

"One Person's Trash...

Your guide to reducing, reusing and recycling



A Newsletter of City of Santa Cruz Public Works Department

Spring 2015

How times have changed FROM DUMP!

A time machine just dropped you into the year 1926. Calvin Coolidge is president of the United States. The headline in the local newspaper reads, "The City of Santa Cruz opens a new dump." The property is just north of town where Lombardi Creek has carved a deep canyon through the coastal hills. The canyon will hold tons of garbage for years to come. The City

can now stop operating the unpopular trash incinerator located in the Garfield Park neighborhood. Residents and business owners can drive three miles up coast Highway 1 to get rid of all their trash. At the end of the day, the dump operators will set the garbage on fire and let brisk ocean winds carry the thick clouds of black smoke up and out of sight, out of mind.

In those early days and for another 40 years, burning was the standard practice for dealing with the City's garbage. But with passage of the Clean Air Act in 1963, the practice of burning trash came to an end in 1969. Operators began covering the garbage with dirt at the end of the day to keep animals from coming to feast and, ironically, to

prevent fires. The practice of daily cover is still in use today. In 1970, the City dump was renamed a **sanitary** landfill.

State and federal environmental laws during the '70s and '80s meant big changes for handling garbage. The Clean Water Act (1972) and the Resource Conservation and Recovery Act (1976) required the City to take extensive and costly steps to prevent landfill-generated pollutants buried in Lombardi Canyon from escaping into nearby waterways. A modern landfill isn't a place where we can simply throw our garbage away and forget about it.

When garbage starts to decompose, it releases the potent greenhouse gas methane. In 1989, a collection system was built within the buried garbage to collect methane gas. The gas powered an on-site turbine to generate electric power. Each year, the system generated enough electricity to power 750 to 1,000 homes. Fortistar Methane Group replaced the old turbine with a more efficient 20-cylinder internal combustion engine in 2009. The methane plant is now rated at 1480kWh of net power, equivalent to over 12GW/year of renewable power. That is enough electricity for approximately 1,500 to 2,000 California homes. The methane plant is estimated to reduce greenhouse gases by more than 9,000 tons of carbon dioxide annually.

In 1992, the City constructed an elaborate system to collect and monitor leachate from the landfill and pump it three miles back to town to be processed in the wastewater treatment plant. Leachate is the "garbage soup" that is created when rain or groundwater moves

FROM DUMP TO
RESOURCE RECOVERY
FACILITY — 89 YEARS
AT DIMEO LANE



through a landfill and "leaches" out pollutants that can contaminate creeks and the ocean. In 1996, the City also constructed bypass tunnels under the older section of the landfill to keep Lombardi Creek water from coming in contact with buried garbage.

The City completed the first of five lined landfill cells (Continued on Page 3)



Evolution of Garbage Collection

The old days of garbage men shouldering 100-pound metal cans of your week's cast-offs are long gone in Santa Cruz. The City rolled out the curbside trash and recycling carts in 1997 and has never looked back. Collection trucks are now either semi-automatic or fully automated. The driver uses a joy-stick to control a robotic arm and claw that reach out to grab your refuse, recycling and GreenCycle carts. Drivers don't have to jump in and out of the truck at every stop to hoist heavy cans. Most collection routes only require one operator rather than a team of two or three. The greatest benefit of automation has been a reduction in injuries to collection workers. Gone are the strained backs and shoulders, bruised knees and sprained ankles from heavy lifting and awkward, repetitive movements. A garbage man used to walk or run about 20 miles a day behind the truck as it moved down the street from stop to stop. Today that has been replaced by the mechanical whir and buzz of the automated grabber arm. Even with all the changes over the years, our waste products still get taken away. Get to know a few of these crew members at our Public Works employee blog: http://themanyfacesofpublicworks.blogspot.com/

Sustainable Refuse Trucks



Driver Daniel Guzman with new hybrid truck

You may have noticed recently that the trucks picking up trash and recycling in your neighborhood have gotten a lot quieter. The City has added six new hydrostatic hybrid vehicles to its refuse and recycling fleet over the past few months. The new side loaders move between residential stops using only stored hydraulic energy, which really reduces noise. They remain in a low idle for short distances with drivers only stepping on the gas when driving longer distances. The hybrid engines use about 20% less fuel than the older conventional diesel trucks they replaced. With these more sustainable vehicles in the fleet, the City of Santa Cruz is enjoying many benefits, including less noise, less fuel consumption and a smaller carbon footprint.

