

## Wisconsin Department of Natural Resources SWIMS Project Summary

### General Project Information

**Project ID:** ARRA\_Project12 WTDL  
**Name:** ARRA 12 CARPC Black Earth Creek Study Grant 2P-00E73201  
**Type:** Grant Project  
**Subtype:** ARRA Pass Through Project  
**Status:** ACTIVE  
**Start Date:** 10/03/2009  
**End Date:** 12/31/2009  
**Purpose:** Black Earth Creek monitoring and analysis to determine the impact of agricultural runoff; contract with Capital Area Regional Planning Commission.  
**Objective:** This project is a key component of a water quality monitoring and planning project designed to determine the impact that agricultural runoff is having on Black Earth Creek. The project includes a cooperative monitoring project that involves Dane County LCD, USGS, WDNR Fisheries, CARPC, WDNR Watershed Management, and support from Partner Organizations such as the Black Earth Creek Watershed Association.

The principal needs that the monitoring will address include identification of water chemistry conditions that may be limiting trout populations. A determination will be made regarding the feasibility of establishing an alert system that would use real-time water chemistry parameters to indicate when stream conditions may potentially induce a fish kill. This alert system would notify the WDNR and other organizations to activate management plans to reduce the impact on the fisheries resource.

This project funds collection and analysis of water quality data sondes at two locations along BEC to help identify areas of water chemistry changes. These sites would use regressions to estimate the discharge (non-published) between the site locations and the active stream gages located on BEC. Manual EWI samples will be collected during base flow and periods of storm runoff. These samples will be used in the development of the regression analyses to predict real-time constituent concentrations from the water quality sonde data and water quality samples.

The funds are intended to be used for equipment, gage stations, and analysis by USGS. The results of this work will be used in a subsequent Phase two effort, to be conducted four to six years in the future, to conduct comprehensive watershed planning, including all land uses in the watershed with the goal of preserving and restoring a healthy aquatic ecosystem for Black Earth Creek. This is a key component of areawide water resources management planning for the area. The information from the current project will be tied in with other ground and surface water modeling work conducted in the watershed by the USGS, and used to estimate pollutant loading from specific land uses in the watershed, set goals, identify load reductions and establish habitat protection measures and strategies as part of an overall comprehensive watershed management plan supported and implemented by all the various stakeholders and groups in the watershed.

**Comments:** DUNS #: \_\_\_\_\_ CCR#: \_\_\_\_\_  
 Total project award: \$30,000

**Outcome:** Project Deliverables: Project report with recommended alternatives including monitoring data and analysis results

### Project Statuses

Date	Reported By	Status	Comments
04/13/2010	JAMES MORTON	0-25% Complete	The monitoring stations have all been installed and are reporting water quality parameters in real time. The weblinks to the monitoring stations and the parameters that are being monitored are shown on the USGS website (link provided). To date, there have been no alerts that would trigger more detailed sampling.
04/20/2010	JAMES MORTON	0-25% Complete	<p>Water Quality stations were established in September of 2009, stations were activated for automated sampling in October 2009. The monitoring stations are all available on-line via the web at the following url:  <a href="http://waterdata.usgs.gov/wi/nwis/current/?type=quality">http://waterdata.usgs.gov/wi/nwis/current/?type=quality</a>.</p> <p>Four stations were created, station id #'s and sampling gear for each are listed below:</p> <p>USGS station numbers and name, water-quality monitoring equipment present:</p> <p>05406500 Black Earth Creek @ Black Earth, automated sampler</p>

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Date	Reported By	Status	Comments
			and water-quality monitor
			05406497 Black Earth Creek @ South Valley Rd, water-quality monitor
			05406479 Black Earth Ck Nr Treatment Plnt @ Cross Plain, water-quality monitor
			05406457 Black Earth Creek NR Brewery Rd @ Cross Plains, automated sampler and water-quality monitor.
			The alert process has been created that notifies (WDNR, USGS, Cross Plains officials, and Dane County LCD staff. This is an automated alert notification that USGS created to react when water quality conditions are such that a fish kill could occur.
			Runoff and base flow samples were collected starting in November or 2009 and are still being collected. Several small presentations have been given to various user groups through out the county.

### Project Status Detail

Question	Answer
1. Reporting Timeframe (Q1 (Oct-Dec), Q2 (Jan-Mar), Q3 (Apr-June), Q4 (July-Sept): 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:	Jan - Mar  None--contracts have already been established Subcontracts through CARPC to USGS WDNR 120 hours Water Quality stations were established in September of 2009, stations were activated for automated sampling in October 2009. The monitoring stations are all available on-line via the web at the following url: <a href="http://waterdata.usgs.gov/wi/nwis/current/?type=quality">http://waterdata.usgs.gov/wi/nwis/current/?type=quality</a> . Four stations were created, station id #'s and sampling gear for each are listed below: USGS station numbers and name, water-quality monitoring equipment present: 05406500 Black Earth Creek @ Black Earth, automated sampler and water-quality monitor 05406497 Black Earth Creek @ South Valley Rd, water-quality monitor 05406479 Black Earth Ck Nr Treatment Plnt @ Cross Plain, water-quality monitor 05406457 Black Earth Creek NR Brewery Rd @ Cross Plains, automated sampler and water-quality monitor. The alert process has been created that notifies (WDNR, USGS, Cross Plains officials, and Dane County LCD staff. This is an automated alert notification that USGS created to react when water quality conditions are such that a fish kill could occur. Runoff and base flow samples were collected starting in November or 2009 and are still being collected. Several small presentations have been given to various user groups through out the county.  Stations were installed in Sept of 2009 Stations activated for monitoring October 2009 Samplers were started to collect samples effective Nov. 2009 (base flow and runoff samples) The url for on-line viewing of data is listed in document The station id numbers are listed in document Alert notification- has been established and on line for (wndr, usgs, Dane co lcd, and village of cross plains officials) Begin alert notification and detailed water quality monitoring and discharge response
6. Work goals for coming reporting period:	
7. Overall project status:	
	Water Quality stations were established in September of 2009, stations

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**Question**

**Answer**

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8. WDNR Question: Job equivalent Created

**People**

Name	Role	Status	Start Date	End Date	Organization	Comments
CARPC,	GRANT_RECIP	ACTIVE	10/03/2009		Capital Area Regional Planning Commission	
MORTON, JAMES A	PROJECT_OFFI	ACTIVE	10/03/2009		Wisconsin DNR	
USGS,	GRANT_RECIP	ACTIVE	10/03/2009		U.S. Geological Survey	

**Actions**

Action	Detailed Description	Start Date	End Date	Status
Survey Watershed (Status, Sources, Impairments)	Black Earth Creek Watershed	07/01/2009	06/30/2010	IN_PROGRESS

**Monitoring Stations**

Station I	Name	Comments
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**Assessment Units**

WBIC	Segment	Local Name	Official Name
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**Lab Account Codes**

Account Code	Description	Start Date	End Date
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**Forms**

Form Code	Form Name
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**Methods**

Method Code	Description
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## Wisconsin Department of Natural Resources SWIMS Project Summary

### Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
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### Documents

Title	Description	Author	Published	Comments
ARRA Project 12 CARPC Black Earth Creek 2009 Project Description	Project Description	WDNR	10/27/2009	

### Budget

Code	Description	Quantity	Units	Unit Cost	Total Cost
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Test Code	Description	Test Group	# Planned	Unit Cost	Total Cost
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**Total SLOH Lab Costs:** \$0.00