

UPPER MISSISSIPPI RIVER RESTORATION

HREP Team Meeting Monitoring Breakout Session

Monitoring Report Out Form Cover Sheet

Complete one cover sheet form per table.

Table Topic:	Water Quality
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Table Participants	Role
1. Shawn Gibling	Facilitator
2. Kathi Jo Jankowski	Scribe
3. Nicole Manasco	Note-Taker
4. Shawn Gibling	Reporter
5. Alecia Keeny - USFWS	
6. Dave Bierman - IA DNR	
7. Jessie S - USACE	
8. Dave Bierl - USACE	

Jim Fisher - WIDNR
Julie Millholin - USACE

Note - 90%+ of discussion focused on HREP
WQ rather than LTRM

Water Quality

Dave Bierman - IA
Shawn Giblin - WI
Kathi Jo - WKS
Alicia Lanny - USFWS
Paul Bier
Julia Middleton -
Jim Fisher -

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Monitoring Report Out Form

Complete one Report Out Form for each Discussion Question discussed at your table.

Table Topic: Water Quality
Facilitator: Shawn Giblin
Discussion Question: What are we doing well
Findings: <ul style="list-style-type: none">- Base line data- Spot measurements (DO, Temp, ^{sq}velocity)- Winter WQ data for (DO, Temp, velocity)- Pre-Project monitoring (LWI + MVB especially) (but is non-existent in other areas)- Long-Term LTRM data sets - ability to compare
Recommendations: <ul style="list-style-type: none">- Continuous monitoring is good - should be expanded- Need a WQ position in every state (Shawn Giblin's)- Should be doing more monitoring of fate and transport of nitrogen and phosphorus.-

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Table Topic: Water Quality
Facilitator: Shawn Giblin
Discussion Question: What Aren't we doing well
Findings: <ul style="list-style-type: none">- Not doing monitoring systemically (not standardized parameters, locations, different by state) especially for pre-project monitoring. - HREP - patchiness- Data management / Sharing / systemic data analysis (HREP)- Pre-project monitoring- Pre-project monitoring prior to developing fact sheets to identify potential projects.
Recommendations: <ul style="list-style-type: none">- Nutrient monitoring (Nutrient cycling in HREP's)- Monitor cyanobacteria / duckweed created as a result of those nutrients- Measure Retention times (water residence time and how it affects water quality).- measure BOD - O₂ depletion Rates- Need better pre-project monitoring that is standardized.- Need to produce concise, readable reports post-project.- Studies related to sediment (phosphorus release and oxygen demand of sediments).- Need dedicated time to produce reports post-project.- Need more continuous monitoring pre and post project.- Know project water residence time under full range of discharge.

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Table Topic: water Quality
Facilitator: Shawn Giblin
Discussion Question: Things we should start doing?
Findings: There are many things we should be doing pre and post-monitoring that we are currently not doing.
Recommendations: <ul style="list-style-type: none">- Need to measure relationship between water quality and biological response - including phytoplankton and zooplankton.- Need to measure oxygen depletion rates of projects.- Measure sediment oxygen demand.- Measure P release from sediments.- Need more standardized pre-project monitoring.- Need more continuous monitoring - including chlorophyll and nutrients if possible.
<ul style="list-style-type: none">- Need to measure water residence time and how this affects water quality.- Need to produce concise and readable reports post-project.