

Center Stream Newsletter

Keeping our members current on Kaufman County's waste stream news



More Than Tilting at Windmills



Members of the Co-op Board of Directors and Staff view the workings of a wind generator. From left to right front row: Fran Burns, Haltom City, Co-op Board members Susanne Orman and Karen Jones, Co-op Executive Director Marilyn May, Board Member Chari Short, and Office Manager Donita Everett

Members of the Board of Directors and several staff members of Environmental Co-op toured a wind farm in Muenster, Texas, then saw how the fiberglass blades for these giant producers of clean energy, are made in Gainesville. The interesting and exciting Eco Tour was hosted by North Texas Corporate Recycling Association and provided a first-hand view of the production of this alternative energy source.

The tour, in celebration of Texas Recycles Day, began in Lewisville with a winding road trip to Muenster, near the Oklahoma border. This rocky and hilly area is mainly agricultural and is well-suited to wind generation.

Wolf Ridge Wind Farm is situated on an 10,000 acre lease of land that is also used for cattle grazing and has numerous working oil pumps. Wolf Ridge Wind Farm currently has 75 General Electric wind turbines that produce an annual output of 258 GWh (258 Gigawatt Hours), or sufficient electricity to power 34,000 homes. The City of Denton receives about 40 per cent of their electricity from Wolf Ridge Wind Farm.

Following the tour, that included going inside the base of one of the huge wind generators, we boarded the bus and drove to Molded Fiber Glass in Gainesville. Bodies for Mac trucks and blades for wind turbines are fabricated at this sprawling fiberglass plant. The blades on the Wolf Ridge Wind Farm were not made at this plant but the blades and the process to make them are similar. Each blade is 132 feet long and is made up of about 12,000 pounds of foam core and composite fiberglass material. The blades are made in batches to ensure they are balanced and compatible.



With a minimum wind of about 15 miles per hour, the tips of the blades are spinning 180 mph. There is very little sound from the turbines and except for the "swoosh" of the blades, they did not disturb the peace of the pastures that they dominate. The cattle grazing beneath these behemoths did not seem to notice that a great deal of electricity was being produced from the gentle breeze blowing the late summer grass, and they were unaware, (as cows tend to be) that thousands of tons of pollution were not being dumped into the clear blue sky to provide power to energy hungry North Texans.

The Wolf Ridge Wind Farm was proposed in 2004 by Wolf Ridge LLC, a subsidiary of Florida Power and Light (FPL) Energy.

This Eco Tour provided an up-front and personal look at a new application of an old technology, to produce electricity by harnessing the unlimited energy of wind. Wind is abundant in North Texas and we expect to see more facilities like Wolf Ridge Wind Farm in the near future.

Cool New Rebates

The State of Texas is getting on board the energy efficiency wagon. Be sure and register for the appliance replacement/recycling rebate before they run out. Those of you planning to replace appliances/HVAC systems will get some money back. Information at these web links: <http://www.window.state.tx.us/news2009/091211-rebate.html>

"Flat rebates will be given on Energy Star certified refrigerators, freezers, room air conditioners, central air conditioners, heat pumps, water heaters, clothes washers and dishwashers," Combs said. "An additional \$75 recycling rebate will go to consumers who buy an eligible appliance and recycle the same type of functional old appliance."

"Consumers will have an opportunity to reserve an appliance rebate by calling a toll-free number or registering online approximately two weeks prior to April 16, 2010. After the reserved mail-in rebates are awarded, any remaining funds will be rebated to consumers on a first-come, first-served basis. Shoppers will be limited to two appliance rebates and two recycling rebates per household."

QUICK FACT: About 1 Billion trees worth of paper are thrown away every year in the U.S.

The 8 Biggest Myths about Sustainability in Business

As a way of helping to get every company on the journey to sustainability, Kanal Consulting has put together a list of 8 common myths they have heard from otherwise successful companies.

