# Wisconsin Department of Natural Resources SWIMS Project Summary

## **General Project Information**

Project ID: ARRA\_Project\_18C WTDT

Name: SEWRPC SWEET Water Trust ARRA 18C

Type: Grant Project

Subtype: ARRA Pass Through Project

Status: ACTIVE
Start Date: 10/01/2009
End Date: 12/31/2010

Purpose: SEWRPC Contract - Supplemental funds for water quality planning in designated management areas; expedite updates for

additional urban service areas with intense development pressures; contract with Southeast Wisconsin Regional Planning

Commission.

Objective: The Southeastern Wisconsin Regional Planning Commission would pass through the 604 (b) funding to the consultant doing

the Kinnickinnic River Watershed Restoration Plan for the Southeastern Wisconsin Watersheds Trust (SWWT). The consultant would also provide the information to Milwaukee Metropolitan Sewerage District to incorporate into their Kinnickinnic River Watercourse Flood Control Study.

1) To integrate the use of non-structural best management practices widely known as green infrastructure into the planning and implementation process of the Kinnickinnic Watershed Restoration Plan (WRP) process for two subwatershed: Villa Mann Creek and Holmes Avenue Creek.

2) To model using the ¿blanket approach¿ of green infrastructure for the two subwatersheds showing where implementation of practices would benefit water quality and quantity in the stream.

3) To integrate the use of green infrastructure practices into the Kinnickinnic Watercourse Flood Study for the two subwatersheds.

4) To identify areas in the two watersheds where the ¿blanketing¿ approach of green infrastructure would benefit water quality and water quantity goals.

#### Comments:

Outcome:

- 1) Completion of the green infrastructure practices ¿blanketing¿ modeling results for Villa Mann and Holmes Avenue Creek subwatersheds.
- 2) Incorporation of the green infrastructure practices ¿blanketing¿ modeling results into both the Kinnickinnic River WRP and the Kinnickinnic River Watercourse Study
- 3) Identification of green infrastructure practices by area in each of the subwatersheds that show the greatest water quality and water quantity benefit for the stream
- 4) Summarize results in a report on the effectiveness of using a blanket green infrastructure practices approach.
- 5) Recommend a green infrastructure pilot project (if benefits are found through this analysis) to the Southeastern Wisconsin Watershed Trust for implementation.

## **Project Statuses**

Date	Reported By	Status	Comments		
04/23/2010	LISA HELMUTH	0-25% Complete	Contract is signed.		
04/26/2010	LISA HELMUTH	0-25% Complete	The Milwaukee Metropolitan Sewerage District (MMSD) issued the Notice to Proceed to HNTB on February 15, 2010. A kickoff discussion was held on March 5, 2010 between HNTB, Tetra Tech, and MMSD to discuss the project tasks and which stormwater best management practices (BMPs) should be used in the proposed water quantity and quality modeling of the Villa Mann Creek and the Holmes Ave Creek subwatersheds. The BMPs selected and the scenarios developed are summarized below in Task 1. The scenarios will be run for both the Holmes Ave Creek and the Villa Mann Creek subwatersheds.		
07/01/2010	Elizabeth Larsen	25-50% Complete			

## **Project Status Detail**

Question
Answer

1. Reporting Timeframe (Q1 (Oct-Dec), Q2 (Jan-Mar), Q3 (Apr-June)
June), Q4 (July-Sept):
Q3 (Apr-June)

2. Amount expended this time period: No request for funding at this time.

3. Subcontracts or subgrants awarded this period: Yes, Subcontract was signed and is moving forward.

## **Wisconsin Department of Natural Resources SWIMS Project Summary**

#### Question

- 4. Number work hours created or maintained to date:
- 5. Work accomplished this reporting period:

#### **Answer**

NA

Tetra Tech and HNTB have completed the modeling of the four scenarios described in Task 1. A draft report summarizing these results was completed on June 4, 2010, and submitted to MMSD for review. This draft report is currently being reviewed by MMSD.

