

# Sustainable Action Plan for County Operations

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## Year Two Implementation Report Card



PIMA COUNTY SUSTAINABILITY PROGRAM

FY 2009-10

*The Santa Cruz River represents the intersection of riparian restoration, water reclamation, groundwater recharge and renewable energy. See page 2 for details.*

# Sustainability and Accountability

## Making and Measuring Our Progress

The Board of Supervisors unanimously adopted the Sustainable Action Plan for County Operations in August 2008. Since then, staff has taken on a diverse range of activities and programs designed to integrate sustainable practices into virtually all facets of the way County government operates – from the cars we drive, to the energy and water we consume, to the construction of our buildings, to the products we purchase, to the way in which we view and handle our “used” materials.

This Sustainability Report Card charts the progress of the Action Plan’s second year of implementation. In all, County Departments tackled 73 action items programmed for FY 2010, resulting in significant accomplishments in waste reduction, energy conservation, green building, renewable energy, land conservation and management, green purchasing, and water conservation and management.

This Report Card showcases some of those successes, and also provides feedback to County Supervisors, staff and the public on how the County is performing on 31 specific “success indicators.” The success indicators include measurable performance targets that allow the County to track its progress during each year of the 5-year action plan. They can also help guide the County in areas where it strives to improve its performance, particularly in response to the availability of resources or evolving policies, technologies and best practices.

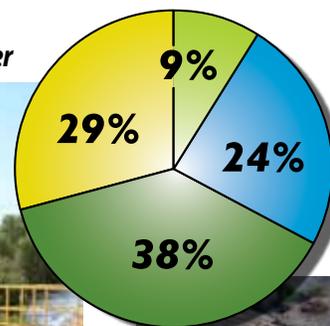
To review or download copies of the Sustainable Action Plan for County Operations or this Sustainability Report Card, please go to [www.pima.gov](http://www.pima.gov) or visit your nearest Pima County Public Library.

Comments and suggestions are always welcome and may be directed to the Pima County Sustainability Steering Committee, attention Tedra Fox, at [tedra.fox@pima.gov](mailto:tedra.fox@pima.gov) or (520) 740-8766.

### On the Cover



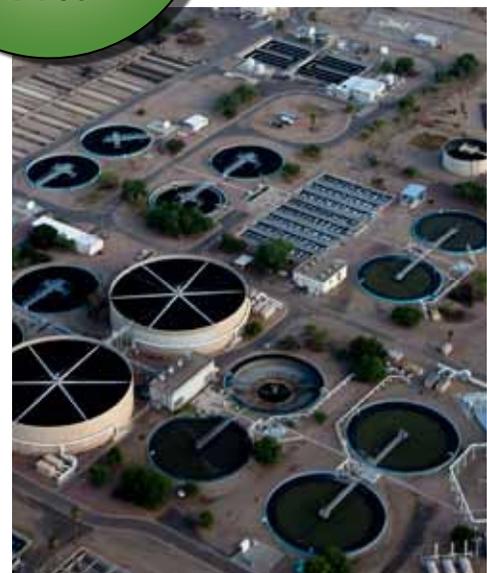
**Roger Road Wastewater Reclamation Facility energy sources**



-  Digester Gas
-  Electricity - TEP
-  Natural Gas
-  Solar Energy

*Riparian habitat along this stretch of the Santa Cruz River is flourishing with the addition of reclaimed water / effluent from the Roger Road Wastewater Reclamation Facility. Effluent released into the river provides the added benefit of groundwater recharge. In FY 2010, the County dedicated 308 acre feet of effluent to environmental restoration and enhancement projects.*

*The Roger Road Wastewater Reclamation Facility is also helping the environment another way: nearly half of its energy supply now comes from renewable energy!*



# Sustainability Success Stories

Year Two

**As a result of the combined efforts of multiple departments, thousands of dedicated staff, and the support of County leadership, Pima County achieved the following sustainability successes in FY 2010:**

- Reduced energy expenses by \$1.2 million compared to the baseline year of FY 2008;
- Managed more than 2.6 MW in renewable energy projects, which is equivalent to 5% of the County's total energy use;
- Cut the amount of waste generated at County facilities by about 29% since 2008;
- Reduced water use at the County's 39 urban parks by 20% compared to the baseline year of 2006;
- Attained the milestone of having one-quarter of the County's regular (non-Sheriff) fleet vehicles run on alternative fuels;
- Increased by 73% the proportion of office supply dollars spent on eco-friendly products compared to the previous year, and reduced office supply expenses by \$93,000;
- Acquired 4,848 acres of land for conservation purposes, and implemented a monitoring system to ensure the amount of acres impacted elsewhere by public improvement projects (151 acres in FY 2010) are significantly offset;
- Received a LEED Gold certification for the Sullivan Jackson Employment Center, surpassing the County's minimum standard of LEED Silver; and
- Established the first greenhouse gas reduction target for County Operations, and prepared a Year 2020 greenhouse gas forecast that demonstrates the target can be achieved with aggressive implementation of the County's sustainability initiatives.

