



West Virginia IN LIEU FEE Stream and Wetland Mitigation Program



What is an In Lieu Fee Program ?



- **Clean Water Act** - Section 404 : “no overall net loss” of wetland acreage and functions.
- One mechanism for providing **Compensatory Mitigation** for unavoidable impacts to the nation’s wetlands and streams.



Clean Water Act



- The objective of the Clean Water Act is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”
- Section 404 of the Clean Water Act authorizes the Corp of Engineers to regulate the discharge of dredged or fill materials into waters of the United States, including wetlands and streams.
- When there are proposed impacts to aquatic resources, the Corp must require mitigation via the 404 Permitting process.

Mitigation

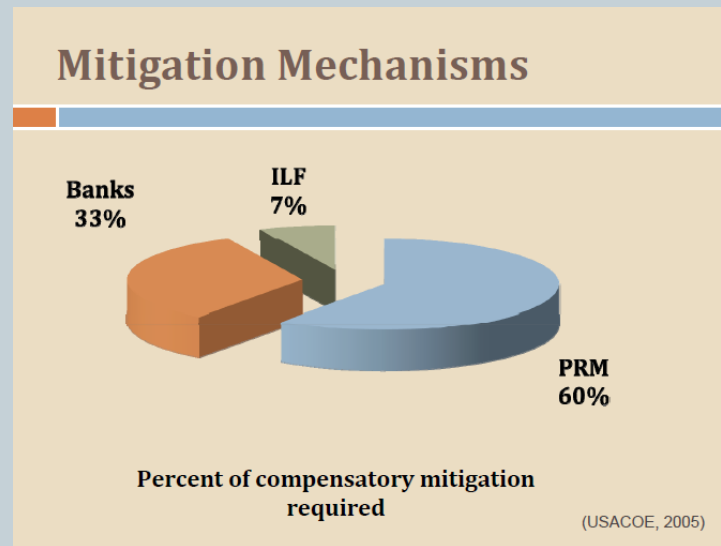


- First - When there is a proposed impact, all appropriate and practicable steps must first be taken to avoid and minimize those impacts.
- Second – For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland, stream, and other aquatic resource functions.
- The Corp is responsible for determining the appropriate form and amount of **compensatory mitigation**.

Compensatory Mitigation Mechanisms



- Mitigation Banks
- In Lieu Fee Programs (ILF)
- Permittee Responsible Mitigation (PRM)



In Lieu Fee Mitigation



- A program established by a government agency or non-profit conservation organization which Restores, Creates, Enhances and Protects aquatic resources using fees collected from 404 Permittees.
- The ILF Program charges a fee for each “stream credit” and “wetland acre credit” that the Permittee is required to compensate for.
- 1 Acre of Wetland Credit = \$60,000
- 1 Unit of Stream Credit = \$800

In Lieu Fee Mitigation



SWVM (v2.0) Data Entry ~ Stream Parts Tab 1 (Impact and Mitigation Assessment)

West Virginia Stream and Wetland Valuation Metric

(Stream Valuation Metric - Worksheet 1 of 3)

