# RESOURCES



### **Breaking New Ground**





Monterey Regional Waste Management District



# **FSSAGE** from Tim Flanagan, General Manager



Tim Flanagan, General Manager

"The District has begun the transition from a traditional waste and recycling facility to an integrated processing facility, where waste is utilized as a resource." I am excited to take the helm from William Merry and serve the District Board, employees, and community as General Manager. In many ways, this is a pivotal moment in the history of the District and the solid waste industry. California is leading the nation with a goal of reducing waste 75% and prohibiting the disposal of commercial organics in landfills by 2020. District staff has been working hard to meet these objectives and to achieve our mission of "Turning Waste into Resources", while operating cost efficiently and serving the needs of our residents and businesses.

Over the course of the next 12 months, many years of planning and preparing for improved District facilities will come to fruition. As you will read in this Annual Report, construction will soon begin on a complete refurbishment of our Materials Recovery Facility. This project will dramatically increase the tonnage of material we divert from the landfill. It will also give us the capacity to process the single stream (blue bin) recycling and utilize the revenue to help keep our rates as low as possible.

As I write, work is now nearly complete on the new Truck Yard and Vehicle Fueling Facility. This will allow GreenWaste Recovery to park and fuel their collection vehicles where they end their routes, at the District. The first phase of this project will fuel collection trucks with Compressed Natural Gas (CNG) from the utility pipeline. In the next phase, we plan to utilize landfill gas and/or gas from our Anaerobic Digestion facility to fuel local collection trucks. This will create a closed loop fueling process with collection trucks delivering the raw material from which their fuel is produced. Running a fleet of CNG trucks also means cleaner air and dramatically reduced carbon emissions compared with diesel-powered vehicles.

The District has begun the transition from a traditional waste and recycling facility to an integrated processing facility, where waste is utilized as a resource. I will bring my passion for people and the environment to my role as General Manager to help lead the District into the future and continue to develop the truly world class facility we have here on the Peninsula.



In May, District staff bid a fond farewell to General Manager William Merry. During his 28 years of service to the District, William served as District Engineer, Assistant General Manager, and General Manager. William's tenure with the District was characterized by the steady growth and expansion of our community-owned recycling, reuse and landfill gas recovery programs. The Board of Directors subsequently named Assistant General Manager Tim Flanagan to take the baton from William and serve as General Manager. Tim had the benefit of working with William for ten years, which made for a seamless transition. Tim is only the 4th General Manager in the 64 year history of the District.

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# **Recognizing Attitude and Achievement**

The new Attitude & Achievement Award (Triple A) recognizes employees who demonstrate exemplary team spirit and initiative. Recipients of the Triple A are nominated by the management staff in recognition that employees are integral to the District's mission and success.

The 2015 Triple A recipients include:

Rodney Barber, Israel Hernandez, Lee Roy Roach, Regina Santa Cruz

# **Charlie Benson Awards**

District employees recognize their colleagues with this award for exceptional work quality, team leadership, and outstanding work performance.

Froylan Hernandez Juan Zepeda Clemente Alvarez Delfino Nunez Steven Padilla Jose Luis Felix

# **2015 Service Awards**

- 25 Year Gene Green, Rick Shedden
- 15 Year Luis Cazares, Hortencia Fernandez, Fernando Becerrill, Maria Becerrill, Molly Beasley, Francisco Ponce, Sten Strandberg, Veronica Lepe, Victor Aguillon
- 10 Year Timothy Flanagan, Jessica Arreola

### New Staff Joined the District Team in 2015

#### HUMAN RESOURCES:

Berta Torres, Interim Human Resources Manager Leticia M. Yáñez, Human Resources Assistant

#### COMMUNITY PROGRAMS:

Angela Goebel, Public Education & Outreach Specialist

MRF MAINTENANCE: Eugenio Ortiz, Laborer I

SITE OPERATIONS: Guy Petraborg, Principal Engineer Jeffrey Spence, Laborer I

David Ramirez, Senior Engineer Jose Venegas, Laborer II













# BREAKING New Ground



### Collection Services Truck Yard Construction Project

Construction began in 2015 for the Truck Yard Project which, when completed, will be leased to the present and future collection companies who serve this area. Beginning in 2016, the facility will provide a base of operations for GreenWaste Recovery (GWR) as they provide collection services to the Peninsula. Occupying an 11.6 acre site, the project includes an administration building, a vehicle maintenance building, truck wash facility, and truck fleet parking.

