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Lessons Learned from the Illinois River Basin Restoration Comprehensive Plan



Watershed Based
30,000 sq miles
11 million people
Multi-Agency
Multi-State
Multi-District

Project Website:

<http://www.mvr.usace.army.mil>

One Team: Relevant, Ready, Responsive and Reliable





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Illinois River Basin Restoration (Sec 519 WRDA 2000)



- **System - Comprehensive Plan**
 - ◆ Program/Process for restoration implementation
 - ◆ Long Term Resource Monitoring
 - ◆ Computerized inventory & analysis system
 - ◆ Program for sediment removal & use

- **Site Specific - Critical Restoration Projects**
 - ◆ Authority to plan, design and construct
 - ◆ \$5 million per project limit

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Lesson Learned Topics



- **Approach to define problems and establish goals and objectives**
- **Formulation of restoration needs and near term implementation**
- **Establishment of collaborative planning and implementation framework**

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Problem: loss of ecological integrity . . .



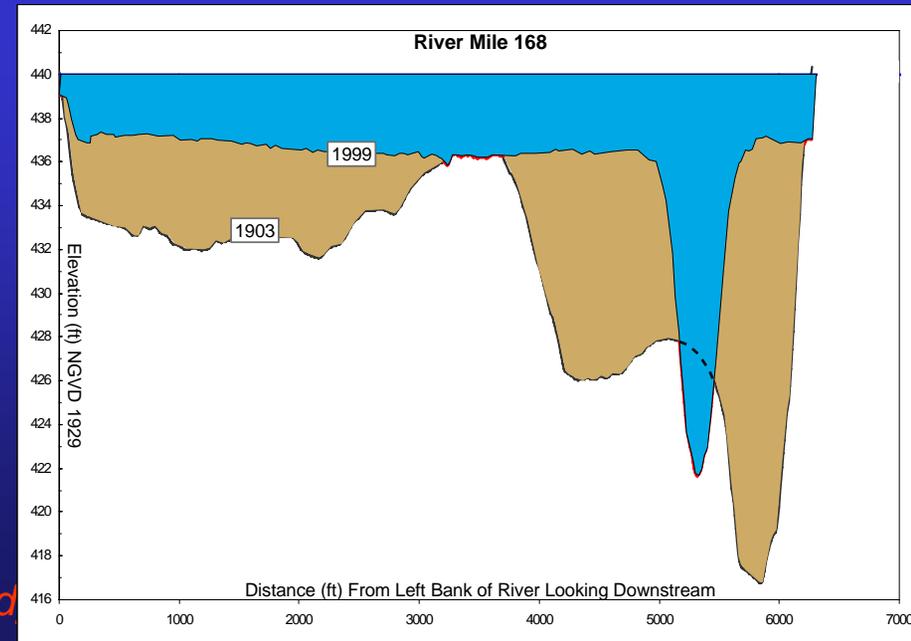
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- Loss of aquatic vegetation
- Decline in macroinvertebrates
- Loss of diving ducks and food for migratory waterfowl
- Limitations in fisheries
- Fragmented populations

due to...

- Destabilized tributary streams
- Sedimentation of backwaters & side channels
- Floodplain alteration
- Water level fluctuations





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Conceptual Formulation Framework



Program Goal

Ecosystem
"Integrity"

System-limiting
factors

Sediment
Delivery

Floodplain
and trib
habitat

Hydrologic
regimes

Mainstem
habitat

Connectivity

Water and
sediment
quality

Projects

Project 2

Project 4

Project 6

Project 1

Project 3

Project 5

Project 7

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System-wide Goals “Limiting Factors”



Overarching Goal: Restore and maintain ecological integrity

- 1. Reduce sediment delivery**
- 2. Restore side channels and backwaters**
- 3. Restore floodplain, riparian, and aquatic habitat and function**
- 4. Increase fish passage**
- 5. Naturalize hydrology and water levels**
- 6. Improve water & sediment quality**



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Objectives



- Reduce sediment delivery to Illinois River by 20%
- Restore 19,000 acres backwater
- Restore 150,000 acres mainstem floodplain
- Restore 150,000 acres trib. floodplain
- Restore 1,000 miles instream habitat
- Restore connectivity
- Restore hydrologic conditions



