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Invest In Our Planet (Again)

Or perhaps we should call it 'Re-invest in our Planet'. The 2022 official Earth Day theme was 'Invest in our Planet', and that was so meaningful and relevant that Earthday.org, the global organizer of Earth Day, named it the theme for 2023 as well, showing that they also reduce, REUSE, and recycle.

We need to continue making a concerted effort to engage governments, institutions, businesses, and the more than 1 billion citizens worldwide who annually participate in Earth Day to do their part in taking action against the climate crisis, and to accelerate a change towards a green, prosperous, and equitable future. Humans are responsible for the warming of the planet, so it is up to us same humans to make every effort we can to reverse these effects – even if it will take centuries before the effects of climate disruption cease. We are now on pace to radically alter life on Earth in the coming decades.

Governments around the globe enacted many significant green policy initiatives in 2022, yet nearly every country is not on track to meet the Greenhouse gas neutrality by 2050. In the past 170 years, global temperatures rose 1.8 degrees Fahrenheit, while before that, it took thousands of years for global temperatures to change that much. This is thanks to technological advances spewing enormous amounts of chemicals and gases into the atmosphere. These greenhouse gases are excellent at trapping in heat.

We can no longer look the other way and rely on someone else to save the planet for us. It is up to <u>us</u>, now. Join the County of Ventura in doing all you can to preserve the world for all the generations to come.

On a personal note, this is my final Earth Day book, but I feel I am leaving you in good hands, and that you will continue to do all you can to help save the world, and make it a better, safer place to live. Best of luck to ALL of us. Remember, reduce, reuse, recycle.



Cyndy Taschman, Earth Day Project Coordinator

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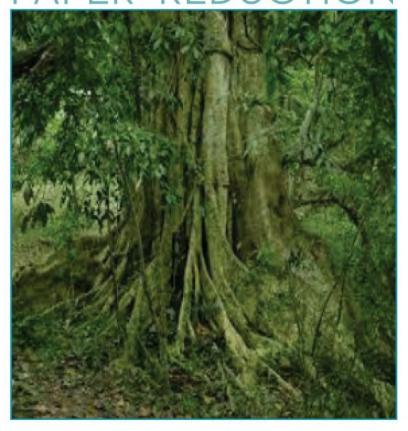
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PAPER REDUCTION



GSA is Going Green, Green, Green in Everything

The County of Ventura, General Services Agency has made it our goal to do all we can to protect the environment by continuously examining our current processes and procedures to *Reduce, Recycle* or *Reuse* where ever possible.

The Security & Special Services Department has taken several steps towards better serving our clients while focusing on the Green Initiatives adopted by the Board of Supervisors.

The first step that was taken was to *Reduce* or eliminate the use of paper in our office processes. This small effort has made a huge impact on the amount of paper that is faxed, copied, mailed and distributed. The processes that are now paperless are as follows:

- Room Reservations/Equipment Request
- Carpool Parking Permits
- Vehicle Parking Permits
- Temporary Parking Permits
- Bike Locker Request Forms
- ID Badge Request
- ID Badge Billing
- Room Reservation/ Equipment Billing
- Work Order Request
- Security Reports
- Contracted Security Time Reporting
- Access and Key Authorization Form
- Special Events
- Security Inspection/Patrol Reports
- Security Incident Reports

The second step completed in July 2008 was the conversion of the paper application to a Microsoft Excel form that can be completed, submitted, and stored online. This form is used for every conference room reservation or equipment request averaging 800 to 1,000 annually. The reduction of paper used in this process is saving more than 1,900 sheets of paper annually.

The third step completed in August 2008 was the removal of faxed forms submitted daily from the Security Control Center to the Security Operations Managers Office. There is a reduction of over 3,800 forms



annually in the Reserve Parking, Carpool Parking Permit, and the Security reports process alone.

In 2011, GSA Special Services began a concerted effort to transfer all of the forms to e-forms. To date the Vehicle Parking Permit, Carpool Permit and Bike Locker Permit forms have been added to Docushare. This created a large savings in paper and ink usage.

More than **45,000** sheets of paper per year used in our department have been eliminated from the process so far.



The next step was to evolve technically by capitalizing on our technology with the use of more robust computer programs that auto populate client information reservations and on e-kiosks. Billing information is automatically extracted from the ID Badge

Requisition e-Form that provides security to our information while supporting our business needs, reducing errors and cutting manhours. Once this was accomplished, forms became obsolete, creating a new greener than green office environment.

The cost savings associated with the reduction of paper and the elimination of faxes calculates in the thousands of dollars; 127,000 sheets of paper and hundreds of trees. Time and material savings are only part of the rewards associated with this small change in the way we do our daily business. We are doing our part to save the trees in our forests that are so precious to our environment.

It pays to reduce, recycle and reuse especially in today's economy. Do your part too and you'll see for yourself the benefits of it.



Room Reservation Program - Billing Process Improvement

GSA Special Services made process improvements to the Room Reservation Program, turning it from a manual program requiring the customer to submit a paper form into an online form, eliminating the paper form and its associated lag-time, and expanding the program base, by making it accessible to all authorized users. Because of the electronic version, we can now automatically list meetings on our e-kiosks, and provide maps to assist customers in the finding the proper meeting or conference room. This streamlined version also allowed the processing of last-minute requests for equipment to be handled directly by Maintenance Dispatch.

With the new upgrades, savings include \$42,530.72 in 3,544.23 hours of labor, and \$936.00 in materials.

Special Use Permit Process

With multiple forms to complete as part of the application process for Special Use Permits, GSA Special Services needed to create an e-form to replace the time-consuming paperwork needed. Leveraging technology, the need for paper printing or processing was eliminated, which in turn cut down on submission and processing time. The e-form also combined some of the old print pages, to further speed up the process. This created a saving of both time and materials: \$6,029.04 in labor, and \$1,699.88 in materials.

Temporary Parking Permits

Before improving our process, a vendor or visitor in need of a temporary parking permit for one week or less had to apply for a parking permit. Once it was approved, a temporary parking permit was issued. One permit was issued for each day due to the expiring chemical decal used on the temporary permit. There was no process in place to track the temporary permits, to whom they were issued or where they were authorized to park.

With the new process, one decal per event can be used across a finite time frame. The department submits a parking permit request online

and it goes through the approval process. The permit is issued for the time frame needed.

The new process takes half the time as the old process, for a time savings of **8.3 hours** per year or **\$409.94**. Use of the Graphics Department ensures a future savings in paper usage and in-house resources as well as making this a green accomplishment.

Parking Permit Application Process (E-Form)

With GSA processing approximately 1000 parking permits and hangtags annually, we needed to update our methods. Instead of manually processing the paper application and updating the spreadsheet containing the records, a process which took approximately 30 minutes per request, costing **\$24,695.00**, we went online.

The application form is submitted online application, and approved online, now taking approximately 10 minutes per permit. This has resulted in a savings of \$16,421.93 – and has freed up over 333.33 hours a year.

Bike Locker Permit Process (E-Form).

By placing the Bike Locker Application form online, the applicant no longer needs to go through the Security Control Center (SCC) in order to obtain a bike locker.

Instead, the applicant now completes the e-form for their requested available bike locker. The request goes through Docushare to GSA Security, where it is immediately approved. The bike locker is assigned and an email is sent to the applicant informing them they have been approved, along with further instructions. Because the information is now in Docushare, the spreadsheet is no longer necessary as reports can be run from Docushare. By automating the system we have reduced the opportunity for human error, as well as saving \$4,346.32.



Changing from Fax Machines to Scanners

By converting from fax machines to scanners, GSA Special Services eliminated ten fax machines and fax lines for a total savings of \$3,090.00 annually.

Because of the switch, we eliminated the use of toner cartridges, saving \$1,600.00 annually. We have also cut back on the use of paper, saving another \$1,281.00

The total cost savings for changing out the fax machines and adding scanners is \$5,971.00 annually.

Maintenance Work Orders/Incident Reports Process Improvements

The information for Maintenance service calls placed after-hours was entered into the Security Incident Reporting (IR) system by the nighttime security dispatch employee, and then also entered into the Maintenance Work Order system, thereby duplicating efforts, and also causing a delay in Maintenance receiving the work order. Each system required different information, so the maintenance details are now keyed directly into the MAINTSTAR system – these details no longer appear on the IR, as they are not needed by Security. Information keyed into MAINTSTAR is immediately available to the Maintenance staff, resulting in quicker response time.

Along with the benefit of streamlining the system and making information readily available to Maintenance personnel, the SCC data base and storage has been reduced by eliminating the non-related maintenance information.

Annual savings now total \$884.52 for paper, \$2,653.56 for ink, \$292.41 for data storage, and \$12,258.60 in labor savings. This totals **\$16,089.09**.

Room Reservation Process Improvements Improving the Process to Stay Green

With over 4,000 room reservations a year, many which require customized set-up of the room and the equipment, GSA Special Services knew that a change needed to be made to the room reservation program. For years, it had been a tedious manual request,

with many steps required by several people before a reservation for room and equipment could be confirmed and reserved.

Upgrading to the room reservation software program, managed and maintained by GSA Special Services, has resulted in a system which is much simpler to access and use. A dropdown menu with mandatory fields was added to the Room Reservation Program, saving nearly 50 hours of work on the part of the person making the request, and the person fulfilling the request, for a savings of **329.59 hours** and **\$16,278.45**. Paper and toner were also saved by the elimination of hard copy drawings, as well as time spent by the requestor in creating the drawings, resulting in **63.66 hours** and **1,146** pieces of paper saved, totaling **\$3,746.36**.

The program is available at every workstation via the intranet. The client has access to the current schedule to view the room's availability. Once availability is determined, the client schedules the room, equipment and setup as needed.

The room reservation administrator reviews the reservation the client scheduled for accuracy. Once complete, the reservation is confirmed. A courtesy confirmation email is then sent to the client.

The Audio Visual Techs review the reservations online daily and set up the rooms accordingly. The client is met in the room before the meeting to ensure setup and connectivity.

Monthly billing information is downloaded from the server and sent directly to accounting via email. We now have a completely paperless process.

Benefits of the new program include:

- Improves customer service. More convenient for customer to schedule meetings.
- Facilities are better-suited for technically supporting our business needs.
- Reduces errors and eliminates redundancy in effort.
- Increase in revenue and annual cost savings.
- Reduces paper usage by approximately 11,700 sheets annually, supporting the 'Paperless Office' commitment.
- Lower costs to clients.

• Time Savings for AV Techs will have reduced setup requirements enabling them to work on other projects. Time reduced approximately **39%**.

Increasing Productivity, Reducing Costs, and Going Even Greener

We were running into room reservation and set-up problems caused by human errors, last minute requests, and redundancies, as the information was not real time data. By leveraging technology to work off real time data, and putting safeguards into place to restrict customers making last minute changes, a streamlined process was developed to handle last minute requests. With automation replacing manual systems, the redefined process, and lines of communication streamlined, fewer errors occur now, customer expectations have a clearer understanding, and there is an increase in satisfaction. This also resulted in a reduction of program cost and labor of:

- Time spent on last minute requests went from 260 hours/year to 52 hours/year, resulting in labor savings of \$10,273/year.
- Time spent reviewing requests went from 572 hours/year to 65 hours/year, resulting in labor savings of **\$25,041/year**.
- Use of paper went from 9,600 sheets/year to 0 sheets/year.
 Use of toner cartridges also went to 0, resulting in savings of \$1,098.40/year.

Grand total soft savings: \$36,412.40

E-Kiosk Meeting Notifications

There are 2 main e-kiosks at the Government Center plus 8 e-kiosks outside of the conference rooms that electronically display the meetings of the day. Previously, the roving Security Officer manually updated each of these e-kiosks, based on paper requests from the meeting organizer/requestor. Errors arose due to the manual procedure, so GSA Special Services purchased a new room reservation scheduler program, and all of these errors were eliminated. Security Officer time was freed up, maps were provided alongside each reservation, and community services were improved. This resulted in a savings of **164.65 hours** per year, \$8,132.00. Also saved was the

cost of the old program which did not communicate properly with our new system, \$7,573.00. Total savings = **\$14,726.00**.

Parking Placard Process Improvement

GSA processes approximately 300 parking placards annually. The parking permit placards are obtained by submitting an application to GSA Security, who approves the request. The permit number is logged, and the new hanging tag parking permit is provided to the client. By removing the involvement of the GSA Special Services Manager, we have reduced the processing time by 83%.

Electronic ID Badge Request Form Process Improvement

GSA produces over 1,700 ID badges annually, and needed to automate the process. Instead of submitting three copies of the printed document for badge issuance, we moved to an electronic copy. Now the information is automatically stored, saving time for those who have to repeatedly submit the form for updates. Electronic completion of the form also ensures an accurate form, as the system fills in the budget information, agency information, and authorized signatures. It eliminates errors that occur due to illegible handwriting, and saves time as with the electronic transmittal, the recipient does not need to obtain and present documentation. This improvement results in a savings of roughly 5,300 pages a year, saves toner, and man hours. Total print savings is \$2,718.00. Total work hours saved is 56 annually.

Security Training Completion Certificates

Security and Special Services conducts roughly six Security Training classes a year, each with the potential to seat 120 employees at a time. Several of the classes have had to schedule two or three sessions, due to the popularity of the topic and the surge of registrations. Some years, we have trained nearly 1,400 County employees. A certificate is issued to each County employee who attends the session, so in order to speed things along, we would print the certificates in advance, and hand them out at the training. We soon discovered that while many people registered for the Security training, not all of them appeared, thereby needlessly wasting much time and paper for the printing of the certificates. To become more efficient and less wasteful, we now email electronic versions of the certificates after the class, and only to

those who attended. The annual savings for not printing certificates is **\$1,115.00** and **20 hours** of labor.

GSA SPECIAL SERVICES' JOURNEY TO A PAPERLESS OFFICE



Once upon a time, back in the early 2000s.... GSA Services Special their journey paperless office bv converting from a paper form to reserve conference room to a digital conference room scheduling svstem.

conference room scheduling system was then enhanced to allow county employees online access enabling them to book their own conference rooms. Digital processes and procedures were developed and implemented eliminating weekly paper distributions to staff and accounting. Additional enhancements have been made with digital signage of daily room reservations outside conference rooms and in the HOA main plaza. The electronic display board has a touch screen to access directional maps to the conference rooms. The reservations are automatically posted to the display boards eliminating errors in data entry. Training was provided as needed. The transition from paper to digital was seamless and everyone adapted quickly to the new improved processes.

Then, we focused our attention on the ID Badge process. A Security Identification Badge is required for every county employee, contractor, and vendor. The ID Badge requisition form has been converted from a paper form to an e-form that is digitally distributed from the client (authorized agency personnel) to the ID Badge desk via a 'Submit' button on the e-form. The security guard processes the e-form and places it in a pending file. The ID Badge is developed when the employee, vendor, or contractor arrives at the ID Badge desk. The e-form is then placed in a completed file on a shared directory. A query was developed to extract the information from the e-form to the billing database. This process improvement eliminated time spent on checking correcting and re-entering the data into the billing database. It also eliminates thousands of pieces of paper.

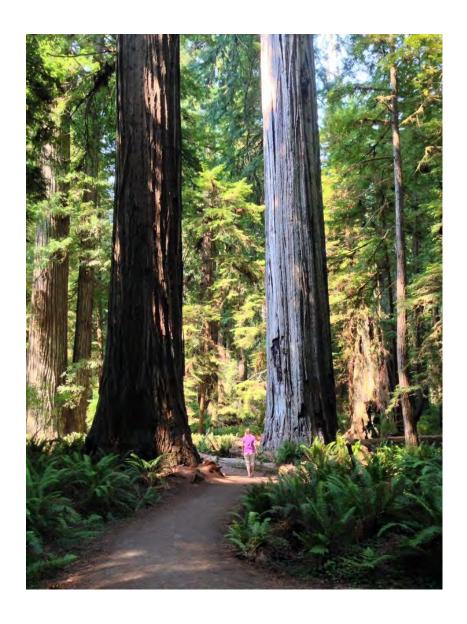
Finally, our attention focused on the Special Use Permit process. A Special Use Permit/Film Permit or Display Permit is required for internal and external customers to host events on county grounds or in conference rooms. The special use permit packets include a permit application, a questionnaire, a cleaning agreement and information on rules, regulations and policy/procedures. Insurance and a Hold Harmless Indemnification form are required for external customers. The packets consisted of at least 9 pieces of paper each. Several thousand pieces of paper were eliminated when special use permit eform packets were developed. Digital processes and procedures were developed to distribute the packets digitally for approval. Once approved, the e-form permit is sent to the client via email. Paper forms are no longer accepted for processing. Clients who were turned away and asked to provide the e-form packet happily cooperated and provided the e-forms - once the 'Paperless Office' goal was shared with them.

GSA Special Services has accomplished their goal of operating a **PAPERLESS OFFICE** through continuous process improvements. A total of 18 forms have been converted to e-forms and e-processes. All e-forms are available online for easy access.

