



# San Joaquin County Green Committee 2013 Annual Report

## **ACKNOWLEDGEMENTS**

The San Joaquin County Green Committee would like to acknowledge and thank all County departments who participated in the Green Committee meetings this past year and who assisted in providing input through the process of creating this report.

Special thanks to the numerous County staff who, as employees of the County, go about their jobs with an awareness of being “green” and sustainable, first as an individual making conscious choices to be sustainable and secondly realizing they are part of the County team and members of the community whose role is to lead by example and execute green practices in thought and deed.

Special thanks to the various department committee members who take on the work of managing meeting minutes, organizing departmental green focused sub-committees, arranging for guest speakers, and providing great work and leadership on various sub-committees including website, social media, newsletter, and more.

And finally, a thank you to the Board of Supervisors and the County Administrator for allowing for the creation of the Green Committee and demonstrating to the citizens of San Joaquin County that they share an interest in helping to attain a sustainable future for San Joaquin County.

Note: In order to reduce the number of paper copies printed, this report is being made available for viewing online as part of the Board of Supervisors Agenda for May 20, 2014 and will be available at <http://www.co.san-joaquin.ca.us/green/default.aspx>

**Pictured on the cover (top/bottom):** the solar array on the rooftop of the San Joaquin County Administration Building and the front of the County Administration Building.

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## San Joaquin County

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## Executive Summary

San Joaquin County's "Green" Environmentally Preferable Purchasing Policy, adopted in February 2008, sets forth practices that promote environmental sustainability. Program objectives include the reduction of waste by increasing product efficiency and effectiveness; procuring products and services that minimize environmental impacts at work and within the community; and purchasing products (where practicable) which include recycled content, conserve resources, and reduce greenhouse gas emissions/carbon footprint. The County adopted this policy in collaboration with other civic and public agencies interested in the same cause.

In 2013 County Departments continued to increase their awareness and purchases of environmentally preferable products. Established and chaired by the Deputy Director of Purchasing and Support Services under the advice and guidance of the Board of Supervisors (BOS) and the County Administrator's Office (CAO), the County "Green" Committee provides a central resource for internal agencies primarily and for other organizations. The County desires to maintain a leadership position in awareness and achievement of environmental stewardship and practice, and to report on these activities.

Goals and objectives were established for the committee and departments. The Recycling, Energy, Air Conservation (REACON) certification program developed for business use by the Greater Stockton Chamber of Commerce was adopted and serves as a primary method for departments to model, assess and measure progress against specific measurement criteria. The program is broken into multiple categories, including water conservation, pollution prevention, energy conservation, solid waste reduction and recycling. While voluntary, departments through their committee members have been asked to initiate departmental committees to review the REACON assessment model with a five year plan to try and achieve certification. While resources – both human and time – are increasingly strained, many departments report progress in sustainability efforts either towards the goal of REACON certification or meeting their own internal sustainable efforts including the direction given in the County Environmentally Preferable Purchasing Policy.

Some of the reported achievements for this past year include:

- *Valley air officials declared that Regional Federal pollution control standards were met this year for the first time!!!* CO<sub>2</sub>e emissions are down 24% since 2005, due largely from capturing methane from our County landfills. EPA validation of these findings is still pending.
- Approximately 133,496 kilowatt hours have been saved by the Information Systems Division by utilizing virtual computer server technology;
- At the Hospital, installation was completed on an energy efficient construction project, retrofitting high energy consumption equipment with new energy efficient technology. A rebate of over \$225,000 has been received from PG&E to help offset construction costs. Ongoing energy savings are expected to be \$132,000 per year.

- The Registrar of Voters (ROV) installed Ballot on Demand printers in 2013. This technology allows the ROV to print ballots for new voters as needed, resulting in fewer overall ballots being pre-printed for any given election.
- Through our contracted electronics recycler, computer monitors (CRT's) weighing 468,135 pounds were recycled countywide, plus 367,428 pounds of universal waste electronic devices (UWED's). These items were kept out of our local landfills and properly recycled as they contain hazardous waste. *These are significant increases over prior years (over double.)*
- At the Human Services Agency, vital building upgrades were made: Replaced the building's outdated digital lighting system with an updated control system allowing 24/7 programmed lighting schedules that will reduce energy use and costs; replaced the building's outdated cooling tower motor with an updated energy efficient motor; and replaced the building's outdated boilers with updated boilers that are much more energy efficient, reducing the use of natural gas.
- The Green Committee, in cooperation with the local vendor community, hosted a 'Green Theme Supplier Show and Symposium'. It was well attended, with over 100 regional employees attending 24 different vendor booths, displaying the latest in "Green" products.
- Estimated cost avoidance by using the County's surplus personal property process in lieu of buying new products at retail prices is \$105,418.
- Over \$30,000 in energy cost savings realized from two solar projects;
- County-wide travel has been reduced by increased use of web and phone based teleconference technologies;
- The Environmental Health Department maintained an environmental stewardship committee that, in part, conducted a solid waste, water conservation and utility assessment of its new office location to find new ways to conserve resources (assisted by General Services);
- 28% of total office supply spend is being used to purchase recycled products;
- The Department of Child Support Services has reduced paper usage 52% over 9 years, using 2,050,000 fewer sheets of paper, by updating technology, imaging records and consciously making and distributing fewer paper copies;
- 42,480 pounds of metal was recycled (not counting Solid Waste/Landfill);
- 70,189 pounds of CRT's and universal electronic waste was recycled from County operations;
- LED lighting installed at the Airport and other locations will generate energy and maintenance savings;
- In the Assessor/Recorder's office, E-recorded documents now make up 50% of the volume on average. This is up slightly from last year. Contracted vendors electronically record documents from their office, reducing processing time by our employees as well.
- Savings continue from the replacement of 70 Heating, Ventilation and Air Conditioning systems in 22 county buildings, including a 550-ton chiller at the Sheriff's Facility. An estimated that 477,489 kWh or the equivalent of \$69,956 in annual energy costs have been saved, with a reduction of greenhouse gas emissions of 164 tons per year.
- The Solid Waste Division of Public Works continues or originated several projects including achieving a landfill diversion rate greater than the AB 939 mandate of 50%; and proceeded with a Landfill Gas-to-Energy project that will produce a maximum electrical power generation of 4.3 megawatts, leading to the County receiving 32% of gross sales (possibly \$600,000 per year) at project completion;
- 339 tons of paper was recycled producing \$44,474 in revenue;
- We maintained nearly 100% of office supply orders being placed online, reducing paper, time, errors, and carbon emissions;

- The number of small (under \$50) supply orders was reduced and reduced freight costs are now occurring by eliminating supplier deliveries on Mondays, producing a carbon offset from reduced truck trips.
- Expanded utilization of electronic document conversion and data storage, reducing paper usage, physical storage space required, cabinets needed, and faster access to documents. Our County appears to be ahead of the curve in internally managed and implemented electronic document systems (i.e. Questys) according to outside suppliers consulted and a reduction shown in mailed and printed pieces.
- Savings continues of approximately \$150,000 a year by expanded use of electronic diagnostic images stored electronically as opposed to purchasing, storing and disposing of radiologic film – and existing film is being recycled – at the Hospital and Correctional Health Care. Revenues continue from old medical x-ray film.

There was participation in, or attendance at, several key events during the past year, including:

- REXPO; the Recycling Exposition sponsored by the Green Team San Joaquin at the Stockton Hilton;
- A presentation in regards to and promotion and participation in the Commute Connection/San Joaquin Council of Governments “Share the Ride” Rideshare Program;
- The Caltrans Small Business Exchange;
- The Recycling Build Infrastructure Now (BIN) Summit hosted by the Greater Stockton Chamber.

