



IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

River Restoration Program Update

Iowa DNR

Tim Hall, DNR Hydrology Resources Coordinator

Water Resources Coordinating Council
December 20, 2016



River Restoration Planning



River Restoration Program Updates

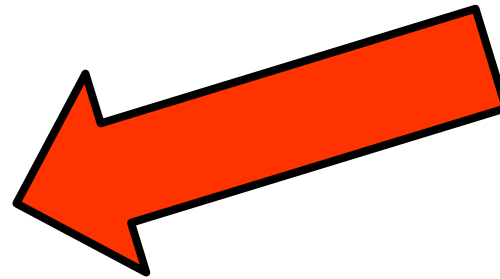
Updates to three significant programs:

- 1. The Iowa Stream Mitigation Method**
- 2. Best Management Practices Toolbox**
- 3. In-Lieu Fee Program for Stream Restoration**

What is stream mitigation?

- Required by the Clean Water Act for impacts to Water of the US
- Anyone proposing to impact a stream must:

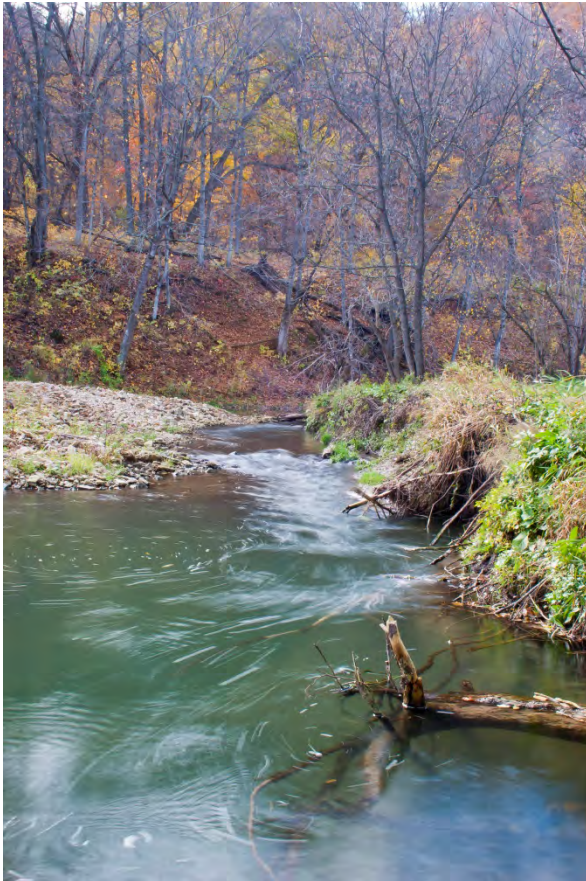
1. AVOID
2. MINIMIZE
3. MITIGATE



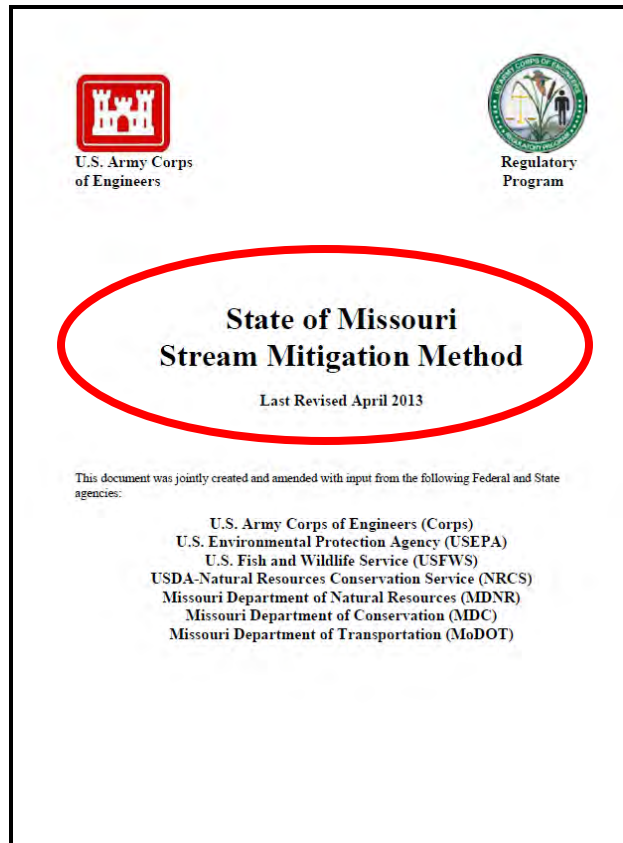
- As a last resort, mitigation can be proposed to offset loss of function.

