

Welcome and Introductions

- Introductions (all)
 - Jeff Smudde, NEW Water Watershed Programs Manager
 jsmudde@newwater.us, 920-438-1071
- NEW Water's compliance with permit
- Measureable improvements in water quality
- Evaluate if we can do this full scale
- Diverse stakeholders with common goals
- Collaboration and partnerships with stakeholders and landowners to implement watershed improvements

Housekeeping and Meeting Approach

- Bathrooms
- Emergency exits
- Break and lunch at 12:00
- Open dialogue and discussion
- Leave with a clear understanding of participation and path forward
- Full schedule but will adjourn at 2:00
- Meeting summary will be provided
- "Parking lot" and committees

Questions before we begin?



Meeting Purpose

- Assemble stakeholders
- Review project scope and schedule
- Review stakeholder involvement and participation
- Identify potential road blocks and potential solutions
- Team Chartering to endorse project and participation
- Continue formal planning for completing the project
- Present information update and proposed paths forward

Kickoff Meeting Agenda

- Project history/background
- Watershed review
- Team chartering
 - Review and confirm project scope and schedule
 - Review project vision and goals
 - Confirm project success factors
 - Review and confirm project roles and participation
 - Review committee structure
 - Endorse the Team Charter



Kickoff Meeting Agenda

- Silver Creek Water Quality Monitoring
- Project Implementation
 - Soil Sampling Plan
 - Landowner/operator contacts
 - Relationship Survey
 - Project Fact Sheet
 - Conservation Planning and Field Walks
 - Field Delineations
 - Biological Assessment
- Schedule of Activities
- Wrap Up and Action Items



Project History and Background

- NR 217 Adaptive Management initiated pilot project
- Pilot Project
 - Can we demonstrate AM in a 4 yr pilot?
 - Will it result in water quality improvements?
 - What does compliance mean?
 - Can we demonstrate AM in 20 years for permit compliance? (e.g. implement, legacy P, watershed response)
 - What will it cost?
 - Will our commission accept this permit compliance approach?
 - Is this the best approach for our ratepayers?
 - Will we have willing stakeholders and landowners/operators?
 - What barriers exist to full scale implementation? Can they be overcome with changes?



Project History and Background Why Silver Creek

- Work by many stakeholders in the Silver Creek watershed
- Significant lands owned by Oneida Nation
- Progressive Counties and NRCS interested in Adaptive Management
- Progressive crop consultants
- Primarily an agricultural watershed

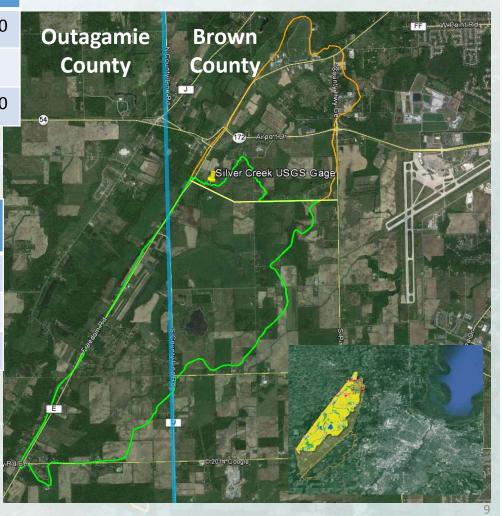


Silver Creek Watershed

Land Use	Brown County (ac)	Outagamie County (ac)	Total (ac)
Cropland/Pasture	~1,200	~850	~2,050
Farmsteads	~15	~10	~25
Other	~650	~800	~1,450

Cropland/Pasture	Brown County	Outagamie County	Total
Approx. # of Parcels	69	88	157
Unique Landowners	19	36	55
Approx. # of Fields *	93	118	211

^{*} My be over estimated by 50% due field overlaps



Scope Approach Overview

- Evaluate the water quality impacts of agricultural nutrient and conservation planning.
- Determine cost effectiveness.
- Determine institutional capacity of installing traditional or innovative agriculture BMPs.
- Complete soil sampling on 2.5 acre grids.
- Conduct field walks to identify conservation needs.
- Develop and implement comprehensive nutrient management and conservation plans.
- Monitor resulting water quality changes in Silver Creek
- Utilize a GIS.
- Track successes and lessons learned.
- Provide information to NEW Water for permit compliance
- Execute pilot as a template for future sub-watershed implementation projects.