The County Green Committee meets bi-monthly and serves to provide direction and encouragement to departments and as a means to bring information forward from experts internal and external to the organization. Where possible, departmental sub-committees are getting established and reports are being submitted on progress. Local suppliers are invited to discuss their offerings, demonstrate their products or share their company’s vision for the future. Best practices are examined, challenges and opportunities discussed, and a means of input and information back out to the public through our website and social media resources is now occurring.

This report summarizes some of the achievements of San Joaquin County agencies in their implementation of the County Environmentally Preferable Purchasing Policy and Green Committee goals.

## SJC Environmentally Preferable Purchasing “Green” Committee

Chair: Jon Drake; [jdrake@sjgov.org](mailto:jdrake@sjgov.org) (209) 468-3240

### Members (as of March 2013):

Agricultural Commissioner	Terry King
Airport	Debbie Vasquez
Assessor /Recorder/Clerk	Mary Calderon
Auditor Controller	Jeff Woltkamp
Behavioral Health Services	Carmen Murillo
California Cooperative Extension	Marcy Souza
Child Support Services	Craig Wishhusen
Child Support Services	Jose Daroy
Clerk of the Board	Wanda Smith
Clerk of the Board	Mimi Duzenski
Community Development	Kerry Sullivan
Communications	Pamela Sauseda
Correctional Health Care	David Gonzales
Correctional Health Care	Lori Cyr
County Administrator’s Office	Chris Rose
County Counsel	Kristina Rubianes
District Attorney	Lisa Schmidt
EEDD	John Solis
EEDD	Rick Aguilera
EEDD	Leticia Rocha-Corona
EEDD	Mark Ulm
EEDD	Tammy Aguilera
Environmental Health Agency	Robert McClellon
Environmental Health Agency	Michael Kith
Environmental Health Agency	Laurie Brown
Fleet Services	Dan McCann
General Services	David Castagna
General Services	Deprice Tillis
Human Resources	Tanya Hong-Moreno
Human Resources	Pat Delasandro
Human Services Agency	Lauri McQuaid
Human Services Agency	Chris Woods
Human Services Agency	Annette DePauli
ISD	Jerry Becker
ISD	Sandy Roderick
ISD	Nick Celis
ISD	Ralph Cordero
Office of Emergency Services	Art Bentley
Probation	Phil Brown
Probation	Susan Guzman
Probation	Stephanie James
Public Defender	Maria Montalvo
Public Defender	Pat Nelson
Public Health Services	Bruce Cosby
Public Works / Solid Waste	David Gorton
Public Works	Joanne Ripp
Purchasing & Support Services	Jon Drake
Registrar of Voters	Austin Erdman
San Joaquin General Hospital	David Freeman
Sheriff’s Dept.	Greg Williamson
Treasurer/Tax Collector	Phonxay Keokham

## San Joaquin County Green Committee 2013 Annual Report

### Policy

The County Administrative Environmental Purchasing Policy (Green Policy) Section 2700, Sub-Section 2737 reflects a long-term commitment to the purchase of environmentally preferable products. This policy was established in response to internal, political and public expectations for a basic framework for defining and achieving environmental purchasing goals. The policy seeks to conserve natural resources; preserve air, soil, and water quality; eliminate or reduce toxins that create hazards to workers and the community; reduce landfill disposal; increase the use of environmentally preferable products, and more. The Green Policy encourages all agencies of County government to revise their purchasing practices to reduce their negative impact on human health and the environment “whenever practicable.” Environmentally preferable procurement considers multiple attributes, such as toxicity, durability, recyclability and conservation of resources, while still fulfilling the basic requirements of price, performance and availability.

### Program

The Environmental Purchasing Program is centralized in the Purchasing and Support Services Department and works with established, successful programs (i.e. Public Works/Solid Waste, Information Systems, etc.). We work together to promote environmental considerations in the purchasing decisions of County agencies. The program helps County personnel understand policy requirements, helps identify environmentally preferable products and services, and communicates specifications, contracts, and other practical information between County agencies, vendors, users, and other jurisdictions.

### Green Committee

The San Joaquin County Environmentally Preferable “Green” Purchasing Committee (County Green Committee) was established in April of 2009. All Departments were invited to participate, and invitations were also sent to some outside agencies. The Committee assists County personnel with resources, information and technical assistance. The Green Committee advocate for sound practices, reviews policies, establishes goals and lends support. All agencies are interested in learning from one another and have a great deal to share. Membership may expand or contract each year.

### Implementation

Successful implementation of the County's Green Policy relies on effective communication with County agencies, our vendors, partner agencies, and the businesses and residents of San Joaquin County. It requires the participation and education of the people who make purchasing decisions. Purchasing staff works with the departments to locate and contract with vendors offering green products and services. The program's collaborative approach relies on the expertise of County employees to evaluate procurement opportunities and revise procedures. Implementation includes:

- Communicating policy requirements and established procedures:
  - document policy implementation
  - provide product/service evaluations
  - provide technical assistance, including policy development and implementation strategies

- Identifying environmentally preferable products and services and establish agreements with vendors:
  - research and communicate information about price, performance, availability and potential benefits of environmentally preferable products
  - identify and contact local suppliers to demonstrate their products and be given every opportunity to do business with the County
  - assist buyers and user agencies in the development of specifications and contracts
- Providing information on environmental issues, the County's progress towards sustainability, and successes experienced by County agencies and partners:
  - host educational seminars and presentations
  - create and maintain Internet and Intranet based "Green" websites
  - publish an annual progress report, as requested by the Board of Supervisors, providing data, updates, and target goals and objectives
  - provide technical assistance to other jurisdictions, businesses and nonprofit agencies
  - produce e-mailed environmental purchasing articles and bulletins

County agencies have responded by developing ways to test, evaluate, and use environmentally preferable products, especially where they will reduce costs while still meeting performance standards. We are gradually bringing about greater understanding that every purchase has an impact, and every employee has opportunities to improve the environment. This effort is ongoing and continuous.

## **Plan and Goals**

The Stockton Chamber of Commerce has a successful environmental initiative for Recycling, Energy, Air Conservation (REACON). The REACON Team is the outreach arm of the Chamber's Green Team San Joaquin. REACON is a collaboration between the Greater Stockton Chamber, private businesses, municipal and county solid waste divisions, economic development professionals, and the communities of San Joaquin County. Their purpose is to promote environmental stewardship solutions, to address environmental and economic development issues, and to create a nexus to enhance the delivery of Chamber services in Stockton and all of San Joaquin County.

In 2010, our Green Committee developed, discussed and approved a 5 year Implementation Plan beginning in 2011 that provides direction for the Committee and Departments. This plan included a discussion as to the most appropriate model that could help departments to identify a framework and specific goals and to measure meaningful progress toward achieving those goals. The REACON model was discussed and approved as a viable and critical part of our plans for identifying, measuring and reporting on green targets. If any departments are successful enough, specific levels of achievement can also result in achieving Green Sustainable Business Certification through a REACON assessment.

Areas of focus under this assessment include recycling, energy conservation, air pollution mitigation, and water conservation. Reducing product resources used, expanding and utilizing recycled materials, re-purposing surplus items and disposing of surplus and scrap in environmentally preferable ways are also targets for identification, measuring and reporting. Several departments have now begun this process and identified departmental green sub-committees. Whether REACON certification is achieved or not (some are affected by lack of funds or other significant issues related to specific areas, i.e. water conservation in leased

facilities) progress is being made, and it is exciting to see the focus, pride and progress being made where possible. We hope to achieve at least one REACON Green Certification this year.