1. It's a cost and we can't afford it right now.
2. It requires lots of staff.
3. There's no money to be made from sustainability.
4. It's just for big companies.
5. It's mostly for B2C companies.
6. If we make claims about sustainability, we'll be accused of greenwashing.
7. NGOs are our adversaries.
8. We don't have to worry about the supply chain because we don't make things.

Read the entire article at [GreenBiz.com](http://www.greenbiz.com).
<http://www.greenbiz.com/blog/2009/11/23/8-myths-about-sustainability-business>

Solid Waste Questions? Find the Answers Here:

Environmental Co-op

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Information on the Web

*www.trashbusters.org
www.epa.gov (we are Region 6)
www.timetorecycle.com
www.tceq.state.tx.us*

Kaufman Trash & Recycling Center

972-932-2161

Terrell Citizens Convenience Center

972-551-6628

Kemp ECO-Station

903-498-4135

*To report illegal dumping activity call:
Kaufman County Law Enforcement Center – 972-932-4337*



*Executive Director May and Senator Kaye Bailey Hutchison
Tour New MRF*

Co-op Staff Tours Material Recycling Facility

Executive Director of Environmental Co-op Marilyn May, along with staff members, recently attended the grand opening of a state-of-the-art Material Recycling Facility (MRF) in McKinney, Texas.

The McKinney MRF will be the first privately funded, single-stream LEED Certified Material Recovery Facility in the United States. The United States and a number of other countries around the world, recognize LEED Certification (Leadership in Energy and Environmental Design), as the standard for measuring building sustainability. LEED certification is achieved by using materials such as certified wood, building materials containing recycled content, low-emitting materials, energy efficient components to reduce consumption by 17.5 percent, water-conserving fixtures, and reduced concrete and gravel used to lessen the heat-island effect.

Among the distinguished guests attending this ceremony were Senior Senator from Texas, Kay Bailey Hutchison, Brian Loughmiller, Mayor of McKinney, and IESI Founder and CEO, Mickey Flood.

The new IESI McKinney Material Recovery Facility (MRF) will have the ability to recycle up to 156 million pounds of material annually reducing pressure on local landfills and saving over 13 million gallons of oil. The McKinney MRF will service the communities of Frisco, McKinney, Melissa, Prosper and Rowlett. The facility will also process recycled materials from commercial clients across North Texas.

Co-op Takes Storm-Water Management to Monday

Lee Holbert, Program Manager for Environmental Co-op, showed the effects of rainwater falling on different types of surfaces and the destructive force of storm water on creeks and lakes to nine classes of second and third graders from Sharon Smith's Kid Tracs Tech Center at Monday Primary School in Kaufman.

Using the "Stream Trailer" demonstration from AgriLife Research and Extension Services, Mr. Holbert helped these young students understand how fast moving water can erode banks of creeks, create muddy conditions in lakes, and alter the course of rivers.

Another demonstration was a Rainfall Simulator. This simple device demonstrates what happens when rainwater falls on different types of surfaces such as concrete, barren pasture, a lush lawn, and natural landscape. When water falls on the impervious surface, it all runs off, carrying leaked oil and other contaminants into the creeks and streams, but when rainwater falls on the lawn or natural landscape, the rainwater is slowed down by the leaves and roots so that it can soak into the soil. "Most of the water falling on the natural landscape penetrates deep into the soil and replenishes the groundwater," according to Mr. Holbert, while the rainwater falling onto the barren pasture "runs off, carrying mud and fertilizer or pollutants into the creeks and lakes downstream."

Providing education and information to local students on conservation, illegal dumping, watershed protection, and recycling are important parts of the Co-op's mission. The Co-op routinely makes presentations to local school students, civic groups, and other interested organizations.