## Areas in Need of Additional Focus for FY 2011

This Report Card helps County officials and staff identify areas where solid sustainability advances are being made, as well as areas in need of more attention. In response to the latter goal, this Year Two Report Card includes "improvement plans" for a handful of success indicators. These improvement plans spell out actions the County will take to enhance performance in those specific areas.

In addition, because the Sustainable Action Plan for County Operations is intended to be adaptive and evolve over time based on changing conditions, knowledge and technologies, a few success indicators include "recommended amendments." These amendments are designed to make the indicator more meaningful by suggesting another form of measurement (as in the case of Indicator 25) or to make adjustments based on changed circumstances or the need for greater flexibility (as in the case of Indicators 5 and 11).

The end result is the evolution of a Sustainable Action Plan, and a County organization that is committed to achieving excellence in operational sustainability and efficiency.



*A multi-disciplinary team representing more than 22 County Departments developed the Sustainable Action Plan for County Operations, which was adopted by the Board of Supervisors in August 2008. The plan was honored in 2009 with the "Innovation in Sustainability Award of Excellence" from the Association for Operations Management.*

## Report Card Legend



**Achieved Target**



**In Process**



**Not Met,  
But Shows Progress**

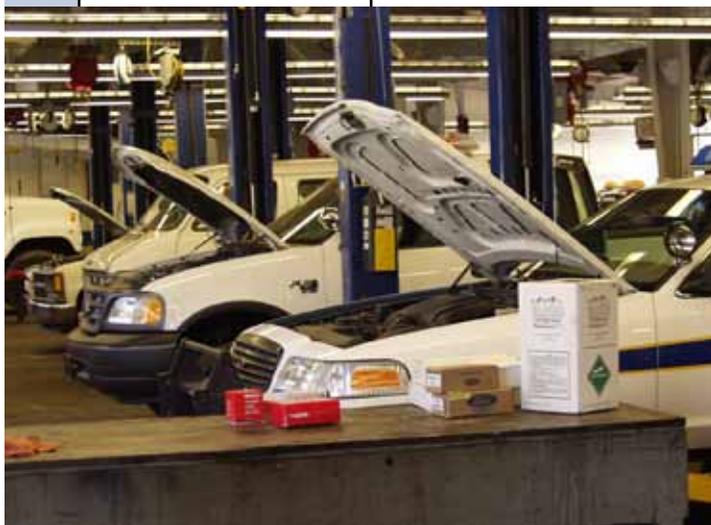


**Not Met**

# Alternative Fuel Vehicles

Year Two

Number	Success Indicator	Target	Score / Progress Report
1	Number of environmentally friendly fleet vehicles	100 vehicles, or 25% of vehicle fleet, by 2008; 30% of the fleet by 2009; and 50% of the fleet by 2017 (excluding Sheriff's vehicles)	 <p>Not met, but shows progress</p> <p>More than 25% of County fleet vehicles (excluding Sheriff's vehicles) are now alternative fuel vehicles (291 of 1141 total). The County limited its purchases to 28 in FY 2010 due to cost-cutting measures. As economic conditions improve, the County anticipates it will achieve the 50% target by 2017.</p>
	Education of County employees	100% of new employees using County vehicles trained on how to drive more efficiently and reduce vehicle miles traveled. 100% of employees enrolled in Defensive Driving class trained on how to drive more efficiently.	 <p>Not met, but shows progress</p> <p>The County's Defensive Driving Course became a web-based educational program for the first time in FY 2010, and the Driver Energy Conservation Training (DECAT) was not added to the on-line course until Summer 2010, making it impossible to meet this target. However, 100% of new employees are now receiving the DECAT training on-line so full achievement is expected in FY 2011.</p>
2b	Education of County employees	Articles promoting travel reduction, alternative fuel vehicles and fuel-efficient driving techniques published in employee newsletters and on County websites	 <p>Achieved</p> <p>Department of Environmental Quality (DEQ) staff prepared four articles for the employee newsletter addressing alternative transportation options. DEQ also created a new intranet site about the County's Travel Reduction Program. Visit <a href="http://intranet.pima.gov/">http://intranet.pima.gov/</a>. DEQ actively promotes PAG's monthly Commuter Contest and presents information on the Travel Reduction Program at new employee orientation sessions.</p>
3	Participation of County employees in trip reduction programs	<p>Baseline: Historical participation rate of 25%</p> <p>Target: Achieve a minimum 30% participation by FY 2010</p>	 <p>Not Met</p> <p>Of the 5,000 employees responding to a May 2010 survey from the Pima Association of Governments, only 19% reported using alternate travel modes. The most popular alternative modes were carpooling and vanpooling (524), bus travel (397), bicycling (142), and walking (90). One positive trend: the number of employees registered in the Sun Rideshare Commuter database has nearly doubled in the past year (from 292 to 559).</p> <p><b>Improvement Plan:</b> DEQ, in cooperation with PAG, will initiate a pilot project in FY 2011 with the goal of enhancing employee awareness and participation in trip reduction programs in a specific geographic area. Areas with limited bus service may receive priority consideration. Based on the pilot's results, the program may be modified and expanded to other geographic areas.</p>