List of e-Forms developed and implemented:

- 1. Special Use Permit application, Internal
- 2. Special Use Permit application, External
- 3. Check list Special Use Permit Application, External
- 4. Check list Special Use Permit Application, Internal
- 5. Special Use Permit
- 6. Special Use Questionnaire
- 7. Rules & Regulation Acknowledgement
- 8. Equipment List
- 9. Cleaning Inspection Agreement
- 10. Credit Card Authorization
- 11. Hold Harmless Indemnification
- 12. Insurance Requirement
- 13. GSA Authorized Signature
- 14. Notice of Change in Charges
- 15. EMS Authorized User
- 16. Parking Permit
- 17. Security Escort
- 18. GSA Products Form (used internally to purchase GSA retail items)

Proof that we are devoted to SAVING the PLANET and the TREES.







The Weather Station and Water Conservation



In December 2008 the GSA Grounds Department installed a weather station at the GSA Service Building located on the Government Center Campus. The wireless system sends valuable information to our Central Irrigation Computer. The weather station provides

weather data that can be used for irrigation scheduling. The weather station takes weather information such as solar energy, temperature, humidity and wind velocity and converts this information into (ET) or Evapotranspiration. This is a measure of the amount of water that is used by turf, plants and trees on a daily basis. ET is expressed in inches of water per acre. Soil moisture is depleted by plants twenty four hours a day - ET tells us the amount of water that is depleted from the soil on a daily basis so we can replenish the soil water reservoir. The weather station also provides us with some weather forecasting based on changes in barometric pressure. In 2021, we installed an additional weather station at the Government Center, located outside the Grounds Shop in the Service Building.

A recent evaluation of the irrigation water usage at the Government Center revealed a significant reduction in applied water for the year. Calculations indicated that the GSA Grounds Department achieved a water savings of 25% to 35% % less water from our well than was required according to the University of California Evapotranspiration (ET) data.

The benefits of the weather station are many:

- (1) Water is conserved because the station shuts down automatically during rain events
- (2) The weather station makes daily changes in the amount of applied water thus minimizing the potential for human error
- (3) ET assures that the plants are getting the right amount of water at the right time this makes for healthier plants that

can resist pests and diseases thus minimizing the need for pesticide applications

(4) Healthier plants make for a better looking landscape.

The onsite Weather Station and Toro Sentinel II irrigation system have proven to be very effective tools. In fact so effective that the Toro Sentinel Wireless Irrigation System was recently installed at 2220 Gonzales Road, the Saticoy Yard and the Juvenile Justice Center by Innovative Irrigation Systems. This was due to the substantial water savings that has been achieved at other sites such as the Government Center, 646 County Square Drive, 669 County Square Drive, and 4651 Telephone Road using this system. The GSA Grounds Department remotely manages the irrigation from the Government Center.

Drought Conditions

In response to the ongoing severe drought in California, we have curtailed the watering of the lawn areas at the Government Center, greatly reducing the frequency. At these minimum levels, we allow the grass to become dormant but not to die. Trees and shrubs continue to receive proper watering so they remain



healthy. We also have the benefit of fog as a means of precipitation.

This reduction of watering at the Government Center has netted a savings of many millions of gallons of water over the same period the previous year. This further encouraged us to reduce watering at our six outlying sites, thereby conserving even more water.

Approximately 5,000 square feet of turf in parking lot 'E' finger was removed. Weed barrier and a two inch layer of Cedar Red Mulch was installed. This work is part of the overall strategic plan to significantly reduce water consumption at the Government Center, in response to the current drought.

In 2019, GSA Grounds worked at rewilding the hillside along the Victoria embankment, bringing the area back to its original condition as best as possible. By reseeding the California wildflower and plant seeds and allowing minimal weed tolerance, we do our best to replicate the original condition.









Water Conservation Measures



The GSA Grounds Department has implemented numerous water conservation measures over the last several years. We are responsible for the irrigation system management at the Government Center and 24 additional County properties that the Department manages.

The Government Center always irrigated using an on-site well. Therefore, all of the water used was ground water. The cost of the water was much less expensive than municipal water. The only associated costs of using a well are for electricity to pump the water and for well maintenance. The water quality is rated as being "poor" for the purpose of growing landscape plants, primarily due to its high salt content. However, with the proper management and the use of salt tolerant plants, they are able to do a fairly good job of maintaining good plant health and vigor.

With the drought, our on-site well (formerly part of the City of Ventura water supply program) was temporarily put out of service. It was no longer able to draw water at the depth, and it was experiencing mechanical issues. It was brought on-line in October of 2020. The well has improved energy saving features, as well as an advanced filtration system.

The other 24 County properties that are being managed get their water from municipal water purveyors. The irrigation systems are maintained and managed by landscape contractors. The Supervisor checks the properties regularly and corresponds with the owner and supervisors several times a week to assure that the irrigation is in good order and that the contractor is not over watering.

In 2021, we upgraded controllers and other devices at the Government Center. Controllers had previously been V2, which were

slow and aged, but are now V3. Additional firmware and hardware were also installed.

Best Practices

One of the water consumption reduction measures was water scheduling modifications. As far back as 2003, the Government Center was receiving up to 6 complete irrigations per week. Fiscal year 2005 the irrigation system automations were upgraded and rezoned to facilitate more versatile methods and techniques of watering and to make maintenance easier. The careful water management has resulted in highly significant reductions in water usage and electrical pumping charges. The new system has hand-held remote control devices which makes on-site inspection and repair easier. Fiscal Year 2006, the watering methods were divided up into three categories/areas.

Area 1: Which covers 20% of the campus; contains shady area established shrubs and ivy. The irrigation system was turned off in these areas.

Area 2: Which covers 40% of the campus; receives 10 minutes of irrigation.

Area 3: Which covers 40% of the campus; is more drought resistant and receives only 5 minutes of irrigation.

The frequency of irrigation has been further reduced:

Spring – from 3 to 2 times per week; reduced to 1 time per week during the drought.

Fall – from 2 to 1 time per week; curtailed altogether in the event of sufficient rainfall.

Summer – from 3 to 2 times per week; reduced to 1 time per week during the drought.

Winter – from 3 to 1 time per week; curtailed altogether in the event of sufficient rainfall.

During fiscal year 2007, electronic flow meters were installed and tied in to the new irrigation system. These new meters report information into our data base from our three largest locations: Government Center, County Square Drive and Telephone Road.

This information has facilitated the below summary of savings.

Government Center

50% water consumption reduction Water savings per year = 47,125,000 gallons = 63,001 HCF Energy savings from well pump per year = \$688

Note: There is no water cost savings due to the fact that we use well water.

646 County Square Drive

50% water consumption reduction Water savings per year = 115,960 gallons = 155 HCF Cost savings per year = 155 HCF (\$2.40/HCF) = \$372

669 County Square Drive

50% water consumption reduction Water savings per year = 256,568 gallons = 343 HCF Cost savings per year = 343 HCF (\$2.40/HCF) = \$823

4561 Telephone Road

50% water consumption reduction Water savings per year = 513,552 gallons = 687 HCF Cost savings per year = 687 HCF (\$2.40/HCF) = \$1,649

Total

Water savings per year = **48,011,080 gallons** = **6,419 HCF**Cost savings per year = **\$2,844**Energy Savings = **\$688**Total Cost Savings: **\$3,532**

Below is a summary of water savings measures that are currently being used.

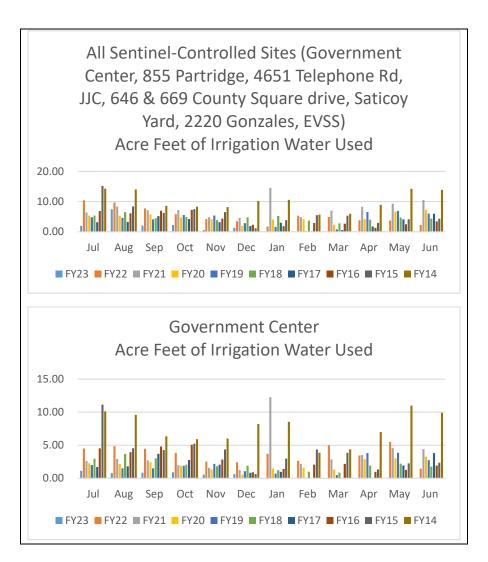
- The irrigation system at the Government Center, 646 County Square Drive, 669 County Square Drive and 4651 Telephone Road are controlled using a Toro Sentinel irrigation system that is state of the art. The system has been adjusted to maximize efficiency. Flow meters have been installed to monitor water usage in order to conserve water usage.
- Water saving irrigation heads and nozzles added.
- Watering is done primarily at night to reduce evaporative losses.

- Changes are made regularly and quickly as the weather changes.
- Adjustments have been made to reduce the amount of applied water to many areas that are low or are shady most of the time.
- Some areas that have established drought resistant plants have been turned off for extended periods of time.
- Mulch has been applied wherever possible again to reduce evaporative losses.
- Weather forecasting is used to turn off water before periods of rain.
- Current irrigation is no longer ET-based, but is now timebased. This is used for scheduling and determining when to turn water back on after a rain event.
- Contractors are notified when to turn water off, make adjustments and when to make repairs.
- Irrigation systems are checked regularly and repairs made to assure that leaks are fixed and water is not being wasted.
- Drought tolerant plants from the Integrated Pest Management Committee Recommended Plant List are used for new plantings whenever possible.
- Conducts irrigation audit using California Department of Water Resource standards.
- There is now an additional 10% more bubbler and drip used in shaded areas.
- New trees are irrigated with low gallon bubblers by GPH.

The use of the above mentioned measures equate to significant water savings. Please see our Key Performance Indicators accessible from the GSA home page for specific quantities.

Note: Evapotranspiration (ET) is a measure of plants water requirements on a daily basis. ET is measured using weather station data. Factors influencing ET are; solar energy, temperature, humidity and wind speed.

With the installation of a new 500 foot deep well, Government Center and overall water usage was initially higher as undesirable sediment and sand first needed to be flushed from the irrigation system. Additionally, multiple repairs last year to leaks in the 50 year old underground piping distribution system also contributed to higher water usage. Nonetheless, the new well saves the County approximately \$6,000 on every million gallons as it is no longer dependent on having to use City water.



In late Spring of 2022, the State Water Resource Control Board implemented stricter water conservation guidelines to combat the third consecutive year of severe drought conditions throughout California. In compliance with these directives, the County's Landscape Division suspended watering of ornamental lawns at all of its GSA-maintained properties. In doing so, water consumption for the latter half of the calendar year was reduced by over 50%, or 7.66 million gallons.

Water Conservation Methods

Pervious Pavement and Gutters:



Currently pervious pavement and gutters have been installed at parking lots A and B at the Government Center. Pervious pavement and gutters allow for more water penetration into the water table rather than the water being wasted as runoff. Future pervious pavement and gutter projects have been

approved for the entire Government Center complex. GSA is partnering with the Public Works Agency to provide maintenance to the pervious pavement installed in the Government Center parking lots. Pervious concrete comes with a guarantee of functionality for not less than 20 years from the date of completion of construction.

Animal Services Irrigation Upgrade:

Our vendor installed a pressure regulator on the irrigation backflow prevention manifold to reduce excessive pressure to an appropriate working pressure of 75-85 PSI. This upgrade reduced strain on the irrigation valves, sprinklers, and seals, increasing their longevity.

293 sprinkler heads were replaced with water-efficient heads which save up to 30% water by applying water at a lower rate in order to allow soil infiltration and less misting. Less misting reduces wind drift and overspray.

Our vendor applied to the SoCal Watersmart Program, and passed along a rebate to the County of \$4 per sprinkler nozzle, totaling **\$1,172**.

Telephone Road Building Combined Methods:



GSA installed jute mesh to stabilize the slope at the Telephone Road building, along with new mulch which suppresses weed growth and reduces the need for herbicides and pesticides. New mulch retains soil moisture, resulting in a 30% savings in water efficiency for the sprinkler nozzles which were exchanged. The sprinkler nozzles apply water at a

slower rate and with less misting to reduce water loss from runoff, drift, and evaporation.

East Valley Sheriff Station Upgrade:

The EVSS Property was upgraded with a Sentinel Controller to tie into the Irrigation Central Control System managed by Grounds for multiple sites. This included the installation of a Hydrometer to control and measure water flow, and the valve replacement and water efficient nozzle upgrades. These upgrades will have a tremendous impact on water savings for this large property by maximizing water efficiency through regular monitoring, appropriate water applications, and fail-safe back-up systems to prevent water waste when damages or malfunctions occur.

Drip System Installation:

Installed drip systems specifically for trees to supply appropriate irrigation during periods of drought to preserve this valuable resource, independent of turf watering that can be cut back or eliminated at the southwest portion of the Government Center. Adding mulch to protect the system also helped to retain moisture and suppress weed growth, thus reducing the need for herbicides.

Agricultural Commissioner's Office:

Modified Irrigation coverage patterns to eliminate overspray and apply water in a more efficient manner at the Agricultural Commissioner's Office.

Quad Landscape Design:

Installed Quad Landscape designed with drought tolerant plantings and a bio-swale to capture storm water run-off and allow to percolate into the groundwater system.

Moorpark Water Reclamation:

Installed Wi-Fi capable irrigation controller, Hydrawise, which optimizes irrigation and saves water by automatically adjusting time-based watering schedules based on environmental factors. Also allows easy identification of problems.

Illicit Storm Drain Discharge (Program Oversight)

GSA, Special Services, Housekeeping and Grounds are providing compliance, education, training and awareness to our vendors and clients on an annual basis. It has also been integrated into our contracts and our quality assurance programs. The Contract Administrators for Landscape, Custodial and Special Services programs will oversee and inspect their contracts to insure compliance. Contract sanctions are available as a remedy. Any

penalties, as discussed in the following summary from Anacapa Consulting Services, Inc. of February 4, 2011, will be passed on to the vendors of the County. (See Ordinance 4142).

All vendors that are impacted by the storm drain requirements have been notified by changes to their purchase orders. In addition, training sheets have been provided to the vendor with a signature line stating that the vendor has received the training sheets as well as a brief training session. A meeting was held with our vendors to explain the new changes and requirements. In addition to the above, we have provided information on the Outdoor Events requirements and the changes made to the IPM as a result of the Storm Water requirements.

By taking a storm water management approach including staff monitoring, vendor compliance and best management practices;

GSA's Landscaping and Grounds program has adopted a preventative approach to illicit discharges that would be out of compliance with the National Pollutant Discharge Elimination System (NPDES).



In general, the risks of significant environmental damage from GSA activities

are relatively low in comparison to larger entities like food production facilities, landfills, etc. If a discharge occurred, it would more likely be relatively small. A possible exception would be the illicit use of highly toxic chemicals by any of GSA's vendors. The IPM precludes these vendors from using toxic chemicals and any discharge would be considered a serious breach of contract.

• In the event that a violation occurred, either through its own actions or those of its vendors, GSA would be responsible for bringing this to the attention of PWA's enforcement personnel.

With the exception of significant discharges as described above, and

given the responsibility standards, the significant Landscaping would likely be violation.



County's civic to meet its own most risks to GSA and Grounds a notice of

Wood Mulch

During the winter months, lawn growth slows down considerably. This gives us time to do projects that we wouldn't have time for otherwise. With the drought, we have had to step up efforts to ensure the life of our greenery. The GSA Grounds Department has been applying mulch to bare soil areas, weedy areas and augmenting areas where the mulch is getting thin. Mulch breaks down over time and needs to be replenished. Good quality wood chip mulch applied at a depth of 4 inches will typically last 3-4 years before replenishment is necessary. Finer green waste mulch materials may need to be replenished every 2 years.



The Grounds Department has an extensive mulching program at the Government Center and has started applying mulch to other properties that we manage. Mulch has been applied to 855 Partridge,

669 County Square Drive, 2220 Gonzales Road and 4651 Telephone Road.

The benefits of applying mulch are many. Below is a list of many of the benefits achieved by applying mulch:



- Minimize soil erosion and impacts on storm water.
- Improve soil chemical and structural characteristics.
- Enhance the growth of beneficial microorganisms and earthworms.
- Conserve water.
- Reduce the need to apply herbicides for weed control.
- Reduce maintenance labor (mostly for weed control).
- Fertilize plants as it breaks down into essential plant nutrients.

The application of mulch also provides a pleasing natural look to the landscape. The next time you pass one of the locations where we have laid rubber mulch, stop and take a look. You will see how well it blends in with the surrounding vegetation, complementing the living landscape as well as trying to preserve the future environment.



