

Elk Creek Area Watershed Project (Delaware)

Elk Creek and three of its tributaries are continuing to support wild trout populations as more sediment and nutrients from surrounding lands are kept out of the water. The Elk Creek Watershed Project has been steadily working at that problem, offering cost sharing and encouraging landowners to apply best management practices on land that drains into the streams. Landowners have shared costs to install terraces, grassed waterways, fencing, nutrient and pest management, no-till farming and other practices.

Year started: 1998 Lead SWCD: Delaware (Completed)

Ensign Hollow Watershed Water Quality Protection

Animal waste management, terraces, forestry improvements and wildlife habitat management practices on uplands have teamed with extensive streambank protection and trout habitat improvements within Ensign Hollow Creek to dramatically improve trout numbers in the cold water stream. Landowners contributed \$26,000 and IDALS added about \$60,000 to the project, which became the basis for the development of a second project, the Ensign Hollow II Watershed Project.

Year started: 1991 Lead SWCD: Clayton (Completed)

Ensign Hollow II Watershed Project

The Ensign Hollow II Watershed Project builds on an earlier effort completed on the Ensign Creek portion of the watershed in 1994. The project demonstrated how people can voluntarily work together to create water quality improvements. Goals were to reduce sediment delivery to the streams by 33%, reduce the over application of nutrients and pesticides by 25% on half the watershed's cropland acres, and reduce manure runoff by developing utilization plans and by constructing two manure storage structures.

Year started: 1999 Lead SWCD: Clayton (Completed)

Silver Creek Watershed Project

Silver Creek, a warm water stream, is on the 303d list of impaired waters. The Silver Creek Watershed was included in one of Iowa's initial water quality improvement projects, the Big Spring Demonstration Project. Goals are to promote stream corridor and sinkhole protection along critical areas of the watershed, install buffer practices on an additional 40% of the Silver Creek stream channel, and accelerate installation of conservation practices to reduce sediment delivery to the stream by at least 25%.

Year started: 2007 Lead SWCD: Clayton (Active)

Glovers Creek Water Protection Fund Project

Glovers Creek, a coldwater trout stream heavily used for recreation, had negative impacts from sediment, livestock access, and livestock waste runoff. Special cost-share incentives encouraged landowners to apply more than 15 miles of terraces and other best management practices. Landowner education was important in this intensively cropped watershed. This watershed project, the first of many in the county, operated in conjunction with the Glovers Creek Water Quality Evaluation Plan.

Year started: 1989 Lead SWCD: Fayette (Completed)

Glovers Creek Water Quality Evaluation Plan

This project evaluated water quality impacts of carrying out the Glovers Creek Water Protection Fund Project, including impacts of conservation programs implemented by the Fayette SWCD. The goals were to monitor agriculturally influenced parameters, monitor atrazine and alachlor, evaluate rural drinking water wells, and make a benthic invertebrate bio-assessment, with involvement from the University of Iowa Hygienic Laboratory and Institute of Ag Medicine and Occupational Health.

Year started: 1990 Lead SWCD: Fayette (Completed)

Grannis Creek Watershed Project

Increased sediment was being delivered to Grannis Creek because of changes in cropping practices and expiring CRP contracts that brought more crops on highly erodible lands. The Grannis Creek project applied one mile of terraces, 18 sediment and water control basins, 3 grade stabilization structures, and many other practices. A notable achievement was streambank stabilization and installation of "lunker hides" for trout and a sidewalk that led to them that made Grannis Creek handicap accessible.

Year started: 2002 Lead SWCD: Fayette (Completed)

Mink Creek Watershed Project

The Mink Creek Watershed Project was begun to help reverse the negative trend in water quality and resulting downward trend in angler visits to Mink Creek. One indication of producer interest in conservation is the level of enrollment in the Conservation Reserve Program. More than 800 acres of cropland—10% of cropland acres in the watershed—was enrolled or re-enrolled in the CRP program in the first 5 years of the project. More than a dozen other practices are also being used.

Year started: 2004 Lead SWCD: Fayette ~~(Active)~~ (Completed)

Nutting Creek Watershed Project

The Nutting Creek Watershed is designed to eliminate manure runoff pollution on 40% of priority livestock sites and reduce sediment delivery to Nutting Creek by 30% over the life of the project. The creek has biological impairment of the water quality from elevated levels of fecal coliform and sedimentation. The project, which received its first funding in 2008, also has an information and education component. In addition to Fayette County landowners, Winneshiek County landowners are also involved.

Year started: 2008 Lead SWCD: Fayette (Active)

9029-015 Otter Creek

The City of West Union has been selected by Iowa Department of Economic Development as a Green Pilot Community. A major part within this designation is the reconstruction of the downtown business district public infrastructure in a sustainable, innovative, and replicable way. A key component of this project is replacement of the impermeable street and sidewalk surfacing with a porous paver system. This system, along with bio-retention cells in intersection bumpouts and sidewalk planters, will infiltrate, then cleanse and cool the storm water prior to a very slow discharge rate to Otter Creek. The project area will see a 95% reduction in peak discharge rate for a 100 year storm and a 20% reduction in runoff volume. West Union is located within the Otter Creek watershed, a designated cold water trout stream just below the city. Fayette County Soil and Water Conservation District and IDNR consider improvement of the water quality of Otter Creek to be very important. This reconstruction of downtown West Union in a sustainable manner will be the start of an overall Otter Creek watershed improvement project.

9005-002 Silver Creek Watershed

Silver Creek is a warm water stream resource located in one of the most intensely cropped portions of Clayton County. The stream has been included on Iowa's 303(d) list of impaired waters since 2002. Aquatic life, which should be present in Silver Creek, isn't there. According to the Draft Total Maximum Daily Load (TMDL) for Silver Creek, the primary nonpoint pollution sources are soil erosion from agricultural land uses and direct deposition of ammonia by livestock with access to the stream.

The Clayton Soil & Water Conservation District has begun efforts to remove Silver

Creek from the impaired waters list. The District has promoted stream corridor and sinkhole protection, and the installation of buffer practices along Silver Creek and its tributaries. Conservation practices have been targeted to crop fields to reduce sediment delivery to the stream. A series of news articles, newsletters, and field days have been utilized to increase public understanding of water quality issues. Landowner interest has outweighed available cost share resources. Additional financial support will allow the project to build upon its early successes, to further address the identified impairments, and to respond to a long list of landowners that are interested in conservation work on their farms.