*Fleet Services continues to identify and evaluate fleet vehicles that are under-utilized. Twelve (12) vehicles were transferred to new departments in FY 2010, saving \$250,000 in vehicle replacement costs and an estimated \$12,000 in annual fuel costs.*

# Green Building

Year Two

Number	Success Indicator	Target	Score / Progress Report
4	Attendance at green building educational series	Minimum of 20 in attendance	 <p>Achieved</p> <p>Pima County's Green Building Program offered a four-part seminar series entitled, "Residential Green Building Rating Systems: Dive into the Details." The seminars addressed different aspects of green planning and design, and each was attended by approximately 60 to 70 people.</p> <p>The Procurement Department also offered its third annual "Business of Construction Course." This 11-course program included classes on Green Building and the U.S. Green Building Council's LEED Program. More than 20 students participated, representing local contractors, engineering firms, and municipalities.</p>
5	LEED Accreditation of County employees	Minimum of 30 Leadership in Energy and Environmental Design (LEED) Accredited Professionals by 2010.  <b>Recommended Amendment:</b> For FY 2011, change target to 14 LEED accredited employees because Development Services Department and Facilities Management Department are now fully LEED functional given current work loads and project responsibilities.	 <p>Not met, but shows progress</p> <p>Facilities Management celebrated the accreditation of 4 employees this year, and the Department of Transportation hired an additional LEED accredited employee, bringing the total number of County LEED-accredited professionals to 14. In addition, two employees in the Development Services Department earned LEED designations, one as a "LEED Green Associate" and the other as a "LEED for Homes Green Rater."</p> <p><b>Improvement Plan:</b> To encourage more LEED-accredited professionals, applicable position classifications will be updated to reflect LEED accreditation as a preferred qualification for internal and external applicants.</p>
6	Percentage of LEED Silver-Certified Buildings	100% of all new occupied County-funded buildings and 100% of all building additions greater than 5000 square feet.	 <p>Achieved</p>  <p><b>SURPASSED!</b></p> <p>The new Sullivan Jackson Employment Center, surpassed LEED Silver and received a LEED Gold certification instead! Four other County facilities are being designed to achieve a minimum LEED Silver certification: the Curtis Park Recreational Center, the Regional Wastewater Reclamation Department Central Laboratory, the consolidated Justice Court, and the Pima County Wireless Integrated Network (PCWIN) building.</p>



*The Regional Wastewater Reclamation Department building on North Dodge Boulevard incorporates numerous passive energy savings technologies, including skylights, clerestory windows and an open design that transmits light throughout the building.*