“No Net Loss of Function or Value.”

How do you determine if the proposed mitigation is sufficient to offset impacts?



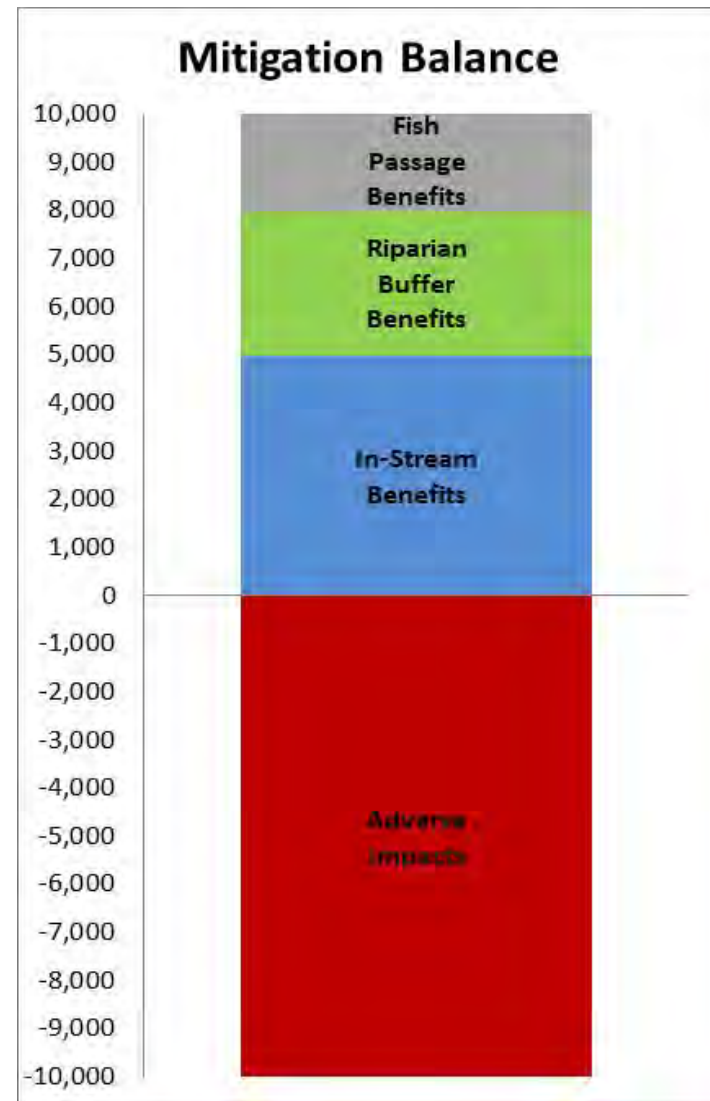
Starting Point – The Missouri Method



- The Corps requested that the DNR begin with Missouri Method, and then adapt it to better fit the conditions of Iowa.
- The Missouri Stream Mitigation Method has already been through one revision by the Corps, and represents a process that has been used, and subsequently improved as a result of experience.

What is the Method, and how does it work?

- The method is designed to be a **rapid** assessment of the **relative value** of lost functions and restoration benefits based on predicted effects of proposed activities.
- It is **not** meant to measure the unique functions of each individual stream reach.
- It is a system of “debits” and “credits.”
- To get approval for mitigation the number of credits from restorations must equal or exceed the number of debits from impacts.




