

2007 Governor's Awards Recipients

Find out who received a Governor's Awards in each of the seven categories:

- Land Use
- Outreach and Education
- Recycling/Reuse
- Pollution Prevention

Land Use

Indiana Dunes State Park: Dunes Creek Daylighting Project

When Indiana Dunes State Park was first developed on the shore of Lake Michigan in the 1920s and 1930s, a 1,300 foot section of Dunes Creek was routed through a steel pipe, and the area above it paved to provide parking for beach visitors.

For years high bacteria levels were a problem at Lake Michigan beaches. Environmental organizations as well as federal, state, and local health departments investigated the problem. They found that during rains, *E.coli* bacteria that had accumulated in the soil were washing into the stream, and eventually discharging into Lake Michigan in an area adjacent to the bathing beach. They realized there was no man-made source for the pollution, but man had made the problem worse by enclosing the stream in a pipe, thus removing the natural cleansing effects of the stream.

The Daylighting Project involved the removal of approximately 95,000 square foot of concrete pavement, 500 foot of the culvert pipe, and restoration of that section of Dunes Creek to a meandering stream and wetland. This allows the natural cleansing effects of the restored stream and wetland to reduce *E.coli* levels, while benefiting wildlife and providing an opportunity for public education.

Since the Daylighting Project, several species of fish have been seen in the creek, including steelhead and Coho salmon, as well as bluegill and bass.

Meadowlane Farms

Meadowlane Farms operates a 15,000 pig wean/finish Concentrated Animal Feeding Operation, producing nearly 6 million gallons of manure waste annually.

Meadowlane Farms adjusted feed rations to better meet the nutritional needs of the growing pig, and used additives to improve characteristics of the manure. New watering technology has reduced the water volume of the waste by as much as 50%. Changes in technology and management created a waste stream capable of nearly replacing the 200+ tons of salt and petroleum-based fertilizers used on their 1,300 acres of corn and soybeans.

Meadowlane Farms uses a Comprehensive Nutrient Management Plan to identify specific areas of fields to which to apply waste. They also developed a Pest Management Plan that helps identify pest threats and available practices to mitigate those threats. Part of this plan is to treat for pests only when a real economic threat exists, thereby reducing chemical pesticide usage.

Meadowlane Farms uses technology that allows subsurface injection of the waste, greatly reducing the incidence of spills and over-application of waste nutrients. They have also used their equipment to assist in mitigating spills involving fertilizer and lagoon water entering waters of the state.

Pfizer, Inc.: Terre Haute Facility

When the Pfizer Animal Health Research facility in Terre Haute was relocated, they opted to convert the abandoned facility to an ecologically-productive area.

The land was re-contoured to include replacement of a rapid runoff channel with a sinuous stormwater conveyance system capable of servicing the area. The new stormwater treatment system was designed and constructed to enhance infiltration, water quality, and groundwater recharge. The former industrial property was re-vegetated with native plant species.

The result is an area that is accessible, low-maintenance, environmentally protective, aesthetically pleasing, ecologically productive, and dominated by native plant species and wildlife.

Outreach and Education

Lake County Solid Waste Management District

In response to a decrease in the number of households recycling in the community of Winfield, the Lake County Solid Waste Management District piloted a new program for Fall 2006. The G.S.I., (Garbage Scene Investigators) program was developed and spanned the first half of the school year, and was then culminated with a 3 "R"s (Reduce, Recycling and Reuse) Fair in December 2006. G.S.I. was a contest for Winfield's public, private, and home-schooled students in 1st through 6th grades. The goal of the program was to encourage students to begin to analyze the garbage situation in their homes, and also learn to be responsible for recycling at home. Each entrant was instructed to, in cooperation with family members, document increased efforts at reducing, recycling, or reuse at home, school, or within the community. A total of fifty students and their families signed on to become Garbage Scene Investigators.

In this effort to excite the community about recycling and its benefits, the Lake County Solid Waste Management District also increased environmental education in the community of

Winfield. Instead of merely teaching students about environmental issues and concepts, this project served as a call to action, resulting in kids taking responsibility to make positive changes at home and in their community.

The results are encouraging. Since the object was to get residents involved in recycling and waste reduction, the District looked at the volume of solid waste going to the landfill- and has documented an appreciable reduction in these materials. Though the population of Winfield continues to grow, the amount of garbage generated has not.

Recycling and Reuse

National Starch Food Innovation

When an hourly worker questioned why this facility didn't recycle, they took the initiative to start a recycling program. Their goal was to reduce the volume of waste generated by 75%. The only direction given of the Site Manager was that it needed to be a sustainable initiative that was generated by operators on the shop floor.

Departments were set up to recover, reuse, or recycle all items in their particular waste stream. All recycling duties have been absorbed into the employees' regular jobs. National Starch now recycles cardboard, paper, plastic, bulk bags, pallets, electronic equipment, metals, starch and co-products, and batteries.

One of the challenges faced by the facility was a use for waste fiber barrels, a by-product that can not be reused within the plant. Recycling the barrels is impractical. By networking with local recyclers, they started donating the barrels to schools and other organizations, typically for use as recycling receptacles. A second innovative program was the selling of surplus starch to be used in animal feed programs. This facility reduced the amount of waste sent to the landfill from 199 tons per month in 2005 to three tons per month in 2006. They exceeded their 75% goal, and have a sustained rate of 98% less waste for disposal at the landfill.

The individual responsible for suggesting the recycling program has been assigned to promote the program at two other plants, in Indianapolis and North Kansas City, MO.

Pollution Prevention

General Motors – Fort Wayne Assembly

The General Motors (GM) – Fort Wayne Assembly has been certified to the ISO 14001 standard since November 2001, and has utilized its Environmental Management System (EMS) to send a clear message to its employees and benefactors on its commitment to the environment.

Their Environmental Policy is summarized by the tag line "Our M.A.P. to the Future" and highlights three main commitments:

- Mind the Laws,
- Always Improve, and
- Prevent Pollution.

In the five years since GM – Fort Wayne Assembly's original certification, they have achieved significant reductions in air, water, waste, and energy impacts. Between 2000 and 2006, they reduced land filled wastes by 68% and VOC emissions by 7%. In 2006, this facility achieved an 87% reduction in Hazardous Air Pollutant (HAP) emissions. GM – Fort Wayne Assembly also reduced total energy consumption by 17% from 2002 through 2006. These reductions were achieved even with the addition of a 285,750 square-foot building to the facility.

Among the many initiatives implemented to achieve these reductions, this facility is proud to be one of the seven General Motors facilities that have established an infrastructure to burn landfill gas (methane) in its powerhouse. This program has allowed GM – Fort Wayne Assembly to avoid the use of 1,750,000 MMBTU of natural gas between 2002 through 2006, and has helped GM achieve the status of the largest non-utility direct user of landfill gas in the U.S.