# Green Purchasing

Number	Success Indicator	Target	Score / Progress Report
7	New and existing contracts include "green" specifications pursuant to Action No. 8	<p>100% of new contracts to include green specifications by January 2009; all contracts in subsequent years to include green specifications, whenever applicable.</p> <p>100% of existing contracts updated with green specifications, as applicable, by June 2010</p>	 <p>Achieved for New Contracts</p> <p>Revised Pima County Procurement Policy D 29.2 XIII requires County Departments to incorporate the goals of Sustainability Resolution No. 2007-84 into procurement specifications for supplies, equipment and services.</p> <p>This goal has been achieved for new contracts processed by the Procurement Department.</p> <p>To enhance "green" contract specifications in both existing and new contracts in FY 2011, the Procurement Department will offer to assist major Department Green Purchasing representatives with the creation of Green Specifications training materials that are tailored to the Department's materials and services needs.</p>
8	Percentage of eco-friendly office supply purchases on the Staples website	<p>Baseline: 9.1% of total office supply expenditures</p> <p>Targets: 18% of total office supply expenditures in FY 2010; at least 20% in FY 2011</p>	 <p>Not met, but shows progress</p> <p>County Departments increased their purchase of eco-friendly office supplies by 73% over the prior year. They spent an average of 15.7% of their office supply budget on eco-friendly purchases, coming close to the FY 2010 target of 18%. Departments, on the whole, have shown continuous improvement during each quarter, spending 19.2% on eco-friendly supplies during the last quarter of the fiscal year.</p> <p>Also noteworthy: Employees cut office supply expenditures by \$93,000 from the previous year.</p>
9	Purchase of Energy Star-rated appliances and equipment	100% of appliances and equipment purchased to meet Energy Star standards by June 2010	 <p>Achieved</p>  <p><b>NEW!</b></p> <p>In FY 2010 Facilities Management adopted an equipment standard for new construction and tenant improvements that requires, at a minimum, Energy Star-rated appliances.</p> <p>For existing office upgrades, the Procurement Department will continue to work with County Departments to offer training on how to develop eco-friendly contract specifications, including specifications for Energy Star-rated equipment.</p>
10	Use of non-toxic products for janitorial services	100% of janitorial service contracts to be updated with non-toxic and environmentally-friendly product specifications by June 2010	 <p>Achieved</p>  <p><b>NEW!</b></p> <p>Janitorial services contracts now require the use of green cleaning supplies whenever feasible.</p> <p>The requirements specify the use of Green Seal's Standard for Industrial and Institutional Cleaners (GS-37), hand soaps that do not contain antimicrobial agents except where required by law, and janitorial paper products that are chlorine-free and contain recycled content.</p>

Number	Success Indicator	Target	Score / Progress Report
11	Availability of "green purchasing" training opportunities for employees	<p>Department Trainers to offer at least one training session a year for employees with purchasing responsibilities</p> <p><b>Recommended amendment:</b> Staff recommends amending this target to require employees with purchasing responsibilities to attend at least one green purchasing training session a year, regardless of whether it is offered by the Department Trainer or another Department. This will provide Departments with more flexibility in acquiring the training.</p>	 <p>Achieved</p> <p>During FY 2010, Green Purchasing Representatives hosted power-point trainings for their coworkers, shared the Pima County Train-the-Trainer educational intranet site, posted education materials, and followed procurement procedures for eco-friendly specifications and worked with the Commodity Contract Officers.</p> <p>A "Sustainability Column" debuted in the E-Scoop employee newsletter, and 16 articles were published to keep employees informed about the Pima County "Recycle While You Work Program," paper purchasing policies, green purchasing, and electronic recycling opportunities.</p>
12	Purchase of recycled and/or Forest Stewardship Council paper	All Departments to purchase 30% post-consumer recycled paper	 <p>In Process</p>  <p>NEW!</p> <p>In FY 2010, the County Administrator issued Administrative Procedure 3-29 requiring Departments to purchase paper that contains 30% post-consumer recycled content when available. The 30% standard was chosen because it was compatible with the County's existing inventory of copiers and printers. The goal is to move to a 100% standard as reproduction equipment is replaced.</p> <p>Fourteen County Departments bought recycled paper products 100% of the time.</p> <p>All Departments combined purchased recycled paper, on average, 59% of the time. Some Departments reported that price differences between recycled paper and virgin stock can be a deterrent to the purchase and use of recycled paper.</p>

*In FY 2010 the Pima County Public Library spent one-third of its office supply budget on eco-friendly items, exceeding the County goal of 18%.*

*Other top green purchasers in FY 2010 included: Economic Development and Tourism (50%); Procurement (34%); Department of Environmental Quality (34%) Office of Court Appointed Counsel (31%); Superintendent of Schools (27%); Legal Defender (26%); Public Defender (26%) and Pima Health System (25%).*

*Pictured to the right are Library Green Purchasing Representative Robin Samitz, the Library's Accounting, Finance and Facilities Manager and some of the members of the Library Green Purchasing Team.*