Pilot Project Scope - 2014

- Stakeholder work planning
- Field inventory and soil sampling
 - Kickoff meeting
 - Desktop field data inventory
 - GIS and standards development
 - Landowner and stakeholder coordination
 - Soil sampling plan, laboratory analysis and data management
- Conservation needs inventory
 - Landowner and stakeholder coordination
 - Field walks with Counties and/or NRCS
 - GIS data management and web-application
- Project reporting
- Steering and advisory committees
- Water quality monitoring
- Biological assessments (Oneida)







Pilot Project Scope - 2015 to 2017

- Conservation planning
 - Conservation plan development
 - Modeling
 - Nutrient management strategies
 - Preparation of conservation plans
 - Develop cost share agreements
 - Consideration of nonconventional approaches
- Conservation plan BMP design
- Landowner agreements
- Conservation plan implementation and monitoring
- Water quality sampling
- Watershed modeling
- Continuation from 2014: Soil sampling, project reporting, steering and advisory committees, water quality monitoring, biological assessments (Oneida)





Project Vision

A robust pilot study in the Silver Creek subwatershed that provides NEW Water with the information to make an informed and confident decision on whether to use the adaptive management approach to meet the phosphorus and total suspended solids (TSS) reductions required to meet water quality goals in the Lower Fox River Basin.



Key Stakeholders and Project Participants

- Oneida Nation of Wisconsin and Tilth Agronomy
- Brown and Outagamie Land and Water Conservation Departments
- USDA Natural Resources Conservation Service
- UW Green Bay
- Fox Wolf Watershed Alliance
- US Geological Survey
- The Nature Conservancy
- US Fish and Wildlife Service
- Ducks Unlimited
- Alliance for the Great Lakes
- WDNR and DATCP





Consultant Key Team Members

CH2MHILL.

- Brent Brown Project Manager
- Jim Jordahl Senior soil scientist
- Doug Baughman Watershed management
- Mark Mittag Senior engineer and assistant PM
- Jenny Krenz Soil Scientist

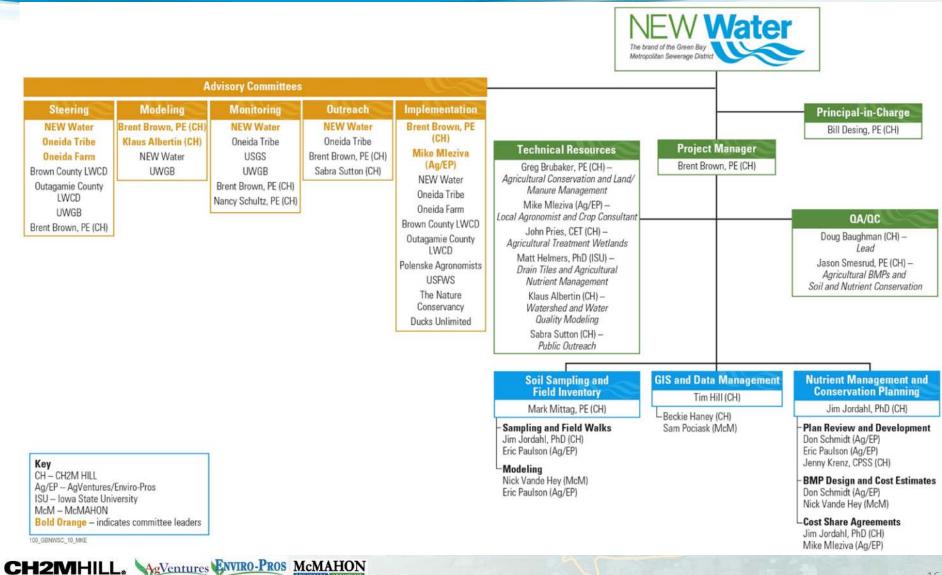


- Mike Mleziva Senior agronomist and crop consultant
- Don Schmidt Agronomy and crop consulting, nutrient management and comprehensive conservation planning