## Challenges

A number of factors challenge efforts to increase environmental purchasing:

- a need for more staff time that can be allocated towards research, education and action plans;
- overall economic factors affecting public and private resource devotion;
- some users may not be familiar with many environmentally preferable products and are uncertain of the ways in which they might be effectively specified and applied in place of familiar products;
- developers of environmentally preferable products are often in the early stages of identifying the needs of customers and establishing marketing and distribution capacity to meet them in a cost effective way;
- the use of environmentally preferable products must be effective and fiscally responsible;
- the lack of consensus-based standards for many product categories requires specifiers to define their own criteria for environmental preferability, and specifications must balance many attributes, such as consumption of water, energy and other natural resources, toxicity, recyclability, and recycled content;
- “greenwashing,” or false claims of meeting environmental standards, complicating consensus on acceptable products and terminology used in marketing claims; and
- collecting data on environmentally preferable purchases through existing accounting information systems can be time consuming and expensive.

## Opportunities

The Program and County agencies are addressing these challenges by:

- working with other “green” agencies and key suppliers, including Green Team San Joaquin, local suppliers, etc.;
- participating in seminars, other green committees, recycling expositions and the educational community collaboratively and effectively;
- evaluating environmentally preferable product performance in new applications through testing and pilot programs; and identifying acceptable third-party certification standards.
- utilize technology and assemble application information and performance data from product users and manufacturers and disseminating this to potential users in the County;
- engaging staff and outside representatives to actively participate in our Green Committee;
- participating in efforts by government agencies, non-profit groups, trade associations, and others to develop consensus-based standards that will enable users to specify materials that are environmentally preferable as well as available, economical and effective;
- maintaining liaisons between agencies to facilitate policy implementation, contracting, and data collection;

- helping agencies develop specification and solicitation documents and contracts for environmentally preferable products whenever evaluations establish that product performance and cost are acceptable;
- helping potential suppliers understand County procurement processes and obtaining feedback from users to assist them in product development; and
- networking with other jurisdictions and organizations to share information about techniques, materials, and strategies to take advantage of each other's successes and minimize duplication of effort.
- working with key suppliers to provide report data as part of their contracts.

## Greenhouse Gas Emissions Inventory

We have talked at previous meetings about the Global Warming Solutions Act of 2006, commonly known as AB32. AB32 requires the state to reduce its GHG emissions to 1990 levels by 2020. While an inventory is not currently required, we expect it will be. You can't effectively reduce what you don't measure. PG&E, under the California Public Utilities Commission, provided funding for jurisdictions within its service area to complete inventories. The inventory can also be used as a planning tool.

In 2012 the County, including staff from the CAO's office and the Public Works Solid Waste Division, took advantage of an offer from the Great Valley Center to compile a Greenhouse Gas Inventory. With funding from PG&E and an extensive program developed by ICLEI, Great Valley Center compiled data that we provided to determine the emissions generated by the County as a business entity. This did not include the businesses and residences within the County but simply our own operations. An inventory was done for 2005 as the base year. We also did a 2010 inventory to measure improvements and identify where to focus our efforts. Our emissions for 2005 totaled 154,524 metric tons of CO<sub>2</sub>e. Our emissions for 2010 only totaled 117,158 metric tons, a reduction of 37,366 metric tons or 24%. 33,068 of those metric tons, or 88% of our reduction, come from improvements made to capture methane at our two open landfills.

As reported to your board by the Great Valley Center, Regional Federal pollution control standards were met this year for the first time!!!

## Purchases and Savings

Where possible, paper is eliminated and replaced with electronic storage and distribution methods. Recycled paper is used for many items, including packing and shipping containers, statements, forms, notifications, business cards, general correspondence and reports. Other purchases include: remanufactured toner cartridges, office supplies, re-refined motor oil, vegetable based oil, ultra-low sulfur diesel, hybrid and electric vehicles, plastic lumber, compost, road materials and shredded wood-waste. In addition to their environmental benefits, many of these products are more economical than those they replace, and they perform well.

The information below summarizes environmentally preferable product purchases for 2013 that are identifiable. This data is obtained primarily from orders placed and "term" supply contracts, which are centrally administered goods and service contracts that enable County agencies to purchase materials at low and consistent prices. The data from one-time purchases where known, is included.

## 2013 Purchase Summary Highlights:

### Office Products

The County contracts with OfficeMax to provide most office supplies. In an effort to reduce costs and our carbon footprint, OfficeMax and purchasing staff initiated a study of materials ordered and evaluated green alternatives that are equal to or better in terms of quality and equal to or less in cost. The study showed that we could replace over 10% of our items with recycled products. Orders placed were set to automatically default at time of order placements to the environmentally preferable product. This standard order default was implemented and to date has proven successful. Over 28% of our products purchased are now “green”. We are working with suppliers, key manufacturers and end users to take advantage of new products entering the market as soon as they become available.

- 28% of our total spend for office supply items was for recycled products. This is down slightly from a peak reached last year; tracking began in 2006.
- The value of recycled office products purchased was \$358,894.

Although exact cost saving detail is not readily extracted from current accounting systems, standard reports and files, it is important to identify the areas we are focusing on so that measures can be put into place that could capture more details for reporting. As we progress and are able to obtain and refine reporting detail, more of these categories will reflect actual savings.

Sometimes environmentally preferred products are equal to or slightly more in price compared to the original or virgin product, but global marketplace and development influences affect these products or categories constantly. Suppliers are asked to provide report data to us where feasible and are evolving their systems to be able to accommodate customer demands and to validate their own performance when it comes to being “green.”

### Copy and Printer Paper

County agencies purchase recycled processed chlorine-free (PCF) copy paper with 30% or more post-consumer content if desired and where cost effective. The post-consumer content level meets the Federal Environmental Protection Agency’s (EPA) Comprehensive Procurement Guidelines. County purchases of white and colored recycled copy paper totaled around 14% of paper purchased, equal to the percentage from the year before. Recycled paper is traditionally and still usually more expensive to purchase than non-recycled and highly subject to market fluctuations.

Using recycled content paper saves resources. According to the Paper Calculator, created by Environmental Defense, a national nonprofit organization, buying one million pounds of 30% recycled copy paper instead of virgin saves the equivalent of 3,600 trees and approximately 315,000 pounds of CO<sub>2</sub>, equating to greenhouse gases produced by 29 cars in an average year.

Printing preferences for the County Print Shop and through contracts administered by Purchasing and Support Services for County departments is to use recycled paper whenever practicable. This includes all printing, from business cards to forms, reports and more. The recycled content of this paper can vary from 20% to 100% depending on the type of paper and the application, with a minimum of 30% being the target.

This past year has seen another reduction in the use of paper by way of departments implementing more electronic storage and communication procedures. This continued focus by

departments to move away from printing where possible continues to result in less hard copy production, retention and storage.

### **Paper Products**

In addition to recycled copy and printing papers, the County also maintains several contracts that allow agencies to purchase various recycled paper products. These include office supplies, such as envelopes, boxes, folders and notepads, and janitorial products, such as paper towels and tissues. The recycled content of this paper varies from 10% to 100% depending on the manufacturer and product type. Several unbleached and non-chlorine bleached products are available on contract.

### **Toner Cartridges**

The County has purchased remanufactured toner cartridges for laser printers, fax machines and ink-jets for many years. Cartridges supplied under contract must meet original equipment manufacturers (OEM) standards and provide full performance guarantees. The current contract with our office supplies provider and our managed print provider provides good quality comparable products that, as usage continues to grow, may result in significant cost savings. The cost of new OEM cartridges can be as much as two times more expensive than remanufactured cartridges on contract. The County's specifications require spent cartridges to be properly remanufactured and all components to be properly recycled when their useful life is over, reducing the landfill disposal of hazardous material or shipment overseas. Used cartridges are recycled through a simple return process with the contracted delivery driver at any time. Purchasing and Support Services also provides a pick-up service, if sites desire. Implementation occurred in 2011 and expanded in subsequent years for a managed print service program where print devices can be maintained, print devices reduced, copies eliminated or reduced, and greater utilization and quality control of recycled consumables can occur.