STREAM IDENTIFICATION	WETLAND IDENTIFICATION	WETLAND IDENTIFICATION	WETLAND IDENTIFICATION	WETLAND IDENTIFICATION
<p>Stream Name: [Blank]</p> <p>County: [Blank]</p> <p>Watershed: [Blank]</p> <p>Wetland Type: [Blank]</p> <p>Wetland Code: [Blank]</p> <p>Wetland Acres: [Blank]</p>	<p>Stream Name: [Blank]</p> <p>County: [Blank]</p> <p>Watershed: [Blank]</p> <p>Stream Type: [Blank]</p> <p>Stream Code: [Blank]</p> <p>Stream Length: [Blank]</p>	<p>Stream Name: [Blank]</p> <p>County: [Blank]</p> <p>Watershed: [Blank]</p> <p>Stream Type: [Blank]</p> <p>Stream Code: [Blank]</p> <p>Stream Length: [Blank]</p>	<p>Stream Name: [Blank]</p> <p>County: [Blank]</p> <p>Watershed: [Blank]</p> <p>Stream Type: [Blank]</p> <p>Stream Code: [Blank]</p> <p>Stream Length: [Blank]</p>	<p>Stream Name: [Blank]</p> <p>County: [Blank]</p> <p>Watershed: [Blank]</p> <p>Stream Type: [Blank]</p> <p>Stream Code: [Blank]</p> <p>Stream Length: [Blank]</p>
<p>Stream Valuation Metric (SVM): [Blank]</p> <p>Wetland Valuation Metric (WVM): [Blank]</p> <p>Total Valuation Metric (TVM): [Blank]</p>	<p>Stream Valuation Metric (SVM): [Blank]</p> <p>Wetland Valuation Metric (WVM): [Blank]</p> <p>Total Valuation Metric (TVM): [Blank]</p>	<p>Stream Valuation Metric (SVM): [Blank]</p> <p>Wetland Valuation Metric (WVM): [Blank]</p> <p>Total Valuation Metric (TVM): [Blank]</p>	<p>Stream Valuation Metric (SVM): [Blank]</p> <p>Wetland Valuation Metric (WVM): [Blank]</p> <p>Total Valuation Metric (TVM): [Blank]</p>	<p>Stream Valuation Metric (SVM): [Blank]</p> <p>Wetland Valuation Metric (WVM): [Blank]</p> <p>Total Valuation Metric (TVM): [Blank]</p>

Impact

Baseline Mitigation

Mitigation Projected at 5 yrs

Mitigation Projected at 10 yrs

Mitigation Projected Maturity

Differences Between Banks & ILF



- **In Lieu Fee Programs**

- Sponsor: government or non-profit conservation organization
- Fees received before sites secured or mitigation initiated
- Multiple project sites
- Corp approves project funding via an Inter-Agency Review Team (IRT)

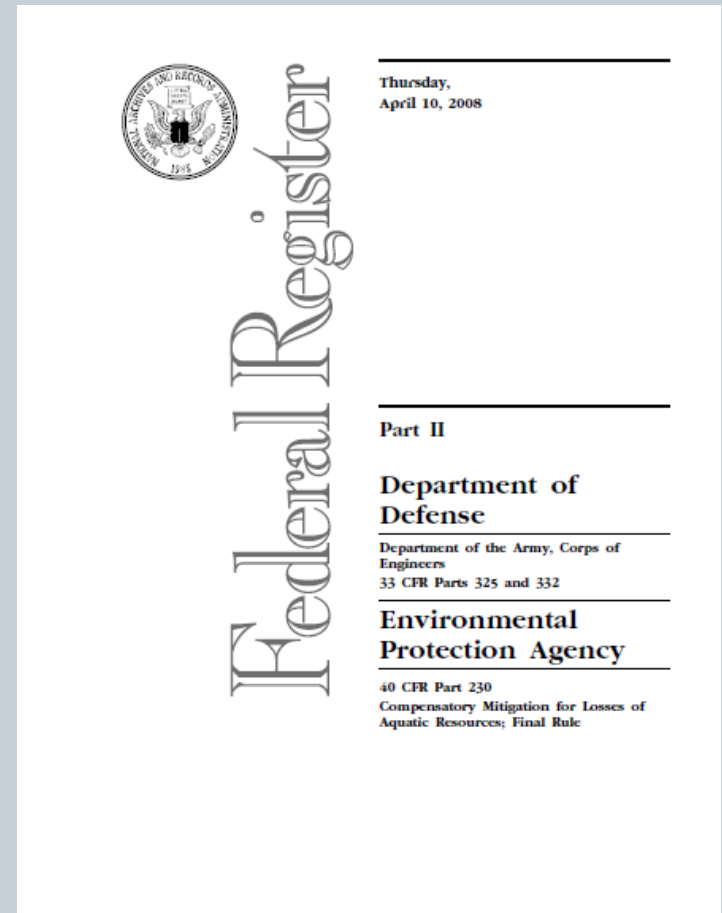
- **Mitigation Banks**

- Sponsor: public or private
- Site secured and mitigation initiated in advance of credits being sold
- Single or multiple project sites
- Corp has no authority over bank expenditures