XERISCAPE AT COUNTY PROPERTIES

PROPERTY

Ag. Commissioners Office Animal Control Colston Youth Center East County Sheriff Gonzales Road Government Center

Mulch

ISD

Juvenile Probation/Courthouse

Moorpark PD
Multi Service
Partridge Building
Rain Property
Saticoy Yard
Solid Waste Management
Telephone Road Building
Vanguard Building
Williams Drive
TOTAL

Xeriscape Improvements

13,000 s.f. Mulch

500 s.f. Mulch

1,000 s.f. Mulch

4,300 s.f. Mulch

10,858 s.f. Mulch

32,420 s.f. Rubber Mulch

6,000 s.f. Crushed Brick

750 s.f. Synthetic Turf

300 s.f. Mulch

6,500 s.f. Mulch

108,900 s.f. Mulch

34,964 s.f. Mulch

4,000 s.f. Mulch

9,000 s.f. Mulch

4,000 s.f. Mulch

5,000 s.f. Mulch

4,000 s.f. Mulch

500 s.f. Mulch

13,000 s.f. Mulch

1,300 s.f. Mulch 4,000 s.f. Mulch

264,292 s.f. Mulch

4.9 acres

Demonstration Garden

In 2011, the GSA Grounds Department installed a Demonstration Garden at the south entrance to the Pretrial Detention Facility. The garden contains recycled rubber mulch, weed free plastic and synthetic sod. Future plans include the addition of another 1700 square feet of synthetic sod. The primary purpose of this installation is to show the community alternative products that can save water, and significantly reduce the amount of labor needed to maintain their landscape. We chose this site because it is located over an underground structure. The soil drainage conditions are less than desirable and it is hard to get plants to grow. We also wanted to reduce the amount of applied water and minimize the potential for leaks below. Recycled synthetic mulch reduces chemical weed control.





There is a native plant demonstration garden located on the right side at the entrance to the circular drive near the Victoria entrance. This garden was planted in the fall of 2009 with native plants. The plants were purchased from Performance Nursery by way of Matilija Native

Plant nursery in Somis. A drip irrigation system was installed initially to get the plants established.





The system was turned off after 5 months. We have not watered the area for over a year and the plants are doing pretty well. Grounds installed weed block material and mulch to minimize weed growth and to conserve water. The plants that have established themselves are; Manzanita, Sage, Galvesia, Blue-eyed grass, Juncus and Penstemon.

Ocean Friendly Garden





Thanks to the Prop. 84 Stormwater Implementation grant, the County conducted Ocean Friendly Garden workshops at the Government Center for the general public to learn, design, and implement a project.

A 2,300 square foot site located outside of the Hall of Justice was selected, in cooperation with Public Works Watershed Protection District and General Services Agency-Grounds Maintenance Department. The turf at this location was replaced with a rain garden.

After project completion, maintenance training was conducted for County employees and contractors as part of the Stormwater Training Program.

Water usage at the Government Center has steadily decreased, providing generous savings to the County. For the month of December 2018, usage was barely half of what it was for November 2018: 2.84 Acre Feet in December versus 5.40 Acre Feet in November.

The garden was completely replanted in 2020, and will be on site for all to enjoy until at least December 2035.

Butterfly (Pollinator) Garden





The Pollinator Garden was planted in early 2022, next to the Ocean Friendly Garden and across from the Demonstration Garden, and was completed in April 2022, in time for the annual Earth Day tour of the Government Center. The new garden replaced a small flower bed in a large rubber mulch enclosure. Due to the nature of the ground in this location, it is difficult to grow grass, so GSA Grounds strived to find a use for the area. With the Monarch Butterfly population shrinking, there had been a number of suggestions to install a pollinator garden. The garden was planned to specifically address the issues on this area. GSA Management encouraged this and so we worked with

our vendors to get it properly supplied with plants. Many of the plants in the Ocean Friendly Garden are beneficial to pollinators, so the proximity of the two gardens will be beneficial for pollinators. As we are in a drought, we are using our well water in an effort to further assist the environment. Currently, we are hand-watering while the plants establish. We will be using a limited spray watering system once the garden has developed. As with all of our gardens, we will work to use minimal watering. Being at the coast, Ventura is lucky to also receive much moisture-laden fog. The new Pollinator Garden caught the attention of the Santa Paula Agricultural Commissioner, who has requested we plant the same for them.

Succulent Garden





The Succulent Garden was planted mid-summer 2022, across from the Ocean Friendly Garden, replacing a no-longer viable rose and mixed garden. You may think that succulent flowers are nothing more than beautiful and extremely decorative, but there is, in fact, a reason behind this behavior. Like all living creatures (both flora and fauna), succulents have an instinctive desire to survive. Their way of doing this is to reproduce - which is why they produce flowers. Just as is the case with all plants (including climbing ivy), succulents are not able to travel to other plants in order to reproduce, so they must find another way of doing this - which is where flowers come in. These brightly-colored, beautiful flowers attract the attention of pollinators (such as bees and butterflies) who then land on them to collect the nectar. While they are collecting the nectar, they are also unwittingly picking up seeds, which they will then carry to other flowers, thereby pollinating them. This new garden is therefore perfectly situated near the Pollinator Garden. It uses minimal spray watering, and adds much color and beauty to what has become the Garden Center at the Government Center. The next garden scheduled to be planted is the Carmen Ramirez Memorial Rose Garden, in honor of our late member of the Board of Supervisors. We plan on incorporating roses from Supervisor Ramirez's own garden. We will also be planting three more succulent gardens around the Government Center campus.

Eco-tip: National Honey Bee Day Highlights Role of Pollinators

By David Goldstein

The third Saturday in August is National Honey Bee Day, an annual celebration started by beekeepers to raise awareness about a very useful insect.

Even more important than the delicious honey provided by bees is their role as key pollinators, since three-fourths of the world's flowering plants, including our local avocado crop, depend on pollinators to reproduce.

A U.S. Department of Agriculture website, <u>farmers.gov/pollinators</u>, cites an estimate stating "one out of every three bites of food we eat exists because of animal pollinators like bees, butterflies and moths, birds and bats" and beetles and other insects.

The <u>Agriculture Museum of Ventura County</u>, located in Santa Paula, recently celebrated the 13th anniversary of honey bee day with a "Save the Pollinators" exhibit and, on Aug. 20, hosted many clever and informative activities. Volunteers helped kids craft bees out of pipe cleaners and make candles from wicks rolled into small sheets of beeswax, among other activities.



Eduardo Flores, owner of Ventura Bee Rescue, hosted a display and explained how he captures bee swarms and relocates hives. In addition to finding new customers for those services, he hoped to find

more local farmers interested in hosting colonies he establishes and maintains.

Bob Cromwell, the museum's manager of education, offered honey sticks as rewards for children who eagerly raised hands in answer to his informative kid-oriented presentation, danced the bee "waggle" to imitate bees' motion and sang along during his song session. Beethemed songs included an altered Beatles song, "Let it Bee."

When not educating and entertaining, Cromwell served as DJ for the event, queueing up on his sound system tunes ranging from Nikolai Rimsky-Korsakov's orchestral "Flight of the Bumblebee" to the Rolling Stones' classic rock, "I'm a King Bee."

Of course, anyone who visits the museum will quickly learn there are no "king bees," just a queen, drones and workers. Educational signs explain the activities of a working bee hive which is on permanent display at the museum. The hive, with an open pipe to the outside, but fully enclosed in transparent plastic inside the museum, is swarming with real live bees. At the event, kids swarmed the hive and stood staring at it, fascinated.

Schools can schedule field trips to the museum by contacting Cromwell at rcromwell@venturamuseum.org. Admission is free from 11 a.m. to 5 p.m., Thursday through Sunday, at 926 Railroad Ave. in Santa Paula.



Another way to learn about pollinators — and to glean some gardening ideas — is to go to the Ventura County Government Center and see a pollinator garden emerging on an 8,000-square-foot space planted in April by the General Services Agency.

The garden, on the greenbelt between the courthouse and the main jail, features a variety of colorful plants expected to flower at various times of the year. There are also plants, including milkweed, specific

to targeted pollinators, said Patrick Squires, manager of housekeeping and grounds for the county agency.

The pollinator garden is supplemented by a succulent garden, which the General Services Agency planted last week. An ocean-friendly garden was planted in 2015 and was expanded in 2020 in cooperation with the Public Works Agency's Watershed Protection District.

The succulent garden demonstrates landscape optimal for cutting water use, while the ocean-friendly garden teaches visitors to "slow, spread and sink" water.

As with the rest of the government center landscape, these gardens are irrigated with well water rather than drawing directly from the city's infrastructure.

As the gardens establish, hand watering ensures application of only amounts needed. Extensive use of mulch further conserves water by reducing evaporation, shading soil and preventing the growth of water-stealing weeds.

Water usage at the government center has steadily decreased in recent years, according to Cyndy Taschman, who coordinates security and special services for the General Services Agency.

As noted on the Agriculture Department's website, "animal pollinators face many challenges in the modern world. Habitat loss, disease, parasites and environmental contaminants have all contributed to the decline of many species of pollinators."

The way we plant and maintain landscapes and crops affects the future of these essential animals.

Tree Inventory Program

A GPS Tree Inventory Software Program by ISA Certified Arborists was implemented for the Government Center, and off-site properties including 855 Partridge, 4651 Telephone Road, and 646 and 669 County Square Drive. This interactive, modifiable program and database provides GPS location, tree species (common and botanical name), size, characteristics, photograph, condition and assessment, recommended maintenance, and priority ratings. GSA Grounds

currently uses Greene Tree Care to manage our tree inventory, but continue to remain confident in our contractor, who truly feels that every tree needs attention.

Tree Management Plan

The GSA Grounds Department keeps an inventory of trees. The trees are tagged and mapped whenever possible. The data base identifies trees as per their species, size and trunk diameter. Currently the GSA Grounds Department is responsible for approximately 2563 trees. Approximately 1141 of those trees are located at the Government Center. The remaining trees are located at other GSA/Grounds managed County properties. In 2021, we planted an additional 162 trees with an emphasis on climate appropriate plantings. The goal will be to maintain the inventory at this level moving forward with tree replacement on a 1 for 1 basis if any are lost. We have now published an online map of our tree inventory, Tree Plotter. This allows us to view all trees on all properties managed by the County of Ventura, including the Government Center. Information provided includes name of the tree, eco benefits, and photographs.



Tree Attrition Plan

The tree attrition plan is a comprehensive plan by which the trees are regularly inspected to determine the "Health and Safety" of each tree. The Tree Attrition Plan includes the following;

- Each tree is regularly inspected by an independent Certified Arborist.
- The Certified Arborist determines the relative health and safety of each tree.
- Trees are tagged and pictures taken whenever possible.
- Maps are regularly updated showing each individual tree.
- New trees are planted on an ongoing basis to replace trees that need to be replaced for health or safety reasons.
- Replacement trees are chosen that have desirable characteristics such as; drought tolerance, resistance to insects and diseases, or trees that are better suited to the environmental conditions in which they are to be planted.
- Recommendations that are provided by the Certified Arborist are prioritized (1-4). Priority 1 means that the tree needs to be dealt with immediately. This is usually a public health hazard. Priority 2 as soon as possible. Priority 3 in the near future. Priority 4 when time allows.
- The GSA Grounds Department is very diligent in following the recommendations in a timely manner to assure the trees are healthy and safe.
- Environmentally friendly materials and cultural methods are used to maintain trees.

We are working to purchase an online map of our tree inventory.

Tree Treatment

To augment minimal irrigation schedules, Grounds is routinely deeproot feeding trees using a soil needle to inject water, fertilizer and micronutrients directly in to the root zone to improve tree health, increasing resistance to diseases and insects during drought stress. Our trees have also been injected with Mycorrhiza. It is a soil fungus that forms a symbiotic relationship with the roots of most plants. The fungus increases the plant's absorptive capacity for water and mineral nutrients, thus limiting water waste.

Integrated Pest Management

What is IPM?

Integrated Pest Management (IPM) is the decision making process for managing pests that reduces the amount of health and environmental risks. It encompasses the use of mechanical, biological and green chemical treatment methods to reduce the amount of harmful substances introduced into the system.

GSA's Efforts

GSA has demonstrated leadership in the successful implementation and use of an Integrated Pest Management Program. With the goal of utilizing the most environmentally sensitive approach possible to both plants and pest management, we have reduced the application of pesticides by 80%. Better planning, better pest management and choosing specific over systematic treatments have allowed us to create such a drastic improvement.

While reduction of pesticides has been successfully implemented, the elimination of these products would be a step too far. The IPM allows us to balance the use of pesticides to the health and safety of County employees and the public who visit our many locations. The ability to respond to an urgent situation that requires an immediate and potent treatment will still occur. The response to an urgent situation involving public safety may at times require treatment.

Through better practices, we should be able to identify the proper level of response and maintain our plan of using the lowest effective response. The Integrated Pest Management Committee was formed to share IPM methods and strategies that can be applied by other Agencies.

Throughout our IPM efforts, we have NOT used any EPA categorized tier I or tier II chemicals. The Use of Horticultural Oils on the Rosewood (Tipu) and Coral Trees.

Integrated Pest Management and Sluggo

IPM techniques utilized by the GSA Grounds Division minimize use of harmful chemicals to control pests at the Government Center and other sites we manage. Toward that end, we use a product called "Sluggo" to control snails and slugs. Sluggo consists of iron phosphate, a compound that occurs wildly and naturally in the soil and is not harmful to people or animals.

Traditionally snails and slugs have been controlled using products that contain toxic chemicals like metaldehyde. While effective in killing snails and slugs, metaldehyde poses danger to unintended targets. The toxicity level in metaldehyde is sufficient to cause serious, sometimes fatal, injury to animals and even children if ingested. Sluggo is the safer, least toxic alternative product and is an effective tool in implementing our IPM strategies.

Result of Caustic Chemical Use Outside of IPM





When too much fertilizer is applied to a crop, garden or lawn, excess nutrients like nitrogen and phosphorus end up in the sewer and eventually in our lakes and streams.



Algae feed on the excess nitrogen and phosphorus and bloom in rivers, streams and ponds. The algae consume oxygen in the water, thereby choking fish to death.

Excess nitrogen in drinking water contributes to the "blue baby" syndrome in babies under 1 year old. One of the diseases causing blue baby syndrome is Methemoglobinemia. Blood in such infants is unable to carry oxygen, and the condition can lead to death.

GSA Grounds does not use EPA Category I and II chemicals, and has reduced less toxic pesticides by 86% since 2007. GSA Grounds also ceased using the herbicide glyphosate in 2016, joining in the trend in practice throughout the state of California of finding alternative, noninvasive methods.

Anticoagulants and IPM



Using anticoagulant bait interrupts the life cycle as smaller animals contaminate the larger animal.

In March of 2005, the Board of Supervisors recommended that the County of Ventura eliminate the use of anticoagulants due to the possibility of unintended poisoning

of larger animals such as coyotes and mountain lions. This was in support of AB 1548 (PAVLEY) which recommends the avoidance of the use of anticoagulants to the extent possible. Specifically, the Grounds division is complying with the request by taking a comprehensive program overview to seek opportunities to reduce anticoagulants where applicable and use alternative methods.

Existing protocols for approval of any chemical application is documented. Decisions are first based on the need for control; secondly on the failure of non-pesticide control methods, and last on an evaluation of the various chemical options available; their toxicity, their potential for unwanted exposure and adverse impacts, and their demonstrated efficacy for the proposed application. Anticoagulants will be placed at the bottom of the list.

In an effort to prevent and eliminate rodent populations, it is important that conditions favorable to their survival be reduced or eliminated as much as possible, thereby reducing the chemicals needed to treat these pests. Prevention begins with sanitation.

Additionally, exclusion measures shall be taken that will make structures less hospitable or accessible.

AB 1548 (Pavley) has been successful in far-reaching ways. California has invested over \$12 million to integrate environmental education in the state science and social studies curriculum. With nearly 6.3 million students and more than 295,000 teachers, this shift in the education system is a formidable task, positioning California at the forefront of integrated environmental education. With California being one of two states that drive textbook content for much of the country, this requirement in California textbooks should influence the revisions for textbooks in the rest of the United States.

Another bill which was introduced but failed was AB 2422, the Proposed Anticoagulant Rodenticide Ban. The bill passed through the Environmental Safety and Toxic Materials Committee, but was defeated by the Pest Control Operators of California (PCOC) and their 150+ Legislative Day attendees who stormed the Capitol in Sacramento, claiming there was a need for federally and state approved rodenticides, and that they played a vital role in protecting public health. AB 2422 would have banned first and second generation anticoagulants, both of which are responsible for wildlife deaths, and 'sublethal' impacts that affect the ability of wildlife to survive and thrive.

The GREEN Landscape Department Goes Even Greener

GSA Grounds has always looked for ways to provide pest control while at the same time refraining from polluting our environment. The use of fumitoxin and anticoagulants has been banned by the County for use for many years now, so our staff has had to become creative in order to keep us rodent-free.

Thanks to the ingenuity of our team, more than 100 gophers have been eradicated in just six months at the Juvenile Detention Center. This has been done by using pesticide-free mechanical traps, placed directly in the gopher holes, thereby allowing the gophers no advance warning that they are stepping into no man's land, from which they will not return.