### **Computers and Electronics**

The majority of desktop computers purchased by the County are manufactured by one of two firms that are at the forefront of energy and materials efficiency (Dell and IBM/Lenovo). Information Systems Division (ISD) utilizes various tools for evaluating computer purchases, including the Electronic Products Environmental Assessment Tool (EPEAT). EPEAT is an environmental procurement tool sponsored by the Environmental Protection Agency (EPA) and managed by the Green Electronics Council. EPEAT is used by ISD to evaluate, compare and select desktop computers, laptops and monitors based on their environmental attributes. During 2010 and continuing, ISD established a new technology standard which requires that all personal computers (PCs) purchased by the County be designated as having achieved the EPEAT "Gold" rating.

### **Operations and Maintenance Products**

#### **Cleaners**

The County, particularly through the General Services team, has tested and used many cleaners that have been marketed as "green" with varying degrees of success. The market has improved dramatically for environmentally preferable cleaners in the past few years, as standards and certification programs have begun to emerge and more products have become certified. The use of environmental standards will help counter the unsubstantiated marketing claims, often called "greenwashing," that can be confusing to users.

We continue to monitor and evaluate various efforts around the country to facilitate the

advancement of reliable standards, certifications, and labeling programs that can make it possible for jurisdictions and consumers to purchase chemistries that are demonstrably better for worker health and the environment than some we have used in the past.

In 2013, based on outcomes of those efforts, the County has awarded or extended contracts to key suppliers, including in some cases local suppliers and manufacturers products, which are Green Seal certified (an industry accepted product certification) or otherwise meet our environmental standards. We will continue to evaluate the performance and price of these certified products and services for approval and use.

Ongoing use shows good results. The use of ready-to-dilute systems are proving safer for workers, as they are not directly exposed to the chemicals, and this results in the use of less product to do the same job. Most are sold in concentrate form and then diluted with water, as appropriate for the application. Another benefit is typically a reduction of the number of different chemicals used in product base formulas from dozens to a few.

Outside contractors, including those providing custodial cleaning services to our Administration Building, the Courthouse, Public Works, and Canlis facilities, are on board with being “green” and adapting to customer and social demands and good stewardship without sacrificing quality. The use of microfiber cleaning cloths for all cleaning operations is required, and reports are that this change saves water and performs well.

Specifications in bids and Requests for Proposals for all goods and services now call out the requirements for providing “green” products where practicable and to the County’s satisfaction.

### **Solar Installations**

The Robert J. Cabral building at our San Joaquin Agricultural Center utilizes solar panels to provide some of their energy needs, as does the County Administration Building. These two projects provided energy savings of over \$30,000 last year. Additional solar sites are being considered.

### **Organics and Natural Vegetation Management**

For over 6 years the County has utilized sheep herds to assist with vegetation management at our landfills. These sites have been difficult and fairly expensive to maintain using manpower and traditional fueled equipment. The sheep are a more efficient way to control the weeds than crews of human workers, present less risk of injury to the human staff, reduce the need for fueled equipment, and eliminate the need for chemical maintenance. The County’s use of sheep has generated interest from other jurisdictions and the community, and we are in the process of expanding the use of this natural method of range management.



Goal: Implementation of best management practices, including drought and pest resistant landscaping, use of less-toxic products, organic landscape maintenance, and use and preservation of native species.

### **Carpet**

The County buys carpet, cushions, adhesives and installation services for small remodels and renovation work typically through cooperative purchase contracts. Many of the products available have various certifications for recycled content and other environmentally preferable elements,

including low emissions of Volatile Organic Compounds (VOCs). Recycled carpet and related materials are constantly evaluated and selected where practical.

### **Tire Retreading**

Tires have various speed and load ratings that must be complied with to ensure safe operations. Fleet will be testing specific re-capped tires on selected equipment and buses and will reduce to the extent possible the number of new tires purchased without compromising safety and needed performance. Solid Waste Division retreads tires for transfer trucks and off-road equipment, when possible.

### **Resource Recovery Services**

County agencies have continued to transform waste into sources of revenue. When materials cannot be sold, they can still be diverted, resulting in lower disposal fees.

### **Electronics Recycling**

County agencies have been recycling obsolete computers, television sets and other electronic equipment with a local recycling firm for several years. There is growing concern about the ultimate effects of landfill, disassembly, or incineration of computers and electronics, which contain a variety of heavy metals and other toxins. Of special concern are cathode ray tubes (CRTs) because they contain large amounts of lead. We dispose of our electronic equipment through a local recycler in a responsible manner, and provide residents with similar convenient and regularly scheduled proper disposal methods.

The County requires surplus computer equipment to be disposed of by following the procedures developed by Information Systems Division (ISD) for redistribution, transfer, or disposal as hazardous waste via the local recycler contracted by the County (Onsite Electronics Recycling). This contract includes strict requirements for recycling electronic components domestically and responsibly, meeting all regulatory and environmental regulations and/or guidelines.

### **Office Recycling Programs**

County agencies recycle paper, cardboard, newspaper, aluminum cans, and plastic and glass bottles from all offices. These are collected by staff and/or outside local recyclers and sold (where possible) as feedstock for the manufacture of various recycled products. In 2013 we recycled over 339 tons of paper material. We have also begun a foam packaging recycling effort utilizing local recycling resources.

## **Departmental Contributions**

All departments contribute in some way towards County sustainable goals and objectives. Reports submitted by Departments for 2013 are provided below:

### **Agricultural Commissioner/Weights & Measures**

Agricultural Commissioner/Weights & Measures contributions to San Joaquin County's Green Policies include:

We're continuing to recycle glass, plastic, aluminum, paper, batteries, writing instruments, printer and toner cartridges.

We're now on a schedule for Records Management to pick up our recycling on a weekly basis.

We're looking at multifunction copiers for our two satellite offices. This will eliminate the need for separate fax machines and printers plus give them scanning capabilities. The new copiers will only print black and will default to duplex mode for front and back copies.

We're just starting to use 30% post-consumer content recycled copy paper.

We're looking into a nitrile glove recycling program.

We're still dreaming of solar panels in the parking lots.

### **Stockton Metropolitan Airport**

The Department of Aviation staff and Stockton Metropolitan Airport tenants actively participate in the recycling of and "greening" of the site that includes:

- Purchasing of recycled bond paper
- Recycling of all bond paper
- Copy machine defaults to duplex printing
- Terminal and operations recycling receptacles available for utilization by passengers, patrons and staff
- Airport Maintenance provides containers for the recycling of oil to better accommodate Airport tenants
- Energy saving LED lighting was installed throughout the terminal

The Airport hopes to broaden its efforts in the coming year.

### **Assessor-Recorder-County Clerk**

The Assessor-Recorder-County Clerk Department is continuing its commitment toward green sustainability in its processes and purchasing. These are new for 2013:

- E-recorded documents are now up to about 50% of the volume on average. Contracted vendors electronically record documents from their office, reducing processing time by our employees as well.
- New process and software changes have reduced time and wasted paper while making birth certificate copies.
- Vital Checks payments are now received once per day rather than for each transaction.
- Monthly state reports use less printing and more scanned document transfer and storage.
- The audit processes for business appraisals are more streamlined. Audit results are emailed and documents scanned to electronic files.

- Additional appraisal software has been added for direct enrollment of residential sales, for single evaluation appraisals, and for Proposition 8 processing. These save time, document processing, and file space.