# Renewable Energy & Conservation

Number	Success Indicator	Target	Score / Progress Report
13	County expenditures for energy	Baseline: Energy expenditures for FY 2008 (\$15.1 million) Target: Energy expenditures do not exceed \$15.1 million	 Achieved The County spent \$1.2 million less for energy than it did in FY 2008. Total energy costs in FY 2010 were \$11,409,308 for electricity and \$2,447,227 for natural gas.
14	Energy consumed by County buildings and facilities	Baseline: Electrical use in FY 2009 (50.16 MW or 100,327,840 kWh) Target: To be determined based on efficiency goals established through Countywide audit	 In Process Facilities Management will establish energy efficiency goals based on the results of energy audits initiated in FY 2010. In FY 2011, Facilities Management plans to procure and implement a utility bill software management program so that it can identify annual electrical consumption, monitor use trends, document savings, and troubleshoot spikes in electrical consumption.
15	LEED Silver energy credits in County projects	Baseline: Projects designed after June 30, 2008 Target: All new buildings obtain a minimum of 65% of available energy credits in LEED-New Construction (NC)	 In Process Facilities Management is designing all buildings to take advantage of the optimum energy credits available based on the facility's use, budget and design.
16	Renewable energy use in County buildings, parks, and other facilities	Baseline: FY 2009 renewable energy use is 1,588kW Target: Provide 5% renewable energy for County facilities by 2012; 10% renewable by 2017; and 15% by 2025	 Achieved  <b>EARLY!</b> The County achieved the FY 2012 goal of supplying 5% of its energy needs with renewable resources early! The County's renewable energy portfolio now contains more than 2.6 megawatts of methane-to-energy and solar energy projects combined. This equals 5% of the County's current energy load (50.16 megawatts). In addition, the County is currently planning another 1.2 megawatts of solar photovoltaic facilities at the Ina Road Wastewater Reclamation Facility and on the rooftop of the Herbert K. Abrams Public Health Center. The Department of Environmental Quality is also working with a third party on plans to convert portions of the Tangerine Landfill to a methane-based power plant.
17	Methane as an energy source	Baseline: Methane use in FY 2006/2007 (169.84 million cubic feet) Target: Increase use by FY 2011	 Achieved The Regional Wastewater Reclamation Department used 193.47 million cubic feet of methane as an energy source this year, a 14% increase over the baseline year. Overall, the Regional Wastewater Reclamation Department is now obtaining 24% of its energy from renewable resources.

*NRPR replaced six ball fields of outdated sports lighting at the Mike Jacobs Sports Park and installed two new lighted fields at Brandi Fenton Park with new "dark skies-friendly" lighting systems that reduce electricity use by 40 to 50%.*



*Pima County is proud to have developed the largest (one megawatt) polycrystalline photovoltaic solar facility in Southern Arizona.*

*The Facilities Management Department managed the project in coordination with the Regional Wastewater Reclamation Department. The solar farm occupies five acres at the Roger Road Wastewater Reclamation Facility.*



*Information Technology installed a power-save program on most County computers, which automatically places them in standby mode between 6 P.M. and 6 A.M. on weekdays and on weekends. By Fall 2010 the program is expected to be running on 4000 PC's, saving the County \$58,000 a year and reducing CO<sub>2</sub> emissions by nearly 450 tons.*



*The Information Technology (IT) Department conducted an energy efficiency overhaul of the Pima County Data Center, saving \$409,000. To achieve the savings, IT eliminated 40 physical servers and replaced them with 19 physical servers running 428 "virtualized" servers.*

# Waste Reduction

Year Two

Number	Success Indicator	Target	Score / Progress Report
18	Amount of waste diverted from landfills	Baseline: Tons of landfill waste generated by County operations in FY 2008 (5,593 tons) Target: 25% reduction by FY 2011	 <p>County departments have cut their waste streams 29% since FY 2008. This year's reduction in landfill waste saved the County an estimated \$26,000.</p> <p>Achieved</p>  <p><b>SURPASSED!</b></p> <p>The County's expansion of its recycling program to 15 more facilities in the unincorporated area helped spur the big drop in waste generation.</p>
19	Green events at County facilities	100% of special events to implement an Integrated Waste Management Plan beginning in FY 2010	 <p>An Integrated Waste Management Plan has been created, signed and received from 80% of the County's major leased properties.</p> <p>Not met, but shows progress</p>  <p><b>NEW!</b></p> <p>The development of integrated waste management plans will be expanded to other County partners and event vendors in the future. In addition, the Sustainability Program prepared tips for County employees on how to plan and hold eco-friendly meetings.</p> <p><b>Improvement Plan:</b> "Green" guidelines for special events will be developed in FY 2011.</p>



Vernon Moore of Natural Resources, Parks and Recreation (NRPR) recycles old sheet metal across the street from the NRPR main complex. In FY 2010, NRPR staff recycled approximately 15 tons of scrap metal. These efforts conserved natural resources while generating \$3,500 in revenue for the County.

Department Eco-Champions visit the Friedman Recycling Center to see first-hand the volume of paper received at the facility, and the many recyclable materials that are transported off-site to manufacturing plants.