We now end up with dead gophers but without using the noxious pesticides which could in turn have poisoned other creatures who

came upon their corpses – such as our local bobcats and mountain lions. Just one more way GSA Grounds is helping to preserve wildlife and keep from adding more animals onto the endangered species list.

Zero Waste Stream

Did you know that the GSA Grounds Division maintains the landscape at the Government Center and other County facilities as a nearly zero waste stream operation? All grass, tree and plant clippings are either reused on site as mulch or are hauled to Agromin and recycled to



wood chips and green waste. Collection of clippings is done with reusable and recyclable burlap sacks made of Jute vegetable fiber and are reusable for approximately six months, after which they are recycled to green waste. The plastic ecofriendly pesticide containers are triple punched, triple rinsed and recycled.

Implementation of these zero waste stream efforts reduces our use of plastic bags by **95%**.





LEED and Custodial



As the GSA works to certify more buildings in the LEED (Leadership in Energy and Environmental Design) Program, the Green processes in our Custodial Department provide the support and requirements for this program. From our Waste and Recycling programs to our Green cleaning products and practices, GSA Custodial plays a large role in the certification. A majority of the requirements were in place long before the LEED certification started, allowing us to concentrate on just a few changes.

Custodial Best Practices

The GSA Housekeeping Division is literally working around the clock to keep your work environment clean, including your air! Exposure to indoor air pollutants can cause health effects including irritation of the eyes, nose and throat, headaches, dizziness and fatigue. Certain immediate effects are similar to colds or other viral diseases.

To keep you safe, we employ a number of best practices to reduce both chemical and biological pollutants to our indoor air. Our vacuum cleaners are equipped with HEPA filtration systems. We use cleaning towels and mops with micro fiber technology to capture airborne particulate and bacteria. Our carpet cleaning equipment employs a low moisture process to eliminate spores. All of our cleaning processes are designed to minimize cleaning solution atomization into the air and volatile organic chemical concentrations. Your work environment is our business.

Microfiber Cleaning Cloths

Microfiber cleaning materials are a blend of microscopic polyester and polyamide fibers which are split in such a way as to create microscopic "hooks" which act as claws that scrape up and hold dust, dirt, and grime. They are 1/16 the thickness of a human hair and can hold six times their weight in water.

Microfiber products virtually eliminate cross-contamination during janitorial tasks. They drastically reduce chemical and water use while cleaning more effectively. Microfiber cleaning tools also absorb fat and grease and their electrostatic properties give them a high dust-attracting power.





The County of Ventura began using microfiber three years ago as part of the LEED certification program for the Vanguard Building in Oxnard. The County of Ventura is at the cutting edge of green, bacteria reducing products and will continue to review new products for smarter and safer uses.



The Microfiber tube mop is engineered with continuous filament bi-component Microfiber yarn for superior cleaning efficacy, superior absorbency, and release characteristics. It provides twice the cleaning power versus a standard cotton mop, and has triple the

durability of standard blend mops, due to its headband and tailband construction. The material allows for faster drying floors and easier scrubbing of marred floors, so combined with the superior absorbency and release characteristics, we have improved and increased productivity at the same time as lowering operating costs.

Smarter Cleaning

The WaveBrake side press mop bucket combo is the most effective mop bucket ever made that helps reduce splashing. It is a 35 quart capacity bucket that has the capability to accept a



separate dirty water bucket. This system truly allows for separation of the clean water from the dirty water, making it a more efficient product all around by eliminating unproductive trips to the janitor's closet. A cleaner mop and a cleaner floor improves the cost-in-use and sustainability by reducing water.

Custodial Supplies Quality, Price or Sustainable Products?

The GSA Custodial Department often receives requests or questions regarding the custodial paper products and soap selected for our facilities, specifically employees and visitors ask how products are chosen. The truth is there is no one measure for any product that drives the selection, but rather a combination of criteria that is considered in our selection of products.

Due to the high volume of staff and visitors (thousands each day) we have to be concerned about price. We are spending taxpayer money on these items, and it is incumbent upon us to carefully consider the costs in relation to the product. This applies to both ends of the cost scale. Just because a product is the least expensive to purchase, it may not achieve our needs or might be of an insufficient quality.

Quality is of an equal concern. A poor quality product, no matter how inexpensive, causes other issues. Customer concerns, plumbing failures, and performance of the product all play into the issue of quality.

While trying to balance the two basic elements of price and quality, we also look to the environmental impacts caused by our products. Recycled content, landfill and water impacts, and chemical content are all considerations made in our goal to be as "green" as possible. As demand for these qualities rise, the availability increases and the price decreases, so we are always looking for the next improved sustainable product.

There is a fine balance to customer satisfaction, price, quality and responsible purchasing. The GSA Custodial division continually strives to stay balanced on that fine line.

Green Soap Dispensers

Over the course of the year, GSA replaced an estimated 96% of the



soap dispensers we service. The new foaming soap is not only Bio-based, but it also Green Seal Certified and free of the soon-to-be FDA banned ingredient Triclosan. The change has not only been beneficial to our customers but has reduced soap costs by **50%**.

Custodial Slip Resistant Shoes

When the slip resistant shoes the Custodial staff wears has reached the limits of their usefulness, there is a way to recycle the shoes. The Custodial staff turns the shoes over to their supervisor. The supervisor turns the shoes into the Inventory Management Assistant for recycling and the Inventory Management Assistant contacts the recycling vendor for pick up. In this one small way we are helping to sustain the environment.

Greening Your Cleaning Can Protect Your Health

For Eye on the Environment
By David Goldstein, Ventura County PWA, IWMD

The city of Ventura's Environmental Sustainability website asks the ominous question, "Do you know that many household cleaning products, even used as directed, could be hazardous to your health as well as the environment?" The web site follows with a series of recipes for "safe substitutes," featuring items such as "mold killers" made from tea tree oil and vinegar, furniture polish made from olive oil and lemon juice, and deodorizer made from vinegar.

Practicing what it preaches, the city requires its housekeeping contractors to use only Green Seal certified cleaning products. Green Seal, begun in 1989, is a non-profit organization evaluating and certifying the environmental claims of a variety of products. Green Seal focused first on standards for paper, and by 1993 they developed standards for the environmental claims of household cleaning products. Green Seal describes itself as using "science-based programs to empower consumers, purchasers and companies to create a more sustainable world."

"Since we started this program (requiring Green Seal certified cleaners) in 2007," said Joe Yahner, manager of the city's Environmental Sustainability Office, "our contractor has eliminated the use of many harmful cleaning products, improving indoor air quality and reducing the manufacture of toxic chemicals."

Similar to the city, the County of Ventura also uses only Green Seal certified products. However, rather than using a contractor to do the job, the County of Ventura's own General Services Agency provides cleaning services at County facilities. GSA Housekeeping staff began using the less-toxic products in November 2004. A study at that time estimated the 8 buildings (2 large and 6 small) cleaned by the General Services Agency janitors, reduced the amount of toxic products used by approximately 15,000 pounds per year after switching to Green Seal Certified products, with no additional costs.

"Custodians are the real heroes of our toxic use reduction program," reported Rosalind Harris, GSA's Manager of Facilities and Security. "They care about the environment and have always been willing to try greener products as management presents them, even if they require just a little more effort to clean."

Indeed, in some cases, elbow grease is the necessary added ingredient to make less toxic products as effective as toxic cleaners. This extra effort pays off by creating a healthier workplace, and switching to less toxic products can also enable cleaning crews to reduce the variety of specialized cleaners they use, saving money. Consolidating cleaner types enables more bulk purchasing in commercial settings, and at home it can result in fewer nearly-empty bottles cluttering a storage area.

If you do not see Green Seal certified options where you buy cleaning products, you can still make greener choices by staying away from products labeled with key words: "Danger," "poison," "caution," and "warning."

You might also avoid toxic products by creating your own cleaning, polishing, and deodorizing products from non-toxic ingredients such as baking soda, cornstarch, toothpaste, lemon juice, vegetable-based liquid soap, vinegar, and borax. When applying these cleaners, start with less abrasive tools, such as white nylon scrubbers, and then work

your way up to toothbrushes, pencil erasers, steel wool, pumice bars or single-edge razor blades if you need to really scrape and scrub.

Of course, it would be counter-productive to diligently restrict your cleaning to non-toxic methods on a daily basis and then hire a contractor to clean your rugs and upholstery with toxic cleaners. Fortunately, many cleaning companies offer plant-based, non-toxic cleaning solutions, applied in a vapor form. For example, Craig Pagett, of All Natural Enviro-Clean in Ventura, uses a tankless water heating system and automated agitators to clean carpets and upholstery with non-toxic cleaners. His truck-mounted pump sucks residual back into a tank, and after cleaning, with homeowners' permission, Pagett dumps about five gallons of leftover water and soap directly into their sewer drain.

Whether hiring a contractor or doing the cleaning yourself, you can keep your "eye on the environment" by using non-toxic cleaning solutions.

Some of the products used by GSA Housekeeping include:

Product	Manufacturer	EPA Certified Green	Green Seal	Green Replacement For:
Vectra	Diversey		X	10F949
Speedball Spray Cleaner	Diversey			
Perdiem – Dispenser Unit	Diversey		X	10A341
Spitfire Power Cleaner	Diversey			
Virex #256 Disinfectant	Diversey			

Product	Manufacturer	EPA Certified Green	Green Seal	Green Replacement For:
Glance Glass Multi-Surface Cleaner	Diversey		X	
Shineline Emulsifier Plus (Wax Stripper)	Spartan			
Bleach	Clorox			
Comet	Comet	X		
Quick Spot – Carpet	Envirox		X	
Carpet Complete	Envirox		X	
Everbrite Metal Cleaner/Polish	House Sanitary			
Mineral Shock	Envirox		X	

Compostable Bags

In 2014, GSA began using compostable trash bags, to replace the standard trash bags previously in use. These bags are made with post-industrial and post-consumer recycled materials, 10% of which is New Technology Resin for more strength and source reduction. They also contain a minimum 10% post-consumer recycled material. Construction allows for multiple uses of the liner, prevents leakage, and prevents bag failure and environmentally damaging 'chemical cleanups', so they begin as a friend to the ecosystem.

Compostable bags are great for contributing back to the environment, as the bags themselves can go back into the ground to make soil, mulch, or fertilizer that can be used in a garden or around the buildings, diverting plastic intended for land-fills. The decomposition

is beneficial to the Earth, as opposed to biodegradable materials that simply disappear, without enriching nature or decomposing back into natural elements.

By using compostable bags for compostable waste, we are doubling our efforts to create healthy soil.



Staffing Expediency

A full staff is necessary to maintain the high standards to which we strive to achieve. A large Housekeeping staff of nearly 50 is bound to have many absences, due to vacations, illness, or other reasons. We use the services of Temporary Staffing Agencies to fill the staff shortages, which can be a time-consuming process - something of which we do not have when it comes to custodial services. It had been taking approximately 5 days per staffing request to attain all of the necessary signatures within GSA in order to submit the paperwork to the staffing agency. After examining the process and finding nonvalue added steps, we were able to eliminate 3-4 days of delay in processing the request, thereby saving 8.2 hours annually. It was further determined that the request for signatures could be handled electronically via email instead of on hard copy, saving \$405.00 annually – but more important, saving time in bringing in a temporary worker to fill a vacancy. Turnaround time from initial request to start of employment went from 18.30 days to 8.29 days, a net savings of 10 days - which means full staff coverage much faster. And fewer wornout employees.

Housekeeping Efforts During the COVID-19 Pandemic

During the COVID-19 pandemic, a lot of responsibility fell on the shoulders of GSA Housekeeping. This team was responsible for cleaning and sanitizing all of the County workspaces, restrooms, break rooms, courtrooms – you name it, they took care of it. This

pandemic-shortened staff worked practically around the clock, from midnight to 4:30 PM on different shifts, ensuring the safety of the rest of the employees not teleworking. ALL restrooms were suddenly cleaned and sanitized every few hours, instead of merely once a day. High touch common areas were treated multiple times per day with anti-viral cleaning supplies. When an area was reported to have been possibly exposed to COVID-19, the area was sanitized using CDC protocols to protect both the custodial staff and employee tenants.

GSA Custodial also procured two "Clorox 360" machines that allow staff to treat a large area quickly and effectively. These units provide an electrostatically charged mist that clings to all surfaces, providing a product rated to treat and kill the COVID-19 virus on surfaces. Starting with a base of using personal protective equipment, the GSA Custodial staff immediately operated and continues to operate within recommended CDC guidelines for personal safety.

We sincerely thank GSA Custodial Department for helping to keep everyone safe. They continued this extra work throughout 2022.





We recycle over 50% of our waste and reduce landfill -

REDUCE, REUSE AND RECYCLE



Why Recycle?

Recycling is good for the economy and the environment for the following reasons:

- Conservation of natural resources.
- Reduction in energy and fuel required to extract and process "virgin" or primary, raw materials to manufacture new products.
- Reduction of greenhouse gases, such as carbon dioxide, methane, and nitrous oxide used to transport and process raw materials.
- Creation of jobs to sort and process recyclable materials.
- Reduction of the cost of waste disposal in landfills and incinerators.

County Policy on Recycling

The County of Ventura is very proactive when it comes to recycling, and has instituted an administrative policy to that effect.

COUNTY OF VENTURA	2018 ADMINISTRATIVE POLICY MANUAL	BUILDING AND FACILITIES CHAPTER IV (A) Operations	
Originating Agency: GSA	Last Issued/Revised	Policy No. Chapter IV (A) - 25	
	2018	RECYCLING POLICY	
Policy Change Requires:	[] Board of Supervisors Approval		
	[x] CEO Approval		
Forms Change Requires:	[x]CEO Approval		

Policy

The County of Ventura advocates a clean and safe environment and is committed to excellence and leadership in protecting the environment. Therefore, the County promotes environmentally sound recycling, reuse, reclamation, and source reduction of all waste streams.

It is the responsibility of every department/agency to implement waste reduction measures at the source, while maintaining operational efficiencies, quality products and services, and the safety and health of the workplace. Departments/agencies are to reduce all waste to the minimum levels economically and technically practical and to be in full compliance with all federal and state waste regulations.

Procedure

Managers and supervisors are required to review this policy with all employees and provide them with a copy of the General Services Agency (GSA) Employee Recycling guide. This guide can be obtained online at GSA's website under Facilities, Housekeeping, and Grounds. Employees are responsible for emptying Recycle All Products (RAP) boxes into centrally located blue recycle bins. GSA Housekeeping staff are responsible for disposal of recycle products. For additional information or to obtain RAP boxes and/or blue bins, please call 654-2051.

Employees are encouraged to come forth with suggestions for further reducing waste in their own work areas and in other areas for which they may have ideas. Ideas can be reported to the employee's department or to GSA Housekeeping and Grounds at 654-2116.

Green Badge System

The electromagnetic key cards that are issued to employees and vendors have a second life. When an employee or vendor badge is returned to GSA Special Services, it is deactivated and the employee identification is removed. More than **95%** of these electronic key cards can be returned to stock and reissued with a new activation and employee or vendor identification label. The overlying ID Badge is recycled. This is one more way that GSA reduces waste, both financially and environmentally. In 2022, we were able to re-use 852 badges. Those we cannot re-use are due to malfunction or damage.



Combo Drinking Fountain/Bottle Refill Stations

In 2013, GSA replaced traditional drinking fountains with combo units, which tracks how many bottles of water were saved, simply by filling containers at the refill stations located in assorted county buildings. We currently have 49 stations. As of January 2023, **816,378** 16-ounce bottles of water have been saved, with the addition of **168,896** for 2022. This information was provided by GSA Maintenance Department. GSA Parks received grant funding to cover the cost of 7 new refill stations, with 5 more to come, for a savings of **\$9,400.00**. In 2023, we will use grant funding for refill stations for RAIN and at least one of the two Family Justice Centers.





Safe Drinking Water

California Proposition 65, also known as the Safe Drinking Water and Toxic Enforcement Act, was designed to address growing concerns about exposure to toxic chemicals, and requires the state to publish lists of potentially harmful chemicals.

Excess nitrogen in drinking water contributes to the "blue baby" syndrome in babies under 1 year old. One of the diseases causing blue baby syndrome is Methemoglobinemia. Blood in such infants is unable to carry oxygen, and the condition can lead to death.

We at the County make sure to abide by guidelines required in order to provide safe drinking water, whether from a drinking fountain or from a faucet.



Trash, Recycling and Wet Garbage

In our continuing efforts to provide a safe, clean and healthy environment, the GSA Housekeeping and Grounds Department has developed a no cost recycle removal program. Pick-ups and dumping is provided by vendor service for free. The Custodial staff removes the recycle from work locations at no additional cost to departments. Thousands of employees on a volunteer basis deposit their recycle materials into the proper receptacles. We have analyzed the process and behavioral patterns of disposal and have made adjustments to the quantity and locations of dumpsters and bins.

As a result of the joint efforts of everyone, we are proud to say that we have met state standards by recycling more than 50% of the solid waste material.