fingernail clam



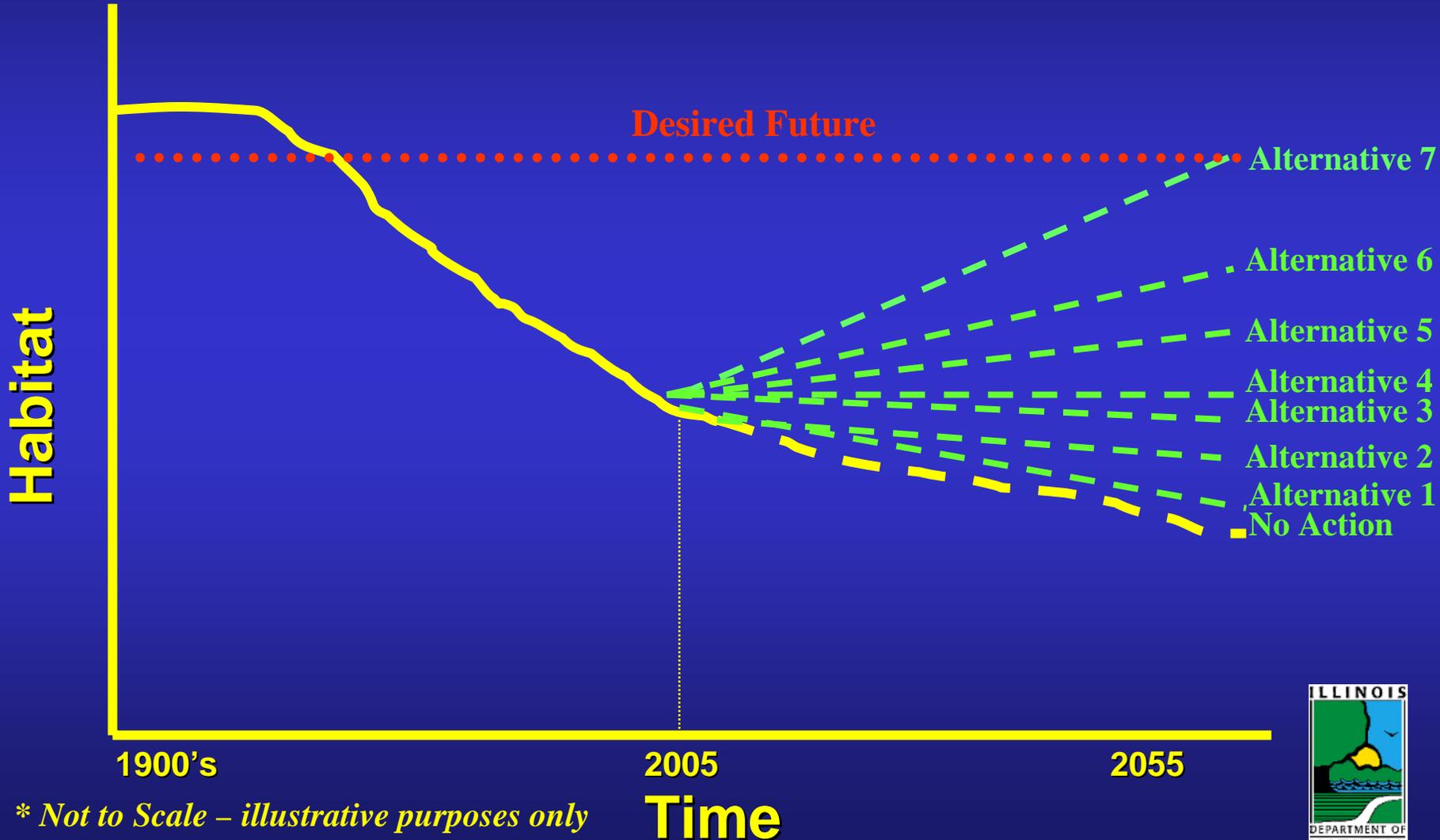
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Formulation of Restoration Alternatives



* Not to Scale – illustrative purposes only

Time

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Conclusions/Need

50 Year Implementation

All Agencies/Programs



- **Alt 6 - \$7.4 billion total – through 2055**
 - **Projects \$6.8 billion**
 - ◆ **Small Watersheds – 150 watersheds**
 - ◆ **Major Tribs – 88 reach**
 - ◆ **Main Stem – 60 backwaters, 35 SC/Islands, 150 floodplain areas**
 - **Technologies and Innovative Approaches \$585 M**
 - **Management \$55 M**

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Recommendation

Tiered Restoration



- **Tier I - \$131.2 million program (\$85.3 million Fed) - 2011**
 - **Projects \$122.3 M**
 - ◆ **Small Watersheds – 8 watersheds**
 - ◆ **Major Tribs – 2 reach**
 - ◆ **Mainstem – 3 backwaters, 4 SC/Islands, 1 floodplain area**
 - **Technologies and Innovative Approaches \$6.1 M**
 - **Management \$2.75 M**