Upon completion, the Truck Yard facility is projected to earn LEED Silver certification. Supporting the District's mission of "Turning Waste into Resources," 90% of the construction waste is being diverted from landfill disposal. The building materials will include recycled content. The structural steel will be composed of 10-20% post-consumer material, while the entire 20,000 tons of base rock is 100% recycled concrete and asphalt rubble material. The site plan also includes a bioswale and storm water retention pond.

The estimated cost of the Truck Yard Project is \$10 million and the projected completion date is Spring 2016.

# Fueling the Collection Fleet with Compressed Natural Gas

The District contracted with Trillium  $CNG^{TM}$  to build, own, and operate the compressed natural gas (CNG) fueling station to power GreenWaste Recovery's CNG collection trucks. At the end of a 15-year term, Trillium  $CNG^{TM}$  will transfer ownership of the CNG fueling system to the District. The station will be located adjacent to the Truck Yard and will time-fill (typically overnight) up to 50 trucks and fast-fill two trucks at a time. The station will have the flexibility to be expanded to fuel 100 trucks in the future if needed.

CNG is a much cleaner fuel source than diesel and produces 22% less greenhouse gas emissions. The station will initially use natural gas from PG&E to produce CNG. Later, the station will transition to use biogas produced onsite from the Monterey Peninsula Landfill or the SmartFerm Anaerobic Digester, which will be a closed loop fueling process. The transition to biogas is a part of the District's long term strategy supporting the "Turning Waste into Resources" mission.



# BREAKING New Ground

### **Materials Recovery Facility Improvement Project**

Since it opened in 1996, the Materials Recovery Facility (MRF) has recycled or reused nearly 2 million tons of material that would have otherwise been deposited in the Monterey Peninsula Landfill.The MRF Improvement Project will replace aging infrastructure and add new capacity to divert larger quantities of material from disposal. The improvements will also work to ensure that District member agencies achieve the State 75 percent diversion goal by 2020 (a goal that was also adopted by the District Board), the new organics diversion requirements of AB1826, the mandatory recycling requirements of AB341, and the construction and demolition material diversion mandated by CalGreen.

Bulk Handling Systems was chosen through a competitive process to design, manufacture, and install the new materials recovery system. The advanced system design will employ

screens, air separation, and optical sorting to allow for processing up to 80 tons per hour of either mixed waste or single stream recyclables from local collection programs. The system will maximize recovery rates and purity of fiber and containers. In addition to traditional plastic, glass, and paper commodities, the system will recover organics, wood, and aggregates.

Construction is projected to begin late Spring 2016 with completion by year end.

The MRF Improvement Project will feature two processing lines and occupy much of the existing 100,000 sq ft building. Project costs include \$12.8 million for equipment and \$4 million to retrofit the building and install the equipment.

#### **Annual Resource Savings from MRF Improvements**

<b>Material Recycled</b>	<b>Resources Conserved</b>
Mixed Plastics – 4,504 tons	Energy saved by recycling will equal the electricity needed to power 2,400 homes
Mixed Paper – 13,200 tons	Equivalent of 225,000 trees, enough to absorb approx. 5,500 tons of CO2
Tin & Steel – 3,040 tons	Equivalent of 230,000 gallons of oil saved compared to producing steel from iron ore
Food Scraps – 17,280 tons	Potential for saving 1,250 tons of methane from being released into the atmosphere



# Landfill Gas Blower and Flare Project

Completed in 2015, the Landfill Gas (LFG) Blower and Flare Project consisted of the replacement of a temporary LFG flare with the installation of a new LFG blower system and enclosed ground flare. The flare has the design capacity to control 4,000 standard cubic feet per minute of landfill gas.

The District operates a LFG collection and control system (GCCS) at the Monterey Peninsula Landfill. The GCCS includes an energy plant with four engine generators to convert the methane from the landfill to electricity, as well as a LFG utility flare as a secondary control device. Currently about 9,000 tons of methane are captured a year, which is the equivalent of removing 33,760 vehicles from the road.