2008 Compensatory Mitigation Rule

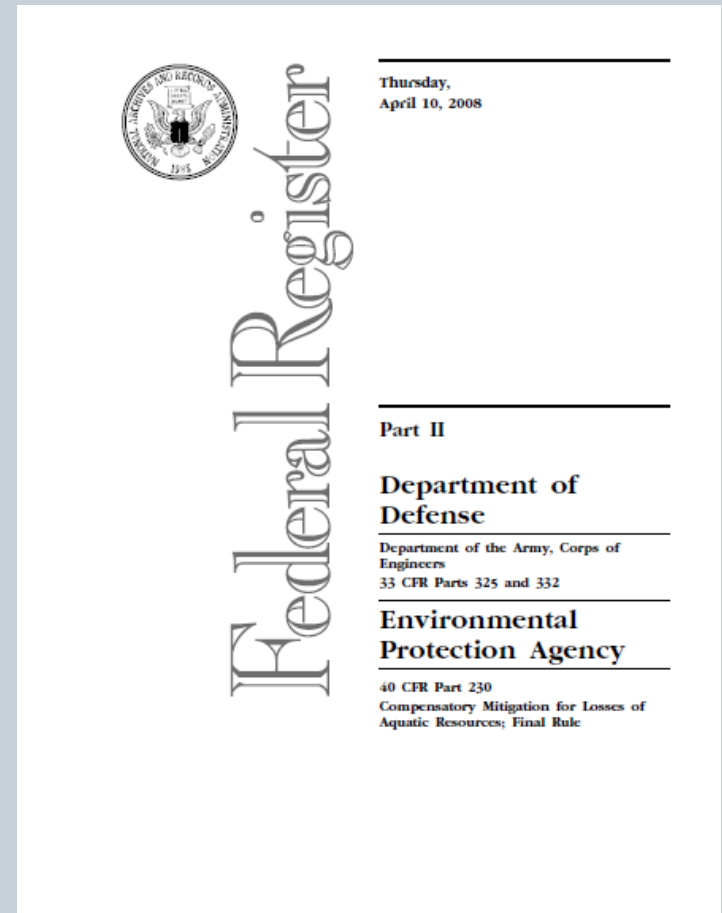


- Goals
- The “ Preference Hierarchy “
- Watershed Approach
- In Lieu Fee Compliance



2008 Compensatory Mitigation Rule: Goals

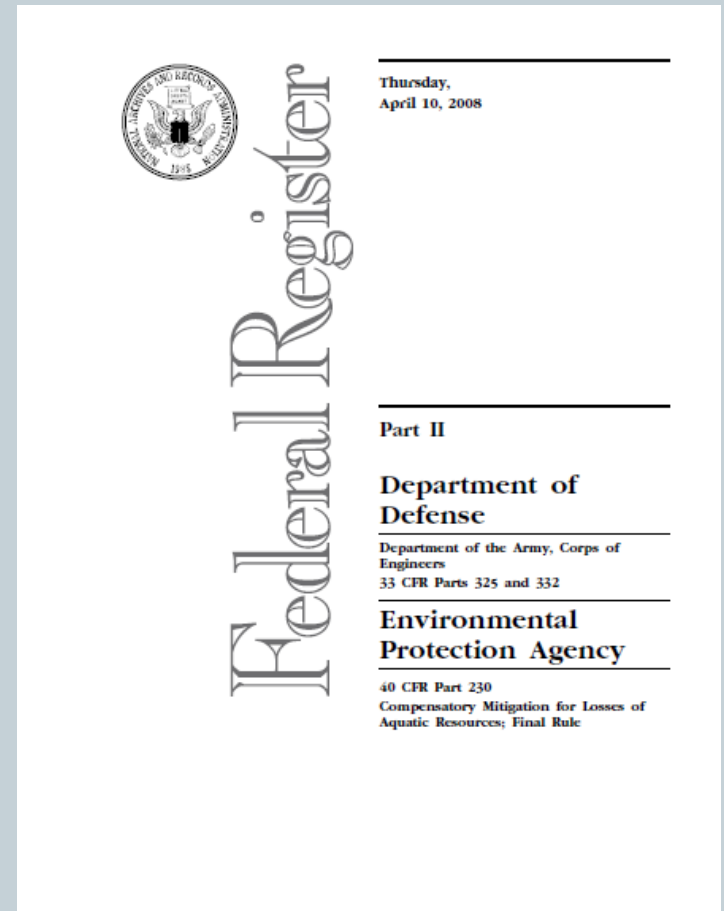
- Apply equivalent standards to Banks, ILF, and PRM mitigation, to the maximum extent practicable
- Ensure permanent protection of all compensatory mitigation sites