### **Auditor-Controller Department**

During 2013 the Auditor-Controller's office continued the following green processes:

- Monthly reports are available online rather than printed and distributed to departments.
- Accounts Payable transaction processing is largely automated within the County's financial system so the controls are effectively utilized with limited need for paper and associated labor.
- Special District and outside Agencies reports are emailed rather than printed and mailed.
- Vast majority of County payroll checks are electronically delivered reducing check stock and postage.
- Payroll remittance advices are emailed saving significant labor and postage costs.
- All supporting accounts payable and deposit documentation is scanned into Questys to be viewed electronically rather than stored for future reference.
- We are in the advanced stages of developing electronic vendor payments to reduce postage, labor and supply costs.
- Exploring options for creating an interactive reporting tool available on the public website.

### **Behavioral Health Services (BHS)**

During 2013 BHS efforts in going green include:

- Continue our efforts recycling through Waste Management.
- Placed recyclable bins in break rooms to collect recyclable products (plastic bottles and cans) to encourage staff to recycle instead of using the regular garbage.
- Scanning and emailing of documents for record keeping and/or distribution whenever possible.
- Duplex printing as much as possible.
- Encourage staff to turn off lights in rooms when not in use. We will be installing motion sensors in select rooms to conserve energy.
- Recycled used fluorescent tubes, batteries and other hazardous waste through the County's Household Hazardous Waste facility.
- Items that can be recycled are taken to a recycling center and the funds are put into our employee benefit fund.
- We use the County's shredding/recycling services.
- Goals for the department include:
  - Expanding the recycling effort with Waste Management to our outlining clinics.
  - Conduct a utility assessment to find new ways to conserve resources.
  - We will use our "Did you know" newsletter to give Green tips to our staff.

### **CLERK OF THE BOARD**

The Green Committee Report for the Clerk of the Board and the Board of Supervisors is as follows:

- Agenda Items are submitted and processed electronically.
- Agendas and Meeting Minutes are emailed and available online.
- Recycled paper is used for printing and copying.
- All incoming claims are scanned.
- Assessment Appeals information is available online and the application can be downloaded.
- Staff is engaged to actively participate in Green Committee events.
- Discarded paper and shredding is recycled.
- Copier is set to “sleep mode” to save power when not in use.
- Duplex feature is used as often as practical when making copies.
- Copier default is set to B&W not color.
- Toner cartridges are recycled.
- Batteries are recycled.
- Bottles and plastic are recycled.
- Office orders are placed through OfficeMax for recycled products.
- Staff is encouraged to turn off lights where sensors are not in place.
- Water and paper towel sensors are in all bathrooms.
- Electronic clocks that do not require batteries or electricity.
- Thermostat is set at a reasonable level for offices and Board Chambers.

2014 Green Goals: The department plans to review the Boards and Commissions process in order to reduce mailings and hard copy applications.

We look forward to the challenge of finding more opportunities to Go Green in 2014.

### **Department of Child Support Services (DCSS)**

SJC DCSS has had a quiet year with regards to Green Committee accomplishments. We have been maintaining our activities we have established and practiced over the past number of years such as:

- Continuing to reduce our copy paper usage as we rely more upon electronic communications to interact with our customer base. In 2013 we reduced our paper usage by another 9 cases of paper (45,000 sheets).
- Continuing to use County Record Management to shred and recycle documents. In the past two years we received special funding to convert over 30,000 paper files to electronic images. We were able to reduce our paper storage needs, shred and recycle those case files.
- Continuing to recycle used office products through the program arranged by County Purchasing with our office supply company.
- Continue to recycle aluminum and plastic beverage containers from our employees rather than to discard them into the trash and landfill. This is done by volunteers.

We do not have any hard statistics to back up our report other than the reduction in the copy paper usage. County Records Management does not charge us by weight, just time to shred documents. The time dropped from 60 hours to 59 hours from 2012 to 2013. The recyclers of products, aluminum, and plastic also do not provide statistics on what we recycled; they just keep the items out of the landfill.

Our report for 2014 will be more extensive as we have completed a computer upgrade here at

DCSS involving new monitors and CPU's for over 150 employees. We will be recycling the old units as well as other pieces of outdated equipment.

Our long-term goal would be to evaluate as an option a flex time schedule for employees here at DCSS to a 9-80 work time frame. This was contemplated in the past as a possible means to reduce DCSS employee greenhouse emissions related to single car travel to and from work by up to 10%.

## **Employment and Economic Development Department (EEDD)**

### **A. The Green Tips Page**

1. The Employment and Economic Development Department continues to provide educational information to staff via the "Green Tips" page that is deployed when each employee starts up their computer. Our tips have focused on Reduce, Recycle, Reuse and Refuse and have followed seasonal themes such as Holidays, Summer, Back-to-School to provide staff with timely and relevant information.

### **B. Green Computer Technology Transition**

1. EEDD has completed the virtualization of servers replacing non-green servers with high efficiency green servers. In addition, old printers have been replaced with new, efficient Ricoh printers with the capability to email and/or scan directly from the printer rather than utilizing paper, reducing paper consumption for the department. EEDD is also encouraging vendors and/or employers to scan and send documents, where allowable, rather than requesting paper copies. Where possible, printers have been set to default to double-sided copies.
2. To reduce the need for traditional paper forms, ISD has worked with several units to create on-line, fillable forms. These forms are on the local intranet and available to all staff.

### **C. Changing the Culture on Recycling**

1. All of the divisions within the Department have received strategically placed blue recycle bins to encourage recycling rather than disposal of paper. Shredders are available in most areas for confidential documents.
2. EEDD staff recycling efforts (the collection of bottles and cans over the past year) led to \$228.97 being deposited in the Employee fund to pay for lunches and events for staff appreciation.
3. One division has implemented a "reusable" office supply area for binders, file folders and other supplies. This idea will be replicated over the next few months in all divisions of the department to ensure purchases are necessary and further promote the reuse rather than purchase of items.

## Environmental Health Department

In 2013, the following Conservation, Solid Waste Reduction, Recycling and Pollution Prevention activities were accomplished by the San Joaquin County Environmental Health Department (EHD):

- The Environmental Stewardship Committee consisting of the EHD Director, two Program Coordinators, two Inspectors, and a Management Analyst II met to discuss strategies for improving the department's green focus.
- The department relocated in May 2012 to the County Hazelton Complex, 1868 E. Hazelton Avenue, Stockton. The Committee conducted a solid waste, water conservation and utility assessment of our new office location to find new ways to conserve resources.
- The building was renovated prior to occupation, and included installation of water saving devices in the form of low flow toilets and urinals and hand wash sinks equipped with automatic shut-off faucets. Instant Flow tankless micro water heaters were installed instead of the traditional centralized water heaters. These efforts have resulted in less energy usage.
- The renovated building and rooms were equipped with occupancy sensors for office lighting and offsite programmable thermostats for monitoring temperature and usage of heat and air conditioning.
- Through careful monitoring of water usage by the Management Analyst, the department was able to detect an ongoing water leak in the main water line that serves the office building. The repair was a major undertaking and required that the building be without water for a period of time, but the repair was able to stop the leak. This is all part of an ongoing effort by the department to conserve water.
- Regularly checked for and repaired any plumbing leaks in the kitchen and restroom areas.
- Maintained signage encouraging water conservation in the kitchen and restroom areas.
- Provided staff with information on the Commuter Ride Sharing Program and the Guaranteed Ride Home Program.
- Provided a secure area for employee bicycle storage for commuters.
- Purchased and used rechargeable appliances and equipment instead of using disposable batteries wherever possible.
- Maintained 28% of departmental County vehicles as CNG and hybrids.
- Regulated businesses, manufacturers and medical facilities for hazardous waste and chemical usage, encouraging use of less toxic materials whenever possible.
- Worked with two regulated businesses, a solid waste landfill and a waste tire shredding operation, and identified a waste stream that could be beneficially reused at the landfill site. The department is currently working through the approval process to allow shredded waste tires to be used for traction control at the landfill. This change will allow up to 6,000 tons of shredded tires that would have otherwise been disposed of at the site to be reused. This will allow the landfill operator to save airspace and avoid using additional natural resources that could be better utilized elsewhere.
- Implemented a universal waste collection program for alkaline and ni-cad batteries, cell phones and other small electronic devices. Most of the waste is generated by the department, but employees are encouraged to bring similar items from home.
- Posted signage near sinks, dumpsters and garbage cans reminding staff to avoid dumping hazardous chemicals down sinks, placing liquids in trash cans and dumpsters, and keeping dumpsters closed.
- Committed to suggesting that staff patronize businesses close to the EHD office to avoid unnecessary trips.

