



# Perspectives

W M P U B L I C S E C T O R S E R V I C E S



*Welcome to PERSPECTIVES, an email-newsletter designed to give you a window into what is going on here at El Sobrante Landfill. Topics include waste management issues, community involvement, and environmental protection and legislation. We hope you enjoy it.*

**EL SOBRANTE LANDFILL**

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## ***New Developments at El Sobrante Landfill and Wildlife Habitat***

Welcome to El Sobrante Landfill's electronic newsletter. We understand that you are interested in news about the landfill and the disposal issues affecting our community. We hope you enjoy reading this update about our people and our operations.

Although a lot of trash ends up in our landfill, in truth more of our property is devoted to habitat development for Riverside County's native plant and animal species than for waste. We thought you would be interested in hearing something about the management of the natural species that call our property home. Most people probably aren't aware that we have numerous biologists working with us year-round to protect and promote our native species, and to keep them safe from both natural trespassers, like the Brown-headed Cowbird, and unnatural trespassers, including dirt bikers.

Riverside County has seen remarkable growth, which is of course impacting all of our lives and the infrastructure that supports County services. Dr. John Husing shares his thoughts with us on where this will all end. Are we becoming another Orange County, or will we be able to protect the gorgeous western vistas that give Riverside County its beauty?

At the landfill, our work crew is creating a new waste cell. Unlike in previous generations, we don't just dig a hole and dump the trash! The cells are high-tech, highly regulated, and designed for minimal long-term environmental impact. In fact, once closed our landfill cells are indistinguishable from the natural habitat that surrounds them. We would be happy to give you a tour of the cell under construction and the rest of the landfill to show you the environmental protections in place. Simply drop me a note at [ddefrates@wm.com](mailto:ddefrates@wm.com) and we will arrange to take you out on a tour.

Finally, there are some things that we never want to see in a landfill. One of them is the United States flag. Here, we offer some tips on proper flag disposal.

Sincerely,

Damon De Frates  
District Manager  
El Sobrante Landfill

## Not Your Father's Dump



Way back when, garbage was taken to the dump at the edge of town. It was far enough from homes that nobody cared much about its ecology, and it seemed like it would last forever. We certainly have learned our lessons since then. The only thing that El Sobrante Landfill has in common with those old dumps is that it takes your trash.

To begin with, the landfill is not simply a large hole. It is a series of carefully constructed cells that function to handle your waste and reduce environmental and health impacts. Cells are designed to limit their exposure and only one cell is constructed at a time for trash. Filled cells are landscaped with native Riversidian Sage vegetation which restores the land to a natural appearance. While some filled landfills become parks, golf courses, or even soccer fields, El Sobrante Landfill is being restored to provide natural habitat for the area's native species and will be deeded to the California Department of Fish and Game for permanent conservation at the end of landfill activities in the future.

El Sobrante Landfill is currently preparing its phase 9A cell for use, while 24 acres on the western side of the existing landfill are undergoing the closure and restoration process. The site of the new cell is being prepared with multiple liner and protective layers. At the bottom of the layering system, one foot of clay is compacted to reduce permeability. This is covered with a synthetic Geomembrane HDPE liner, equivalent to a two-foot layer of compacted clay. This is the final barrier (of many) to prevent leachate, the liquid byproduct of the trash, from entering the eco-system. Above this is a geosynthetic clay liner.

This serves as the base for another Geomembrane HDPE liner. Above these layers in the liner system is a system of perforated pipes layered in a 12-inch bed of gravel, known as the leachate collection system. Leachate is the contaminated liquid that filters through the trash picking up the organic and other contaminants that reside in the trash that we throw away. The leachate collection layer transports the leachate out to pumps that remove it for treatment and disposal. Above the leachate collection layer is the filter geotextile, a felt-like fabric that filters solids out of the leachate to prevent the pipe and gravel system from clogging. Above the geotextile on top of the leachate collection layer is two feet of soil, known as the "operations layer." The operations layer is in place to protect the underlying filters and liner system from possible damage when trash is first moved into the cell. Trash is placed directly on this layer, but the first four to eight feet of trash are carefully monitored to minimize the potential for bulky or sharp objects to be pushed through the operations layer and damage the Geomembrane liners below.

