

Agricultural Pollution Prevention Resources

Environmental Management Systems (EMS)

Livestock EMS Project The project goal was to develop and evaluate environmental assessment and decision-support aids with which livestock producers can address local priority water and air quality issues. A livestock EMS is a systematic approach to identify, correct and monitor the environmental performance of a livestock enterprise. It involves a continuous cycle of risk assessment, action planning, implementation, review and improvement to fully integrate environmental responsibility into the business of farming. <http://www.uwex.edu/AgEMS/livestock/about.html>

Iowa Soybean Association Certified Environmental Management Systems for Agriculture (CEMSA) is a farmer-led program that is designed to help farmers incorporate an EMS within their farming operation, implement the EMS framework for production agriculture, and assist farmers with documenting and demonstrating measurable environmental quality improvements. <http://www.isafarmnet.com/enviroagron/cemsa.html>

Colorado EMS Permit Program The Colorado Department of Public Health and Environment (CDPHE) is working to find effective and innovative ways to achieve superior environmental protection through an EMS approach. The pilot project will test a systematic, cross media, outcome based permit system using an approved EMS permit as the vehicle. <http://www.cdphe.state.co.us/el/EMS/emspermit/>

Montana Environmental Self Assessment for Beef Operations The Montana State University Natural Resources Extension Program has produced a comprehensive environmental checklist for beef cattle operations. Several operations have modified practices and a few have used the assessment to develop EMS approaches. <http://animalrangeextension.montana.edu/articles/NatResourc/main-assess.htm>

Utah State Agriculture Environmental Management Systems The Utah State University Ag Systems Technology and Education program has produced a variety of publications promoting EMS for agricultural production. <http://extension.usu.edu/?q=ems>

University of Wisconsin Agricultural EMS An EMS is a voluntary, flexible business management system that helps farmers and managers to develop their own strategies for integrating environmental considerations into the daily operations of a farm. It relies on one's own knowledge and sense of how to best

manage an operation. The EMS starts with what is already in place and helps organize multiple management approaches. <http://www.uwex.edu/AgEMS/>

Pork EMS Template The North Carolina Department on Environment and Natural Resources Division of Pollution Prevention and Environmental Assistance has developed a sample ISO 14001 EMS for pork production facilities. <http://www.p2pays.org/porktool/samples/samplemanual.pdf>

Poultry EMS Pilot Project is a voluntary, flexible business management system that helps farmers develop their own strategies for integrating environmental considerations into the daily operations of a farm. An EMS builds on existing management strategies, such as emergency, pest, or nutrient management plans. http://www.agp2.org/env_assess/poultry_ems.php

California Wine Grape Growers Sustainable Winegrowing Program endeavors to produce the best quality wine and/or grapes possible, provide leadership in protecting the environment and conserving natural resources, maintain the long-term viability of agricultural lands, support research and education, as well as monitor and evaluate existing practices to expedite continual improvements. http://www.cawg.org/index.php?option=com_content&task=view&id=44&Itemid=33

National Environmental Performance Track Performance Track is a partnership that recognizes top environmental performance among participating U.S. facilities of all types, sizes, and complexity, public and private. Program partners are providing leadership in many areas, including some that are not currently regulated, such as energy use, greenhouse gas emissions, and water consumption. Performance Track compliance commitments are backed by participating facilities' periodic EMS and compliance audits as well as an annual certification of compliance. In recognition of these and other program elements, facilities in Performance Track are considered to be a low priority for routine inspections. <http://www.epa.gov/performancetrack/>

Cross Media Programs

Idaho One Plan provides data and software to help growers develop a single conservation farm plan that can be pre-endorsed by the various agencies, streamlining and simplifying the regulatory process that farmers face. <http://www.oneplan.org/>

The **California Dairy Quality Assurance Program** is a voluntary partnership between dairy producers, government agencies and academia to address the issues impacting agriculture. <http://www.cdqa.org/>

New York's Agriculture Environmental Management (AEM) Program is a voluntary, incentive-based program that helps farm operators make common-sense, cost-effective and science-based decisions that help meet business objectives while protecting and conserving the State's natural resources. As the umbrella program for all of New York's agricultural conservation efforts, AEM also lays the groundwork for participation in other state, federal and locally administered programs.

<http://www.agmkt.state.ny.us/SoilWater/aem/index.html>

Michigan's Agriculture Environmental Assurance Program (MAEAP) is the state's latest tool to assist in the implementation of agricultural pollution prevention practices on farms. MAEAP is a voluntary, pro-active program designed by state and federal agencies, farmers, and industry partners to help producers comprehensively evaluate their entire farming operation and reduce potential environmental and legal risks. <http://www.maeap.org/>

USDA Sustainable Agriculture Research and Education (SARE) Program has helped advance farming systems that are profitable, environmentally sound and good for communities through a nationwide research and education grants program. SARE is part of the Cooperative State Research, Education, and Extension Service (CSREES), is managed in partnership with regional land grant hosts, funds competitive grant projects, and conducts outreach designed to improve agricultural systems. http://www.sare.org/about/what_is_sare.htm

USDA Natural Resources Conservation Service (NRCS) Conservation Security Program (CSP) is designed to reward the best and motivate the rest. CSP is a voluntary program that provides financial and technical assistance to promote the conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on tribal and private working lands. Working lands include cropland, grassland, prairie land, improved pasture, and range land, as well as forested land that is an incidental part of an agriculture operation. <http://www.nrcs.usda.gov/programs/csp/>

The **Pollution Prevention Resource Exchange (P2Rx™)** is a consortium of eight regional pollution prevention information centers, funded in part through grants from EPA. These centers all provide pollution prevention information, networking opportunities and other services to States, local governments and technical assistance providers in their region. The centers represent a broad constituency, including state and local pollution prevention programs, manufacturing extension partnerships, cooperative extension and nonprofit organizations. <http://www.p2rx.org/>

Peaks to Prairies Pollution Prevention Information Center encourages adoption of pollution prevention practices by citizens, small businesses, and local governments. The Center is a member of P2Rx™ operated by the Extension Service at Montana State University, a land grant institution located in Bozeman,

Montana. The Center offers access to current information and contacts, encourages collaboration and leveraging of resources between programs, and builds information systems to enhance information dissemination.