- Promoted the use of teleconference meetings and webinars for trainings to reduce the requirement for travel.
- Replaced aerosol products with non-aerosol products.
- Recycled used toner and ink cartridges and purchased recycled toner and ink.
- Updated the department's Questys records management software used for storing scanned documents. The new version of the software allowed the scanning process to be more efficient and added flexibility in how the documents can be stored and accessed. The upgrade brings the department one step closer to a paperless office.
- Copied program records and document information onto CDs for public record requests. This has greatly reduced the amount paper necessary to relay public information.
- Copied on both sides of the paper whenever possible, utilizing black ink as the default instead of color.
- Upgraded certain CPUs and computer monitors. The upgraded units are Energy Star compliant and reduce the department's overall energy usage.
- Recycled cardboard in a separate dumpster and recycled paper, glass, plastic and aluminum at several locations throughout the EHD office.
- Committed to educating staff about recycling, conservation and solid waste reduction.
- Committed to following the County Environmentally Preferable Purchasing Policy and purchased recycled content products whenever possible.

## General Services Department

General Services Department continues to recycle metals and proper disposals of batteries, light bulbs, toner, etc. All janitorial chemical supplies are Green products.

Government Buildings air conditioning PM program

- This year preventive maintenance has been completed on the outer area building. We are presently doing preventive maintenance on cooling equipment on all county owned buildings.

Human Services Agency

- Lighting Controls - installed at the Human Service Agency to help with the zoning capability for employees in working areas, when working on the weekends. This will help with utility cost.
- Boilers – replaced two oversized inefficient boilers with three 95% efficient boilers, that will match the heating load and reduce cycling.

Public Works

- Boilers – design replacement of 50 year old boiler with 60-80% efficiency for a high efficient boiler.

ADA Upgrades:

The following sites were brought up to 2010 standards for accessibility in 2013, from the parking lots to the entrances to the buildings. The parking lots were striped and signs were installed per the new standards. The Path of Travels were improved.

- Boggs Track Community Center
- Lodi Community Center

- Kennedy Pool and Community Center
- Northeast Community Center
- The Public Health Office on Hazelton Ave.
- Taft Community Center
- Canlis Building entrance handrails upgraded.

### **Health Services Agency (HSA)**

During 2013, Human Services Agency has made the following upgrades contributing the County's Green Program Goals and Human Service Agency's commitment to reduced energy use and cost savings:

- Completed installation of energy star compliant monitors to all employees reducing energy use.
- Installation of a new trash compactor resulting in less waste pickups and reduced costs.
- Replaced the building's outdated digital lighting system with an updated control system allowing 24/7 programmed lighting schedules that will reduce energy use and costs.
- Replaced the building's outdated cooling tower motor with an updated energy efficient motor.
- Replaced the building's outdated boilers with updated boilers that are much more energy efficient reducing the use of natural gas.

### **Health Care Services Agency (HCSA)**

The Health Care Services Agency (HCSA) supports the San Joaquin County's Green Policy through the following measures:

- Purchase products made from recycled materials when possible, i.e. paper, printer ink cartridges, calendars.
- Encourage recycling of used materials such as paper, plastic, toner, and batteries via recycling collection containers in the department.
- Encourage scanning and emailing of documents for record keeping or distribution.
- Utilize reference items such as policies and procedures and forms and templates on the County webpage.
- Maintain an inner office repository for documentation sharing.
- Encourage duplex printing documents.
- Encourage staff to participate in conference call meetings and training webinars, rather than traveling by car, whenever possible.
- Set department copy machine to energy save mode when not in use.
- Encourage staff to turn off lights and heating/cooling units in rooms and common areas when not in use.

## Hospital (SJGH)

SJGH has implemented a Picture Archiving and Communications System (PACS) by which diagnostic images are stored electronically as opposed to purchasing, storing and disposing of radiologic film. Ongoing and expanded use produces continued savings of at least \$150,000 per year compared to past practice and is expected to increase near term.

Installation was completed on an eleven component savings plan to include retrofitting high energy consumption equipment with new energy efficient technology. A rebate of over \$225,000 has been received from PG&E to help offset construction costs. Ongoing energy savings are expected to be \$132,000 per year.

Recycling containers for cans and bottles continue to be used throughout the facility, with proceeds donated to the Patient Helping Fund.

Green waste has been taken out of the waste stream and stockpiled. Annually, the stockpiled waste is ground into mulch and put back into the landscaping.

## Human Resources

HR has taken advanced steps forward in the Going Green arena. We are continually searching for new ways to manage our resources keeping within the County's "green" philosophy including the following routine actions:

- Recycling containers for paper and plastic are strategically placed in the HR office
- When possible, utilizing a paperless environment by sending information electronically
- Consideration of environmentally/energy efficient technology
- Use of copy machines designed for energy efficiency and that use recyclable cartridges
- Default of copy machines to duplex printing to reduce paper and utilize recycled paper

Below are specific examples of HR meeting the County "Green" commitment:

Employment Application Process: The HR recruitment unit began using a web-based application called Job Apps in 08/25/09. This program used by the HR Recruitment Team is utilized to accept submittal of applications, access information electronically, and allow electronic referrals to departments. This integrated system gives the capability to review and do necessary processing electronically without printing and handling thousands of pieces of paper. For example, in fiscal year 2012-13 there were 24,956 applications submitted to HR. On average each application is 8 pages. That equates to 149,739 pieces of paper that previously HR would print and file. That process has now been converted to a system where we store and access information electronically.

Email Notices: Employment applicants who provide an email address (approximately 95% of applicants) allow us to email all notifications instead of using paper and the U.S. Mail system. For a typical recruitment, applicants could receive 3-5 notices from HR regarding the status of their application. If on average there are 24,000 applications in a calendar year this would equate to over 96,000 notifications that no longer are printed and mailed

Application Referral to County Departments: We now refer qualified applications electronically to County departments for hiring interviews and they can elect to view online or

print the applications.

Electronic Distribution of Employment Bulletin: Our Employment Bulletin is produced on a bi-weekly basis. We now distribute to County Departments, outside organizations and to layoff affected employees almost exclusively via email, replacing what used to equate to 13,000 pieces of paper printed annually.

Seniority Letters: In the past HR would print two copies of the annual seniority letter which is sent to all Civil Service employees. One copy of the letter is mailed to the employee and the second copy filed into the personnel file. Today we only print one letter which is mailed to the employee but the second copy is electronically uploaded into the individual electronic personnel file, reducing approximately 5000 pieces of paper annually.

Self-Serve Open Enrollment: Self-service open enrollment was rolled out in 2009. In 2013 we had 584 online enrollment submissions (about 61%). Those employees did not return paper enrollment forms packets. This is a significant increase over the previous year when only 29% of employees used online enrollment. We also post the enrollment documents on the HR website and continue to encourage online benefit enrollments. It is expected we will continue to experience increased online enrollments, both this year and in the coming years.