By recycling **12.831 tons** of paper per year, the County avoids emissions of **4,000 metric tons** of carbon dioxide, equivalent to emissions from **7,000 cars or 20 railcars** worth of coal.

Food Waste Disposal

2022 saw the enaction of SB 1383, which sets goals to reduce disposal of organic waste in landfills, including edible food. Food scraps are to be composted, and put into green waste bins, not trash bins. The County of Ventura is working with cities, trash haulers, and customers to ensure compliance and earth-friendly solutions at all of our oncampus and off-site locations.

Food Waste Collection, Probation JJC

The Juvenile Justice Complex has recently implemented a food waste collection program. In just the first 6 weeks, JJC diverted 4.56 tons of organic resources from local landfills. These efforts will save landfill space, reduce harmful GHGs, reduce the need for chemical fertilizers, and prevent soil erosion. These benefits accrued no additional costs to the county. This program has also proven to increase efficiency and safety within the JJC.

The staff and student workers are now responsible to take the food trays after meals. They dispose of the food waste into a specific receptacle to be picked up. Previously, the duties to scrape the food off the trays rested on the inmates, (where often food would end up splattered on a wall or the tray would be used as a weapon). Now when the inmates are finished with a meal, they simply leave their

tray on a cart. This new procedure avoids any incidents or messes from occurring.

This program is currently being monitored to reduce the number of trash compactor pickups and reduce costs. This program could not have been achieved without the help of the Division Manager Joseph Moore and the kitchen staff. The simple procedural change has proven to dynamically benefit safety, efficiency and the environment.

Food Separation Program at RAIN

Project RAIN in Camarillo is the latest county agency participate in initiating a food separation The process. tenants, staff, and cooks, now separate and place unwanted food scraps into a bin designated for organic materials.



RAIN's new countertop modification allows for easy disposal of organic materials, recyclables and trash. The organic material disposed is sent to our local composting facility Agromin, where it will decompose to become a rich soil amendment. This simple procedural change is responsible for preserving natural resources, reducing the amount of discards sent to landfills, reducing the need for chemical fertilizers, and conserving water due to compost's strong ability to hold moisture.

RAIN has taken it upon themselves to the ensure success of the program. To assure tenants are disposing of the food properly, RAIN has assigned one tenant after each meal, to stand next to the receptacles and inform others to dispose correctly.



The trash pickups are currently being monitored to reduce the amount of pickups per week.

Composting at Fire Department – Simi Valley Firefighters Save More Than Just Lives

Firefighters at Simi Valley Stations 44 and 45 come to the aid of the planet as well as people and property. Having demonstrated exceptional resource management practices weekly by performing basic landscaping maintenance and filling up a residential-size cart, the firefighters divert from landfills approximately **3,869 pounds** of green material per year. Their efforts help to preserve natural resources, reduce the need for chemical fertilizers, reduce soil erosion, conserve water, and help to sustain the environment for future generations.

With the opening of Agromin's composting facility in Santa Paula, the gases generated from the green materials will be converted to natural gas to power the trucks delivering the compostables, as well as the facility itself. This incredible feat is a joint effort between the Fire Department, Agromin, Waste Management, and GSA, expected in 2022.



Composting at Animal Services - Camarillo Cats and Dogs Can Compost Too!



Cats, dogs, rabbits, and horses have helped to join in a new composting program at the Camarillo Animal Services. Their unwanted food, hay, cat litter, and newspapers for lining kennels, are now being separated onsite at the shelter. These organic resources are brought to Agromin, our local

composting facility, to decompose into a rich and safe soil amendment. Any pathogens or harmful bacteria that may be present are cooked away in the 140 °F compost pile. These efforts have turned something that would have otherwise been land filled into a profitable and healthy soil. These efforts will also responsible for generating electricity from the natural gas emitted and collected at the new Agromin Composting Facility, as well as reducing the need for chemical fertilizers, and saving water, due to compost's ability to retain water better than dirt.

Food Waste Composting More Ways to be Green at Todd Road Jail

The County of Ventura has won the 2013 Green Leadership Award in the category of Waste Management for food waste composting at the Todd Road Jail.

Keeping inmates fed at the Todd Road Jail (TRJ) is a big job. Daily, thousands of meals are prepared and served. The bi-product of the meal service is food scraps and ultimately Greenhouse Gas (GHG) emissions. Until recently, the practice of the TRJ kitchen staff was simply to throw the food scraps into the trash compactor with other trash. The contents of the trash compactor end up in the landfill, releasing tons of harmful GHG into the environment.

Recognizing an opportunity to be green, the Sheriff's Office and GSA, together with E. J. Harrison and their strategic partner Agromin, conducted a pilot program to divert TRJ food scraps from the waste stream and convert them to composted soil amendments.

During the pilot program (May 2012 to February 2013), **108 tons** of food scraps generated by the meal service operation at TRJ were diverted from the landfill by disposing them in designated food waste containers for pick up by the hauler (E. J. Harrison). The food waste containers were then delivered to Agromin to be composted for 20 days, cured for 30 days, screened, and mixed to soil amendments.

The impacts achieved during the piloting period from this process change are significant:

The pilot was so successful that that the diversion program process changes have been fully instituted and the project was submitted for

a Green California Leadership Award for outstanding environmental achievements in government.

According to Agromin, commencing in April 2013, food waste may alternatively be placed in a digester to yield methane gas for electricity production. Approximately 5 tons of food waste yields 1 megawatt of electricity.



All of the above noted composting programs are as a result of the partnership between EJ Harrison, Agromin, the General Services Agency, and the following participating agencies:

- Sheriff's Department Todd Road Jail
- Animal Services Camarillo
- Juvenile Justice Complex
- Human Services Agency RAIN Project

One year's worth of contents of the Food Collection Diversion Program amounts to **1,345,366 pounds** of organic resources composted.

The following articles regarding composting and food separation were written by David Goldstein, Public Works Agency and appeared in the Ventura County Star.

Separate Collection of Food Waste Leads to Composting

Excerpted from For Eye on the Environment

By David Goldstein, Ventura County PWA, Integrated Waste Management Division.

If you believe the success of environmental programs depends on convincing participants to be environmentalists, then you might doubt a composting program could succeed in a jail. There may be many inmates whose long-term thinking and compassion have helped them develop an environmental ethic, but a jail can be tense, full of immediate concerns about safety, and far removed from motivations inspired by the tranquility of nature.

Undaunted by this challenge, the Ventura County General Services Agency (GSA), Probation Department, and Sheriff's Department have implemented some of the most successful food waste separation programs in the county, arranging for Harrison Industries to separately pick up bins of sorted, compostable material from the Todd Road Jail and the Juvenile Justice Facility, delivering these loads to Agromin's composting site at Ormond Beach. Last year, Todd Road Jail was the biggest source of food waste for the Harrison/Agromin pilot program, contributing 103 tons. In the past six weeks, the County's Juvenile Justice Facility followed the good example of the Todd Road Jail, diverting 4.56 tons of their food discards from local landfills.

Using statewide data, the California Department of Resources Recycling and Recovery (CalRecycle) estimates wasted food is the largest single category of recoverable material in our garbage, comprising 16% of the waste Ventura County sends to landfills. While many County residents waste this resource, our jails have instead been leading the way with a pilot program that organizers hope will soon become widespread. Separating food discards and sending it to a compost facility "saves landfill space and reduces greenhouse gases, while producing a product (compost) that conserves water, reduces the need for chemical fertilizers, and prevents soil erosion," according to Rosalind Harris, GSA's Manager of Facilities and Security. She also points out these environmental benefits have come "at no additional cost to the County."

As with most recycling programs implemented in difficult locations, the key to success is to make recycling easier than disposal. That way, no one has to be convinced to develop a more enlightened world view. Whether in a jail or at an Earth Day festival, recycling has to be convenient, with adjacent containers for recycling and trash, using clear labels on sides and lids, and relying on a well-planned system of collection. At the Juvenile Justice Center, Division Manager Joseph Moore, the kitchen staff, and student workers implemented a system

involving cart collection of inmates' trays, followed by separation of materials into containers. Labels on these containers show pictures of acceptable items and note in bright red the items to keep out.

Of course, food waste collection programs cannot become more widespread until we have more local facilities able to compost food waste. Of the existing composting and mulching facilities in Ventura County, only Agromin's Ormond Beach site has legal authorization to handle food. Composting food waste requires stringent environmental safeguards against odor, vermin, and other potential negative side effects. Agromin hopes to have a new facility permitted at the Limoneira Farm by the time their authorization ends at Ormond Beach.

Community Recycling, based in Sun Valley, also has a local food waste collection program, bringing food waste from about 100 accounts in Santa Paula to their compost facility in Kern County and is planning to develop a compost and waste-to-energy facility at the old Santa Paula Wastewater Treatment Plant, according to Tim Fry, the company's General Manager. Other companies, such as Farm Share, are trying to gain (or regain) permission to handle food waste, and H Cattle Company feeds specialized sources of food waste (such as packing house fruit culls) to cows.

For now, most Ventura County residents who keep an eye on the environment and want to compost food scraps have to rely on backyard composting or worm boxes, and these will be the subject of next week's column.

Transitional Living Center Helps Homeless Recycle in New Ways

For Eye on the Environment
By David Goldstein, Ventura County Public Works Agency, IWMD

When you think of the links between recycling issues and our County's homeless population, scavenging and river-bottom clean-outs might come to mind. However, recently, a far more inspiring story emerged, linking homelessness solutions to recycling solutions. The River Dweller's Aid Intercity Network (RAIN Project), Ventura County's

main Transitional Living Center, worked with the Ventura County General Services Agency (GSA) to implement a comprehensive recycling program expected to save money and recover resources. The recycling program is having the added benefit of inspiring tenants, especially displaced families, with a community-building activity, involving both children and adults in making a positive contribution to their temporary home and to the environment.

In addition to starting programs in the shelter for recycling paper, steel ("tin") cans, and other items not commonly collected by homeless people, most impressively, RAIN and GSA worked with their refuse hauler (E.J. Harrison & Sons) and a local composter (Agromin) to start a program for separate collection of food scraps.

The average RAIN tenant finds more permanent housing after eight months, so as is essential for recycling programs in places with shifting populations, the program had to be simple and instructions had to be clear in order to succeed. The elegant simplicity and clarity of RAIN's comprehensive recycling program is best seen in their kitchen. Rosie Craig, RAIN's Operations Manager, worked with Sean Clark, GSA's Waste Stream Coordinator, to design and implement an impressively efficient sorting system. Cut into a countertop is a sorting area with three holes, and a separate container is placed under each hole. Each hole is labeled with both words and pictures, indicating which recyclables go into one, what types of food scraps go into another, and that remaining garbage goes into the third.

At each meal, one RAIN tenant is assigned the duty of assisting others in proper use of the sorting system, and tenants help empty each container from the kitchen into the corresponding hauler bin or cart outside for collection by E.J. Harrison & Sons. This collector then hauls the mixed recyclables from RAIN, which is near Cal State Channel Islands, to Gold Coast Recycling, in Ventura, for sorting. The hauler transports the food scraps to Agromin, near Oxnard, where covered piles, aerated with a system of pipes conducting pumped air, speed and control the composting process of turning organic discards into soil amendment.

In addition to the innovative program in the kitchen, GSA also helped RAIN begin recycling programs in each of the tenants' rooms. Each room has separate five-gallon containers for trash and for recyclables.

As with other sites where they help establish food waste collection programs for composting, E.J. Harrison is providing extra collection services (separate food waste hauling) without additional charges for a limited time, with the expectation that RAIN will be able to reduce refuse service in compensation for the extra cost. Currently, RAIN's refuse bins are collected three times per week. If getting the food waste and recyclables out of the garbage lets them cut down to only once per week, there could be a cost savings.

Tina McDonald, RAIN's Program Manager, also says, "Don't forget to mention the other positive aspects of the recycling program," noting the opportunity the 70 tenants of the shelter have for participating in a positive program. "RAIN families and individuals have struggled to gain traction after the loss of employment, housing and self-confidence," she said. "Working together to protect the environment provides the opportunity to participate in a program dedicated to the common good of their community."

As the residents of RAIN's transitional living center are starting new lives, the center's discarded resources are also getting a new start, through recycling.

You can keep your eye on the environment by implementing comprehensive recycling programs in cooperation with your hauler, and you can volunteer at RAIN by contacting them at the below web site.

Solar Powered Trash Cans at the Government Center

GSA Custodial and Landscaping has installed five self-compacting

solar trash cans at the government center. Manufactured by Seahorse Power Company, these high capacity bins are designed to reduce the number of collections by up to **500%**.

Inside each unit is a compactor which is powered by a solar panel on the top of the receptacle. When the trash level reaches a set height, a sensor triggers the compaction unit. This process will repeat until another sensor determines that the



contents cannot be compacted further. The unit will indicate when this level has been reached.

Typical results of this product will allow it to accept up to five times the volume of a regular receptacle before it needs to be emptied. This saves landfill space and employee labor. The solar power source makes it totally "Green". The chute is designed to keep birds and other animals from accessing the trash. We will be monitoring the use and savings provided by these units with an eye towards utilizing more of them in the future.

CalRecycle Recycling Grant

Since 2018, GSA has worked in conjunction with Public Works Integrated Waste Management, and has been able to order 56 trash/recycling combos, 187 blue Slim Jim recycling bins, and 25 10gallon blue bins at no cost to the County, thanks to CalRecycle and their bottle grant. The combos, Slim Jims, and blue bins saved a combined total to the County and GSA in the amount of \$58,203.53, as of December 31, 2022, covering seven grants. We have been able to 'share the wealth' with on and off campus locations alike, including the new Family Justice Center and the Air Pollution Control Districts new offices. A second Family Justice Center is now in the works, which means there will be more Slim Jims and trash/recycling combos on the way, resulting in additional grant funding. Just think of how much more was saved when you consider the contents that go into these combos and blue recycling bins! Recycling is easy and requires little effort. It was wonderful to discover that even in times of extreme trauma, those who make use of the Family Justice Center can still take the time to recycle. You can do it, too, can't you?

Combo Units - Trash/Recycle



Placed strategically throughout the Government Center campus are nine new Trash/Recycle combo units. These combo units are designed to make disposing of recycling as easy as disposing of trash. Although a seemingly small change, these units will help divert waste and extend the life of our landfills.

In an effort to further extend our recycling program, new combo units have also been placed at the East County Court House, East Valley Sheriff's Station, Animal Services in Camarillo, Probation Agency in Oxnard, Child and Family Services in Oxnard, Magnolia Clinic in Oxnard, Health Care Agency in Oxnard, Health Care Agency in Ventura, Human Services Agency in Santa Paula, Air Pollution Control District in Ventura, and the Family Justice Center in Ventura. When the satellite Family Justice Center opens in Oxnard, we will place combo units there, as well.

For further information regarding the County of Ventura's Recycling Program or to view our instructive video, please contact Cyndy Taschman at 805-654-2051 or cyndy.taschman@ventura.org.

Recycling of Cardboard Rolls

In an effort to recycle as much as possible in our determination to save the Earth, the County of Ventura now recycles the cardboard rolls found inside hand towels and toilet paper rolls. On average for the Government Center and the outlying properties, we recycle 220 cardboard rolls a day. Multiple this by 5 days a week by 52 weeks a year, we are now recycling **57,200** cardboard rolls a year. Something that is so easy for us to do, but makes a huge impact on saving the planet!

Making Full Use of Large Rolls of Paper Towels - Nothing Goes to Waste

For restrooms and break rooms containing center-pull paper towel dispensers, GSA Custodians replace the rolls when they are at ¼ roll or less. The replaced paper towels do not get thrown away or recycled, but instead are used for everyday cleansing, such as cleaning and disinfecting windows, counter tops, sinks, doors, door knobs, railings, and on and on. Think of all the things you can do with ¼ roll of paper towels!

Reduction of Paper Towels-Installation of Dyson Air Blade Hand Dryers

In an effort to cut expenses and continue LEED (Leadership in Energy and Environmental Design) certification, we installed Dyson Air Blade hand dryers in the public restrooms at two county buildings: Vanguard in Oxnard (LEED Certified) and the East County Courthouse in Simi Valley. This simple change provides many benefits. By switching from paper towels to hand dryers in the public areas, we see the following benefits:

- Most cost effective method.
- * Reduction in paper supply and budgetary expense.
- * Cuts down on expensive plumbing issues by upset public (intentional plugging of toilets).
- * Reduction in labor + time = more efficient use of resources and available for other custodial requests.
- * Better on the environment > Green initiative.
- * Further assist LEED Certification.
- * Reduction in trash disposal > quantity and cost.
- * More sanitary hand drying option.

Vanguard

County cut out \$6,136.70/year on paper towels. Cleaning contractor charged \$6,326.88/year for day porter services. Changed out 4 restrooms (out of 22) to hand dryers.

ECC

Cleaning contractor charged \$4,200/year on multi fold paper hand towels, \$750 minimum savings for restroom supplies.