The trash that is disposed of in the cell will be compacted in layers within a confined area to reduce the overall volume of the waste. The waste is then spread and compacted in 2-foot thick layers using large bulldozers and landfill compactors, which weigh more than 120,000 pounds each. These machines run over the waste a minimum of three times before the next 2-foot layer is placed. By doing this, we can place up to 1,600 pounds of trash into one-cubic yard of space. This is equivalent to filling a typical minivan with more than 8,500 pounds of garbage!

We are very proud of our state-of-the-art landfill system, and love to show it off. If you would like a tour, please contact us. We would be happy to show you what the future of the landfill looks like in Riverside County!

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## *At Home with Diana Ortiz at El Sobrante's Habitat Preserve*



Field biologist Diana Ortiz knows all about Waste Management's dedication to resource management and environmental protection. As part of an award-winning team of biologists from Recon Environmental, she is responsible for habitat management and reporting at El Sobrante's permanent habitat preserve.

Her meticulous efforts help El Sobrante win ongoing rigorous certification by the Wildlife Habitat Council. Long days at the preserve for Diana include weaving around rattlesnakes, stinging nettles and mountain lions—sometimes at night with just a helmet and flashlight in hand.

Before any new construction begins at the landfill, Diana works closely with Waste Management staff to coordinate pre-clearance surveys for sensitive species and other wildlife and plants. When barn owls took up roosting in hollow concrete pipes, she worked with crews to stop construction in the area and monitor the nests to give the fledglings time to mature and move on. As other sections of the landfill close, Diana also works with crews to restore these areas through re-vegetation and by introducing wildlife.

Diana's other responsibilities include an annual population survey of the Quino Checkspot Butterfly (a Federally endangered specie), habitat enhancement for the Federally endangered Stephens' Kangaroo Rat, and surveys of rare plants on the preserve. She enjoys the distinct seasons at El Sobrante. Summer and fall are usually hot and dry, while her favorite time of year is late winter and early spring. In rainy years, lush grass and wildflowers blanket the hills in emerald green, brilliant oranges and purples. Diana notes that this springtime

spectacle is unique to Riverside County. "I'm really lucky," she says. "People in California usually have to go back east to see seasons, but I get to experience them right here at El Sobrante."

Despite the natural beauty, the habitat faces challenges, including trespassers and invasive bird species. Off-road vehicle and motorcycle riders often sneak past the enclosures and rip up the ground, leaving large bare patches in their wake. Their joy rides have especially threatened the restoration site for the Many-stemmed Dudleya, a native plant with yellow starburst flowers. To keep such vehicles at bay, the habitat management team has tried blocking off strategic locations with boulders and large cactuses. They are also currently working with a security company for routine patrols of the area, and coordinating a team for weekend patrols with help from local authorities.

The Brown-headed Cowbird is another trespasser that has proven sneaky. The female birds of this parasitic species can each deposit as many as 40 eggs per year in nests that belong to songbirds, which are unable to distinguish between the imposter eggs and their own. Once the Cowbird hatches, it shoves its step-siblings out of the way, and tires out its adopted parents with a voracious appetite and relatively hefty body weight. Because songbirds can lose an entire nesting season in this way, Diana continues to work with a trapping specialist to capture and remove the Cowbird from the preserve.

Diana enjoys taking part in the landfill's community outreach efforts, which include educating the public about the preserve and leading three-day outdoor classrooms for middle and high school students. She brings out her microscope, books, butterfly nets and other gear to open up a world that students may have never considered before. "All you need to do this type of work are ears, eyes, nose, and heart," Diana tells students. For more information, or a tour of the Habitat, please contact us.