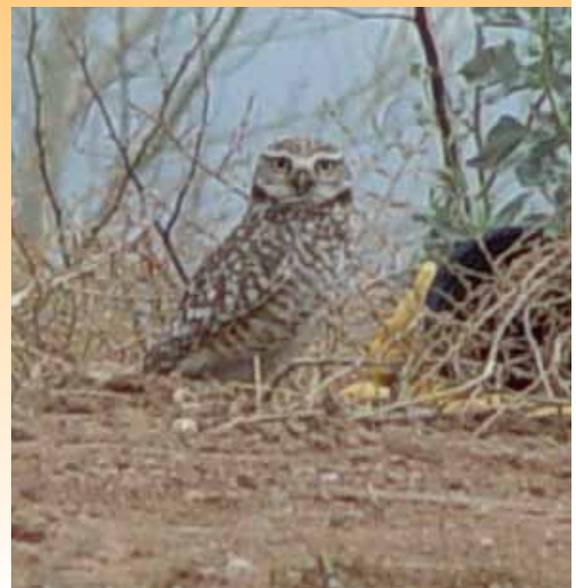
# Water Conservation & Management

Year Two

Number	Success Indicator	Target	Score / Progress Report
20	New buildings maximize LEED Silver water efficiency credits	Baseline: Projects designed after September 1, 2008 Target: All new buildings obtain at least 60% of the water efficiency credits available	 Facilities Management is designing all buildings to take advantage of the optimum water efficiency credits available based on the facility's use, budget and design. In Process
21	Percentage of new County landscaping projects relying exclusively on rainwater harvesting, reclaimed water, greywater and/or other non-potable sources (includes landscaping for parks, buildings, roadways, and medians, but excludes turf)	Baseline: Projects designed after September 1, 2008. Target: 100% after initial establishment	 Not met, but shows progress While this target was not achieved, the Department of Transportation (DOT), Natural Resources, Parks and Recreation (NRPR) and the Regional Flood Control District (RFCD) continue to explore and use a variety of strategies to reduce water use and limit irrigation with potable water. They include: using native plants and/or drought tolerant plants; employing rainwater harvesting as microconditions allow; and using reclaimed water. <b>Recommended deletion:</b> After further evaluation of this success indicator by multiple departments, staff is recommending that it be deleted because the elimination of all potable irrigation after plant establishment is not always possible for operational and environmental reasons. Over the long run, it also could result in more cost and water use if it increases plant mortality and thus the need for revegetation with new irrigation. Staff recommends instead modifying the Sustainable Action Plan to add the following action items into the Water Conservation and Management Chapter: (1) The initiation of an employee education series in FY 2011 that focuses on lessons learned from local case studies of landscape projects and techniques; and (2) the development of Countywide Guidelines for Low Water-Use and Non-Potable Irrigation in FY 2012-13.
22	Water consumed by existing County buildings, ornamental landscaping, and roadway landscaping	Baseline: Establish baseline in FY 2010 Target: Reduce baseline water use by at least 5 percent by 2012; 10% by 2017; and 15% by 2025	 In Process The County manages 575 water meters from 20 different utilities. In FY 2011, the County plans to procure and implement a utility bill software management program so that it can establish a water consumption baseline and monitor use trends.
23	County parks served by reclaimed water	10 parks served by reclaimed water in FY 2006-2007 (285 AF of reclaimed water) Target: 20 parks served by 2018	 In Process Natural Resources, Parks and Recreation added Hildago Park and two new soccer fields at Rillito Park to the reclaimed water system. The new field at Thomas Jay/Littleton Park has been installed with irrigation equipment that will enable it to be converted to reclaimed water when there is a line available in the area.