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THE MAKING OF A ZERO WASTE PIONEER

Bea Johnson, author of *Zero Waste Home: The Ultimate Guide to Simplifying Your Life*, is a pioneer. She may not be the first person to attempt making her own cosmetics and cleaning supplies or to buy all of her foods fresh or in bulk. She may not be the first person to advocate making do with a smaller house, fewer possessions, or consuming less media. There have certainly been others who have written books on recycling and composting. What makes Johnson a pioneer is that she does all of these things with the remarkable goal that her household (herself, a husband, and two sons) will produce no more waste in one year than can fit in a large canning jar. The very boldness of the idea hints at the compelling nature of this story.

Pursuit of the "zero waste" goal did not happen overnight. The Johnsons were moving from a far inland suburb of San Francisco, Pleasant Hill, to a more urban community, Mill Valley. Mill Valley enjoys a walkable downtown, in close proximity to the coast and to the city, but the price of housing is about twice what it is in Pleasant Hill. After selling their old home, the Johnsons lived in rental housing to get acclimated to their new community and give themselves time to search for a new place. During this time, most of their belongings were placed in storage and they found the experience freeing. In the end, rather than replace their 3,000-square-foot suburban house with a similar-sized home, they opted for a two-bedroom bungalow adjacent to the downtown neighborhood they found so appealing. It had no yard to take care of and half the square footage. Shrinking their possessions down to what would fit in their new home and without as much yard work, they spent more time biking, hiking, and exploring as a family. And that was just the beginning.

As Bea and her husband, Scott, read about the environment and the impact of their typical, modern lifestyle, they formulated a plan that led the family toward their singular achievement. While Scott quit his job to start a sustainability consulting company, Bea transformed their household into an example of how little waste a family can produce and still enjoy a rich, fulfilling life. Like any pioneer, she tried many things along the way. Some of the things she tried she gave up, as those practices became "socially restrictive and time-consuming, and thus unsustainable." For this reason, she decided to no longer make her own butter or cheese. Throughout, the author avoids scolding or preaching, except perhaps in the short chapter, "Getting Involved." Mostly, she documents her experiences as she pursued her goal. The result is 292 pages of practical "how-to" instructions laced together with an interesting family story.

The Johnson family's waste for the year 2014.

Johnson's philosophy of zero waste is broader than just placing recyclables in the proper container and trashing whatever other waste her family produces. Her strategy has five Rs, as opposed to the three Rs you may know. Johnson prefaces "reduce, reuse, recycle" with a flat-out "refuse" phase. Items she refuses include single-use plastics, freebies, promotional items, individually-wrapped snacks, and other small gifts. She admits that "refusing is the most difficult to achieve socially, especially for households with children. Nobody wants to go against the grain or be rude when something is offered with no ill will." However, she offers strategies to politely refuse these things and points out: "If we all refuse hotel freebies, then they will no longer be offered; if we all refuse receipts, then they will no longer need to be printed."

Reduce is the second R in her lexicon. She distills reducing into three steps: evaluate past consumption; reduce future consumption; and decrease your exposure to media and time spent leisure shopping, since these can lead to more consumption.

Reuse is the author's third R. This includes selling or donating usable items you no longer need, as well as shopping secondhand first, before investing in newly manufactured goods. She also discusses "collaborative consumption," which is basically sharing. This applies to things which you do not use all the time, such as tools, lawn equipment, recreational vehicles, cars, and even homes and office space.

Her fourth R is "recycle," a category she maintains for "what we cannot refuse, reduce, or reuse." She advises knowing and understanding what your community can and cannot recycle. She couples this with the recommendation to select products with high post-consumer recycled content and choose those that are accepted in your local recycling programs.

After refuse, reduce, reuse, and recycle, the fifth R Johnson espouses is "rot," or composting. She provides a concise, two-page chart which is an excellent starting point for anyone wishing to know the pros and cons of various types of composting.

The author claims there are many direct personal benefits to her lifestyle, in addition to minimizing her family's impact on the earth's environment. The first benefit is financial. Her husband estimates their household expenses went down 40% over the five years it took her to fully evolve her strategies. In addition, she cites the health benefits of reducing toxics and allergens in her home and eating healthier foods. Lastly, she notes the satisfying benefits of additional time. "Anyone can benefit from a life freed from the burden of stuff and wasteful practices, and instead focused on experiences," she writes. "Time also opens opportunities to get involved and participate in collective consumption, through which sharing, interacting, and reinforcing community bonds are possible."