# BOARD Highlights



### **Board of Directors**

Our nine-member Board includes a representative from each of the municipalities within the District boundaries, one to represent unincorporated Monterey County within the District, and a "director-at-large" representing the Pebble Beach Community Services District. Board Members are appointed for four-year terms.

Dennis Allion, Chair (since July 2013) Del Rey Oaks Appointed February 2011 **Ian Oglesby, Vice Chair** (since July 2014) Seaside *Appointed January 2009* 

Gary Bales Pacific Grove Appointed April 1969 **David Pendergrass** Sand City *Appointed July 1999* 

Libby Downey

Monterev

**Leo Laska,** Pebble Beach *Appointed January 2004* 

Jane Parker Monterey County Appointed January 2009 **Bruce Delgado** Marina *Appointed February 2009* 

Appointed January 2007

**Carrie Theis** Carmel-by-the-Sea *Appointed January 2015*  **Rob Wellington** Legal Counsel *Appointed August 1973* 

"It has been a pleasure to serve this community and work for a District that has become internationally known as the Best Solid Waste System in North America." – William Merry, General Manager

#### November 2014

Authorized \$4,052,792 expenditure to perform Landfill Gas to Energy Facility Improvements to install a new engine generator, switchgear, utility lines and transformers to provide power direct to facilities on site.

#### December 2014

Authorized a 15-year agreement with Trillium CNG to install a compressed natural gas (CNG) fueling station, on a design, build, own, operate, and transfer basis for sale of CNG fuel at market rates to GreenWaste Recovery under its new franchise contracts.

#### January 2015

Awarded Contract to low bidder Lewis C. Nelson and Sons, of Selma, CA, in the Amount of \$10,864,800 for construction of Truck Parking and Maintenance Facility.

Adopted a Resolution of Appreciation for Director Sue McCloud, who represented the City of Carmel-by-the-Sea on the Board for 16 years.

Adopted Negative Declaration for Proposed Landfill Gas Flare Project; installation of new flare will destroy excess landfill gas and improve collection system performance.

Received LAFCO Municipal Services Review that found the District in excellent financial and operational condition and recommended retaining the District's current Sphere of Influence, established in 1982.

Director Downey (City of Monterey), Director Parker (Monterey County) and Director Bales (City of Pacific Grove) were all re-appointed to four year terms.

#### February 2015

Approved Payment for Recyclable Materials to allow a \$40 per ton recycling rebate to participating member agencies at such time recyclables are redirected to the District for processing.

#### **April 2015**

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District received Standard & Poor's "AA-" Rating for revenue bonds: The Board approved issuance and sale of Bonds in an amount not to exceed \$34,000,000 to finance \$20 million for improvements to the MRF, and \$10 million for construction of the new Truck Parking and Maintenance Facility.

# BOARD Highlights

#### May 2015

Approved a \$12,894,584 contract with Bulk Handling Systems for the purchase, installation, and commissioning of new MRF equipment; amended the \$380,000 contract with JR Miller and Associates to complete the design of site and building improvements to retrofit the existing MRF.

#### June 2015

Approved of Fiscal Year 2015/16 Budget that projected \$20,280,000 in operating revenues, \$20,134,000 in operating expenses, \$1,200,000 in non-operating expenses, and a net loss of \$824,000. Unrestricted cash reserves projected to decrease \$5,056,000, which is below the 20% Board guideline; this deficiency is recovered by FY 2017/18 as MRF Improvements are projected to generate positive cash flows and capital expenditures to return to historic levels. The Bond Debt Service Ratio is 1.50, in excess of the 1.25 Bond Covenant.

Following the request of a local resident to revisit the Gull Abatement Program, the Board unanimously voted to continue the Gull Abatement Program, which includes the use of falcons, in order to be in compliance with State and Federal regulations.

Staff reports that the District successfully sold \$31,145,000 in Bonds, with an average interest rate of 3.68%, based on the District's S&P rating of AA-.

#### **July 2015**

Following a nationwide search, Tim Flanagan was named District General Manager. He has served as the District's Assistant General Manager since July 2005.

#### August 2015

A Shared Services Study that evaluated opportunities to share services for economic and environmental benefit with the neighboring Monterey Regional Water Pollution Control Agency was presented to the Board. Staff was directed to continue to explore opportunities to partner in areas, including safety and information technology.