2008 Compensatory Mitigation Rule: Preference Hierarchy for Mitigation Mechanism



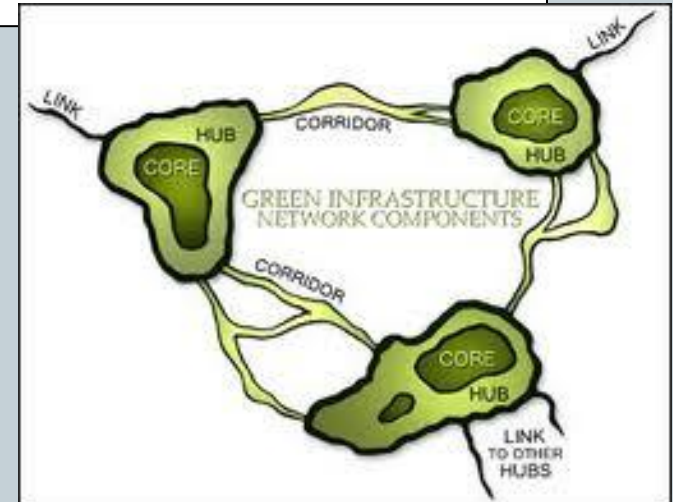
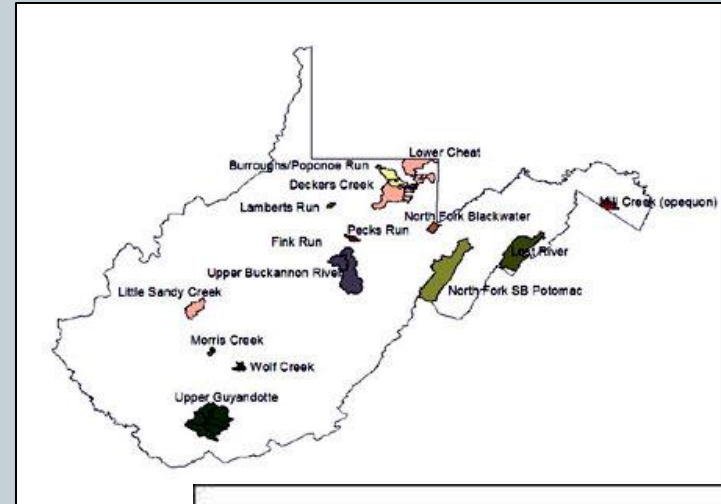
- Mitigation Banks
- In Lieu Fee Programs
- PRM under a watershed approach
- On-site and in-kind PRM
- Off-site and/or out-of-kind PRM



2008 Compensatory Mitigation Rule: The Watershed Approach



- Main Objective: maintain and improve the quantity and quality of aquatic resources on a watershed scale
- Use existing watershed plans, State Wildlife Action plans, Green Infrastructure planning, etc.



Watershed Approach: Data Needs



- Current trends in habitat loss or conversion
- Cumulative impacts of past development activities
- Current development trends
- The presence and needs of sensitive species
- Site conditions that favor or hinder the success of compensatory mitigation projects
- Chronic environmental problems such as flooding or poor water quality

2008 Compensatory Mitigation Rule: Compliance : 6 Basic Characteristics of ILF Programs

- In-lieu fee program instrument
- Review by interagency review team
- Geographic service area(s)
- Compensation planning framework
- In-lieu fee program account
- Allocation of advance credits