Lee Holbert demonstrates how ground cover increases the absorption of rainfall at Monday Primary School

A Man-Made Water Cycle to Quench a Texas Size Thirst

In a recurring ritual worthy of Bill Murray's troubling experiences in the Groundhog Day movie, water used by families in Dallas, is treated at a wastewater facility, and then discharged into Lake Lavon. It flows over the spillway, down the Trinity River, is cleansed, filtered, and then pumped back to Lake Lavon to be used, treated, and discharged, again and again. This is the story of how North Texas Municipal Water District, (NTMWD) has increased the water available to thirsty North Texans from Lake Lavon by 40%, without drilling another well or building a new reservoir.

This story begins on November 12 when we accompanied Molly Cannon, science teacher and 51 members of the Environmental Club from Crandall Middle School on a bus tour of the North Texas Municipal Water District wetlands and the rainwater harvesting system and gardens at the Kaufman County sub-courthouse in Kaufman.

First, on this interesting and fast moving bus tour, we viewed the wetlands and transfer stations near US Hwy. 175 and heard the rationale for diverting water from the East Fork of the Trinity River to "clean" it in the wetlands then pump it back to Lake Lavon to be used again for drinking water and recreation.

Denise Hicky, from the public relations department of North Texas Municipal Water District was our tour guide through these unique artificial wetlands and provided us with answers to all of our questions.

This project diverts an average of 91 million gallons per day (MGD) of effluent dominated water from the East Fork of the Trinity River and polishes the water in one of the largest constructed wetlands in the country (1,840 acres). After passage through the wetland, the water will be pumped through an 84-inch pipeline 44 miles north of the project site back to Lake Lavon for storage, blending, and water supply use.

Most of the water we use in our daily lives is returned to area lakes and streams after going through a wastewater treatment plant. When water from Lake Lavon flows over the spillway, it flows into the East Fork of the Trinity River. About 40 miles south of the spillway, North Texas Municipal Water District built a pumping station near Crandall to divert water into a series of man-made wetlands. Over a period of six or seven days, the water naturally flows through 1,840 acres of wetland, aquatic plants polish the water – a natural process that removes about 95 percent of the sediment, 80 percent of the nitrogen and 65 percent of the phosphorus. The cleansed water from the wetland is then pumped through 44 miles

of 84 inch diameter pipe to the north end of Lake Lavon and blended with NTMWD's other raw water sources that include Lake Lavon, Lake Chapman and Lake Texoma.



Man-made wetlands cleanse effluent from river water while creating beauty and natural habitat for many bird species. (Photo from NTMWD)



East Fork Diversion Pump Station

The Pump Station includes a river diversion structure and a pump station to lift a maximum flow of 165 million gallons/day to the constructed wetland.

A multi-year project, work first began on the constructed wetland in 2004 with the design and construction of the first of two nursery wetlands. The initial nursery, 25-acres in size, was used to provide plant stock of selected emergent wetland species for a 180-acre, second phase nursery. The 180-acre nursery, completed in early 2006, is being used to provide over 1.6 million plants for the full-scale wetland.

Reuse of treated wastewater is becoming an increasingly important source of water across Texas. There are two kinds of water reuse—direct and indirect. Direct reuse occurs when treated wastewater is delivered directly from a wastewater treatment plant to the reuse application. Indirect reuse occurs when treated wastewater is discharged to a stream or reservoir and is diverted downstream or out of the reservoir for reuse. The wetlands project is an example of the indirect reuse method.

The East Fork Raw Water Supply Project, representing the largest project in Texas using reclaimed water to augment a surface water supply source, will provide the North Texas Municipal Water District (NTMWD) with over 102,000 acre-feet of water per year, enough water to serve a half million people. The East Fork Reuse Project is one of 18 similar projects currently in operation or under construction in Texas. Water reuse projects are an important part of the strategy to provide sufficient high-quality water to the rapidly growing population of Texas and elsewhere.



Crandall MS Students learn about Native plants and rainwater harvesting

After learning how to reuse water from the river, Master Gardeners, lead by Brad Ackerman showed off their beautiful gardens and rainwater harvesting system in Kaufman. This site, designed, built, and maintained, by Master Gardeners demonstrates how homeowners and businesses can have beautiful landscaping without using any water other than rainwater harvested and stored onsite.