#### September 2015

Presented retired General Manager William Merry with a resolution of appreciation for his 28 years of service to the District.

Received a summary of the Countywide Integrated Solid Waste Management Study. The final report is available at www.mrwmd.org.

Approved \$861,000 purchase of Caterpillar D8T Dozer, which was reduced by \$278,445 with an emissions reduction grant received from the Monterey Bay Unified Air Pollution Control District.

#### October 2015

As a result of an engine failure, approved purchase of replacement engine block for Jenbacher 420 Landfill Gas Generator/Engine in the amount of \$627,115.





# COMMUNITY :-









# 2015 District Public Outreach and School Education Program

"Turning Waste into Resources" and environmental stewardship were central program themes this year. Along with offering tours, workshops, and school presentations, the District supported a wide range of waste reduction, organics diversion, recycling, and litter prevention activities. Highlights include:

- The first Organics to Energy Food Scrap Compost Project was implemented at Carmel middle and high schools, Spring 2015. An estimated 5,500 pounds of food and compostable products were diverted from disposal. School staff received an Ocean Guardian Grant to continue the project into the 2015-16 school year.
- District staff published their first Eco-Literacy Student Newspaper, which was delivered to 2,500 students. Articles highlighted environmental initiatives by local students, schools, and non-profit organizations, as well as Solutions to Plastic Pollution and Waste Reduction Strategies for Home and School.
- Staff partnered with Save the Whales, Monterey Regional Storm Water Management Program, CSUMB Service Learning, and Waste Management, Inc. to provide educational assemblies to more than 600 K-6th grade students. A marine biologist with a special guest, "Ruby the SeaTurtle" helped students and their teachers make the connection between waste reduction and the preservation of our marine environment.
- In an effort to prevent litter at State beaches, staff partnered with California State Parks, and produced 40 permanent signs posted at Monterey County State beaches.
- To support local cities in implementing their bans on the distribution of single-use plastic bags, staff produced heavy-duty recycled content reusable shopping bags made from recycled agricultural plastic. CSUMB students and local non-profit, The Offset Project, assisted with the outreach and distribution of 10,000 reusable bags to residents and businesses.

### 2015 District Public Education / Outreach Activities

47 Tours (School & Public)	1,300 Visitors		
48 Student Presentations & Events	2,689 Attendees		
7 Compost & Greener Gardening Workshops	123 Attendees		
33 Presentations & Event Attendees	2,393 Public Reached		
23 Community Events Received Zero Waste Sup	port		
(Support included technical assistance and in and food scrap diversion)	frastructure for recycling		



# COMMUNITY :

# Second Successful One-day Hazardous Waste Collection Event at MPC

The District hosted a second annual Household Hazardous Waste (HHW) one-day collection event at Monterey Peninsula College on June 27, 2015, from 9 a.m. to 2 p.m. The 2015 event attracted 565 residents who turned in more than 35 tons of hazardous and electronic waste, a 17% increase over material collected at the 2014 event. Surveys conducted at the event found that it is especially popular with residents in Carmel Valley and other areas that are a long distance from District facilities.

The HHW collection facility at the District is openTuesday - Saturday, 9 AM - 4 PM and is available free to residents living in the District service area. This facility receives more than 10,000 turn-ins annually.





# HOUSEHOLD HAZARDOUS WASTE



www.mrwmd.org | 831.384.5313



### Last Chance Mercantile Sales Reach All-time High

The Last Chance Mercantile (LCM) is the only thrift store we know of that is located on the same site as a recycling and landfill disposal facility. The LCM accepts donations of reusable goods, offers a buy back center for CRV beverage containers, provides free electronic waste recycling drop-off, sells bag-yourown compost and top soil products, and features a 7,000 sq. ft. store with an inventory of used goods that changes daily.

With the close of the 2014-15 Fiscal Year, the LCM surpassed \$800,000 in sales for the first time in its 24 year history. Net sales totaled \$812,000 for FY 14/15 compared to \$693,000 in FY13/14, a 17% year over year increase. This success is a testament to a lot of hard work and dedication by the LCM staff and the loyal support of many customers who always make a stop at the Last Chance part of their trip to the District.