McMAHON ENGINEERS ARCHITECTS

Nick Vande Hey – Water Resources Engineer

Project Organization







Committee Structure

Modeling

Klaus Albertin (CH)

NEW Water

UWGB

Advisory Committees Monitoring Brent Brown, PE (CH)

Oneida Tribe USGS **UWGB** Brent Brown, PE (CH)

Implementation **NEW Water** Brent Brown, PE (CH) Oneida Tribe Mike Mleziva (Ag/EP) Sabra Sutton (CH) **NEW Water** Oneida Tribe Oneida Farm Brown County LWCD Outagamie County LWCD Polenske Agronomists **USFWS** The Nature Conservancy

Ducks Unlimited

Steering

NEW Water Oneida Tribe Oneida Farm

Brown County LWCD Outagamie County LWCD **UWGB** Brent Brown, PE (CH) **NEW Water**

Nancy Schultz, PE (CH)

Outreach

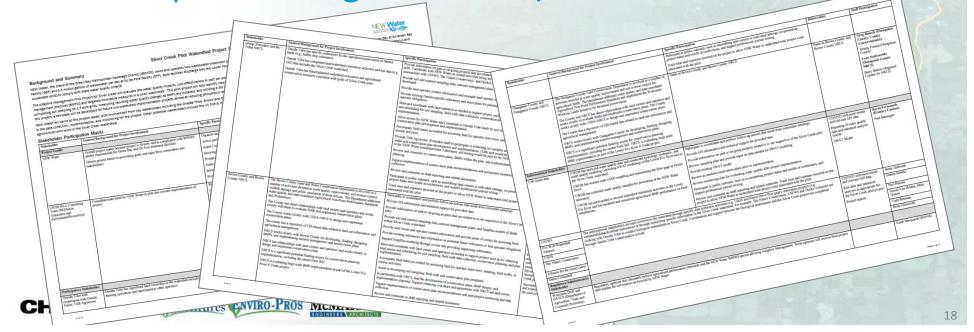
Brent Brown, PE (CH)



Stakeholder Participation Matrix

- Individual roles/expectations
- Steering and sub-committee involvement
- Involved staff and single point of contact

Land owner/operator communication and coordination: Build upon existing relationships.



Roles and Responsibilities

NEW Water – Project leader

 Project leader, organize partners/stakeholders, participate in meetings, and direct consultant team.

Consultant Team – Implementation Support

 Plan and carry out project, support and attend meetings, coordinate with stakeholders and partners, GIS management, execute soil sampling, support County and NRCS conservation planning, and project reporting.

Oneida Tribe – Cooperating Land Owner

 Participate in meetings, provide data from on-going studies, coordinate with Tribal operators, execute soil sampling and field walks on tribal lands, and support conservation planning and implementation.

Roles and Responsibilities

Brown and Outagamie Counties and NRCS

 Participate in meetings, provide data from on-going studies, support coordination with landowners/operators, support soil sampling, and lead conservation planning and implementation.

Information Stakeholders

- UWGB, USFWS, Fox Wolf Watershed Alliance, USGS, TNC, Alliance for the Great Lakes, and Ducks Unlimited:
 - Participate in meetings, provide GIS data and information on existing projects and SWAT modeling, review sampling plans and data analysis, review conservation plans, and provide technical support for monitoring programs.