Rainwater harvesting is viewed by many, including the EPA, as a partial solution to the problems posed by water scarcity: droughts and desertification, erosion from runoff, over-reliance on depleted aquifers, and the costs of new irrigation, diversion, and water treatment facilities.

Harvested rainwater in the U.S. is used mostly for irrigation; however, there is a growing interest in using rainwater for drinking and other indoor uses. Over 50% of household water is used indoors; bringing rain indoors could save the expense and environmental costs of treating and transporting water.



A large storage tank to store rainwater from the roof

Mr. Ackerman and his fellow Master Gardeners explained how Native plants, that is plants that occur naturally in an area, or plants adapted to an area, need much less fertilizer and less water than imported and exotic species. The use of fertilizers on lawns and gardens is a major cause of pollution in area lakes due the run-off during storms and improper irrigation.

A renewed interest in this time-honored approach of collecting water has emerged in Texas and elsewhere because of escalating environmental and economic costs of providing water by centralized water systems or by well drilling. The health benefits of rainwater, and potential cost savings associated with rainwater collection systems have further spurred this interest.

The Master Gardener program is open to individuals that want to learn more about gardening, rainwater harvesting, Square Foot Gardening and other gardening subjects.

The bus trip was a great success and the students had up-close and personal learning experiences that will help them make wiser choices as they become the decision makers and water users of the future.

QUICK FACT: Recycling one aluminum can saves enough energy to run a TV for three hours.



Resolve to be Green/Save Green in 2010

In 2010, why not make some resolutions to keep Kaufman County clean and green?

Simple changes can make a world of difference to our environment, and might even save you some green in your wallet.

Use durable shopping bags to cut down on the number of plastic bags you take from the store—and not just the grocery store. Many stores give a small credit for bringing your own bags.

If you get plastic shopping bags, be sure to recycle them at the store where you get them, reuse them as wastebasket liners, use as shoe covers in your suitcase, keep one in your car to collect litter, or give them to a local food pantry to put groceries in.

While you are shopping with your reusable bag, look for products that contain recycled content, such as refilled ink jet cartridges, printer paper or school notebooks.

Switch to natural, homemade cleaning products instead of chemical products. You can work wonders around the house with vinegar and baking soda.

Recycle your paper, plastic bottles and cans. About 60 percent of what we throw away can be recycled, and will save landfill space. Besides, the recycled materials get turned into new products. Resolve to visit your nearest recycling center in Kaufman County.

Resolve to save energy by replacing at least one incandescent light bulb in your house with a compact fluorescent (CFL) bulb. CFLs use less energy, last longer and will save you money on your electricity bill.

Resolve to save even more energy by turning off lights and televisions when not in use.

Resolve to save heating and cooling costs by turning down your thermostat one degree in winter and up one degree in summer. Small adjustments mean big savings.

Resolve to conserve water by turning off the water faucet when brushing your teeth and taking shorter showers.

Resolve to give a \$12 gift membership to the Environmental Co-op (or become a member yourself) for a gift that keeps on giving to the environment.

Log on to www.trashbusters.org for membership information, or call 972-524-0007.

If you have made changes in your daily habits that help the environment, we want to hear from you. E-mail us at environmentalco-op@cebridge.net. We will publish your tips in the next edition of the Co-op's newsletter, Center Stream.

2010 Calendar of Events January—December

Call 972-524-0007 for more information about events (as of the time we went to print, we have not heard if we are going to receive our Electronic Recycling Grant—Stay tuned!)

