ENVIRONMENTAL MANAGEMENT SYSTEM

IOWA DNR
DEPARTMENT OF NATURAL RESOURCES

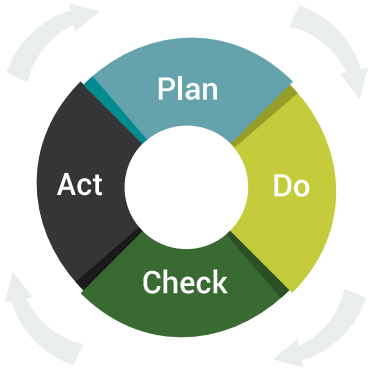
ANNUAL REPORT
FISCAL YEAR 2025

www.iowa.dnr.gov/swems

The Solid Waste Environmental Management System (EMS) program is a continuous improvement program—measuring environmental performance in six program components. Participating solid waste agencies implement a management system throughout their operations and organizations—following a framework of 10 elements.

The EMS program—an approach that rewards environmental stewardship efforts beyond waste reduction—is an alternative to Solid Waste Comprehensive Planning. Twelve solid waste agencies – serving more than half of Iowa's population—voluntarily participate by pursuing local environmental goals.

FOLLOWING A CYCLE OF CONTINUOUS IMPROVEMENT



ACTIVELY PURSUING 6 PROGRAM COMPONENTS

- Organics Management
- Greenhouse Gas Reduction
- Household Hazardous Materials Collection
- Recycling Services
- Water Quality Improvement
- Environmental Education

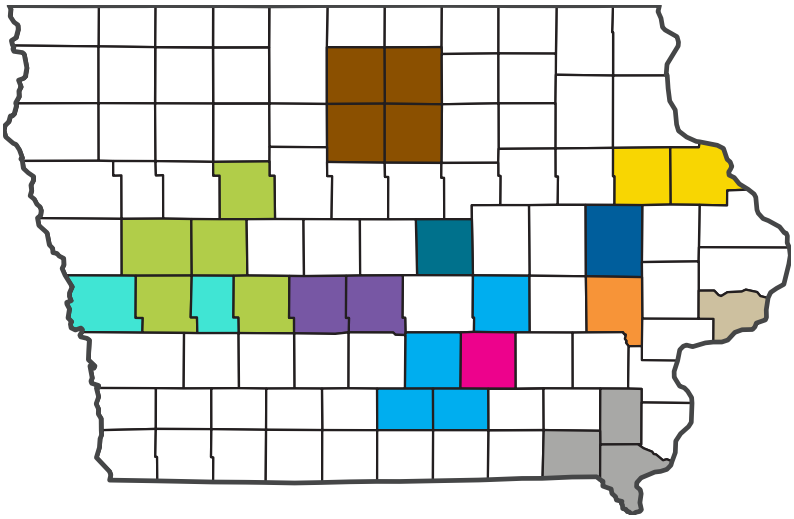
IMPLEMENTING A FRAMEWORK OF 10 ELEMENTS

DNR PROGRAM SUPPORT

DNR supports program participants with grant opportunities for measurable, environmental improvement projects in program component areas. In FY2025, DNR awarded $320,065 in grant funds for ten projects with a total cost of $459,353, including the participants' grant matching funds. DNR also offered three in-person networking/training events, including a fall conference with an emphasis in innovative ideas in waste management, a summer workshop that focused on improving objectives and targets, and an internal auditor training. EMS program costs are sourced from the landfill alternatives account of the groundwater protection fund.

FY2025 EMS PROGRAM COSTS	
Third-party external auditing	$35,312
Technical assistance and participant training/support	$51,959
Grant awards	$320,065
TOTAL	**$407,335**

ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) PROGRAM PARTICIPANTS



CRLCSWA
Cedar Rapids Linn County Solid Waste Agenc

DMASWA
Dubuque Metropolitan Area Solid Waste Agency

GRRWA
Great River Regional Waste Authority

HCLC
Harrison County Landfill Commission

ICLF
Iowa City Landfill and Recycling Center

LNI
Landfill of North Iowa

MCSWMC
Mahaska County Solid Waste Management Commission

MWA
Metro Waste Authority

SCISWA
South Central Iowa Solid Waste Agency

SWMCMC
Solid Waste Management Commission of Marshall County

WCISWMA
West Central Iowa Solid Waste Management Association

WCSC
Waste Commission of Scott County

PARTICIPANT ACHIEVEMENTS

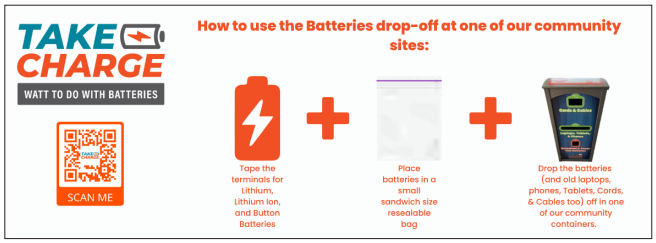
At a local level, participants work to achieve quantifiable objectives and targets—resulting in environmental improvements within their service areas. DNR provides grant opportunities for up to 75% of project costs to assist participants in reaching their environmental goals. Highlighted below are projects that were completed during FY2025 some of which were funded with EMS grants.

CEDAR RAPIDS LINN COUNTY SOLID WASTE AGENCY—Bioreactor

To continue progress on the water quality objective, the agency sought to reduce the amount of nitrates reaching an adjacent creek by installing a constructed wetland and bioreactor. Prior to installation, a baseline of 8.9 mg/L nitrogen as nitrate was established. Bioreactor samples at the inlet and outlet were 16.3 mg/L and 8.87 mg/L of nitrate, respectively. This indicates a decrease in the tile water by 7.43 mg/L. Wetland samples taken at the inlet and outlet were 12.9 mg/L and 15.3 mg/L of nitrate respectively. While this indicated an increase in nitrate, the agency's environmental engineer expects the surface water runoff to have higher levels than the tile line inlet, giving a potentially false low reading for the inlet sample. Additionally, this type of testing does not account for the benefits of evapotranspiration under drier conditions. Due to these testing limitations, the results from the wetland are continuing to be studied, as well as the impact of droughts and extreme rain on the effectiveness of the wetland. The agency is also testing the impact of the bioreactor on the soil. Those results were not available by the end of FY25.

Aerial image of constructed wetland.

DUBUQUE METROPOLITAN AREA SOLID WASTE AGENCY— Battery Recycling



Fires due to the improper disposal of batteries have increased significantly in recent years due to the increase in embedded batteries. The DMASWA Landfill had a significant fire in September 2022, which was likely caused by a lithium-ion battery. DMASWA prioritized recycling all batteries to reduce the chance of fire. This reduced customer confusion over what types of batteries could be dropped off and increased awareness of embedded batteries in everyday electronics. With the support of an EMS grant, the agency increased collection locations and implemented a focused media campaign to promote the initiative. They were able to collect 205 pounds of lithium ion and other rechargeable batteries and 3,235 pounds of lead acid batteries.

Above: Customized HHM collection bin. Top left: Customized instructions based on DNR's "Take Charge" campaign

Example recycling tote for classrooms.

GREAT RIVER REGIONAL WASTE AUTHORITY—Increase Recycling at Schools

In order to increase recycling and education at local schools, GRRWA donated totes to be used for recycling in classrooms. This allows teachers to have a recycling bin in each classroom. Before this program, only 22 classrooms in the participating schools had recycling totes. After the implementation of this program, 337 classrooms had dedicated recycling totes.

HARRISON COUNTY LANDFILL COMMISSION— Household Hazardous Materials Participation

The agency decided to focus on increasing participation in Household Hazardous material drop offs. It was determined that the majority of HHM drop off participants were either preparing to move or had just moved into a new property. HCLC prepared an informational flyer and worked with local realtors to distribute it to their clients. Additionally, they hosted a HHM collection event in Missouri Valley, IA, which was promoted using social media. Through these efforts, HCLC was able to increase the number of household participants from 67 to 93. The collection event in Missouri Valley was a huge part of increasing participation.

HHM Collection event at Missouri Valley

Leaf yard waste diverted from landfill.

IOWA CITY LANDFILL AND RECYCLING CENTER— Leaves Spreading

To improve water quality and soil health, ICLF implemented a one-year project to divert collected leaf yard waste for use as a soil amendment. In summer 2024, the agency assessed areas at the Landfill with poor vegetative growth. Diverted leaves were spread in these areas to improve soil quality and moisture retention, while also increasing stormwater infiltration and reducing runoff. The goal of spreading leaves on 8,100 square feet was greatly exceeded with a total of 546,264 square feet.