Cleaning contractor charged \$6,326.88/year for day porter services. Changed out 4 restrooms (out of 23) to hand dryers.

Calculations

Paper towel supplies = \$2,000 Day porter services = \$12,653.76 Labor Savings = \$89.05

Total Savings = \$14,742.81

Installation of Dyson Air Blade Hand Dryers in the Hall of Administration

The installation of Dyson Air Blade Hand Dryers began in 2011. Along with the hand dryers, the use of paper towels was left as an option. Although the savings aren't as great as they would be if the paper towels were eliminated, there has still been a marked savings in paper towel usage.

Based on increased traffic in the Hall of Administration, paper towel usage is down 26%, thanks to the hand dryers. Imagine how much better it could be if everyone chose to bypass paper towels for hand dryers.

For the remaining sites where paper towels are used, all products are made from 100% recycled material.

We Recycle Our Green Waste



The County of Ventura generates green waste daily from its Landscape operations. All generated green waste materials are either applied on site or recycled. Materials generated from tree removals are ground at the site and applied. Generated green waste materials that are picked up by a rubbish company,

are processed into a variety of recycled products such as mulch, wood chips, and compost and soil amendments. We apply the processed materials in our landscape in the form of mulch to enhance the soil, save water and to reduce the need for weed control.

GSA Projects Group Reduces, Reuses, and Recycles

The GSA Projects Group is responsible for project management of significant facility repairs, infrastructure replacement and upgrade, and remodeling of County facilities. Example projects include mechanical & HVAC, power distribution & lighting, plumbing, roofing, interior remodeling, paving, painting, carpet & flooring, system & free-standing furniture. The Furniture and Interiors division is responsible for servicing and reconfiguring the County's installed inventory of over 3000 panel systems furniture work stations. The team is very proud to **Reduce** by using panel system furniture in GSA facilities which is manufactured with a commitment to sustainability:

- Manufactured at an ISO 14001 certified site, using 100% renewable energy
- FSC Sustainability, Level 1 Certification
- Made from 43% recycled content
- Indoor Advantage™ Gold, air quality certification
- GREENGUARD Certified

Projects displays their **Reuse** in that:

- Over **\$250K** of County-owned modular furniture is reused annually.
- Components manufactured today are compatible with original generation.
- Some of the original furniture installed in Hall of Administration, circa 1977, is still in use today.

And the department also makes sure to **Recycle**:

• Up to 34% of the panel systems furniture is recyclable.



Recyclable and reusable materials from construction sites are not left to lie about littering the environment or our landfills. Our Job Order Contractor, MTM Construction, Inc., is a leader in recycling construction debris. MTM has recycled approximately **69%** of all construction material, year to date.

Recycled Material Summary:

Concrete: 10 Tons

Wood: 9.20 Tons

Ancillary Material: 0.07 Tons

Commingled Construction/Demolition Debris: 21.07 Tons

Electronics Recycling

The Surplus program has collected over 425,300 pounds of electronic recycling with pick-ups from our electric waste vendor, Gold 'n West. The operation recovered **\$95,243.81** in electronic and metal recycling from July 1, 2017, to December 31, 2022.

Surplus also promotes reuse of products via auctions on the County of Ventura Public Surplus website. With numbers reported from roughly 90% of the participants, the County sold **\$74,360.42** in reusable products during 2022. Though lower than pre-pandemic years, this amount increased slightly from 2021. 2023 should be back to normal.

Custodial Crew Tablet Usage

With multiple locations of County-managed buildings, not all custodians work at sites with easy computer access, a necessity for submitting time sheets. By providing tablets with Wifi to the 12 off-site employees, travel time and material needed to reach a County-managed building in order to access computer was eliminated, thereby saving paper, toner, and time, and increasing productivity.

- Travel mileage saved = **\$2,325.02**.
- Hours saved = **\$15,409.68**.
- Grand total saved = **\$17,734.70**.

Digital Daily Task Sheet

Digitizing employees' daily tasks for their supervisor's daily review saved on paperwork, time, supplies, and storage, and also made them easier to retrieve for data analysis. We extended the savings by having the forms created and administered internally by GSA IT, thereby eliminating carrier fees. GSA's IT Department was able to develop the form at no cost, thereby saving \$29,674.00 as quoted by another.

Paper and toner eliminated = \$637.00.

- Labor savings = **\$1,185.36**.
- Carrier fees eliminated = \$10,419.12.
- Development fees bypassed: \$29,674.00.
- Grand total saved = **\$12,241.48**.

Recycling Toner Cartridges

Even in a 'paperless' society, everyone seems to print something every day. Toner cartridges may now have a long life, in comparison to the past, but they still eventually run out of toner and need to be replaced. What to do with your old, empty cartridge? Recycle it, of course.

In the General Services Agency Employee Recycling Guide, page 14 details two methods for recycling toner cartridges – calling the vendor (in this case Staples for refurbished toner, Compuwave for OEM toner) to request pick up, or using a prepaid shipping label to return the cartridges directly. Staples supplies 100 percent green, refurbished toners. If they pick them up for recycling, nothing goes to a landfill!



When returning the cartridges to Staples, gather your toner cartridges together and place inside either the original box or a shipping carton, attach the shipping label, and deliver to the mailroom. You must have at least 6 cartridges in one carton,

but that is all it takes to recycle your toner. If you have fewer than 6 cartridges in one carton, Staples will pick up your cartridges for recycling when they make their next delivery, if pre-arranged.

Not much effort on your part – but you are helping to save the environment.

If you need assistance with vendor response, contact Procurement at 805-645-1322.

Receiving Packages Can Be Good For The Environment

How many times do you receive a delivery from a supplier, and don't know what to do with the carton? Should you reuse it? Should you break it down and recycle it? Should you totally reduce and stop ordering items that come in cartons? GSA Shipping and Receiving

takes weekly delivery of cartons of cleaning supplies, which they in turn split up and divide among the Custodial crew, making use of these same cartons. They receive approximately 15 cartons of cleaning supplies a week, which comes out to **780** cartons reused during the average year – just for one department! Think of the savings we would have if every department reused their boxes. So the next time you receive a delivery, think first about how you can reuse that carton, rather than just recycling it. Remember – it is reduce, REUSE, and recycle.

Every Day Office Supplies Recycling is easy – and you probably do it without thinking!

The next time you receive a document with a paper clip or a binder clip attached to it, you will be helping to reduce, reuse, and recycle – simply by reusing that clip. Do you usually throw binder clips in the trash? Or do you usually use them on another document? There you go – recycling!

Think of all the other common things you do around work or at home that are second nature to you, but are evidence of your efforts to reduce, reuse, and recycle – rubber bands that come around your newspaper, or the plastic sleeves that are used on your paper on rainy days – both reused just when you need them. The back of receipts used for lists or notes to yourself. The pen you pick up when you sign in at a Security Training class – oops! The binder you reuse for your purchase orders, year after year. Manila folders, turned inside out. Even adding more files to a flash drive, instead of taking a new one for every document you need to save. Do you recycle toner cartridges? And do you shred paper in your office? Combine the two – use the shredded paper for the filler in the used carton in which you ship back the toner for recycling.

Do you shred old spiral-bound documents? Next time, save the plastic spiral, and turn it into GSA Graphics. They will then reuse that spiral piece on another document which they bind for a customer.

We even have a writing utensil recycling program, through TerraCycle. Collect your pens, pencils, markers, and highlighters together, along with glue sticks, paint sets, watercolor dispensers, empty correction tape containers and fluid bottles (but not correction pens), refills for ink and erasers, and flexible packaging for any and all of these, and send them into TerraCycle, using a pre-paid mailing label. Please contact Cyndy Taschman for details at (805) 654-2051. Please note that this program has become so successful that TerraCycle has had to limit the number of shipments to one per month per user.

It doesn't take much effort on your part to make a HUGE effort on behalf of the planet. And another benefit is that it saves money, too. Every penny counts – especially coming from nearly 10,000 County employees. Reduce, reuse, recycle.



Reuse of Bottles

GSA Custodial Department receives many bottles of cleaning solutions and floor wax throughout the year. Rather than simply recycle all of the bottles, staff saves many of those bottles for their water/wax mixture, which is used for spray buffing. They also reuse the 32 ounce bottles for holding the cleaning and disinfectant Virex 256. Virex 256 comes in a $1\frac{1}{2}$ gallon bottle, not easy to maneuver, so the premixed contents are emptied into the 32 ounce bottles for easy storage in each individual custodian closet. With 10 closets and 3 bottles per week per closet, that totals 30 bottles a week, and **1,560** bottles a year reused. This puts the County of Ventura well ahead of the curve, as nationwide, 70% of plastic bottles end up in dumps, or worse.

Earth Day Handouts

The County's weeklong Earth Day celebration is one of the more popular events when it comes to handouts. We provide our annual Earth Day book, our County recycling guide, and various other documents to educate employees and the public alike. In an effort to be even greener in honor of the holiday, we decided to reduce the number of printed documents, and instead provide them digitally to the user via Quick Response Code (QRC). This turned out to be quite successful. With our first year of trying this, we printed 500 fewer copies of our Earth Day book and 500 fewer copies of our recycling guide, while visits to our Earth Day page via QRC hit 451 by the first day alone, and 2,285 nine months later. We plan to expand this even further in the coming year, with fewer copies of each printed, as there continue to be visits to our Earth Day page via QRC, months after the celebration.

- Hard savings = **27,500** pieces of paper for books no longer printed. This converts to **\$2,815.00/year**.
- Soft savings = **\$1,432.31** for fewer Business Support hours needed for printing and production of books.
- Grand total saved = **\$4,247.31**.

Earth Day Tour

We added the QR Code to our annual Earth Day Tour invitation, as well as creating an electronic registration form for the tour. Using our e-invite, we received electronic registrations totaling over 100 for the 2019 tour, thereby continuing to save more paper. Great way to help save the environment! Unfortunately, due to COVID-19, we were unable to conduct our Earth Day Tour in 2020 and 2021, even though we had received registrations from the schools and from the public, but we resumed the tour in 2022. We began receiving registrations for the 2022 tour on the first day the invitations were sent out, in April 2021. Attendees of all ages look forward to our annual informative and educational tour. We truly missed conducting the tour as much as our participants missed attending it. For 2022, we added the District Attorney's Consumer and Environmental Protection Unit to the tour, with District Attorney Erik Nasarenko speaking about what they do to preserve and protect the environment, from the law enforcement side, thereby giving us our largest crowd vet. We cannot thank DA Nasarenko enough for his informative and enlightening presentation. The tour participants were very impressed. We hope to continue this trend for years to come.



Recognition for Earth Day Tour Efforts

On April 23, 2019, the Board of Supervisors in general and Supervisor John Zaragoza in particular recognized GSA for our continuing efforts to enrich the annual Earth Day Tour of the Government Center. GSA felt especially rewarded, as the honor and recognition is only given out to 5 individuals or groups a year. We are proud of all we have been able to accomplish with the Government Center grounds, particularly in the times of severe drought, and are anxious to share our knowledge and skills with the public. Some years used to have only 6 people attend the hour-long tour, but with the continued efforts of GSA Special Services, we have reached out to all of the schools in the county, regardless of the age of the students, as well as the Scouts and Boys' and Girls' Clubs, and have watched our registrations grow to 146. By reaching so many young people with an aptitude towards the environment and helping to save the planet, we are serving to set the next generation of public servants.



Recycling Fun Facts

Did you know that recycling has been around since at least 400 BC? Archaeologists have found evidence of glass, pottery, jewelry, and bronze coins being recycled, turned into goods of greater value, or into items necessary at the time.

In pre-industrial times, items were frequently melted down for re-use, as that cost less than manufacturing new items from scratch. Even dust and ash from wood and coal fires were collected and used as base material in brick making.

Industrialization brought a slowdown of recycling, as massproduction became cheap and easy, resulting in the throwing away of items instead of reusing.

The World Wars saw an increase in recycling, due to rationing and the materials being needed at the warfront, enabling a greater chance of victory.

Since the 1970s, recycling has become popular, and the normal way of life. Curbside pick-up of recyclable goods in residential areas is done by the local sanitation companies, and Recycling Centers are open to the public, making it easy for all to participate. In a concerted effort to save our planet, environmental consciousness has brought about an awareness of what can and cannot be recycled – some of which may surprise you.



Not only is recycling necessary for the planet, it is also good for the economy, conserving resources, saving money, creating jobs, and generating revenue. It is also an ethically sound thing to do, as we consider what resources will be available for future generations on this planet.

Recycling has also gotten easier over time as methods progress. What used to need to be sorted before recycling no longer requires this, as plastics, paper, metal, and glass now all go in together. Styrofoam and food remain the most common items NOT recyclable – but almost everything else is. Even raggedly old clothes, too worn out for normal recycling, can be re-used. Goodwill takes donations and re-purposes the fabrics and materials, while TerraCycle, where we send our writing instruments for recycling, has an international program where they will send you a box to fill with your old clothes, which you then send back to them pre-paid, and they re-purpose the goods. American Recyclers has bins nationwide, and accept belts, shoes, undergarments, towels, rags, stuffed toys, curtains, and more. Their donations are tax-deductible, as are Goodwill's.

The County of Ventura does its part when it comes to recycling. We have an established program, designed to make it easy for employees to recycle, and will perform on-site training. We gladly provide RAP (Recycle All Products) boxes for under your desk, which conveniently list what products can be recycled. We also provide blue bins for recycling larger objects, which Housekeeping will empty for you. We even have our own instructional video, available upon request.

During the week of November 18, 2019, we had a recycling display in the Hall of Administration main entrance, focusing on reducing and reusing, but also showing examples of what to recycle and how, an entry form for the County's Recycling Pledge, and fun and informative materials. In just two days, we were able to distribute 290 RAP boxes! We also collected e-waste for the first time, with a container at the Service Building loading dock, where people brought electronics of all kinds for recycling, including computers, printers, TVs, typewriters, stereos, and fax machines, among other things. We filled 7 pallets with collected items, weighing a total of 3,795 pounds. We intended to collect e-waste at least twice in 2020, but unfortunately were not able to do so, due to the COVID pandemic. We resumed collecting e-waste during our America Recycles Day celebration in 2021. Over a two-day period, we filled 8 pallets with collected items, weighing a total of 4,310 pounds. In 2022, we began holding the event twice a year – at Earth Day in April, and at America Recycles Day in November. Over the four days in 2022, we collected 35 pallets & 22,080 pounds, along with 14 cartons of batteries (weighing 617 pounds) and 383 light bulbs (both items for hazardous materials disposal), plus 158 toner cartridges (8 huge cartons). We received an excellent suggestion from the library, and have put into practice encouraging anyone who recycles a DVD or CD player to donate their no-longer needed discs to the library, thereby collecting 825 discs. double-recycling! We are also adding shredding events in the future.

We were recognized by the Ventura County Board of Supervisors with a resolution proclaiming November 15, 2018 as America Recycles Day, stating that GSA Security and Special Services ensures County employees have access to convenient recycling in their workplace. We do all we can to assist.

We were once more recognized by the Board of Supervisors with a resolution proclaiming November 15, 2019 as America Recycles Day, again commending GSA for providing convenient access to employees for recycling in the 41 County buildings.

Unfortunately, due to COVID-19, we were not able to have our annual America Recycles Day display, but we returned to our celebration in November 2021, with a display in the Hall of Administration, once more in conjunction with Public Works Integrated Waste

Management. Information was disseminated, and IWMD also offered a survey, plus a giveaway, which is always popular. With people returning to work after teleworking for nearly one and a half years, there were many new RAP boxes given out. Over a two-day period, we supplied 165 RAP boxes to users – both new, and for replacement of their old, over-used RAP box. This number is lower than in the past, due to many workers teleworking again, and the Hall of Administration being closed to the public for half of the event – but it is still a decent amount of new RAP boxes given out.





Remember, recycling is easy, so why not do your part today?

If you have any questions about recycling, or would like to schedule a training, please contact Cyndy Taschman, GSA Security and Special Services, at (805) 654-2051.

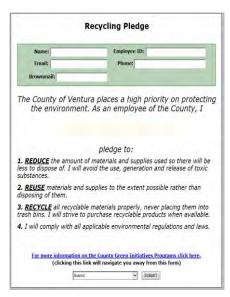
Recycling Pledge

We know that the County strongly encourages all employees to recycle, but now we have made it even easier to sign up to recycle.

By going on the Admin Services home page on the GSA website, you can pull up the 'Recycling Pledge', complete the form online, and then click on the 'Submit' button, and it is forwarded to Cyndy Taschman for processing. That is all it takes – very little effort from you, but it can accomplish so much in an effort to try to save the planet.



If you have not already taken the Recycling Pledge, why not do it today? Your participation WILL make a difference!