<http://peakstoprairies.org/>

Pest Management

The **EPA Strategic Agriculture Initiative** is designed to provide a reasonable transition from the use of high risk pesticides, such as organophosphate and carbamate insecticides and carcinogenic products, to reduced risk pesticides and pest management practices. The program funds innovative research and demonstration projects by universities or agricultural groups to reduce potential adverse impacts on human health and the environment that may result from pesticide use and to encourage sustainable agricultural production systems.

www.epa.gov/pesticides/grants/aginitiative.htm

The **EPA Pesticide Environmental Stewardship Program (PESP)** is a voluntary public-private partnership organized to reduce pesticide risk and increase adoption of integrated pest management (IPM) in U.S. agriculture. PESP partners recognize that environmental stewardship is an integral part of pest management, and they commit to working toward innovative practices that reduce risk to human health and the environment.

www.epa.gov/opppdpd1/PESP/about.htm

USDA IPM Centers CSREES works in partnership with researchers and educators in the land-grant university system and the private sector to develop and implement new ways to address complex pest management issues. CSREES provides funding to support extension IPM implementation, four regional IPM centers, which contributes to the development of safe and effective IPM systems that increase farm profitability, reduce environmental and human health risks, and protect natural resources.

http://www.csrees.usda.gov/nea/pest/in_focus/ipm_if_regional.html

The **High Plains IPM Guide** is intended to provide current effective management options for insect and other arthropod pests, and for plant pathogens affecting all major field crops grown in Colorado, Montana, Wyoming, and Western Nebraska. Chemical and non-chemical control practices, when available, are described in detail for individual pests and pathogens. These practices include cultural and biological control options, and host plant resistance.

<http://www.highplainsipm.org/>

The **Center for Agriculture in the Environment** was jointly created by American Farmland Trust (AFT) and Northern Illinois University to help protect America's agricultural lands and to encourage healthy farming practices. This public policy center works closely with the academic, environmental and

agricultural communities to raise awareness of issues by providing research and strong academic arguments for wise public policy. In addition to its research, the Center oversees and provides support for its affiliated centers and organizes workshops and symposia. One important focus of AFT's work is our commitment to IPM. In 1997, AFT entered into a cooperative agreement with EPA to administer IPM projects around the country. <http://www.aftresearch.org/>

The **Farmland Information Center** is a clearinghouse for information about farmland protection and stewardship. It is a partnership between the USDA Natural Resources Conservation Service and American Farmland Trust. <http://www.farmlandinfo.org/>

Certification Programs

Food Alliance is a nonprofit organization that promotes sustainable agriculture by recognizing and rewarding farmers, ranchers, and food processors who produce food in environmentally friendly and socially responsible ways, and by educating consumers and others in the food system about the benefits of sustainable agriculture. Food Alliance operates the most comprehensive third-party certification program in North America for sustainably produced food. <http://www.foodalliance.org/>

Protected Harvest is a non-profit organization that independently certifies farmers' use of stringent and scientifically-based environmental growing standards to promote development of a market mechanism that will stimulate the commercial-scale adoption of sustainable practices, and bring the message and practice of environmental protection to the mainstream farmer and consumer. <http://www.protectedharvest.org/>

Wisconsin Green Tier Program creates co-benefits for businesses aspiring to differentiate themselves by systematically delivering superior environmental performance. Green Tier is based on a collaborative system of contracts and charters crafted jointly by participating businesses and the DNR. Green Tier is designed to help environmentally responsible companies achieve environmental and economic gains. <http://www.dnr.state.wi.us/org/caer/cea/environmental/>

SOUTH DAKOTA CERTIFIED™ Beef The goal of this program is two-fold. First, by adding value to South Dakota beef, the state's producers and processors are able to see an increase in profitability. Secondly, consumers can be confident that SOUTH DAKOTA CERTIFIED™ Beef is a safe, wholesome, quality product. <http://www.southdakotacertifiedbeef.com/>

The **Louisiana Master Farmer Program** helps agricultural producers become more knowledgeable about environmental stewardship and enhance resource-based production and resource management through a voluntary producer

certification process.

http://www.lsuagcenter.com/en/environment/conservation/master_farmer/

Energy Efficiency

NRCS Energy Conservation practices contribute to energy efficiency and fuel savings. Farmers and ranchers can cut input costs, maintain production, protect soil and water resources, reduce the nation's dependence on fossil fuels, and save money by using energy conservation practices and tools described on this web site. <http://www.nrcs.usda.gov/technical/energy/>

EnergySTAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.

<http://www.energystar.gov/>

Climate Change

The **AgSTAR** Program is a voluntary effort jointly sponsored by EPA, USDA and the U.S. Department of Energy. The program encourages the use of methane recovery (biogas) technologies at the confined animal feeding operations that manage manure as liquids or slurries. These technologies reduce methane emissions while achieving other environmental benefits.

<http://www.epa.gov/agstar/index.html>

The Methane to Markets Partnership is an action-oriented initiative that will reduce global methane emissions to enhance economic growth, promote energy security, improve the environment, and reduce greenhouse gases. Through multilateral cooperation, the initiative promotes cost-effective, near-term methane recovery and use as a clean energy source.

<http://www.epa.gov/methanetomarkets/>