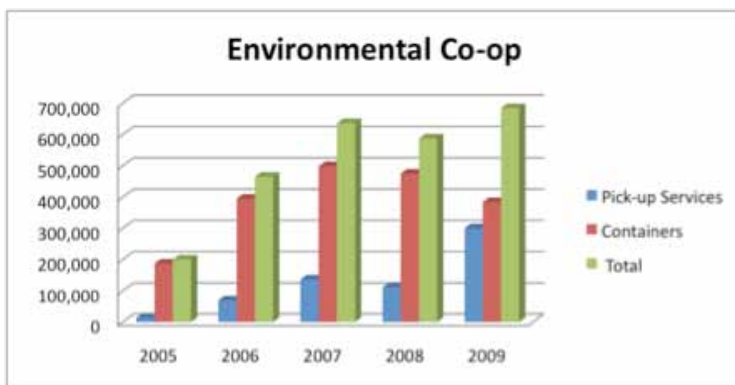
Jan. 23	Vermi Compost Class, 10 am–12 noon, open to the public, 1100 Airport Rd., Terrell, TX
Feb. 17	Vermi Compost Workshop, Crandall Middle School, 2:30–4:00 pm
Mar. 4	2 Hour Mini Compost Workshop—find out the easy way to compost, 1:30–3:30 pm, 1100 Airport Rd., Terrell, TX
Mar. 9–10	Environmental Odyssey, Terrell ISD and Kaufman ISD, Terrell, 9 am–2 pm
Mar. 25	12th Annual Membership Meeting, Kaufman County Library, dinner at 6:30, 3790 S. Houston, Kaufman, TX 75142
Apr. 10	KTB Great American Cleanup Groups should sign up now
Apr. 17	Heritage Jubilee, Co-op booth, Business Expo tent
Apr. 17	Live Green Expo, Plano, TX
Apr. 22	Kaufman County Library, Earth Day Celebration from 10 am–2 pm, public invited
May	Recycling Center Open House, 1100 Airport Rd.
May	County Wide Cleanup, TBA
Apr. 24	1st Part of Master Composter Class, 1100 Airport Rd., Terrell, TX., 9–4 pm
May 1	2nd Part of Master Composter Class, 1100 Airport Rd., Terrell, TX., 9–4 pm
May 3	Vermi-Compost class, (Composting With Worms) 10 am–12 noon. Class includes building your own home compost bin to take with you and instructions on care
Jun. 21	E -Advisory Meeting, location TBA, 10 am
Sept. 18	Trinity River Trash Bash Cleanup in Crandall. Volunteers needed for cleanup 9 am–11 am
Sept. 18	1st Part of Master Composter Class
Sept. 25	2nd Part of Master Composter Class
Sept. 25	Cedar Creek Cleanup, volunteers needed for cleanup at Cedar Creek Lake, 9 am–1 pm
Oct.	Vermi-Compost class, (Composting With Worms) 10–12 noon. Class includes building your own home compost bin to take with you and instructions on care
Oct. 23	Make a Difference Day—Cedar Creek area volunteer workday, 8 am–noon. Mabank Arena—free bulky trash collection
Oct. 23	Scarecrow Festival, City of Kaufman square, Co-op booth
Oct. 26	Kaufman County Hay Show, Tues., 5 pm at Kaufman County Fairgrounds; Co-op booth

What our Recycling Program has Accomplished

Over the past 5 years we have had a huge impact on solid waste in Kaufman County. We started with a container program in 2005. Rock Tenn Recycling in Dallas set out 20-yard containers and we were in business. That first year John Ticer came on board and he went from business to business picking up 18-gallon containers of waste office paper, newsprint and cardboard. That same we put everything into those containers and had them hauled to Rock Tenn. From 2006–2008 this was the way we did business, at least most of the time.

In 2006 Sheriff Byrnes had a baler installed at the new Kaufman County Law Enforcement Center and the inmates baled the cardboard from the Center. This saved money for the Law Enforcement Center and we picked up the bales and kept up with the poundage being recycled. We used that baler a lot over the next couple of years for large quantities of cardboard we picked up at businesses. In 2009 we received grant funding to purchase a baler for the Co-op to use exclusively. What an improvement! Our businesses still use the Rock Tenn containers, but we are picking up so much material (office paper, magazines, newsprint and cardboard) that our pickup numbers have increased from 12,971 lbs in 2005 to 600,299 lbs in 2009.