The bulk of the book consists of well-thought-out strategies, simplified systems, and recipes that address many areas of the home: kitchen and groceries, bathroom and toiletries, bedroom and wardrobe, housekeeping and maintenance, workspace and junk mail, etc. This is where others can really benefit from the trial-and-error experiences of the author and her family. For instance, she has pushed the limits of grocery shopping by using her

own containers. In addition to bulk items where reusable containers are common, she uses her own containers for cheese, meat, and seafood purchased at the counter. "BYOC (bringing your own container) is uncommon and may raise eyebrows, but only if you show hesitation. I find it easier not to ask for permission to shop with reusables," she advises. She suggests simply making a request and handing over the container without making eye contact. "I act as if jars were common practice (as if I had shopped this way my whole life)," she says. Meal planning, shopping once a week, and getting to know the staff of your local grocery and market are all good tips.

The bathroom and toiletries section has detailed recipes to replace the myriad products that crowd your bathroom vanity and medicine cabinet. Likewise, the recipes and strategies included in the housekeeping chapter are helpful. This is serious pioneer stuff that will get you curious enough to try some of it, even if you have no intention of adopting a complete do-it-yourself, zero waste lifestyle.

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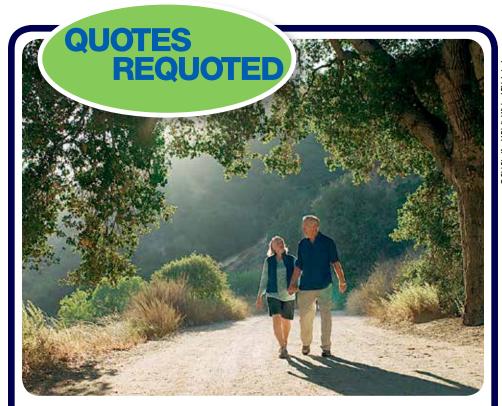
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THE ULTIMATE GUIDE TO

SIMPLIFYING YOUR LIFE

The kids and school, holidays and gifts, and out and about chapters address areas with huge opportunities and challenges to the zero waste lifestyle outlined in the book. Again, like every chapter, you may find that only a few of the strategies are for you. On the other hand, you may see something you never considered that piques your interest. Use what works and consider the rest as part of Johnson's family story.

By her own admission, the author "grew up in the Provence region of France, in a cookie-cutter home on a cul-de-sac." But, she says, "Through my young eyes, my home was a modern version of *Little House on the Prairie*, a TV series I watched religiously in reruns as a kid." She grew up to be a true pioneer with respect to her pursuit of a zero waste lifestyle. Reading this book is like watching *Little House on the Prairie*, if the Ingalls family took the time to show you, in detail, how you too could survive on the 19th century prairie.



Some old-fashioned things like fresh air and sunshine are hard to beat.

Laura Ingalls Wilder, 1867-1957 American writer, best known for the Little House on the Prairie books Page 3 Spring 2015

RecycleMania



This year's RecycleMania marks the 15th annual recycling competition between colleges and universities. The challenge began in 2001 when recycling coordinators at rivals Ohio University and Miami University decided a little competition might be a way to motivate students to recycle. The little contest between two Ohio universities has grown into a competition among 450 schools in the United States and Canada.

Stacy Wheeler, RecycleMania's president, notes, "With the help of millions of students, RecycleMania competitors have recycled and composted over 277,800 tons of material since the competition first started in 2001."

The competition runs over an eight-week period which coincides with the NCAA March Madness basketball tournament, making school spirit a great motivator in RecycleMania's efforts. Each week, colleges report the recycling and trash collected on their campuses. From these reports, colleges are ranked in various categories. After the eight-week competition, the overall winner with the highest percentage of waste recycled receives national recognition and a trophy made out of recyclable materials. There are also 10 category winners, two of which are new for 2015.

