

**Environmental Protection Commission  
Iowa Department of Natural Resources**

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ITEM

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DECISION

TOPIC

**Contracts – Division of Soil Conservation, Iowa Department of  
Agriculture and Land Stewardship – Watershed Improvement Projects**

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**Recommendations:**

Commission approval is requested for two multiple-year service contracts with the Division of Soil Conservation, Iowa Department of Agriculture and Land Stewardship. The contracts will begin on June 17, 2009. The total amount of these contracts shall not exceed \$344,212.

**Funding Source:**

These contracts will be funded through FFY 2008 EPA Section 319 grant funds.

**Background:**

The following project contracts are presented for approval:

Dry Run Creek Sub-Watershed Retrofit Project	2 years	\$245,782
Lake Hendricks Watershed Project	2.5 years	\$98,430
<b>Total</b>		<b>\$344,212</b>

**Purpose:**

The parties propose to enter into these contracts for the purpose of retaining the Contractor to implement watershed improvement activities for the projects selected.

**Contractor Selection Process:**

These projects were chosen using a grant proposal application and committee review process.

Steve Hopkins  
Coordinator, Nonpoint Source Program, Watershed Improvement Section  
Geological and Water Survey Bureau, Environmental Services Division  
June 16, 2009

Attachment(s): Project Summaries

## FFY2008 SECTION 319 PROJECT SUMMARIES

### **Dry Run Creek Sub-Watershed Retrofit and Bank Stabilization Project**

This is a new phase of an existing project sponsored by the Black Hawk Soil & Water Conservation District. While the previous project in the Dry Run Creek focused on agriculture land and a few urban demonstration projects, this project will primarily focus on installing Best Management Practices (BMPs) in the urban portion of the watershed.

Dry Run Creek is a 15,177 acre (23.5 square mile) watershed which flows through rural, residential, industrial and commercial areas. A segment of Dry Run Creek, in Cedar Falls, is listed on the State of Iowa's 303(d) list of impaired waters, with an impairment of aquatic life. DNR is currently developing a TMDL for Dry Run Creek, and TMDL water monitoring indicates that urban stormwater runoff is a likely primary cause of the impairment.

To address the primary water quality problems in Dry Run Creek, the project will implement practices in targeted areas in the urban portion of the watershed designed to infiltrate and filter stormwater, particularly from impervious surfaces near the creek. The goals of the project are to reduce sediment delivered to the stream by 30%, improve and/or protect 25% of the stream corridor, and continue the existing information and education program in the Dry Run Creek Watershed. The key to the success of this project will be to manage runoff from frequent small rainfall events.

Planned BMPs include bio-retention cells, pervious concrete, modular paver block, permeable pavement, soil quality restoration, streambank stabilization, storm drain skimmer boxes, filter strips, riparian plantings. Information and education activities will include newsletters, field days/tours, community programs, educational signs, and press releases.

Section 319 Funding proposed	2 years	\$245,782
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### **Lake Hendricks Watershed Project**

This is a new project sponsored by the Howard Soil & Water Conservation District. Lake Hendricks is a 54-acre, man-made lake within a 1,209-acre watershed. The lake is on the State of Iowa's 303(d) list of impaired waters, due to low dissolved oxygen, organic enrichment, and algae. Fortunately, the installation of an aeration system has been successful and the low DO levels are no longer considered a primary problem. However, recent assessments have identified the primary problems to be high levels of chlorophyll a and suspended algae in the water, poor water transparency, and very high levels of phosphorus in the water column.

Lake Hendricks has been monitored systematically since 2000. Even though the lake has significant levels of phosphorus in the water column; the monitoring indicates the outside sources of phosphorus appear to be concentrated at four of the eleven monitoring sites. Monitoring also indicated high levels of nitrate-nitrogen and bacteria at the majority of the monitoring sites.

Land use is 67% row crop, 17% hayland, 11% timber, and a small portion in CRP. Models provided by Iowa DNR TMDL staff indicate phosphorus loading between 680 and 1,741 lbs per year, and sediment loading to the lake is estimated to be 695 tons per year. Project objectives are to reduce nutrient concentrations in the lake by 35%, and reduce sediment loading from near-lake sources by 70%. BMPs for the project include no-till farming, manure management plans, cover crops, grassed waterways, tile bio-filters, water & sediment control basins, grade stabilization structures, wetlands, streambank stabilization, and timber stand improvement. Watershed outreach activities will include signage, press releases, and an information kiosk located near the lake.

Section 319 funding proposed	2.5 years	\$98,430
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