Task 1. Develop Scenarios to Evaluate Flood Flow and/or Water Quality **Impacts** 

Scenarios that include low impact development (LID) stormwater management practices were developed for the area east of S. 13 Street in the Holmes Ave Creek subwatershed and for the entire Villa Mann Creek subwatershed. Water quantity and quality impacts were evaluated in the Holmes Avenue Creek subwatershed and water quality impacts were evaluated in the Villa Mann Creek subwatershed. In summary, the following scenarios were developed:

- 1. 25% of parking lot areas with storage -apply to 50% of parking lots and use 50% of the area in each for storage. A depth of 4 inch was considered acceptable for the parking lot storage
- 2. 25% of commercial/industrial roofs with storage. A 6 inch depth is used for the roof storage based on the 2020 Facilities Plan State of the Art Report.
- 3. Combine 1 and 2.

In addition, a fourth scenario was developed which replaced parking lot storage with porous pavement in scenario No. 3. All four scenarios built off of the Extreme Measures run from the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) Regional Water Quality Management Plan Update (RWQMPU).

This task was completed in the first quarter of 2010.

### Task 2. Run Scenarios

The scenarios described in Task 1 were modeled by Tetra Tech in the second quarter of 2010. The results of these model runs were summarized under Task 3 which are currently being reviewed by MMSD.

## Task 3. Process and Interpret Results

The results from the model runs were summarized in a draft report prepared by Tetra Tech and HNTB and submitted to MMSD. This draft report is currently being reviewed by MMSD. MMSD shall provide HNTB with comments which will be incorporated into the final report. None documented.

MMSD to complete initial review and provide comments to HNTB: July 2,

HNTB to submit final draft report to MMSD: July 23, 2010 MMSD to complete final review and submit final report to SEWRPC: August 27, 2010

The Milwaukee Metropolitan Sewerage District (MMSD) issued the Notice to Proceed to HNTB on February 15, 2010. A kickoff discussion was held on March 5, 2010 between HNTB, Tetra Tech, and MMSD to discuss the project tasks and which stormwater best management practices (BMPs) should be used in the proposed water quantity and quality modeling of the Villa Mann Creek and the Holmes Ave Creek subwatersheds. The BMPs selected and the scenarios developed are summarized below in Task 1. The scenarios will be run for both the Holmes Ave Creek and the Villa

Mann Creek subwatersheds.

6. Work goals for coming reporting period:

7. Overall project status:

8. WDNR Question: Job equivalent Created

People									
Name	Role	Status	Start Date	End Date	Organization	Comments			
HELMUTH, LISA D	COORDINATOR	ACTIVE	10/01/2009		Wisconsin DNR				
Larsen, Elizabeth	COORDINATOR	ACTIVE	07/07/2010		SEWRPC				

# Wisconsin Department of Natural Resources SWIMS Project Summary

**Actions** 

Action Detailed Description Start Date End Date Status

**Monitoring Stations** 

Station I Name Comments

**Assessment Units** 

WBIC Segment Local Name Official Name

**Lab Account Codes** 

Account Code Description Start Date End Date

**Forms** 

Form Code Form Name

**Methods** 

Method Code Description

**Fieldwork Events** 

ARRA\_18C\_Q2FFY10\_Rep

Start Date Status Field ID Station ID Station Name

**Documents** 

Title Description Author Published Comments

ARRA 18C SEWRPC
SWEET Water Trust
ARRA 18C SEWRPC
SWEET Water Trust Project
Description Comments

Author Published Comments

10/29/2009

10/29/2009

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MMSD LETTER HAHN, MICHAEL 04/26/2010
AGREEMENT ARRA

PROJECT - VMC & HAC

MMSD LETTER HAHN, MICHAEL 04/26/2010 AGREEMENT ARRA

PROJECT - VMC & HAC Exhibit A

MMSD LETTER HAHN, MICHAEL 04/26/2010
AGREEMENT ARRA

PROJECT - VMC & HAC Exhibit B

WPC Modeling HAHN, MICHAEL 04/26/2010 task\_quarterly report 032310

ARRA 18C

**Budget** 

Code Description Quantity Units Unit Cost Total Cost

**WDNR** 

04/28/2010

Test Code Description Test Group # Planned Unit Cost Total Cost

Total SLOH Lab Costs: \$0.00