Regulatory Stakeholders

- WDNR and DATCP (Dept of Ag, Trade, and Consumer Protection)
 - Participate in meetings and provide regulatory technical support.

Review and Endorse Team Charter

- Purpose of the Team Charter is to ensure that everyone starts the project with the same overall understanding of the vision, goals, and critical success factors.
 - Enhances potential for success
 - Avoids confusion on responsibilities and commitments
 - Facilitates cooperation



Silver Creek Pilot Project Team Charter

August 20, 2014

PROJECT	Design and Implem Watershed	entation of an Adaptive	Management Pilot Proje	ct for the Silver Creek								
CLIENT	NEW Water (Green Bay Metropolitan Sewerage District)											
PROJECT VISION	information to ma management appro	A robust pilot study in the Silver Creek subwatershed that provides NEW Water with the information to make an informed and confident decision on whether to use the adaptive management approach to meet the phosphorus and total suspended solids reductions required to meet water quality goals in the Lower Fox River Basin.										
	Safety I	mplement pilot study w	rith no recordable safety	incidents.								
	Cost	Manage study costs effectively and identify total cost for NEW Water adaptive management compliance.										
	Schedule	complete initial study to begin implementing BMPs in 2015 growing season.										
CRITICAL SUCCESS		whether these goals could be met. Lakeholder Active and timely participation, completion of action items, and open										
FACTORS												
		•	tation of agricultural BM fluence decision making.	Ps by owners and operators,								
	Oueslibu	Development of a scientifically defensible adaptive management approach that can be repeatable, predictable, and implemented across the watershed.										
	NEW Water – Project leader, organize partners/stakeholders, participate in meetings, and direct consultant team.											
	stakeholders and p		nt, execute soil sampling,	neetings, coordinate with support County and NRCS								
ROLES AND RESPONSIBILITIES	Counties and NRCS — Participate in meetings, provide data from on-going studies, support coordination with landowners/operators, support soil sampling, and lead conservation planning and implementation.											
(see stakeholder participation matrix)		ecute soil sampling and		g studies, coordinate with s, and support conservation								
	existing projects an	d SWAT modeling, revie	te in meetings, provide G w sampling plans and da support for monitoring pr	- ·								
	NEW Water	Oneida Nation	Outagamie County	Brown County								
	Outagamie County	y Brown County NRCS	Oneida Tribe NRCS	US Fish and Wildlife Service								
	NRCS											
COMMITMENTS	UW Green Bay	Tilth Agronomy	US Geological Survey	The Nature Conservancy								
COMMITMENTS		-	US Geological Survey The Alliance for the Great Lakes	The Nature Conservancy WI Depart, of Natural Resources								





Critical Success Factors

- Safety Implement the pilot study with no reportable safety incidents.
- Cost Manage study costs effectively and identify total cost for the New water adaptive management compliance.
- Schedule Complete the initial study to begin implementing BMPs in 2015 growing season.
- Regulatory Compliance Define compliance with adaptive management approach and determine whether these goals cold be met.

Critical Success Factors

- Stakeholder Participation Active and timely participation, completion of action items, and open communication that maintains commitments and project schedule.
- Stakeholder Acceptance Maximize the implementation of agricultural BMPs by owners and operators, and track factors that influence decision making.
- Quality Development of a scientifically defensible adaptive management approach that can be repeatable, and implemented across the watershed.