LANDFILL OF NORTH IOWA—Recycling

LNI increased total pounds of mixed recycling by accepting glass recyclables, something not previously accepted. The agency recently switched to a new recycler that was able to process glass in comingled recycling. In 2024, before implementing the project, the agency collected 10.62 tons of mixed recycling. After accepting glass, the mixed recycling tonnage collected increased by 38% to 14.66 tons. Additionally, LNI saw an increase in cardboard collected.

New LNI recycling collections.

Educational outreach at Ag Day event.

MAHASKA COUNTY SOLID WASTE MANAGEMENT COMMISSION— Environmental Education- Recycling

Supported by an EMS Grant MSCWC sought to increase participation of the drop off recycling program through education events, social media engagement, and flyers. MSCWC staffed outreach booths at Ag Day and other local events. Additionally, the agency sent informative direct mail post cards and News Reports in Rural Water Bills. In 2023 they saw an average of 41 monthly participants in the drop off recycling program. In FY25, there were an average of 80 monthly participants, an increase of 95%.

METRO WASTE AUTHORITY—Bagged Compost Sales

MWA increased sales of bagged compost to the Metro Compost Center by improved marketing, seasonal promotions, and expanded retail partnerships. The program encourages residents to use compost as a sustainable soil amendment for gardening and landscaping. These efforts saw a sharp increase in bagged sales, far surpassing the original growth target. The amount of bags sold increased from 2,188 in FY24 (est. 122 tons) to 7,354 in FY25 (est. 409 tons).These results show a strong community demand and the effectiveness of MWA's organics management strategy in promoting circular use of yard waste materials.

Ad to promote compost sales.

SOUTH CENTRAL IOWA SOLID WASTE AGENCY—Erosion Control

There was substantial erosion on the new soil borrow area at the SCISWA landfill site. Established in 2024, the borrow area developed major erosion channels within a few months, discharging sediment into the channels south into Willow Creek. To address the erosion and reduce sedimentation, two terraces were installed in March 2025 across 6 acres in the borrow area. The terraces were seeded with permanent vegetation and new erosion channels did not develop. SCISWA plans to extend one terrace and add a third for the next season to further increase the water quality benefits.

Images from before and after terrace installation.

SOLID WASTE MANAGEMENT COMMISSION OF MARSHALL COUNTY— Swap Shop

In order to improve HHM management and participation, SWMCMC started a Swap Shop where customers can shop for usable materials for free. This program prevents unused materials from being sent to the landfill or being disposed of improperly. With the support of an EMS grant, the Swap Shop was stocked with donated items, helping to divert 305 lbs of material out of the waste stream and into reuse. While the program fell short of the 350 pounds of HHM target, it was still a great success and is continuing to build momentum about the program.

New Swap Shop facilities.

Wood waste diverted from landfill.

WEST CENTRAL IOWA SOLID WASTE MANAGEMENT ASSOCIATION— Wood Waste

WCISWMA noticed a lack of participation in the wood waste disposal program. Many customers declined to sort wood waste from standard garbage prior to drop off, causing organic material to go into the landfill. WCISWMA reached out to these customers and promoted a reduced tipping fee for sorting wood waste from regular garbage for recycling. This promotional program saw an increase from 350 to 431 tons of wood waste collected in FY25.

WASTE COMMISSION OF SCOTT COUNTY— Ecosystem Improvement Project

A 10,000 square foot stormwater letdown area at the Recycling Campus was identified for water quality improvement. To reduce the sediment in the stormwater, the area was restructured and seeded with salt-resistant turf grass, along with native prairie grasses and plants. After the prairie was established, sediment in stormwater runoff was reduced to 16 mg/L total suspended solids (TSS) from a baseline of 307 mg/L TSS.

In 2024, the landfill team identified a grove of Swamp White Oaks originally planted in 2004. These trees were too close together to properly mature, so 41 were selected and transplanted to reforest an area previously cleared for the future development of landfill cells. At the close of FY25, the transplanted trees have a very high survival rate of 95%. Based on the projections from the I-Tree planting calculator, the transplanted trees are expected to sequester approximately 15 tons of carbon dioxide over the next 10 years.

Top left: Stormwater controls before seeding. Top right: Prairie installation after seeding. Above: Relocated oak trees flourishing

SOLID WASTE Environmental Management System

Committed to Continuous Improvement