Climate Change

It is no secret that our climate is changing. Every inhabited region on Earth is already impacted by climate change, resulting in devastating rainfall in some regions, and deadly droughts in other areas. There are ice sheet collapses, sudden changes in ocean circulations, and catastrophic wildfires. 2020 ended a decade which was the hottest on record, and included a Siberian heatwave. Even with the worldwide lockdowns in 2020 due to the pandemic, global greenhouse gas levels reached the highest on record - and this includes modern records as well as in ice core records dating back 800,000 years. Emissions from burning fossil fuels dropped by approximately 7% with the grounding of flights and the clearing of streets, but the reduction was too small to have an impact on the build-up of carbon dioxide in the air. Ventura County is warming faster than any other county in the continental United States, according to data compiled by the National Oceanographic and Atmospheric Administration. At the same time, we are experiencing a mega-drought, which lasts 20 years or more, and must now be considered 'normal' for Southern California. There is a 'Ridiculously Resilient Ridge' which makes it difficult for storms from the Gulf of Alaska to slide down the coast to California, while at the same time encouraging Santa Ana wind conditions.

We are experiencing global warming as a result of the greenhouse effect, which is the process of heat absorption by certain gases in the atmosphere. They are called greenhouse gases because they effectively 'trap' heat in the lower atmosphere and some of this heat is re-radiated downward. Water vapor is the most abundant greenhouse gas, followed by carbon dioxide. Man has created this warming effect by the extreme use of fossil fuel. The product of fuel combustion is carbon dioxide, which is released into the atmosphere. The greenhouse effect caused by utility plants, automobile and textile plants, fossil fuel consumption contributes greatly to global warming. This warming is harmful to our health and environment:

- Human Health: Tropical countries will experience increased heat stress. Heat kills more humans each year than floods or hurricanes.
- Sea Level: The sea level will rise due to the melting of the glacial ice cap and thermal expansion, (which is the tendency of matter to increase in volume when heated. When a substance is heated, its constituent particles move around more vigorously and by doing so generally maintain a greater average separation).

Homes will be lost due to flooding and subsequent storms created by the change in sea water volume, increasing disaster costs.

- Ecological System: Some plants and animals will not be able to adapt to the temperature change and the rise in sea level. They will die. Some of those who migrate to new locations where they have never been before increase the risk of spreading pathogens to other animals and to humans.
- Agriculture: Extreme increase in temperature will be harmful to our plant food source, making it harder for many to find food.
- Water Supply: Climate change will exacerbate water shortages in many water scarce areas of the world.

Possible Solutions

- Reduce carbon dioxide emissions
- Increase biological removal of carbon dioxide emissions
 The later can be accomplished by the natural function of plants, which is to take up carbon dioxide through photosynthesis. Photosynthesis is the conversion of light energy into chemical energy by living organisms. The raw materials are carbon dioxide and water, the energy source is sunlight, and the end-products include glucose and oxygen. It is arguably the most important biochemical pathway. [1] A portion of the carbon is then stored in plant biomass and in soil organic matter. The amount of storage in natural systems can be increased through better landscape management.

GSA Landscape Department is doing its share to benefit from this process. We have over 2,710 trees over 55.5 acres of land inventory and have developed a plan to properly treat and preserve trees, while taking into consideration the maturity contributor. We try to maintain a balance of young and old to ensure that there will always be mature carbon dioxide absorbing trees around for years to come. We are careful to maintain open green acreage while taking advantage of IPM methods to preserve our environment by reducing the amount of chemicals used in our tree treatment and landscape treatment programs. We are continually looking for new ways to reduce impacts that may have a negative effect on our environment. We are doing our best to "Go (Stay) Green".

Climate Change and the COVID-19 Pandemic

With the influx of COVID-19 cases around the world, there were massive shut-downs, keeping people in their homes - and their vehicles off the roads, and planes out of the air. These lockdowns resulted in a major drop in carbon emissions. The drop in early April 2020 was 17% globally, bringing the world to levels not seen since 2006. For the first time in thirty years, the snow-capped Himalayas were visible from the Punjab in northern India, 200 kilometers away. The lockdowns caused the normally high-traffic waterways in Venice, Italy to become clear enough to see to the bottom. Air pollution levels in the Spanish city of Madrid, and in the Italian cities of Milan and Rome saw decreases of around 45%, while Paris, France saw a dramatic drop of 54%. Significant decreases were also found in London, England, and Delhi, India. In the United States, Los Angeles saw substantial improvements in air quality in just two weeks, while here in Ventura County, we could see mountain ranges that normally only appear after weeks of heavy rain. The night sky was also clearer, resulting in stars becoming more visible. And for those deemed 'essential workers', miles per gallon in their vehicle greatly increased, due to less traffic on the road and fewer hits of the brake pedal, thereby sending less toxins into the air. By the end of 2020, carbon dioxide emissions, the leading cause of global warming, fell by 7%, the biggest yearly drop on record. In the US, the drop was 12%, while California alone saw a drop of 9%. In Europe, the drop was 11%, while in China, it was only 1.7%.

The air wasn't the only thing that changed with the pandemic. People began noticing animals in places and at times out of the ordinary. Coyotes appeared along Michigan Avenue in downtown Chicago, near the Golden Gate Bridge in San Francisco – and even in the R Lot at the Ventura County Government Center! A puma roamed the streets of Santiago, Chile, while goats took over a town in Wales. Even kangaroos were seen hopping around an empty downtown Adelaide, Australia, while a pack of jackals occupied an urban park in Tel Aviv, Israel. The animals finally feel free to roam where the humans are not. While the pandemic was catastrophic for mankind, it was a boon to wildlife. In March of 2021, two dolphins even made it into Venice's Grand Canal.

Another outcome of fewer people out during the lockdown was the decrease in lightning. MIT found that with the world sheltering at home, global levels of lightning fell by up to 20%. The meteorological change seems to be driven by the drop-off in pollution, due to sharp declines in traffic and industrial activity. Researchers believe that very fine particles of pollution play a key role in generating lightning because they serve as platforms for ice crystals to form in clouds. Less pollution, less lightning. The steepest reduction in lightning strikes was recorded in heavily-industrialized areas, such as northern Italy's Po Valley and the Indian city of Kolkata.

As the world slowly returns to normal, wouldn't it be nice to keep the air so clear, the skies so blue, and the water so pure?











Unfortunately, as the world returned to 'normal', it was estimated that 3.4 billion single-use masks and shields were improperly disposed of **DAILY**, leaving animals to ingest or become otherwise entangled or trapped in them, while also increasing the global plastic pollution problem. There was also a global increase of properly disposed of biomedical waste due to hospitals treating a larger than normal number of patients. The extra precautionary measures required when treating COVID patients played a role in excess medical waste. This includes a greater number of masks, gloves, needles, syringes, and medications. Even worse, the decline in human carbon emissions caused by the COVID-19 pandemic were reversed in 2021. These emissions can remain in the atmosphere for one hundred years some of it could last tens of thousands of years. With the lockdowns, poachers ran wild as conservation and law enforcement agencies that protect wildlife and protected areas were also on lockdown, unable to feed and care for or provide protection to endangered species. Illegal loggers and miners took advantage of the Brazilian Rainforest not being protected, and razed 464 square miles of the rainforest during the first four months of 2020, 55% more area than destroyed in the same period in 2019. Many researchers and wildlife organizations are urging scientists to closely examine the impact of human activity on the natural world, as the information gathered could help improve conservation and biodiversity efforts. It could also improve the ability to predict global environmental changes. COVID-19 has helped illuminate the flaws of how humans interact with and value nature. which could have long lasting, permanent repercussions for both humans and the environment.

Animals in zoos grew lonely without the attention of locked-down workers. Many of the inhabitants who were used to 'performing' for the zoo crowds continued to show up for their normal 'appointments' with humans, just waiting for people to appear. Many other species of animals decided to make the most of their new privacy, resulting in natural pregnancies where none had been able to be achieved in the past.

An unexpected result from the worldwide lockdown was that a slight warming effect resulted. Industry ground to a halt and so did air pollution – but so did the ability of aerosols, tiny particles produced by burning of fossil fuels, to cool the planet by reflecting sunlight away from the Earth.



EYE ON THE ENVIRONMENT | SILVER LINING HIGHLIGHTS PRACTICE TO KEEP

By David Goldstein, VCPWA, IWMD



Pictured: Screen shot of air quality in Ventura County at 11 a.m. on Wednesday, June 10, 2020

Shortly after worldwide coronavirus lockdowns began, news stories began appearing with analyses of a beneficial side effect: Air pollution declined. Thousands re-posted pictures, such as beautiful views of the Himalaya Mountains, previously seldom seen from the Indian city of Jalandhar. Later, reports circulated about countries meeting gas-emission reduction targets set by the Paris Climate Accords.

Locally, at the May 12 meeting of the Ventura County Air Pollution Control Board, Dr. Laki Tisopulos, the executive officer of the Air Pollution Control District, presented data showing declines in ozone and particulate matter, making Ventura County's air better than it has been in years. Not only were people driving less, but coincidentally, "meteorology also chose this time to be our friend,"

Tisopulos summarized for me recently. April and May are always months of lower air pollution for Ventura County, he explained, "and this time we had the right amount of wind and rain, combined with moderate temperatures," to prevent the accumulation of pollutants in the air.

In a sad irony, while some people were suffering from a respiratory pandemic, others with non-life-threatening respiratory illnesses were enjoying the cleanest air they have experienced in years. Tisopulos also noted, "The very young, and the very old are also harmed when levels of particulates and atmospheric ozone are higher... lung health, lung capacity and even lung development in young children can be affected."

You can see Tisopulos' presentation on Ventura County air quality at vcapcd.org by clicking on "Boards/Committees" and going to the May 12 board meeting. The board meeting was held on and recorded through Zoom, the online virtual meeting Internet platform many people are using in lieu of in-person meetings during the pandemic. Virtual meeting platforms have been available online for years, but they exploded in popularity in response to social distancing requirements and are one of the social adaptations the Air Pollution Control District hopes will continue to reduce commuting after the initial stages of response to the pandemic.

Another important measure is telework. Tisopulos reported to the board on the success of work-from-home arrangements for district employees. Some staff still go "into the field" for tasks such as the collection of data from air monitoring stations and facility inspections, but the vast majority of district work is now conducted by employees working in their own home. Tisopulos said the keys to ensuring continued productivity are appropriate assignments, monitoring by management, and follow-up on fulfillment of tasks. The APCD has developed assignment and monitoring tools for its own workforce, produced versions usable as templates by other employers, and will share these tools in response to requests sent to laki@vcaped.org.

Additional measures expanded in the public sector during the pandemic are vote-by-mail initiatives, city and county online permitting and, for the first time, even some court hearings allowed online with the consent of the litigating parties.

Some Earth Day events in April morphed into a mix of online speeches, lectures and performances of music and poetry. The county's Public Works Week event, usually highlighted by displays of heavy equipment, instead became an online hub for public outreach and distance-learning school curricula, with public works employees presenting information and demonstrations of a variety of programs.

Those who were reluctant to shop online, and those who considered themselves too technology averse to participate in online meetings, have been forced by circumstances to try these options and have learned enough to continue using these options in the future.

One such lesson took place during an incident CNN dubbed "The flush heard around the country." In a "supreme embarrassment" last month, during the United States Supreme Court's first-ever remotely held oral arguments session, the public, who were allowed to listen live, heard "the distinct sound of a toilet flushing." As people learn how to use technology, such as a mute button, remote meetings and similar options will become more popular, and this type of progress might help clear the air for everyone.

Climate Change Mitigation

Climate change mitigation may be defined as any attempt to reduce the rate at which greenhouse gases are accumulating in the atmosphere.

We absorb climate action by maintaining healthy trees. Through the process of photosynthesis, trees are able to absorb carbon dioxide from the atmosphere, however much of the carbon that is initially captured is released through respiration.

In addition to our trees reducing greenhouse gases, we reduce greenhouse gas emissions (GHG) by diverting solid waste from landfills.

Waste over time produces and emits carbon dioxide. By reducing waste we reduce this occurrence. By recycling 12,831 tons of paper each year, the County avoids emissions of 4,000 metric tons of carbon dioxide.

Greenhouse Gas Reductions

Trees and plants reduce carbon dioxide in our atmosphere, therefore reducing the warming "greenhouse" effect of the gas. Plants and trees do this in more than one way.

As plants and trees grow they take carbon dioxide out of the air and transform the carbon dioxide into, roots, shoots, leaves, bark, flowers and wood. This is a basic function of Photosynthesis by which plants and trees produce food for growth and sustainability. Over the life time of a tree, several tons of carbon dioxide is taken up. The carbon is taken from the atmosphere and tied up in the tissue of plants in a process called "carbon sequestration". Plants and shrubs do this to a lesser degree due to their size.

Trees in particular, produce shade and transpire water, in doing so they lower air temperatures and, therefore cut energy use, which reduces the production of carbon dioxide at the power plant.

The GSA Grounds Department is responsible for the care of 2,563 trees. These trees can remove as much as 44 tons of CO2 per year. In addition, they can remove 7,600 lbs. of ozone, 5,700 lbs. of particulates and 2,850 lbs. of nitrous oxide each year. These same trees will produce 4,100 lbs. of oxygen for us to breath.

Trees have many benefits in addition to their effect on Greenhouse Gases. Trees and plants are an essential component to a healthy environment. Studies have shown that the prevalence of Asthma is greatly reduced in areas having trees. Trees reduce soil and polluted runoff into our streams and waterways. Trees provide beneficial psychological effects for most people. They provide habitat for a number of living organisms such as; birds, squirrels and butterflies.

The benefits of trees are many, but they do come at a cost. There are costs for planting, staking, watering, pest control, fertilization, pruning and general maintenance. The GSA Grounds Department has developed comprehensive tree programs that provide for public safety and sustainability of our trees.

Over the past year we have had to remove trees for various reasons. Removal of trees is always a last resort. Trees are only removed if they have structural defects, excessive decay or disease. These conditions weaken the tree and increase the potential for branches to fall off or for the tree to fall over. Public safety is always a major concern. Recently, seven trees were cabled that had weak branch structure as a means to prevent limb or trunk damage and for safety reasons. In the coming year we will be planting ten trees to replace those that were lost. The Government Center Campus Urban Forest is fairly dense, our tree plan includes sustainability. We have been able to maintain the same approximate number of trees over the years. We have managed to install a number of California Native trees that are doing quite well.



Our Copier Vendor

Canon Solutions America Incorporated uses "Energy Star" machines and 70% recycled paper. The County fleet of roughly 730 units are defaulted to duplex and black & white printing, thereby saving paper and not needlessly wasting color toner.

Vending "Energy Star" Machines

Energy Star qualified new and rebuilt refrigerated beverage vending machines can save more than 1,700 kWh/year, per unit, or \$150 per unit, annually on utility bills.

New and rebuilt refrigerated beverage vending machines that have earned the Energy Star are 50% more energy-efficient than standard machine models.

Energy Star qualified new and rebuilt vending machines incorporate more efficient compressors, fan motors, and lighting systems to keep beverages just as cold and the machine visible while using less energy.

Energy Star qualified new and rebuilt machines come with a low power mode option that allows the machine to be placed in lowenergy lighting and/or low-energy refrigeration states during times of inactivity.

Carpool Parking Program

GSA Security oversees the carpool parking program. This includes making sure there are enough carpool stalls available to carpoolers by conducting surveys and statistical analysis. In addition, we process and issue all carpool permits countywide, and we monitor the parking lots to insure that only participants park in the carpool stalls. Failure to do so results in citation issuance. We are pleased to report that there are 219 current participants in the program.

Bike Lockers and Bike Racks

Did you know that riding a bike cuts your fuel emissions completely? Bikes provide a cleaner form of transportation than cars, buses, trains or other forms of public transportation. Not only do bikes cut down on the number of vehicles on the road, they cut down on congestion. This means fewer vehicles sit idling in traffic, ultimately reducing the time that the remaining cars spend on the road, thus lowering their emissions. Let's say you spend an average of three hours a day in your car and reduce it two hours. You could save seven hours of greenhouse gas emissions, which is a remarkable step. In a year you would be responsible for stopping **365 hours** of greenhouse gas emissions. That is the equivalent of an hour a day.

Using a bike rather than a car also reduces the need for metals used in production. Metals used to produce vehicles must often be mined from the earth, which can devastate landscapes and cause deforestation. Pollution may enter the atmosphere through the extraction of these raw materials as well. Contamination of water sources is one of the most serious results of mining. Even small-scale mining can leave landscapes barren of vegetation for years, contributing to global warming by removing trees that clean the atmosphere.



Bike riding is also good for your physical and emotional well-being. Riding a bike gives you the opportunity to talk to people and get to know your neighbors, leading to a sense of community. It also lends itself to peacefulness of

the mind and conditioning of the physical body. It increases

cardiovascular fitness, and muscle strength and flexibility, while improving joint mobility, and posture and coordination. It strengthens bones, decreases stress levels and body fat levels, and is excellent for the management of disease. With so many bike lanes marked on the roads in Ventura County, your choice is almost made for you.