Last year, 5.3 million student and staff participants at 461 colleges and universities recycled and composted 85.6 million pounds of materials. The Grand Champion was Antioch University, located in Seattle, Washington, with a whopping 93.13% of material recycled during the competition. Kalamazoo College, located in Kalamazoo, Michigan, won the Per Capita Classic award with 48.62 pounds of recyclables per participant, and Valencia College, located in Orlando, Florida, won the Waste Minimization award, creating only 2.87 pounds of waste per person. During the course of the competition, recycling by the participating colleges and universities prevented the release of 137,452 metric tons of carbon dioxide equivalent, which is comparable to removing 29,937 cars from the roads for one year!

"RecycleMania provides a way for students to get involved and make a difference in their campus communities," said Keep America Beautiful Senior Vice President Brenda Pulley. "Keep America Beautiful is proud to support RecycleMania as part of our efforts to reduce waste and increase recycling."

RecycleMania is managed by Keep America Beautiful, sponsored by the Alcoa Foundation and the Coca-Cola Company, and supported by the U.S. EPA's WasteWise program and the College & University Recycling Coalition. Learn more about RecycleMania at www.recyclemaniacs.org.

Bags with a history

During college at Northeastern University in Boston, Massachusetts, Alice Saunders majored in History, focusing her studies on World War II and Vietnam. She spent her summers working on an organic farm and always thought she would become a farmer, as that is one of her biggest passions. Alice's winters were spent sifting through old textiles at flea markets, barn sales, and antique stores throughout New England and sewing them together to make something new.

In 2007, Saunders found a WWII-era duffel bag at a flea market and had an insight. In Jay Carroll's video for Levi's Makers Goods, Alice says, "My love for military history and those old fabrics, it was like, 'Oh, wow, I can put all of those in one and make a bag." That became her first Forestbound bag, which sold from her Etsy shop in February of 2008. Since then, Forestbound bags have been featured by name brands such as Levi's, Anthropologie, Urban Outfitters, and Patagonia.

Even as Forestbound has continued to grow, Alice makes every bag by hand with the help of her friend Jill. Forestbound bags are mainly made with textiles from the 1920s through the 1960s, especially featuring military pieces like duffel bags, tents, and hammocks. In Jon Walley's video series *American Hand*, Alice states that the textiles she finds and repurposes "encapsulate the history of those events and that time period in such a personal way because it tells a story of that soldier." Finding the material and giving history a chance to tell its story and live again is of great importance

of great importance to this former History major.

Forestbound has grown into a company known for its durable, handmade utilitarian bags, but Alice Saunders hasn't forgotten why she began making the bags in the first place. Every bag has its own story made from its own unique materials, just like every soldier has his or her own story. Alice Saunders has found a way to use her passion and talent to repurpose old materials and share a different story of history with every one of her customers.

Learn more about Forestbound at www.forestbound.



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How times have changed

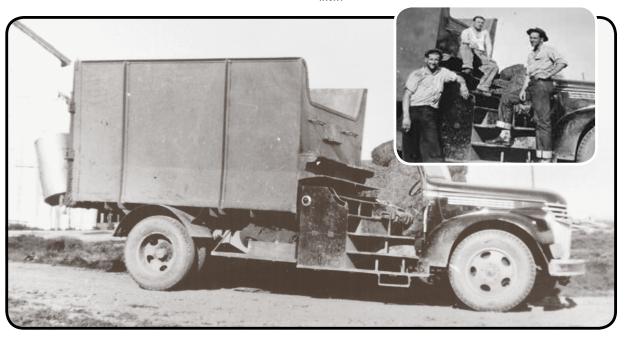
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in 1997. We are currently designing Cell 3A, with plans to build this summer. These lined cells will hold the City's garbage for the next 40-plus years. A cell starts with a big hole dug out of the earth that is outfitted with a liner to prevent any garbage from coming into contact with the ground around it. The liner system (from bottom to top) consists of a groundwater collection system, a 2-foot low-permeability clay layer, an 80-mil* high-density polyethylene plastic liner, an 8-ounce geotextile fabric, a leachate collection and removal system, filter fabric, and a final 2 feet of soil to protect the liner system. After a cell is filled to the top with garbage, a final cover is installed to "close" the cell. Then, after final closure, and for the next 30 years of "post-closure," the City must maintain the cover,

as well as the leachate and methane gas collection systems.