# Water Conservation & Management

Number	Success Indicator	Target	Score / Progress Report
24	Water consumed by existing County park and recreation facilities	<p>Baseline: 733AF of water used in 2006. Note: The baseline was adjusted to include the 39 urban parks operated by the County.</p> <p>Target: Reduce baseline water use by at least 5 percent by 2012; 10% by 2017; and 15% by 2025.</p>	 <p>Achieved</p>  <p><b>SURPASSED!</b></p> <p>NRPR surpassed this goal, by achieving a 20% reduction in water use from the baseline year. The savings were achieved by eliminating three acres of non-functional turf; adjusting irrigation controllers based on local evaporation and transpiration rates; and through aggressive cost-saving measures that reduced park irrigation. At some parks, watering levels became suboptimal due to cost saving measures, so more water use at some parks is likely to occur in the future.</p>
25	<p>Acre feet of effluent used for restoration and number of surface water rights and groundwater rights (including retired rights) used to protect or sustain the natural environment</p> <p><b>Proposed amendment:</b> Staff recommends modifying this target to measure acres of natural habitat restored by County effluent and other non-potable water sources.</p> <p>This indicator focuses on the desired outcome, and is a more reliable measure of success than acre feet of non-potable water used, which will vary from year-to-year based on multiple factors.</p>	<p>Baseline: 340 acres of riparian habitat enhanced or restored in FY 2010 with effluent/reclaimed water and storm water harvesting.</p> <p>Target: 465 acres enhanced or restored by FY 2015; 590 acres by FY 2020; and 715 acres by FY 2025</p>	 <p>In Process</p> <p>The Stadium District, Regional Flood Control District, and Regional Wastewater Reclamation Department managed projects that dedicated 308 acre feet of effluent, plus harvested storm water, to enhancing and restoring a total of 340 acres of natural habitat.</p> <p>These projects include: the Kino Environmental Restoration Project (KERP), Bingham Cienega, Lower Santa Cruz Managed Recharge Project, Marana Water Reclamation Facility Discharge to a Santa Cruz Tributary, Marana High Plains Effluent Recharge Project, the Massingale Detention Basin Reclamation Project, the Roger Road Wastewater Reclamation Facility Pond, Santa Cruz River-West Branch Wetlands, the Swan Wetlands and the Cortaro Mesquite Bosque.</p>



*Burrowing owls nest at the Kino Environmental Restoration Project after successful relocation by Regional Flood Control District staff.*



*Natural Resources and Parks and Recreation (NRPR) staff used rainwater harvesting design features as part of the parking lot design at George Mehl Family/Foothills Park. Three dozen native mesquites were planted in water harvesting islands in the parking lots, providing valuable shade.*



*A soccer field at the new Hidalgo Park is irrigated with reclaimed water. Hidalgo Park is the thirteenth County park to be served by reclaimed water.*



*This storm water detention basin at Meadowbrook Neighborhood Park serves multiple purposes; it was recently enhanced with a new basketball court and a walking/exercise path that local neighbors enjoy. In addition to the recreation benefits, the County cut water use by removing more than 500 square feet of non-functional turf.*

# Land Conservation & Management

Year Two

Number	Success Indicator	Target	Score / Progress Report
26	Acreage of Conservation Lands System conserved	Acres conserved greater than acres impacted	 <p>Achieved</p> <p>The County acquired 4,261 acres within the Conservation Lands System (CLS) to be managed for conservation. County public improvement projects impacted 73 acres of land elsewhere in the CLS.</p>
27	Number of Cultural Resources Sites conserved	Acres conserved greater than sites impacted	 <p>Achieved</p> <p>The County acquired 64 acres of Cultural Resource sites to be managed for conservation. County public improvement projects impacted 24 acres of cultural resource sites located elsewhere.</p>
28	Acreage of Designated Riparian Habitat conserved	Acres conserved greater than acres impacted	 <p>Achieved</p> <p>The County acquired 523 acres of Designated Riparian Habitat for conservation. County public improvement projects impacted 54 acres of designated riparian habitat located elsewhere.</p>
29	Education of County Employees	Provide annual training to employees on environmental education	 <p>In Process</p> <p>Project managers from the Regional Flood Control District and Department of Transportation were educated on riparian mitigation practices and policies. Cultural Resources training was provided on a project specific basis. The comprehensive environmental education program offered last year is now being revised and will be provided in FY 2011.</p>



*A skate and BMX park next to the Picture Rocks Community Center is a popular venue for Pima County kids and teens. The County constructed the park on 1 acre of land the County has identified as being within the Conservation Lands System (CLS).*

*In the same year, the County acquired the Bloom property (below) on the eastern boundary of Saguaro National Park West, which conserved 140 acres of CLS land and offset the impacts to natural resources caused by the construction of the skate/BMX park as well as other County-funded public improvements.*