Personnel Files: The HR project to convert paper personnel files into an electronic platform began in August of 2008 and was completed in March 2009. Utilizing an outside vendor we shipped out 175 boxes of personnel files on a rolling schedule to be scanned into an electronic format. 6,518 personnel files were scanned resulting in nearly 700,000 images. While we have not "eliminated" paper, storage space required on site is now minimal. Benefits to this new electronic storage system include the instant retrieval of file information and allowing HR staff to view from their desks versus making unnecessary copies to review files or documents.

Civil Service Commission Meetings: In 2013 we began distributing the Civil Service Commission meeting agendas and the minutes to all department heads electronically. Reducing distribution of paper and saving both on cost of paper and staff time to produce the copies each month.

Risk Management Files: In the Workers' Compensation Program we have moved from printing 85% of the Work Status reports to storing them 100% electronically. This has reduced the use of approximately a ream of paper every two weeks.

Power Management: Information Systems Division installed Power Management to all computers in 2013. This allows for electricity saving goals by turning computers to energy savings modes automatically when the computer is not being used. This turns down both the computer and monitor.

HR staff follows the department green policies including:

- Recycle – use bottle/aluminum recycling, battery disposal boxes, used electronics, toner cartridges, etc.
- Go as paperless as possible with scanning projects
- Turn off monitors and electronics when not in use (coffeemakers, multi-use machines, etc.)
- Recycle empty ink pen containers
- Use the Administration Building restroom flushing mechanism properly

**FUTURE HR commitment to green:**

Benefits: Benefits will be exploring with ISD the ability to provide an entirely electronic distribution of open enrollment forms and materials. Currently Benefits is mailing out approximately 7 sheets of information to 5198 employees during the open enrollment period. There is significant opportunity for improvement in this paper process.

Staff Development: When enrolled in a Staff Development course, the PeopleSoft system automatically generates notifications to the employee. These documents are printed by Staff Development personnel and then forwarded to the department who in turn provides to the employee. Human Resources will work with ISD in 2014-15 to explore the possibility of making this a paperless process. The overall plan is to have notices sent via e-mail through the PeopleSoft system to each participant along with department notification.

**Information Systems**

Green efforts being put forth by Information Systems Division include:

ISD Green Report – February 2013

In 2013, Information Systems Division (ISD) continued its efforts to support and contribute to San Joaquin County's position as a regional leader in environmental sustainability. ISD has taken the following actions to support the County's Green Policy:

- ISD expanded its use of server virtualization technologies and eliminated an additional 33 physical servers from the County's datacenter. Server virtualization has significantly reduced the level of power consumption utilized in the County's datacenter. ISD estimates that 133,496 kilowatt hours were saved in 2013 through the utilization of virtual server technology.
- ISD has continued its use of heat containment systems in the datacenter which contain and redirect the heat generated by the computer equipment. This has reduced the amount of power required to cool the datacenter while dramatically increasing the reliability of the equipment.
- The ISD Green Committee, comprised of four members of the department, meets regularly to develop ideas for "green" sustainability and to promote departmental awareness to achieve that goal.
- Law and Justice Reports are now primarily being transmitted electronically to departments, as opposed to being printed and delivered to departments via inter-office mail. This move to electronic delivery of the Law and Justice Reports has eliminated the printing of approximately 20,000 pages per year.
- ISD has expanded its use of video conferencing technology. ISD employees are participating in a larger number of meetings and training sessions via video conferencing, thereby resulting in fewer miles driven by ISD employees in 2013.
- ISD has supported departments as they increase their use of Document Imaging technologies. Approximately 13 million pages of digital documents are now stored in the County's datacenter. County departments' use of Document Imaging technology has reduced the volume of paper documents that are created and stored by the County.

- The Registrar of Voters (ROV) installed Ballot on Demand printers in 2013. This technology allows the ROV to print ballots for new voters as needed, resulting in fewer overall ballots being pre-printed for any given election.

## Public Works Department

Below are just a few of the green activities taking place in the San Joaquin County Public Works department:

- This year, Fleet Services began a management system for the processing of obsolete automotive electronic parts. The new system ensures that all components potentially containing hazardous material are diverted from the waste stream and properly managed at the County's Household Hazardous Waste Facility. Additionally, Fleet added five (5) plug-in hybrid vehicles to its fleet this year. The new vehicles will save approximately 12,500 gallons of fuel over their lifecycle.
 
- The Channel Maintenance division recycles approximately 100 yards of vegetation per month and reuses spoils reclaimed from channel projects, along with rock or gravel, to build up levees. Channel has received more than 4,000 tons of used concrete from the I-5 restoration project and local business projects. Channel expects to receive another 15,000 tons of concrete from the I-5 project in the coming months and is anticipating 75,000 yards of spoils from a renovation being completed at the University of the Pacific.
- This year, Public Works bolstered its existing recycling program by adding recyclables collection to its disposal services contract. New service carts were provided to janitorial staff to make it easy and convenient to keep trash separated from recyclables. Providing the proper infrastructure and making recycling convenient is the key to a successful recycling program. With the addition of recycling services Public Works has reduced trash pickup, and its monthly bill, by 40%.
- The purpose of the County's Landfill Gas to Energy program is to convert methane gas from the County's Foothill landfill into usable clean energy for California's power grid. Methane, a naturally occurring byproduct of landfills, is typically burned off into the atmosphere through a flare. Working in partnership with the public sector, state of the art efficient turbines have been installed at Foothill that will use that same methane to generate over 3 megawatts of electricity while drastically reducing emissions. That is enough energy to power 3,400 homes a year!
 
- At County solid waste facilities even the employees are getting into the act and turning waste into savings. Heavy equipment that is used to move material at County solid waste facilities requires protective pads, called scrapers, to act as a buffer between the floor and the equipment, extending the life of each. The crew at the Lovelace facility noticed that the scrapers were made out of a rubber material similar to that of used tires. They created their

own prototype pad made from waste tires collected at the facility and custom cut by a vendor and the rest is history. The prototype pads work just as well as the original product and continue to be used today. This program diverts waste while saving the County around \$30,000 per year.

## **Public Health Services**

### **2013-Acomplishments**

- Developed and implemented a paperless ordering process for office supply products with the intention of having all products ordered through the same paperless process in the near future.
- Developed an environmentally friendly office supply order form which highlights office supply products that environmentally preferred.
- Reduced the ordering cycle for office supply products to bi-weekly.
- Received a grant from the Central California Asthma Collaborative to work with local schools to implement air pollution indicator flag program at school sites throughout San Joaquin County.
- Continue migration of Department Applications to a virtual server environment to reduce the number of computer servers in use. Virtualization in 2013 resulted in the elimination of 8 servers.
- Continue assessment of printers throughout the Department when they become due for replacement. During 2013 a total of 9 printers were eliminated through this process.

### **Ongoing Efforts**

- Continue requiring new printers installed to have settings which include default to black and white printing, default to duplex printing and power save features turned on to make existing printers as green friendly as possible.
- Continue to eliminate fax machines as they require replacement.
- Continue recycling of paper, glass, plastic and aluminum.
- Continue recycling batteries through the County hazardous waste facility.
- Continue recycling electronic devices when retired from service.
- Continue recycling used toner cartridges.
- Public Health installed bicycle racks for both employees and clients in an effort to encourage more bicycle use.
- Continue replacing existing computer monitors with monitors that are rated EPEAT Gold.
- During 2013 Public Health implemented the motor pool electronic reservation system which allows the Department to make better use of the hybrid cars that are available.
- Public Health actively promotes the use of public transit when possible. Facilities are located near existing bus routes when possible and schedules are made available to clients in the waiting areas of our buildings.
- Use of public transit is also encouraged when staff are required to travel to meetings in the bay area or Sacramento.

