss”
  - Undertake series of actions to improve ecological performance of mitigation sites
- Seventeen actions items including publication of the RGL
- Interagency team at HQ level will address the action items
- Work teams from field will assist with each action item

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# National Wetlands Mitigation Action Plan

- **Action Items for FY 2003**
  - Guidance on on-site vs. off-site, in-kind vs. out-of-kind
  - Implementation of the TEA-21 preference for mitigation banking
  - Clarifying considerations for mitigating impacts to streams
  - Develop a model mitigation plan checklist
  - Review and develop guidance adapting the NAS/NRC recommended guidelines for creating or restoring self-sustaining wetlands
  - Analyze existing research to determine the effectiveness of using biological indicators and functional assessments for evaluating mitigation performance
  - Compile and disseminate information regarding existing mitigation-tracking database systems

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# National Wetlands Mitigation Action Plan

- Action Items for FY 2004
  - Guidance on the use of vegetated buffers
  - Guidance on the use of preservation
  - Guidance on protecting wetlands for which mitigation, restoration or creation is not feasible or scientifically viable

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# National Wetlands Mitigation Action Plan

- **Action Items for FY 2005**
  - Use of compensatory mitigation within a watershed context
  - Identify criteria for making compensatory decisions within watershed context
  - Development of performance standards guidance on monitoring and adaptive management of mitigation sites
  - Establish a shared mitigation database
  - Provide an annual public report card on compensatory mitigation

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# National Wetlands Mitigation Action Plan

- Potential Problems with NWMAP
  - Guidance may restrict DE's discretion
  - Some guidance may require rulemaking
  - Watershed approach will require GIS, 3-5 years away
  - Guidance will change as watershed approach is initiated
  - Competing issues within the document: preservation vs. protection

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# Mitigation and Buffers

- Corps has effectively mitigated wetland impacts
- More focus needed on open waters protection
- One critical approach is vegetative buffers
- Can require either wetland or upland buffers
- Vegetated buffers for open waters

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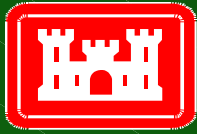
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# Mitigation and Buffers

- Key for Corps is function of vegetated buffer
  - Maintain/enhance water quality -- non point source
  - Aquatic habitat support, shading – cool water, snags
  - Stabilize bank of open water area
  - Moderate storm flows to open waters
- Normally vegetated with native trees or shrubs
- Establish, enhance, or preserve buffers



# Mitigation and Buffers

*(continued)*

- Size requirements may vary, typically 25-50 feet
- We recognize that some studies suggest several hundred feet in width -- normally unreasonable
- Modest buffer is far better than no buffer at all
- Buffer part of overall compensatory mitigation
- Should be placed in conservation easements, and made part of open space -- often wider





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