Silver Creek Water Quality Monitoring

Presentation by Erin Wilcox

Silver Creek Pilot Watershed Delineation

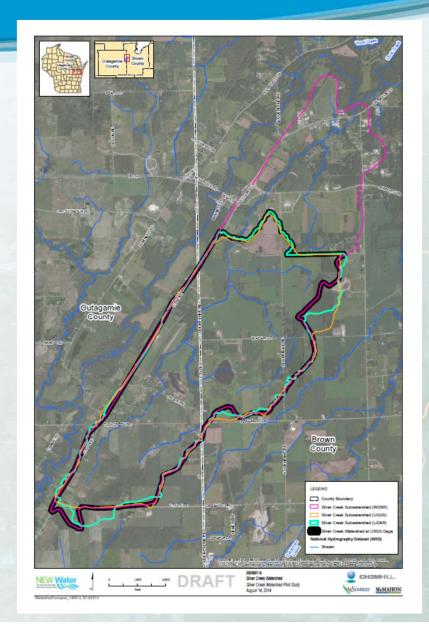
USGS gage at Florist Drive

Purpose

- Graphical display
- Field work
- Watershed modeling

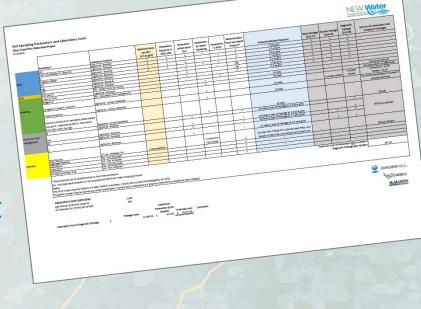
Proposal:

 Utilize WDNR boundary to USGS gage



Soil Sampling Plan

- Support base-lining watershed
- Collect at least basic parameters
- Consistent with Demonstration Farms
- Focus on implementation (not research)
- Support modeling
- Reduce uncertainty
- Sampling by CH2M HILL team and Tilth
- Possible data collection via tablet instead of paper forms



Landowner Contacts & Communication

- Build on existing relationships
- Initial contact
 - Introduce project
 - Soil sampling
 - Conservation planning
 - Confirm field boundaries

Parcels

- Minimum size
- Parcels at watershed boundary
- Confirm with chosen watershed boundary (USGS, DNR, project)



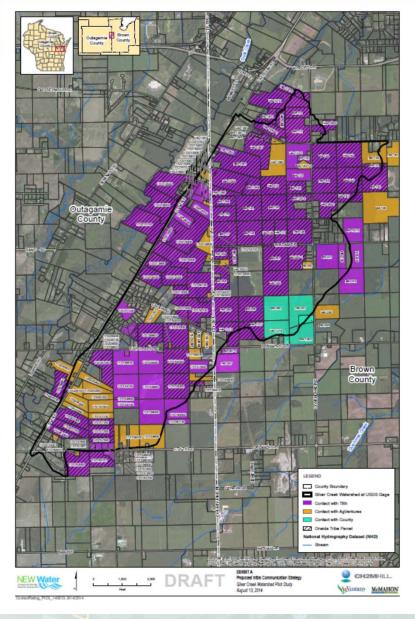




Landowner Contacts & Communication

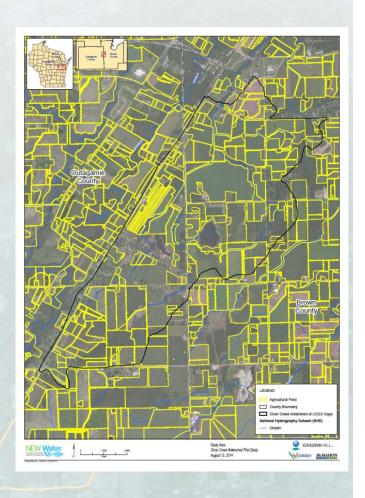
Proposed Initial Communication

- Initial phone call, letter or inperson meeting
 - Owner and operator
- In-person meeting include CH2M HILL team
 - Observe process for future planning
- Landowner benefits
 - Soil sample results
 - Nutrient and conservation plans
 - "No obligation"
 - Develop trust to mitigate risk to project
 - Other?
- Information Privacy



Field Delineations

- Fields from Outagamie and Brown Counties
 - P-mapping
- May 2014 Aerials
 - Available end of September
 - Existing delineations
 - Update from new aerials?
 - Update from field walks, but may be after soil sampling.
- Decisions by field or by parcel
 - Minimum field sizes
 - Sampling grid set by parcel