Today, the facility on Dimeo Lane diverts material from the landfill to be reused or recycled. Paper, cardboard, cans, glass, plastic containers, used motor oil, tires, batteries, appliances and scrap metal are all recycled. The *GreenCyclel* program collects yard waste and grinds it into mulch and compost. Household hazardous waste and electronic waste are collected and sent off for safe disposal or recycling. Construction and demolition debris is separated and reused. Combined, these efforts enabled the City to meet the State mandate to divert 50% of its landfill tonnage by the year 2000. These efforts earned the facility its current name, the **Resource Recovery Facility**. We have come a long way from the old canyon dump!

* A "mil" is a unit of thickness equal to one-thousandth of an inch.



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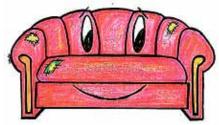
More than 360 million pounds of carpet are buried in California landfills every year. California passed a Carpet Stewardship law in 2010 to support carpet recycling. Now, thanks to the support of the Carpet America Recovery Effort (CARE), you can recycle carpet and area rugs at a discounted rate at the Resource Recovery Facility in Santa Cruz. The carpet must be separated from padding, clear of tack strips, nails and other debris, then rolled in manageable lengths. For guidelines: www.cityofsantacruz.com/reducewaste

Recycling carpet saves natural resources, conserves landfill space and can save you money. Recycling allows a product to become a new resource at the end of its useful life. Recycled carpet fiber goes into the production of new carpet, padding, erosion control products and construction materials.

Mark your calendar for Bulky Item Pickup Day

Big, broken items are difficult to get rid of. If you have an old refrigerator, washing machine, couch or TV that no longer works, the City of Santa Cruz will pick up the large,

unwanted items from the curb in front of your house! Appliance and Bulky Item Pickup Day is Saturday, June 27. To receive this service, you must call Customer Service at 420-5220 by 5 p.m. on Thursday, June 25. Pickup is free, but there is a recycling fee for certain items. You may use your FREE service tags for curbside appliance pickup. You will need to use one tag for each refrigerator, air conditioner, freezer, or other appliance and one tag for each mattress or box springs.



Garage Sale Weekend Is Moving!



The City-wide garage sale weekend is moving from October to May. This year, garage sale weekend is scheduled for May 30th and 31st. Whether you are a UCSC student moving on or a resident doing a bit of spring cleaning, this is the sale for you. The City sponsors garage sale weekend to promote reuse in our community. Register your sale at www. cityofsantacruz.com/garagesales to be added to the garage sale treasure map.

Battery recycling just got easier

Now there are more locations where you can safely dispose of batteries in Santa Cruz. Through a new take-back program operated by Call2Recycle, a battery stewardship organization, there are locations throughout the City and County of Santa Cruz where you can drop off your household batteries for recycling. The program is funded by battery manufacturers and provided at no cost to the participating retailers, libraries or local government. The program accepts all household batteries: AA, AAA, C, D, 9-volt, button cell, alkaline, lithium, rechargeable, phone, hearing aid, watch, and small tool-any type of small, dry-cell battery. Please place batteries in the small plastic bags that are provided at the collection sites to assure safe shipping. Call2Recycle will recycle batteries to the highest standards of resource conservation and environmental protection. For a complete list of drop-off locations: www.cityofsantacruz.com/batteries





Some things really are trash

Most people want to do the right thing and recycle, but some things really do belong in the garbage. In the world of recycling, contamination is a dirty word. Contamination happens when garbage gets mixed in with the recycling. If one really contaminated recycling cart gets picked up, it can contaminate an entire truckload of recyclables. Contaminated loads that cannot be sorted have to be landfilled.

In your home, contamination tends to occur in two places—the kitchen and the bathroom. Food scraps and food contaminated paper and packaging belong in the garbage. We want the bottles, cans and containers but not the food that was in them. Paper towels, milk cartons, chip bags and soy milk containers all go in the garbage. Your bathroom waste basket should also be emptied in the garbage. Tissues, cotton swabs, feminine hygiene products, toothpaste tubes, floss, diapers and wipes are all garbage. The only bathroom items for the recycle bin are empty toilet paper rolls and empty plastic shampoo bottles.

Please stop and think before you throw. With your help, Santa Cruz can have a terrific recycling program.

We want your suggestions, questions and comments!



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The Santa Cruz Public Works Department provides the City of Santa Cruz with a variety of services including engineering design, traffic engineering and maintenance, storm water management, street maintenance, resource recovery management, wastewater management, flood control and parking control. The Public Works Department is committed to bringing the Santa Cruz community the highest possible quality of life.

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