Bikes also take up a lot less space than cars; on the road and in parking lots. When you ride a bike, you help reduce the need for more roads. This is huge as the materials used to build roads add to pollution. Paved surfaces also increase the "heat island effect." This is when built-up areas are several degrees hotter than surrounding rural areas. This translates into an increased demand for energy, especially in warmer months and greater energy-related greenhouse gas emissions. Narrower streets with planters and space for trees, green spaces and pocket parks in place of parking lots will make a city greener, healthier and more beautiful.

Here at the County of Ventura, we provide, free of charge, bike lockers and bike racks for county employees wishing to bike to work. The County of Ventura, General Services Agency, Security and Special Services division, is responsible for and manages the bike locker program. In 2019, we added 4 more bike lockers to the Williams Drive location in Oxnard. The bike lockers we use are made of recycled materials, including Styrene. California Proposition 65, also known as the Safe Drinking Water and Toxic Enforcement Act, was designed to address growing concerns about exposure to toxic chemicals, and requires the state to publish lists of potentially harmful chemicals. Styrene appears on that list, but testing has proven that the resin used in these bike lockers IS California Proposition 65 compliant. These bike lockers are safe and reliable for long-term bicycle storage.

In 2019, we also began the process of replacing the lockers all 118 of our existing bike lockers, and were able to replace 8 old lockers and

install 4 new lockers in 2020, before the pandemic shut down the campuses. In 2021, we replaced 16 bike lockers, and repurposed the old bike lockers, offering new locations the ability to encourage their staff to keep healthy by making use of the County bike to work program. In



2022, we replaced an additional 20 bike lockers, and repurposed the old ones, as well, to new locations as gas prices sky-rocketed. At Partridge Drive, we actually had a waiting list of those eager to have bike lockers available at their location. The users are now very happy. HSA is planning on providing bike lockers at many of their satellite offices. Saticoy Yard is the latest new recipient of bike lockers, for both GSA and PWA staff. As of the current writing, we have discovered two dozen agencies/businesses who are known to provide grant for congestion funding reduction. cleaner environment. transportation services, and assorted other categories, so we are approaching ALL of them for assistance with replacing the remaining 108 old style bike lockers – this includes repurposed lockers as well as those not yet upgraded.

Currently, the bike lockers require a sturdy external lock, provided by the registered user. In the event the user loses their key or forgets their combination, Security must come and cut off the lock - but only at the same time that the user places a new lock on the bike locker door - we will not leave any bike lockers unlocked. With the new door, no physical lock is required, because the lockers all contain a Bluetooth lock. This allows for motorized latching and unlatching of the bike locker door. Each user will have their own specific code. linked directly to that one bike locker, accessed via the Movatic app on their phone. GSA Security and Special Services has a bypass key in the event that access is needed in an emergency (or the user forgets their code), but otherwise, the user is the only one who will know their code, and the only one who will know if their locker is empty or full. GSA Security and Special Services will also be able to generate reports with this new door, allowing us to track how often people actually ARE opening and closing their bike locker door as they ride to and from work. If we find that there truly is substantial use and a need of the bike lockers, this will only encourage us to install more lockers at various locations. Even now, we currently have a waiting list for some of the locations closest to the users' offices. Those using the new lockers are very pleased. Clay Downing, Sustainability Division of the CEO's Office, said, "The new locker is working great – it is a bit of a relief that I cannot forget to bring my keys for the bike locker. Plus, it's been nice to have the enclosed locker so I have somewhere secure to leave my helmet, water bottle, etc. as I finish my ride. I have been able to stick to riding to/from work."

We have several locations for bike lockers and bike racks at the Government Center as well as most offsite locations.

Bike Lockers are located at the following sites:

Government Center Telephone Road

(A Lot, E Lot, G Lot, H Lot, R Lot) Vanguard
County Square Drive Williams Drive

East County Courthouse Family Justice Center-Ventura Partridge Drive Family Justice Center-Oxnard

Saticoy Yard

County employees wishing to apply for a bike locker can go to: https://gsa-

docushare.countyofventura.org/lfserver?DFS Action=RouteGetFor m&DFS EventID=c421242b889752b82d67af00 1995645795&DFS DataSource=1&DFS FormType=crp

Bike Racks can be found at various locations both onsite at the Government Center and at most offsite locations. They are on a first come, first serve basis.

For more information on the new bike locker system, please contact Cyndy Taschman at 805-654-2051.

Electric Vehicles

In 2021, GSA Fleet Services added 18 long-range 2019 Chevy Bolt Electric Vehicles (EV) to the County's Remote Motor Pool, thereby increasing the County's fleet to include a total of 43 fully-electric or plug-in hybrid EVs. These newer electric vehicles are the first all-electric cars to offer 238 miles of range on a full charge.

Even when the electricity used to fuel electric vehicles comes from the dirtiest coal-dominated grid in the US, electric vehicles still produce less global warming pollution than their conventional counterparts. The average EV in the US today produces the emissions equivalent of a gasoline car that gets 73 miles per gallon. The emissions performance of EVs is set to further improve as wind and solar power displace coal-fired electricity generation.

Electric vehicles are an essential part of the Union of Concerned Scientists' plan to cut the nation's oil use in half in twenty years. Using oil causes an array of problems, and transportation remains reliant on oil as the dominant energy source. Electric vehicles offer the potential to disrupt this status quo relationship between transportation and oil, and offer a cleaner, better way to fuel transportation for everyone. Overall, electric vehicles can cut US oil use by 1.5 million barrels a day by 2035.

At the County, we are proud to do our part to assist in the reduction of emission.





Continued Environmental Leadership

The County of Ventura has received numerous awards for its efforts in energy efficiency and reducing greenhouse gas (GHG) emissions. In 2016, the County joined the Beacon Program, which is a voluntary award program that assists local governments in producing measurable achievements in five areas: Agency Greenhouse Gas Reductions, Community Greenhouse Gas Reductions, Agency Energy Savings, Natural Gas Savings and Sustainability Best Practices. During its first year participating in the award program, the County received a Gold Level Beacon Spotlight Award for 11% Agency Energy Savings resulting in approximately **8 million** in kilowatt hour (kWh) savings. Since then, the County has saved more than **11 million** kWhs, which is equivalent to powering **1,338 homes**' electricity use for one year. The County achieved these kWh savings through switching lighting to LEDs, HVAC system upgrades, and utilizing utility management software to monitor energy use in agency buildings.

That same year, the County was also awarded a Gold Level Beacon Spotlight Award for Reductions in Agency Greenhouse Gas (GHG) Emissions for its efforts in developing a Climate Protection Plan (CPP) for Government Operations. The CPP lays out a roadmap and strategies to reduce GHG emissions by setting out 6 major action areas and 15 climate protection commitments that provide direction for the next decade and beyond. Through implementing the CPP strategies,

the County was able to achieve 12% GHG emissions reductions in 2016 through installing over **3,600** solar panels at the Ventura Government Center. This solar array supplies more than 10% of the electricity needed at the Government Center and reduced the County's GHG emissions by about **532 metric tons** per year, equivalent to charging 68 million smartphones. Solar panels have also been installed at the Moorpark Wastewater Treatment Plant, Todd Road Jail, and Juvenile Justice Center in El Rio for a total of more than 3.5 million kWh saved. In 2020, the County began installing solar panels at the Cenergy, formerly Chevron Oil, site in Fillmore. The credits from this site will be used to offset bills at VCMC. Since 2016, the County has achieved additional GHG emission reductions through purchasing energy from renewable sources; thus, far exceeding the GHG emission goals included in the CPP.



In 2017, the County received a Platinum Level Beacon Spotlight Award for Sustainability Best Practices. The County's best practices include achieving water savings by utilizing recycling water and reducing irrigation water use by 88% at County buildings, recycling more than 140,000 pounds of electronics, and replacing lawns with avocado and lemon trees to provide for Todd Road Jail. Other County sustainable activities include developing a Municipal Energy Action Plan, participating in the Cool Planet Program, and implementing U.S. Green Building Council's Leadership in Energy and Environmental Design techniques in construction of the Vanguard Building, Juvenile Justice Center, and Ventura County Medical Center's new north tower wing. Lastly, the County's Public Works Department utilizes sustainability best practices through sharing construction equipment and utilizing an Integrated Pest Management Program with Raptor perches.

Recently, Ventura County was one of the first counties in the state to be awarded a Gold Level Beacon Spotlight Award Natural Gas Savings. The County received the award in 2019 through achieving a 14% reduction in natural gas usage. These reductions occurred from 10

energy efficiency retrofits undertaken at agency facilities resulting in more than 97,000 therm savings, which is equivalent to removing 109 gasoline passenger vehicles from our county roads for one year.

Alternative Transportation Efforts

The County is working hard to convert agency fleet vehicles to higher efficiency and alternative fuel vehicles. The County's fleet includes 105 hybrids, 11 plug-in hybrid electric vehicles (EV), 32 fully-electric vehicles, and two heavy duty hybrid delivery trucks. The County provides instructional videos and training materials to staff for operating EVs, including hosting EV Lunch and Learns where employees can learn about available EV rebates and incentives, charging options, and available EVs. Additionally, since 2019, the County of Ventura in partnership with Ventura County Regional Energy Alliance has hosted annual Ventura County EV Showcases and These events invited County staff and Ride 'n Drive events. community members to test drive a variety of EVs and electric bikes, learn from industry experts, and enjoy food and giveaways. The goal of the events is to promote the clean-air benefits, cost-savings, and fun provided by driving an EV.





Additional County-lead alternative transportation efforts include installing 12 public EV charging stations and using renewable diesel for County fleet vehicles, which has reduced GHG emissions by 983 metric tons of carbon dioxide equivalent removing 13 tanker trucks worth of gasoline from our county roads.

In 2021, work was completed in the E-Lot at the Government Center, in order to convert 20 standard parking spaces to electric charging spaces. This was essential, due to the great number of fully-electric and hybrid electric vehicles now maintained by the County. This was

over and above the already-existing 10 electric charging spaces in the E-Lot, open to the public.



Also in 2021, GSA Fleet Services installed a solar charging station at the medical complex located at 3901 Las Posas Road in Camarillo. Two all-electric 2022 Chevy Bolts have been placed at the nearby Camarillo Police Department visitor parking lot for use with this charging station. A solar charging station was also installed at 4651 Telephone Road in Ventura, next to the Donlon Street entrance. Two all-electric 2022 Chevy Bolts have been placed at the Telephone Road/Market Street location for use with this charging station. Another solar charging station was installed at 2220 East Gonzales Road in Oxnard, home of many medical facilities, with two all-electric 2022 Chevy Bolts placed at this same location for easy convenience. Finally, at the end of 2021, three solar charging stations were installed at 2900 Madera Road in Simi Valley, home to the County Human Services Agency. Six all-electric 2022 Chevy Bolts were placed there. Combined with the Government Center and the above-mentioned locations, there are now 22 Chevy Bolts available for use.

The solar panels at the charging stations are smart enough to move throughout the day following the sun, thereby allowing the solar array to maintain the best angle of the sun.

Battery Program

GSA has submitted to the State Self-Generation Incentive Program to install batteries at two fire stations, one in Simi Valley and one in Moorpark. We do not yet know the final battery size and are waiting to find out if we are selected. We are currently negotiating contract terms and conditions.

Separately, GSA has submitted for resiliency projects through the Clean Power Alliance. This program would provide solar panels and batteries. We submitted Fire Station 14 in Simi Valley and the Oak View Resource Center. We are waiting to schedule a site visit with the contractor for the Resource Center. It is expected that we will begin negotiating a contract with the CPA selected contractor in 2023.

We have been in communication with Tesla concerning an SGIP-funded battery for Todd Road Jail. At this time, we do not know if we will be able to complete the project, as we are running into contracting issues. GSA has signed a contract with Tesla. Design has been delayed by the ongoing construction at Todd Road Jail. We are scheduling site visits for the fall, with hopes of construction near the end of 2023.

Public Works Agency is working on a battery installation at the Piru Wastewater facility.

The libraries are working towards installing batteries at the Fillmore Library and the Ojai Library.

Health Care Agency is working on batteries at some sites, locations to be determined.

SECTION 6 Credits



Vendors Are Our Partners

The Vendors listed below have agreed to use green products whenever feasible; to use Integrated Pest Management Practices, and abide by the Storm Water Requirements for the County of Ventura.

Agromin – Provides composting services and mulch for County properties.

Aller Clean - Provides structural pest control service.

American Bicycle Security – Provides bike lockers which promote bicycle riding instead of driving.

Aramark – Provides County uniform laundering services for Housekeeping and Grounds Departments.

Athens Environmental – Provides rubbish and recycling services for the County of Ventura in the Santa Paula and Thousand Oaks vicinity.

Bee Care Specialists – Provides live bee relocation services for the Grounds Department.

E. J. Harrison - Provides rubbish and recycling services for the County of Ventura.

Enhanced Landscape - Provides general landscape maintenance services for multiple County properties including planting, pest control, irrigation management, and tree health assessments. Installs landscape projects as required.

Gared Corrugated - Provides RAP boxes.

Greene Tree Care Services - Provides tree trimming service. This includes removals and emergency services.

Hope Pest Control – Provides structural pest control service.

House Sanitary – Custodial supplies, including Green Seal Certified.

Imperial Sprinkler – Provides irrigation technical support services for the Sentinel Irrigation Central Control System.

Kastle Kare - Provides rodent control for the Government Center, 855 Partridge, and 646 and 669 County Square Drive.

O'Connor & Sons - Provides structural pest control service.

Pride Industries – The contracted vendor for custodial services at the County of Ventura.

R.A. Atmore & Sons – Provides non-chemical weed abatement services at selected properties and towers.

Sinclair Sanitary – Custodial Supplies, including Green Seal Certified.

Stay Green Landscaping – Provides tree trimming.

Superior Sanitary – Slim Jims, recycling blue bins, custodial supplies, including Green Seal Certified.

Ulrich and Ulrich - Provides power washing for sidewalks, docks, trash compactors and cement staircases.

Venco Power Sweeping – Provides sweeping services at the Government Center, including special sweeping specifications relating to newly installed pervious paving.

Ventura Pest Control – Provides structural pest control.

Waste Management - Provides rubbish and recycling services for the County of Ventura in the Simi Valley and East County vicinity.

We Do Windows - Provides window washing service.

Western Exterminator - Provides structural pest control service.

Our County of Ventura Partners

District Attorney Consumer and Environmental Protection Unit – Safeguards our environment; participates in Earth Day Tour

Public Works Agency – Providing **\$58,203.53** for 7 grants to cover cost of 263 combo units, Slim Jims, and 10 gallon blue bins; participates in Earth Day Tour

Resource Management – Assists with connecting communities with CalRecycle

Risk Management – Assists with proper recycling of batteries

Sustainability Division, CEO – Assists with environmental leadership; participates in Earth Day Tour

GSA Business Support – Graphics creates our wonderful artwork; Surplus staffs and gathers e-waste during our collection events

GSA Maintenance – Maintains our sustainable systems

GSA Projects – Designed and installed our sustainable systems

GSA Procurement – Generates purchase orders with our vendors

GSA Accounting – Supports water management

Points of Contact

Name	Position	Phone
David Barley	Department Head	(805) 654-3721
Lorenzo Villa	Landscape Specialist	(805) 654-3821
Cyndy Taschman	Project Coordinator	(805) 654-2051
Patrick Squires	Division Head	(805) 654-2116
Sean Payne	Division Head	(805) 654-3816
Dawn Julien-Burns	Custodial Contract Administrator	(805) 654-3810
Stephanie Peres	Special Events Coordinator	(805) 477-7187
Jim Dorman	Warehouse Supervisor	(805) 654-3749







"I love a Bat Cave made out of old recycled materials!"



"Recycling makes me happy, and gives me such pretty jewelry!"



"I choke up when I think of people who don't recycle!"



Custodial Staff:

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Pedro Baylon
Salvador Duarte
Maria Espinosa
Edelia Meraz
Sean Mumper
Henry Rangel
Feliciano Rodriguez
Zabri Torres
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Kelli Stewart

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Andrew Juarez
Efrain Leyva
Sandra Lopez
Joseph Macias
Rose Magdaleno
Ellen Reclusado
Daniel Wiggins





Landscape Staff:

Lorenzo Villa, Antonio Barajas-Trujillo, Sabino Benitez, Jade Alamillo, Juan Rivera, Rolly Berg







How you can help in the future

There are lots of options to take to help with saving the planet. One of the easiest and most pleasing is to use seed paper instead of plain paper.

Seed paper is made from a natural cotton fiber, is biodegradable, and grows into wildflowers, herbs, vegetables, and other plants. By planting the seed paper in your garden, you are nourishing the soil and cleaning the air.

Just imagine if all the junk mail you receive was printed on seed paper. You could put the seed paper directly into the ground instead of filling your recycle bin, water it, and then let the sun do its job. You would be replenishing the earth, and creating a beautiful garden at the same time.

And not just junk mail. You can buy greeting cards made out of seed paper, bookmarks, invitations, ornaments – basically any type of stationary.

Think about it. Feel some seed paper today, and you will know what you are giving back to the planet.



