## Wisconsin Department of Natural Resources SWIMS Project Summary

#### **General Project Information**

Project ID: ARRA\_Project15 WTDO

Name: ARRA 15 Village of Sussex Spring Creek Grant 2P-00E73201

Type: Grant Project

Subtype: ARRA Pass Through Project

**Status:** ACTIVE **Start Date:** 02/09/2010 **End Date:** 10/31/2010

**Purpose:** Spring Creek planning and study of culvert removals and stream restoration of Spring Creek, an impaired waterbody.

Objective: Develop a strategy to remove man-made barriers to this waterway and restore a natural stream flow pattern. Collect data

to be used in a study on the water quality benefits and treatment of urban pollutants through restoration of natural stream segments in suburban areas, including the capacity for mitigating urban runoff impacts, through:

¿ more evenly-dispersed flow through natural meanders and in-stream vegetation during storm events as compared to piped systems;

¿ nutrient uptake by in-stream and nearby vegetation;

¿ incorporation of sediment into restored streambed;

 $\hbox{$\xi$ transport of $\xi$ normal $\xi$ amounts of sediment downstream, as compared to excessive scouring of streambed due to $\xi$ normal $\xi$ amounts of sediment downstream. }$ 

current ¿flashy¿ type of system

¿ evaporation and infiltration of runoff throughout the drainage area, rather than depositing excess water in the

downstream reaches of the basin

¿ temperature stabilization

Comments: DUNS #: \_\_\_\_\_ CCR#:\_\_\_\_

Total project award: \$36,000

Outcome: A detailed plan describing the strategy for removing artificial barriers to the stream system which could be adopted by local

units of government, to be used for development of infrastructure and downtown re-development planning. Recommendations from this plan could be adopted by other communities with similar stream obstacles.

The study would determine if there is a water quality benefit to daylighting and restoring other stream segments in semiurban communities by allowing runoff to be treated by the natural ecosystem, as opposed to directing water away to the nearest downstream surface water. Other previous studies around the country have primarily focused on the habitat values of daylighting projects, as opposed to water quality improvements. Results of this study could be considered in

deciding other water quality projects to implement in the region.

#### **Project Statuses**

| Date       | Reported By     | Status                 | Comments   |
|------------|-----------------|------------------------|--|
| 04/16/2010 | MAUREEN MCBROOM | Progress: 0-25% Comple | consultant has gathered field data; using this to begin designing preliminary alternatives before next meeting   |
| 07/14/2010 | MAUREEN MCBROOM | Progress: 50-75% Compl | met with Village and Interfluve (consultant) to review preliminary conceptual drawings. analysis of field work and other information have determined recommended stream width, buffer size, and 2 potential realignment possibilities. Discussed potential funding sources, inclusion in possible TIF district plans, and potential incorporation into upcoming road reconstruction project. Meetings are tentatively scheduled for August - October to present info. to village's redevelopment group, the general public, and Village Board. |
| 10/13/2010 | MAUREEN MCBROOM | Progress: 75-100% Comp | Developed 2 conceptual plan alternatives for daylighting Spring Creek; plans & details sent out to Village & Department staff for review and comment. Continuing with meeting planning.  |

## **Project Status Detail**

Question Answer

1 Reporting Timeframe (O1 (Oct-Dec) O2 (Jan-Mar) O3 (Apr- O4)

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

## Wisconsin Department of Natural Resources SWIMS Project Summary

Question Answer

- 2. Amount expended this time period:
- 3. Subcontracts or subgrants awarded this period:
- 4. Number work hours created or maintained to date:

5. Work accomplished this reporting period:

Completed drafts of 2 conceptual plan alternatives, including memo, modeling, cost estimates cross sections & plan views. Distributed drafts for review and comment by Village and Department technical staff. Compiled comments for review & consideration. Continued meeting planning. Water quality study and community guide for similar projects currently under way.

6. Work goals for coming reporting period:

Evaluate comments received on draft plans; adjust conceptual plans accordingly. Present alternatives to redevelopment, DPW & village boards / committees. Complete water quality report & guide for communities on daylighting

7. Overall project status:

approximately 75% done; review of proposed alternatives, water quality information and proposed guide for other communities still needed.

8. WDNR Question: Job equivalent Created

| People             |               |        |            |          |                   |          |
|--------------------|---------------|--------|------------|----------|-------------------|----------|
| Name               | Role          | Status | Start Date | End Date | Organization      | Comments |
| D ANTUONO, JAMES R | PROJECT_OFFI  | ACTIVE | 10/03/2009 |          | Wisconsin DNR     |          |
| MCBROOM, MAUREEN A | PROJECT_OFFI  | ACTIVE | 04/16/2010 |          | Wisconsin DNR     |          |
| VILLAGE OF SUSSEX, | GRANT_RECIPII | ACTIVE | 10/03/2009 |          | VILLAGE OF SUSSEX |          |

| Actions                       |                      |            |            |          |  |
|-------------------------------|----------------------|------------|------------|----------|--|
| Action                        | Detailed Description | Start Date | End Date   | Status   |  |
| Restore Hydrology, Morphology |                      | 10/03/2009 | 06/30/2010 | PROPOSED |  |
| Restore Riparian Habitat      |                      | 10/03/2009 | 06/30/2010 | PROPOSED |  |

## **Monitoring Stations**

Station ID Name Comments

683208 Sussex Creek at Sth 164

#### **Assessment Units**

WBICSegmentLocal NameOfficial Name7734001Spring CreekSpring Creek

#### **Lab Account Codes**

Account Code Description Start Date End Date

## **Forms**

Form Code Form Name

### **Methods**

Method Code Description

#### **Fieldwork Events**

Start Date Status Field ID Station ID Station Name

# Wisconsin Department of Natural Resources SWIMS Project Summary

| Documents  |   |                              |            |                  |           |
|--|---|------------------------------|------------|------------------|-----------|
| Title  | Description   | Author                       | Published  | Comments         |           |
| ARRA 15 Village of Sussex<br>Spring Creek Contract               |   | WDNR                         | 10/29/2009 |                  |           |
| ARRA 15 Village of Sussex<br>Spring Creek Project<br>Description |   | WDNR                         | 07/22/2009 |                  |           |
| ARRA_15_Q2FFY10_Report   | t   | WDNR                         | 04/28/2010 |                  |           |
| ARRA_15_Q3FFY10_Repoi  | t   |                              | 07/30/2010 |                  |           |
| Preliminary cross section 7/7/10                                 | preliminary conceptual cross section and floodplain - plantings, etc. | BETH WENTZEL -<br>INTERFLUVE | 07/07/0010 |                  |           |
| preliminary plans 7/7/10   | Preliminary conceptual realignment locations 1 & 2                    | BETH WENTZEL -<br>INTERFLUVE | 07/07/2010 |                  |           |
| Budget   |   |                              |            |                  |           |
| Code Descript  | ion   | Quantity U                   | nits       | <b>Unit Cost</b> | Total Cos |

**Test Group** 

# Planned

**Unit Cost** 

**Total Cost** 

Total SLOH Lab Costs: \$0.00

Description

**Test Code**