Timeline

- 2015: IDNR modifies Missouri Method in consultation with agencies and experts
- January 2016: DRAFT of Iowa Method is shared with broad stakeholder group
- March - October 2016: Interagency Review Team monthly meetings
- Public Comment
- Testing
- Revisions
- **2017: Final adoption by the US Army Corp of Engineers**



Current Status – The Iowa Stream Mitigation Method

This public notice is an official statement on the proposed Iowa Stream Mitigation Method. POC: Matthew Zehr, Tele: 309/794-5369
matthew.a.zehr@usace.army.mil



PUBLIC NOTICE

US Army Corps of Engineers
Rock Island District

Sponsor: US Army Corps of Engineers **Issued:** October 06, 2016
Expires: December 01, 2016

Corps Project Number: State of Iowa Stream Mitigation Method (ISMM)

REQUEST FOR COMMENTS ON USE OF THE PROPOSED STATE OF IOWA STREAM MITIGATION METHOD FOR STREAM MITIGATION

The U.S. Army Corps of Engineers (Corps) Rock Island District is proposing to adopt the ISMM for determining mitigation requirements for impacts to jurisdictional streams in the State of Iowa. The ISMM was developed as a means to accomplish rapid, consistent and reliable stream mitigation across the state of Iowa. The ISMM, if adopted, will be the primary tool used for the evaluation of stream impacts and mitigation proposals for Section 404 of the Clean Water Act (33 USC 1344) and Section 10 of the Rivers and Harbors Act (33 USC 403) Department of the Army permit evaluations within the State of Iowa.

Background: In 2012, the Iowa DNR contacted the Rock Island District Corps of Engineers in response to the public notice referencing the 2013 revision of the Missouri Stream Mitigation Method (MSMM). They expressed an interest in the development of a similar assessment method that could be used within the State of Iowa. The Corps then gathered an interagency team consisting of experienced regulatory program project managers and various state and Federal agencies which reviewed the MSMM to assess and modify the method so that it could be better applied to the environment found within the State of Iowa. This team also considered other applicable national guidance, available scientific research, statewide policies and Regulatory Project Manager experience with mitigation issues in Iowa.

Comments: This notice solicits input from the public on the Proposed ISMM, especially on the ability of the method to provide for appropriate assessment impacts to stream and buffer functions, and proper crediting of actions undertaken to provide replacement of lost aquatic functions. Any interested party is invited to submit to this office written facts, suggestions or comments relative to the Proposed ISMM. The expiration for this public notice does not reflect the period of time allowed for substantial comments. Due to the necessity of further testing and public input, substantial comments will be accepted until May 01, 2017. All comments received will be considered in the Corps decision to adopt the ISMM as is, issue with modification, or conduct further analysis. It is the intent of the Corps to issue a final ISMM in June of 2017, pending major issues and modifications.

Comment Submittal: Comments or questions concerning this notice may be directed to Mr. Matthew Zehr (309/794-5369), email matthew.a.zehr@usace.army.mil, U.S. Army Corps of Engineers, Rock Island District, ATTN: OD-P Matt Zehr, Clock Tower Building - Post Office Box 2004, Rock Island, Illinois 61204-2004. The ISMM can be found in whole at <https://www.mvr.usace.army.mil/Missions/Regulatory/Public-Notices>.

- The Corps issued this public notice on October 6, 2016.
- Comment period ended December 1, 2016, BUT . . .
- “Due to the necessity of further testing and public input, substantial comments will be accepted until May 01, 2017.”
- Final Iowa Stream Mitigation Method expected to be adopted in June 2017.

For more information:

Documents available on the DNR website:

<http://www.iowadnr.gov/Environmental-Protection/Water-Quality/River-Restoration>

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Rock Island District

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River Restoration Planning

Updates to three significant programs:

1. The Iowa Stream Mitigation Method
2. **Best Management Practices Toolbox**
3. In-Lieu Fee Program for Stream Restoration

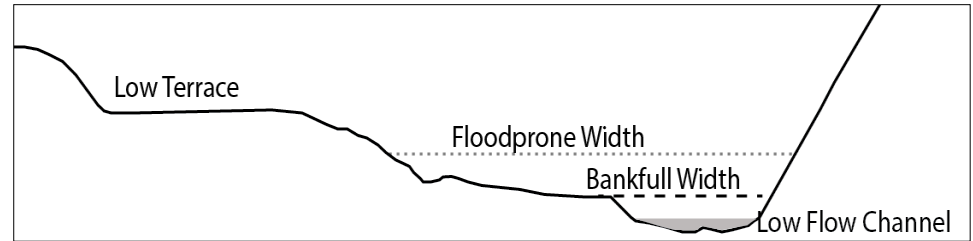
Best Management Practices for Stream Restoration

What should be done to restore streams in Iowa? What practices should be used and where should they be used?