Photo by Jason Bahe



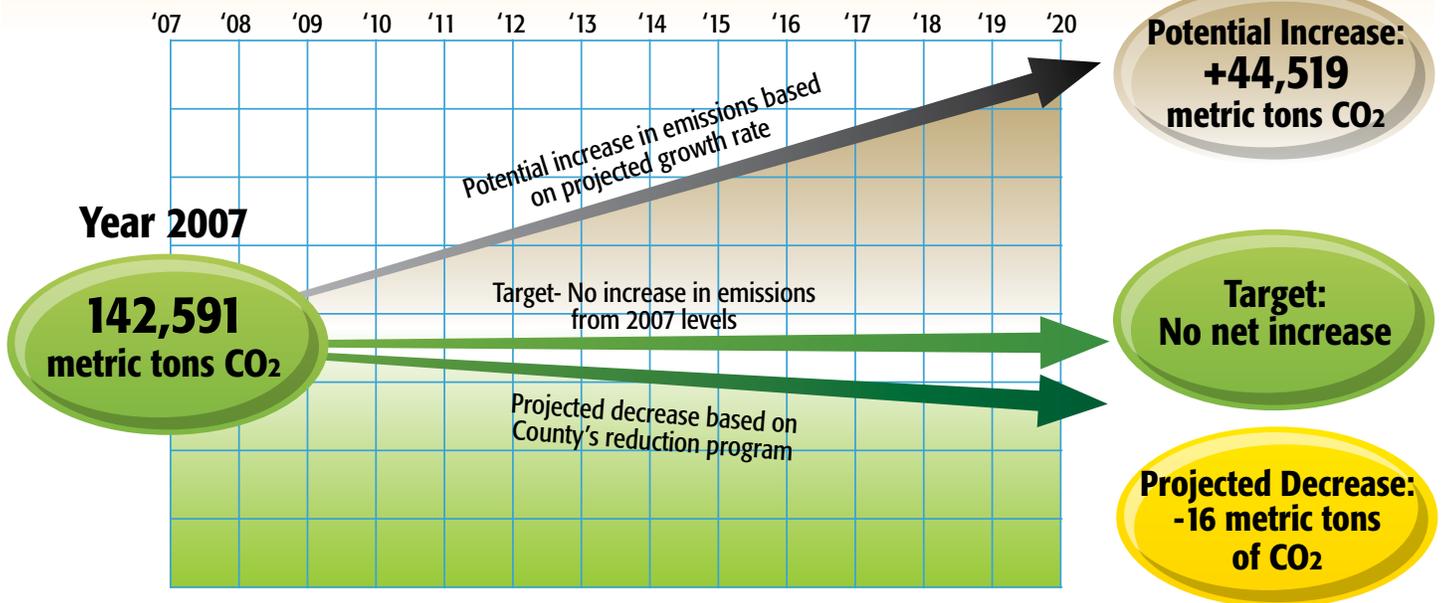
Photo by M. Bell

# Carbon Footprint Reduction

Year Two

Number	Success Indicator	Target	Score / Progress Report
30	Reduction in the carbon footprint of County Government	Emissions = 142,591 CO <sub>2</sub> metric tons  Target: In 2020, generate no more CO <sub>2</sub> emissions than in 2007; develop target for future reductions by 2020	 The County prepared its first greenhouse gas emissions forecast in FY 2010.  The forecast projects that County Operations will not generate more CO <sub>2</sub> in 2020 than in 2007, the baseline year. Through the aggressive implementation of the County's sustainability initiatives, including achieving renewable energy, energy efficiency and water reduction targets by 2020 instead of 2025, the County can offset the emissions created by new growth between the years 2007 and 2020.   <b>NEW!</b> In Process

## Greenhouse Gas Emissions Target for County Operations



### NEW Greenhouse Gas Projections from 2007-2020

	CO <sub>2</sub> metric tons
New building electricity use.....	16,801
New building water use .....	130
New building waste generation .....	62
Employee commutes.....	11,538
Ball field lighting .....	368
Street lighting .....	354
Wastewater Operations.....	15,266
<b>Total .....</b>	<b>44,519</b>

### REDUCED Greenhouse Gas Projections from 2007-2020

	CO <sub>2</sub> metric tons
Electricity Savings .....	5,913
15% Water Use Reduction .....	110
25% Landfill Diversion Rate .....	208
30% Employee Participation in alternate travel modes.....	6,602
7.5 MW Solar Generation .....	11,892
Digester Gas Methane Generation.....	17,809
Natural Gas Savings .....	688
Fleet Vehicle Conversion to Alternative Fuels.....	1313
<b>Total .....</b>	<b>- 44,535</b>

Detailed calculations are available at [www.pima.gov](http://www.pima.gov)



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Ramón Valadez, Chairman, District 2

Sharon Bronson, District 3

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Richard Elías, District 5

County Administrator

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***Pima County's goal is to obtain at least 15% of its electricity from clean, renewable resources by 2025.***

***This 1 megawatt solar photovoltaic plant was completed in FY 2010 at the County's Roger Road Wastewater Reclamation Facility.***

*This publication is printed on paper made from mixed sources, including managed forests, controlled raw material sources and recycled wood or fiber.*

# PCOSP

PIMA COUNTY SUSTAINABILITY PROGRAM