Looking at our totals since 2005, you can see we have recycled a total of 2,491,221lbs of material that did not go to any landfill, but instead was made back into usable products giving them a second life.



Check out Real Simple's great reuse ideas @ <http://www.realsimple.com/home-organizing/new-uses-for-old-things/favorite-new-uses-00000000019718/index.html>

Kaufman County Resources

Precinct 1 – Kaufman Recycling Center

Located at Kaufman Citizen's Convenience Station
East First North and Alton Streets
(From Hwy. 34 N. go N.W. on East First North and North on Alton)

Hours: Wednesday–Saturday 8 am–4 pm

City Hall - 972-932-2216
Public Works - 972-932-2216
Co. Courthouse - 972-932-4331
Recycling Center - 972-932-2161
Pct. 1 Maintenance Barn - 972-932-3684

Material Accepted	Comments
All cans	Rinsed, Labels OK
Cardboard, newspaper, magazines, office paper, paperback books, phone books	Can be mixed
Glass containers	Rinsed
#1 & #2 Plastics (bottles and jugs)	Rinsed
Oil and oil filters IN SEALED CONTAINERS ONLY	Recycle only at Pct. 1 Maintenance Barn, 600 N. Nash, Kaufman
Tires	4 at a time

Pct. 2 – Forney Recycling Drop off Center

Located at Pct 2 Maintenance Barn, Forney
(Corner of FM 741 and 2932)

Serving Precinct 2

Open: Monday–Friday 7:00 am–3:30 pm

For information call:
Pct. 2 Maintenance Barn – 972-564-7282
Pct 2 Office – 972-564-4054

Material accepted	Comments
All cans	Rinsed, Labels OK
Cardboard, newspaper, magazines, office paper, paperback books, phone books	Can be mixed
#1 and #2 Plastics (bottles & jugs)	Rinsed, labels OK
Oil and oil filters IN SEALED CONTAINERS ONLY	At Precinct 2 maintenance Barn

Precinct 3 – Terrell Citizens Convenience Station (TRASH – not recycling)

Located on CR 319 (North of Terrell between FM 429 N. & Hwy. 34 N.)
 Open: Wednesday & Saturday 9:00 am–4:00 pm

City Hall - 972-551-6604
 Convenience Station - 972-551-6628
 Pct. 3 Maintenance Barn - 972-563-5362

**Only residential trash and bulky waste with permit
 Wood chips are available free of charge. You load.**

Two Terrell RECYCLING Drop-off Centers

1. Located at the corner of E. High and N. Delphine (behind Pct 3 Sub-Courthouse)
2. 1100 Airport Road

Both locations are open: 24 hrs a day/7 days a week
 For information call: Co-op office - 972-524-0007

Material Accepted	Comments
All cans	Rinsed, Labels OK
Cardboard, newspaper, magazines, office paper, paperback books, phone books	Can be mixed
#1 and #2 Plastics (bottles & jugs)	Rinsed, labels OK

Environmental Co-op
 401 N. Adelaide St.
 P.O. Box 1833
 Terrell, TX 75160

Precinct 4 – Kemp ECO-Station

Located at 6520 Plainview Drive off US 175 (North side frontage road)
 Hours: Monday–Friday, 7:00 am–3:30 pm

For information call:
 Kaufman County Sub-Courthouse - 903-498-3492, ext. 1
 ECO-Station: 903 – 498-4135

Material accepted	Comments
All cans	Rinsed, Labels OK
Cardboard, newspaper, magazines, office paper, paperback books, phone books.	Can be mixed
Glass containers	Rinsed
#1 & #2 Plastics (bottles & jugs)	Rinsed
Oil and oil filters IN SEALED CONTAINERS ONLY	At the ECO-Station
Tires	Tires - limit 4 tires per person per day
All batteries	Car, cell phone, regular lithium, & alkaline batteries