### **2014-Goals**

- Continue ongoing programs and processes.
- Continue to educate staff about the importance of programs

## **Purchasing and Support Services**

The Purchasing and Support Services Department continues to provide green support activities in many ways. Some of these include:

- Reviewing specifications to allow for alternative bids and proposals using approved recycled commodities, products, or service delivery methods, including packaging and energy usage.
- Participating in “green” webinars, expos, and green team meetings (internal and external) to identify best practices and sources.
- Webinars and phone-in “virtual” pre-bid/proposal conferences are used where practical.
- We identify and talk to local companies to identify green alternatives, and assist with providing business opportunities and supplier registration (now online and paper free).
- We provide pick up service for confidential documents for shredding and recycling, and all other papers for recycling. 339 tons of paper and confidential documents were shredded and sold to a local recycler bringing in revenue of \$44,474.
- We collect and properly dispose of single-use and rechargeable batteries and small batches of chemicals being discarded through the Conditionally Exempt Small Quantity Generator Program.
- We generate electronic copies of documents and data wherever possible to reduce printing/copying.
- Recycled paper and products are used whenever practical.
- The department periodically hosts a trade show with a “green” theme where suppliers are allowed to set up displays and County staff is invited to participate to learn, ask questions, see demos, and obtain sample products.
- Centralized execution and management of several essential, core programs occurs, e.g. office supplies and credit card programs that provide green alternatives from leading edge suppliers and a reduction in time and trips made by staff to efficiently and cost effectively acquire some goods and services.
- Surplus property and scrap was managed with the goal of repurposing/reusing to internal County departments or made available to community based organizations; responsibly recycling; or scrapping.
- 42,480 pounds of metal was recycled locally.
- 70,189 pounds of electronic waste was recycled locally
- 319 pounds of batteries were recycled.
- 514 pounds of glass, cans and bottles were collected and recycled from the Administration Building.
- 463 toner and ink cartridges were picked up and properly recycled from the Administration Building.
- 39,795 pounds of paper was picked up and properly recycled from the Administration Building.
- Estimated cost avoidance by using the County’s surplus personal property process in lieu of buying new products at retail prices is \$105,418.

## **Sheriff’s Office**

The Sheriff’s Office has continued its efforts in being a “green” agency in the following areas:

- We purchase acid free cleaning products.
- The Distribution Center recycles cardboard, pallets, scrap metal, plastic and aluminum.
- Garden waste is collected for composting on site. This compost is later distributed throughout the facility grounds. This is a cost savings, as we don’t have to pay for its removal.
- Whenever possible, the first choice is to purchase recycled toner cartridges. Old cartridges are recycled.
- Printing e-mails or other documents is encouraged only when absolutely necessary. Copiers are set to make two sided copies. Copiers are set in “energy saver” mode when not in use.
- Energy conservation is practiced by turning off lights and/or appliances not being used.
- Recycling containers for batteries, bottles and cans are placed strategically throughout the office.

## Veterans Services

The Veterans Service office supports the green initiatives of the County in part by:

- Identifying and purchasing recycled or “green” products wherever possible.
- Being aware of energy usage and utilizing energy saving features and turning off lights and devices when not in use.
- Recycling collection containers are used for items like paper, cans and bottles.

## Savings Summary

In 2013 the County has identified significant savings by purchasing environmentally preferable products and by reduction, reuse, and/or recycling. Exact amounts are difficult to capture across the board for all items and areas, and where relevant data is unknown attempts will continue to the extent possible for subsequent annual reports.

The Environmental Purchasing Program has helped agencies identify opportunities to purchase environmentally preferable products that not only perform well but also save money. In some cases the product simply costs less, while in other cases savings are achieved through avoided costs because the alternative product is more durable or more maintenance free. Examples:

- locally made and available recycled paint costs less and is of better quality;
- the cost of a remanufactured toner cartridge is often less than one-half the cost of a new cartridge;
- lumber made from recycled plastic avoids the consumption of virgin timber and can last longer;
- and it costs half as much to retread a worn tire as to buy a new one; in addition it only takes seven gallons of oil to produce retread vs. twenty-two gallons for a new one; and it helps divert thousands of tires from costly disposal.

Other areas of savings include a continued major shift by departments to document imaging, reducing the amount of physical space required to store paper documents and lessening the amount of time needed for retrieval. Energy savings and reduced water consumption are also significant areas where the County has achieved much success. As data becomes known, more specific information will be included in future reports.

Working with our office supply contractor we have identified environmentally preferable products that cost less that are now defaulted as standard items when orders are placed county-wide. It is anticipated that this more proactive approach during the next twelve months will save additional dollars and reduce carbon footprint.

## Supporting Program Elements

The Environmental Purchasing Program helps County agencies develop practical ways to use recycled and other environmentally preferable products and processes through several program elements.

## Green Committee

The County’s Green Committee will continue to grow, using a network of liaisons from departments and other outside agencies to provide direction and information on environmentally preferable products and processes. These liaisons will allow us to reach the people who do the daily work and who can help us understand the roles and functions within each unit. This allows us to communicate

new evaluation opportunities, institutionalize the routine use of these materials, and share evaluation results and specifications among agencies. Successes can be celebrated, recognized and serve to acknowledge and demonstrate leadership to all.

Since the initial meeting in May of 2009, the Committee has discussed several topics and reviewed policy and direction. Several presentations have been made to the Committee from some key suppliers and other organizations, on topics ranging from office supplies and paper, environmentally preferable purchasing, copiers and document management, to activities related to the Greater Stockton Chamber of Commerce's "Green Team San Joaquin." Services are also looked at with an eye toward "green" practices that lessen equipment use, utilize less energy, lower carbon footprints and more.

## **Website**

In 2009 a subcommittee was established to draft and provide for review and comment initial internal and external web pages that will serve as effective resources for staff and the public. This now established public web presence also provides links to other resources, ideas for sustainability, our policy, other information and opportunity for feedback. Progress has been made recently on updating the County website experience. In addition, social media sites are also being explored for green communications between agencies and the public. A new mobile application (or "app") is being designed by ISD to provide the citizens of the County with information regarding recycling, including information such as locations and operating hours for various recycling locations to provide the community a quick resource.

## **Local Community/Suppliers**

The local community should be looking to the County as a key resource for information on environmentally preferable purchasing. We have had many successful programs in place for years, and we will continue to demonstrate this leadership in the future. Suppliers, especially local vendors, are key to keeping us informed and are needed to partner with the County to achieve our goals. We will keep open lines of communication to collaborate towards establishing and meeting target goals and objectives.

One example of supplier involvement is contact and discussion via participation in annual trade shows, expositions and the like. When possible, staff attends and participates in relevant events, including the San Joaquin Green Team, the annual Recycling Product Exposition (REXPO), the State Green California Summit, the Responsible Purchasing Network, and more. Symposiums take place on topics such as sustainability, print/paper use reduction, environmentally preferred products and practices, productivity tips, and ergonomics.

Through association with the California Product Stewardship Council (CPSC), the County actively works to promote Extended Producer Responsibility (EPR) in California. EPR, or Product Stewardship, requires product manufacturers, government agencies, and consumers to share the responsibility of reducing the impact of product waste on our environment through all phases of the product's lifecycle, from better design to recycling programs.

## **General Summary**

Partnerships and sharing of knowledge with others including the public, our employees, Chambers of Commerce, City of Stockton, local colleges, and local suppliers will benefit all concerned. These partnerships and exchanges are key to ongoing success. Goals, objectives, and measurements are occurring. Recognition of successes and getting the word out will help in sustainability efforts and demonstrate the strong leadership needed to achieve local, regional, statewide, federal and global success in environmental stewardship. Reduced funding, staffing and other resources presents us

with challenges to making greater progress, but great progress has been made over the years and progress will continue into the foreseeable future.

Our motto: San Joaquin County, Getting Greener Everyday



Please consider the environment before printing this report 