Conservation Planning and Field Walks

- Partnerships between Counties and NRCS
 - Oneida lands: Oneida NRCS
 - Outagamie and Brown County lands: Counties lead with NRCS for federal programs
- Utilize existing processes
 - NRCS tool kits and forms
 - County check lists
- Separate from soil sampling
- Landowner coordination for field walks
 - Utilize existing initial contact, then engage County or NRCS.
- CH2M HILL team participate in each field walk and interview(s)
 - Nutrient Management Plan by CH2M HILL team
 - Consistency, expedite field data collection and management
 - Conservation opportunities
 - Not just federal/state/county program or is NRCS-approved standard



Conservation Planning and Field Walks

- Minimum data collection
 - Crop rotation
 - Tillage
 - Nutrient inputs
 - Tile drainage
 - Existing BMPs
 - Potential BMPs
 - Buffers, grassed waterways, water and sediment control basins, etc.
- Landowner data release
- Web-application
 - Jeremy Freund/Outagamie County

Silver Creek Oneida Biological Sampling

- What is being done
- Why it is occurring
- Future plans





STANDARD OPERATING PROCEDURE (SOP)
FOR THE QUALITATIVE SAMPLING OF STREAMS FOR BENTHIC INVERTEBRATES
#BI002

Prepared by: Mulasam. Moren Date: 3/13/0
Water Resources Specialist

Reviewed by: 2. Date:

Approved by: Levi 12 Helley Date: 3.13.01
Environmental Quality Director

ONEIDA TRIBE OF INDIANS OF WISCONSIN ENVIRONMENTAL, HEALTH AND SAFETY DEPARTMENT WATER RESOURCES PROGRAM

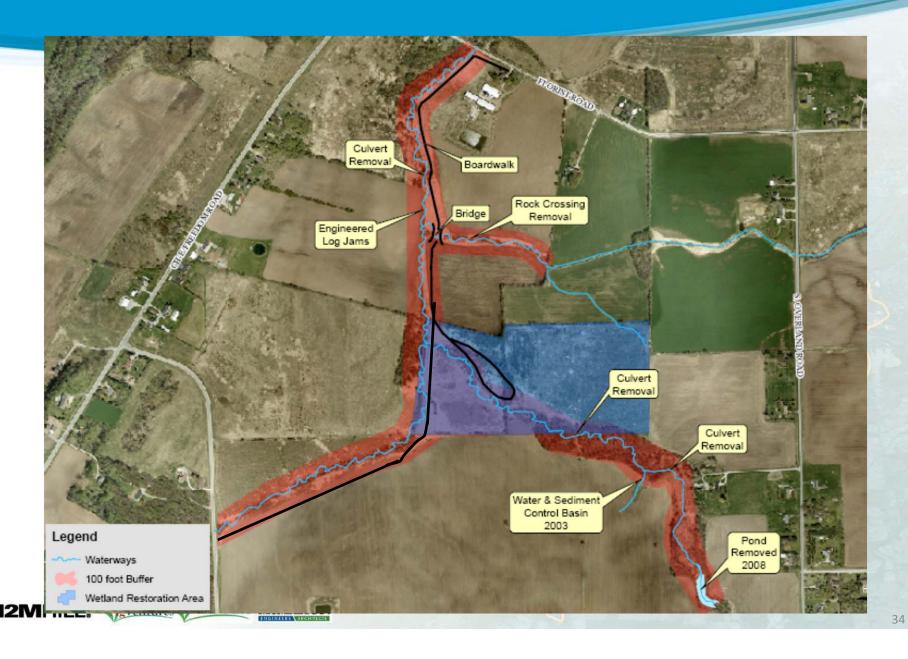
Silver Creek Current and Historical Sampling Locations

 Silver Creek upstream of Florist June 2014 Silver Creek downstream of Florist 2008