# DIVERSION :

# Summary of MRWMD Diversion for Member Agencies

Jurisdiction	Carmel	Del Rey Oaks	Marina	Monterey County	Monterey	Pacific Grove	Pebble Beach	Sand City	Seaside
FY 14-15 Tons Received	10,622	1,831	19,867	108,082	43,243	17,214	16,140	2,814	29,695
Tons Recycled Asphalt / Concrete	1,013	165	1,662	8,483	3,424	1,053	2,454	191	2,703
Green Waste	2,722	246	1,961	12,920	3,924	3,003	4,336	116	2,087
MRF	1,655	194	3,004	18,231	5,181	2,499	2,754	508	3,327
Food Waste	8			64	617	152	224	46	47
Biosolids Compost				22					
Total Tons Recycled	5,398 51%	605 33%	6,627 33%	39,720 37%	13,146 30%	6,707 39%	9,768 61%	861 31%	8,164 27%
Total Tons Landfilled	5,224 49%	1,226 67%	13,240 67%	68,362 63%	30,097 70%	10,507 61%	6,372 39%	1,953 69%	21,531 73%

\*MRF (Materials Recovery Facility) tonnage represents tons recycled at MRWMD from incoming loads of mixed waste. Does not include source separated residential and commercial recycling tons collected and processed by local hauling companies.

# **Transition to New Collection Services Provider Complete**

GreenWaste Recovery (GWR) began providing solid waste, recycling and organics collection services to seven District member agencies in 2015 including: Sand City, Del Rey Oaks, Marina, Seaside, Pebble Beach Community Services District, Carmel-by-the-Sea, and Pacific Grove. GWR was awarded 15year Franchise Agreements with each Agency as the exclusive service provider for the participating member agencies following a competitive selection process. Delivering on their promise, GWR successfully recruited eligible drivers from the prior service provider Waste Management, Inc., so while their uniforms changed, most of the faces remained the same on local collection routes.



New services in the GWR contracts include yard trimmings collection for all single family homes in Marina and Seaside, as well as on-call collection of bulky items and reusable materials and collection of household batteries. Customers will also notice the colors of collection carts are standardized through all the jurisdictions with a blue cart for recycling, green cart for yard trimmings, and the black cart for solid waste. GWR also offers an expanded list of recyclable items that go in the blue cart as well as a discounted fee schedule for collecting food scraps from businesses. For more information visit: www.greenwaste.com.







# FINANCE .:

Source of Funds	FY 2012-13	FY 2013-14	FY 2014-15	Budgeted FY 2015-16
Disposal Fees	\$16,145,000	\$17,161,000	\$18,463,000	\$17,100,000
Material Sales	\$1,909,000	\$2,059,000	\$1,963,000	\$1,810,000
Landfill Gas Power	\$2,377,000	\$2,505,000	\$1,584,000	\$2,000,000
Other Revenue <sup>A</sup>	\$405,000	\$323,000	\$382,000	\$325,000
Total Income	\$20,836,000	\$22,048,000	\$22,392,000	\$21,235,000
A Income from investment earning	ngs, rents/leases, operational servi	ces, HHW fees, and finance ch	arges.	

# Expenditures

Incomo

Use of Funds	FY 2012-13	FY 2013-14	FY 2014-15	Budgeted FY 2015-16
Operating Expenses <sup>B</sup>	\$16,158,000	\$16,290,000	\$16,845,000	\$17,204,000
Acquisition of Fixed Assets <sup>c</sup>	\$4,480,000	\$2,293,000	\$9,470,000 <sup>c</sup>	\$6,722,000
Debt Reduction (Principal) <sup>D</sup>	\$1,373,000	\$228,000	\$449,000	\$850,000
Total Expenditures	\$22,011,000	\$18,811,000	\$26,764,000	\$24,776,000 <b>⊧</b>

<sup>B</sup> Non-cash expenses such as amortization/depreciation and closure/post-closure expenses are not included.

<sup>c</sup> The Acquisition of Fixed Assets (FY 2014-15) contains the design and construction of the Franchise Hauler truck maintenance, parking and fueling facility (\$4.6 million), design and construction of the Landfill Gas Enclosed Ground Flare and Blower (\$1.4 million), replacement of Materials Recovery refuse bin roll-off truck (\$0.3 million), Electric Engine/Generator replacements and overhauls (\$1.6 million), Materials Recovery woodgrinding equipment upgrade (\$0.5 million) and the addition of Landfill Gas Collection Wells (\$1.1 million).