Best Management Practices for Stream Restoration

Right Practices
Right Location
Correct Installation



Preparation of a Best Practices Manual

Best Management Practices for Stream Restoration

Proposals Submitted: October 19, 2016

Evaluated by DNR team.

Decision to award contract to:

Stantec Consulting with LT Leon Assoc.

Contract approved Dec. 8, 2016

**Natural Resource Commission and
Environmental Protection Commission**

Best Management Practices for Stream Restoration

End Product:

- A Data Input Tool
- A Data Analysis Tool
- A Suite of Standard Practices with typical cross sections and details



Best Management Practices for Stream Restoration

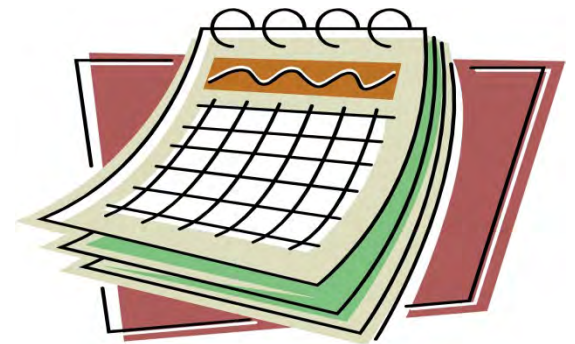
Typical Practices:

- **Dam Mitigation**
- **Grade Control**
- **Stream Bank Toe Protection/Stabilization**
- **Bank and Floodplain Restoration**
- **Channel Definition Structure**
- **Thalweg Moving Structure**
- **Aquatic Habitat/Cover Feature**
- **Geomorphic Channel Design**
- **Vegetative Restoration**
- **Riparian Buffering**

Best Management Practices for Stream Restoration

Timeline

- **Proposals Due – October 19, 2016**
- **Internal Review and Scoring – Oct. 20-31, 2016**
- **Presentation to EPC – November 15, 2016**
- **Presentation to NRC – December 8, 2016**
- **Contract Signed – December 8, 2016**
- **Project Kick-off meeting – December 9, 2016**
- **Anticipated Project Execution – 16 months**
- **BMP Manual Completed – April 2018**



Best Management Practices for Stream Restoration

Interagency Advisory Team

- IDALS – Urban Conservation
- NRCS
- Iowa DOT
- County Engineering
- City Engineering
- Iowa State University -
Geomorphology
- US Army Corps of Engineers
- Nature Conservancy
- DNR Technical Staff –
 - ESD and CRD



River Restoration Planning

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River Restoration Planning

Federal law allows three approaches to mitigation:

1. **BANK:** The permittee can pay for improvements that have already been constructed elsewhere
2. **IN-LIEU FEE:** The permittee can pay an approved provider to do it
3. **PERMITTEE-RESPONSIBLE MITIGATION:** The permittee does it themselves

Currently in IOWA,

- There are some approved banks for wetlands, but not for streams
- There are no approved ILF programs
- Most mitigation is done by the permittee
- There is no systematic method for determining how much mitigation is necessary

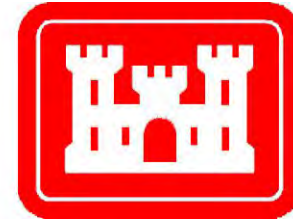
River Restoration Planning

In-Lieu Fee Program

Objective - to analyze the feasibility for the Iowa DNR to sponsor an in lieu fee program to provide stream mitigation credit services.

River Restoration Planning

In-Lieu Fee Program



Steps So Far:

- Reviewed Army Corps of Engineers' permit files to quantify the extent of stream mitigation need in Iowa, and
- Identified major user groups.
- Used that data - working with the Iowa DOT – to built market estimates.
- Worked through analysis of whether sponsoring an ILF program is feasible for Iowa DNR. Internal draft report completed.

River Restoration Planning

In-Lieu Fee Program

Next Steps:

- **Presentation to leadership this month.**

Decision about moving forward in whatever manner is in the best interests of the resource, the State of Iowa, and the Department.

Questions??

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	<u>Tim.Hall@dnr.iowa.gov</u>	Toolbox
	<u>Ryan.Maas@dnr.iowa.gov</u>	ILF

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