Planned Restoration Project



Available Baseline Data

Biological Samples

- Baseline June 2014 samples
- Several previous years data at various sites



Physical Stream Data

- Stream bank phosphorus
- Legacy sediments

Wisconsin DNR Biological Criteria Development

- Started in Feb '14
- References biological metrics in WisCALM '14
- Adjustments likely in multi-year process
- Season specific sampling

Department of Natural Resources processes for waterbody assessments and impaired waters listing, biological criteria for water quality standards, and biological confirmation of phosphorus impairments 1. Finding/nature of emergency (Emergency Rule only): The rules will be proposed as permanent rules Would establish new water quality criteria for a suite of biological metrics ("biocriteria") that are used for assessing attainment of designated uses for different waterbody types. specific changes to how these assessments are currently conducted. The department's protocols for assessing waterbodies and listing impaired waters are contained in a guidance document titled "Wisconsin's Consolidated Assessment and Listing Methodology" (WisCALM), which is updated ever

STATEMENT OF SCOPE

2014 Schedule

Schedule Forecast and Stakeholder Participation Silver Creek Pilot Watershed Project 8/19/2014



Key Stakeholder Participation

		Aug		Sept		00	t	No	w	D	ec		2015	Tilth	 own	Brown County NRCS	Outagamie County	Outagamie County NRCS
Kickoff Workshop	\perp			Ш	Ш	ш	Ш	Ш	Ш			Ш	Ш	X	X	X	X	X
Review field delineations	\perp				Ш	\perp	Ш	\perp	Ш			Ш	Ш	X	X	X	X	X
Finalize parcels/ fields included in analysis		П		ш	П		П		П			П	П					
Finalize leads for initial landowner contacts	Ш				П	П	П	Ш	\Box			П	П	X	X		×	
Coordinate with Oneida for inventorying stream bank erosion and in-stream sediment deposition.					П							П	\prod	X				
Oneida completes stream bank and sediment deposition inventory.	П	П				П	П	П	П			П	П	X				
Develop schedule and work plan with Tilth/Oneida for Oneida lands. Engage AgVentures as needed to supplement Tilth.	\top	П		П	П	П	П	П	П	Т	П	П	П	X	\neg			
Develop talking points for landowner contacts (e.g. data security, landowner obligation, etc.)	\Box	П			П	\Box	П	П	П			П	П	X	X	X	×	X
AgVentures, Tith and Counties contact landowners	\Box	П				П	П	П	П	\top		П	П	X	X		×	
Finalize soil and stream bank sediment sampling plan.	\top	П			П	П	П	П	П	\top		П	П	X				
Contract with AgSource laboratory	\Box	П			П	П	П	П	П			П	П					
Finalize minimum data requirements for field walks (i.e. conservation plan development)	\top	П			П	П	П	П	П	\top		П	П	X	X	X	×	X
Evaluate use of tablet GIS data recording. Jeremy Freund/Outagamie County demonstrate template.	\top	П		П	П	П	П	П	П	\top		П	П				×	
Develop tablet GIS application (Jeremy Freund/Outagamie County) or develop paper field forms for sampling and field walks	\top	П					П	П	П	Т	П	П	П				×	
Develop hard copy maps for each field/parcel (regardless of tablet GIS)	\top	П					П	П	П		П	П	П					
Execute soil sampling, landowner interviews and field walks. Obtain signed landowner release forms.	\top	П		П	П				П	\top	П	П	П	X	X	X	×	X
Laboratory sample analysis	\top	П	Т	П	П	П	П			\top	П	П	П		\neg			
Review laboratory data results and incorporate into GIS	\Box	П		\top	П	\Box	П	П				П	П					
incorporate field walk data into GIS	\top	П		TT	П	TT	П					П	П					
Develop web-accessible GIS and initial mapping and data analysis for initial reporting	TT	П		TT	П	$\top \top$	П	П				П	TT					
	Ш				П							П	П					



Wrap Up and Action Items

October 22, 2014: Next stakeholder and steering committee meeting