DEP

Compensation Planning Framework - 10 Elements

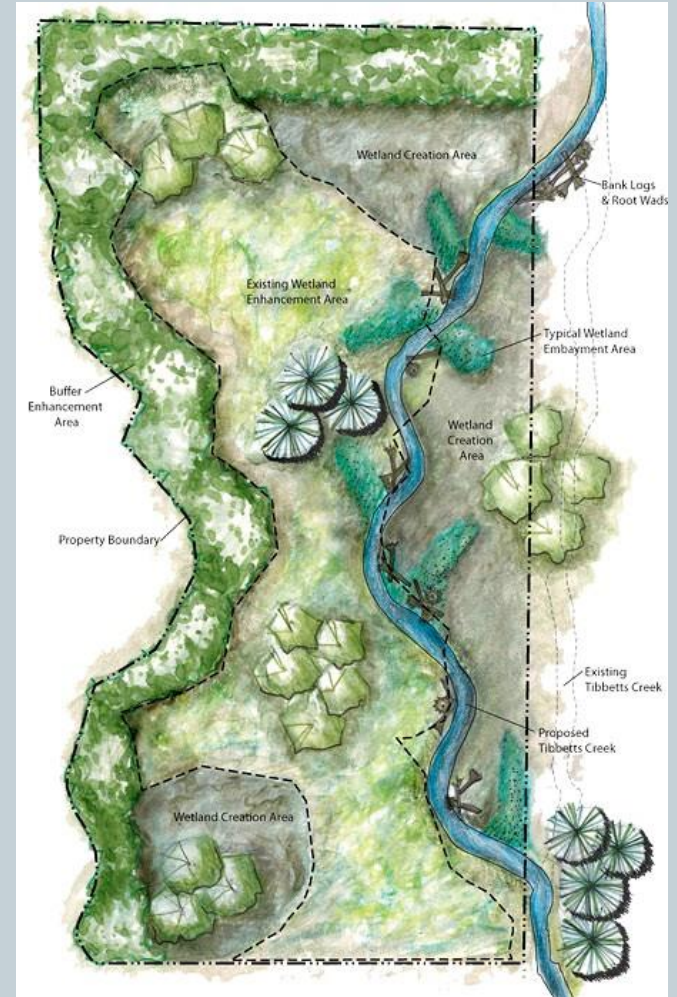
West Virginia In-Lieu Fee Program

Table 2. Stream and Wetland Advance Credits by Watershed

Water Shed	Stream Miles	Streams Linear Feet	Streams Advance Credit Units	Wetland Advance Credit Acres
Big Sandy/Lower Ohio	20.00	105,600	31,680	29.70
Cacapon/Shenandoah	22.86	120,701	36,210	133.80
Cheat/Youghiogheny	38.57	203,650	61,095	56.20
Hardy	30.36	160,301	48,090	28.30
Elk	45.72	241,402	72,420	10.00
Gauley	27.14	143,299	42,990	64.00
Greenbrier	18.57	98,050	29,415	279.80
Little Kanawha	218.22	1,152,202	345,660	15.60
Lower Guyandotte	69.64	367,699	110,310	10.00
Lower Kanawha	61.07	322,450	96,735	149.10
Lower New	9.64	50,899	15,270	10.00
Middle Ohio North	80.36	424,301	127,290	10.00
Middle Ohio South	66.07	348,850	104,655	48.20
Monongahela/Dunkard	19.64	103,699	31,110	11.00
North Branch Potomac	3.93	20,750	6,225	112.30
Potomac Direct Drains/Shenandoah Jefferson	16.43	86,750	26,025	76.20
South Branch Potomac	7.86	41,501	12,450	214.00
Tug Fork	12.50	66,000	19,800	10.00
Twelvepole	22.50	118,800	35,640	10.00
Tygart Valley	31.07	164,050	49,215	211.40
Upper Guyandotte	38.22	201,802	60,540	10.00
Upper Kanawha	10.72	56,602	16,980	10.00
Upper New/James	21.07	111,250	33,375	160.70
Upper Ohio North	9.64	50,899	15,270	10.00
Upper Ohio South				
West Fork	22.14	116,899	35,070	32.10

Mitigation Plan – 12 Components

1. Objectives
2. Site Selection
3. Site Protection Instrument
4. Baseline Information
5. Determination of Credits
6. Mitigation Work Plan
7. Maintenance Plan
8. Performance Standards
9. Monitoring Requirements
10. Long-term Management Plan
11. Adaptive Management Plan
12. Financial Assurances





West Virginia IN LIEU FEE Stream and Wetland Mitigation Program



FOR MORE INFORMATION CONTACT:
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