<sup>D</sup> The 1998 Revenue Bonds were paid off during FY 2012/13 and in FY 2014//15 Revenue Bonds (\$31.1 million) were issued.

E See the Financing Community Infrastructure Improvements section to see how the bond proceeds will be used in FY 2015-16.

### Cash Reserve

Cash Reserve	June 30, 2015
Total Cash and Cash Equivalents	\$ 9,052,000
Restricted Cash and Cash Equivalents	
Landfill Closure and Post Closure Care Costs	\$ (1,238,000)
Environmental Impairment Fund	\$ (1,000,000)
	\$ (2,238,000)
Total Unrestricted Cash and Cash Equivalents	\$ 6,814,000
Budget Designation of Unrestricted Cash, 20% Cash Operating Expense Reserve	\$ 3,441,000
Unrestricted cash reserves are maintained to pre-fund routine capital improvements as note in Footnote <sup>c</sup> above and tipping fee rates.	\$ 3,373,000

### **Financing Community Infrastructure Improvements**

In May 2015, the District issued \$31.1 million in Revenue Bonds to provide funds for the Community Infrastructure Projects. As of June 30, 2015, \$30.8 million of the bond proceeds were restricted for capital expenditures to be made in FY 2015/16 (\$28.4 million) and \$2.4 million for a Bond Trustee Reserve account.

#### **Materials Recovery Facility Improvement Project**

The Materials Recovery Facility Project is designed to (1) update aging infrastructure for processing construction and demolition material; (2) install new capacity to process commercial mixed waste and single-stream recyclables; and (3) ensure member agencies are in full compliance with State recycling mandates and goals.

#### Franchise Hauler Truck Parking and Maintenance Facility

Beginning in 2016, this facility will be leased to current and future franchise haulers serving the area and is designed to provide an administrative building and location to service, wash, and park the collection trucks at the end of each service day.

#### **Compressed Natural Gas (CNG) Fueling Station**

The Fueling Station is an integral part of the 2015 franchise agreements and will significantly reduce the carbon footprint of collection vehicles. The first phase of the project will produce CNG from natural gas and phase two will utilize landfill and/or digester gas to produce CNG fuel.

# Hours For Disposal/Facilities/Administration

Landfill Disposal Site Monday – Friday, 7:00 a.m. – 4:00 p.m. Saturday, 8:00 a.m. – 4:00 p.m.

**Last Chance Mercantile** Tuesday – Saturday, 9:00 a.m. – 4:00 p.m. Closed Monday

**Buy Back Center** Tuesday – Friday, 9:00 a.m. – 4:00 p.m. Saturday, 9:00 a.m. – 3:00 p.m. Closed Monday

Household Hazardous Waste Collection Tuesday – Saturday, 9:00 a.m. – 4:00 p.m. Closed Monday

Administration Building Monday – Friday, 8:00 a.m. – 4:00 p.m.

### **Service Area**

The District covers a total of 853 square miles. District jurisdictional boundaries include the cities of Carmel-by-the-Sea, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City, Seaside, and the unincorporated areas of Big Sur, Carmel Highlands, Carmel Valley, Castroville, Corral De Tierra, Laguna Seca, Moss Landing, Pebble Beach, San Benancio, and Toro Park. The population currently served is approximately 170,000.

### **Mission Statement**

Our mission is to **Turn Waste Into Resources** in the most cost effective and environmentally sound manner to benefit the community.



#### **Monterey Regional Waste Management District**

14201 Del Monte Blvd., Marina, CA 93933 831-384-5313 (tel) 831-384-3567 (fax) www.mrwmd.org www.keepmontereycountyclean.org

Monterey Regional Waste Management District saved the following resources by using 720 pounds of Leaf Paper Reincarnation MatteText , made with 100% recycled fiber and 100% post-consumer waste, designated Ancient Forest Friendly™ and manufactured with electricity that is offset with Green-e® certified renewable energy certificates: 7.2 fully grown trees, 3366 gallons of water, 3.2 Million BTUs of energy, 225 pounds of solid waste, and 1,100 pounds of greenhouse gases. Calculations based on research by Environmental Defense Fund and other members of the PaperTask Force. www.newleafpaper.com



Turning Waste Into Resources