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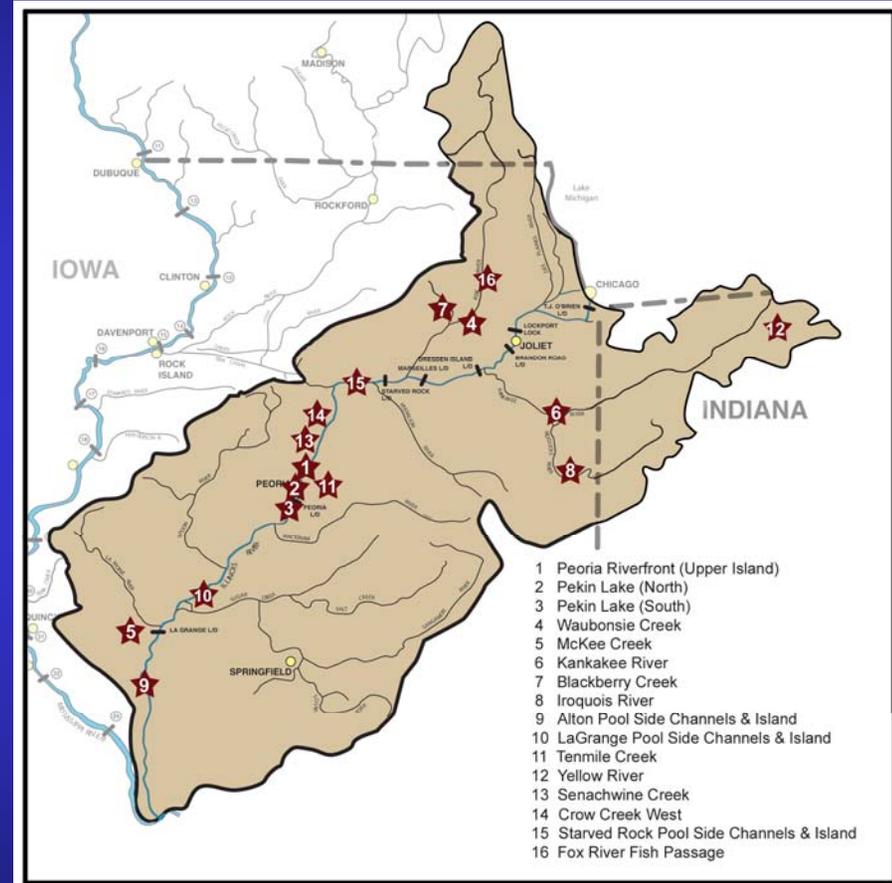


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Critical Restorations Projects



Peoria Riverfront Upper Island
Pekin Lake (Northern Unit)
Pekin Lake (Southern Unit)
Waubonsie Creek
McKee Creek
Kankakee River
Blackberry Creek
Iroquois River
Alton Pool - Side Chan & Island
LaGrange Pool - Side Chan & Isl
Tenmile Creek
Yellow River
Senachwine Creek
Crow Creek West
Starved Rock Pool – Side Chan
Fox River Fish Passage



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Formulation Lessons Learned



- **Recommendations will be Tiered**
 - **Need to demonstrate benefits with initial projects**
- **Policy will change:**
 - **OMB Letter – Returned system studies on Great Lakes, Puget Sound, Ohio River. . . System studies will not be approved without detailed information on specific sites.**
 - **Need detail on some/all sites for OMB approval**

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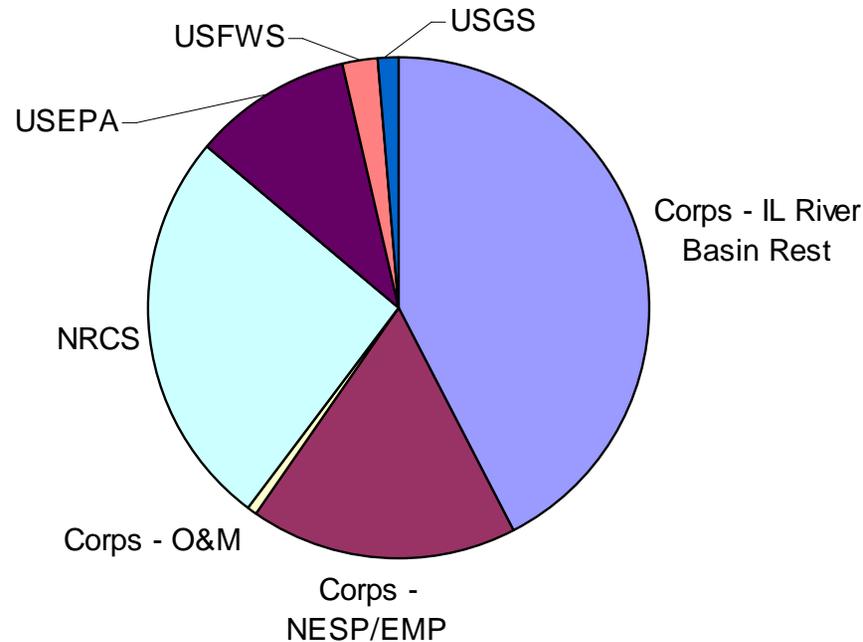




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Collaborative Planning

Estimated Funding Sources



**Estimated amount by Federal agency shown
(state or local match required for most)**

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Collaborative Planning and Implementation



- **Critical need for multi-agency work at multiple levels to make this succeed (authorities, budgets, etc.)**
- **Develop national approach to cross-cut budgeting**
- **Need for cooperative agreements / implementation tools**

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Stakeholder Involvement



- **Feedback positive during study – we provide great value in doing Watershed Level Planning**
- **Frustration with challenges/delays resolving policy (benefits, real estate, partnering with other Fed agencies/assistant agreements)**
- **Frustration with getting implementation funds**

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Lessons Learned



- **Goals - Limiting Factors/Desired Future – hydrology and geomorphology**
- **We are well suited to facilitate Watershed Planning**
- **Requires multi-agency planning and implementation – all levels**
- **Phased/tiered implementation, feas-level details on any initial sites**

bradley.e.thompson@usace.army.mil

(309)794-5256

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