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## *Interview with John Husing about Growth in Riverside County*



When El Sobrante Landfill first opened in 1986, it was in the middle of nowhere. While it is still surrounded by open fields and hills, it is now a ten minute drive to Starbucks, and to the recently opened Promenade Shops at Dos Lagos. In fact, the area around the landfill has seen a record-setting housing, job and population boom. How did we get here and where are we going? Are our open spaces going to fill in until we look like Orange County?

According to John Husing, the influential local economist (recently selected by the Los Angeles Times as one of the 100 most influential people in the Los Angeles area) we are at the tail end of a period of phenomenal growth.

The accelerated population and business growth of the region is following the traditional pattern of growth in San Bernardino in the 1960s, the San Fernando Valley in the 1970s, and Orange County in the 1970s and 1980s.

Geography was at the root of the growth. As a lack of affordable housing in the “coastal counties” (Los Angeles, Orange and

Ventura) pushed residents eastward, the Corona area’s location as the closest Riverside area to Orange County made it the first town in the Inland Empire to be part of the outward migration and growth from Orange County. From 2000-2005, Corona saw the sixth largest population growth rate among the Inland Empire’s 48 cities. The area added nearly 24,000 residents to reach a population size of nearly 150,000 residents. Jobs followed people and by 2004, the area had gained over 49,000 new jobs, equaling the growth in Orange and San Diego counties in those years. The Southern California Association of Governments has forecasted that the Inland Empire will add more jobs from 2000-2020 than San Diego, Orange, Ventura and Imperial counties combined.

By now though, the area is all but filled in. There is some continued eastern expansion — for instance Santa Ana Canyon is forecasted to continue to fill in up to Lake Elsinore. However, most major residential growth in the county from here on out will be in multi-unit or mixed use developments.

And yet, we are not going to end up looking like Orange County, where developments have chased the natural beauty of the area to the county’s borders. One crucial difference is the Western Riverside County Multiple Species Habitat Conservation Plan. The plan sets aside approximately 1.26 million acres, including 500,000 acres of habitat. This hugely ambitious habitat reserve is one of the largest such areas in the United States, and this is why the hills immediately surrounding the El Sobrante are going to remain undeveloped. This is also why we work so hard to return our filled landfill cells to their natural, pristine state. The Conservation Plan protects more than endangered species—because it preserves our breathtaking mountain and desert views, it also protects property values!

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## Retiring Your Old Glory



Do you display Old Glory at home? If you are among the thousands of Americans who fly the U.S. flag, you may be wondering what to do with a flag that shows some wear and tear. Depending on the material, you can have it washed or dry-cleaned. If the flag is no longer serviceable “as a fitting emblem for display,” then the United States

Flag Code recommends that you destroy it “in a dignified way, preferably by burning.” While there are no actual guidelines on how to burn a retired flag, Veterans of Foreign Wars suggest these helpful steps.

- Fold the flag in its customary manner
- Check that you are following local/state fire codes or ordinances
- Make sure that the fire is sizeable enough to ensure the complete burning of the flag
- Place the flag on the fire, salute the flag, then recite the Pledge of Allegiance followed by a brief period of silent reflection
- After the flag is completely consumed, safely extinguish the fire and bury the ashes

Many VFW posts, as well as Boy Scout and Girl Scout troops, also conduct periodic ceremonies to retire flags. These frequently occur on Flag Day (June 14). For more information, try contacting these local posts:

*The Black Sheep Post*  
13759 Central Ave, Chino  
(909) 628-2080

*Mathias Hogue Robert Wheeler Herald Cales Memorial*  
8751 Industrial Lane, Rancho Cucamonga  
(909) 980-5220

*Arlington Post*  
10303 Arlington Ave., Riverside  
(909) 688-7170

*George A. Ingalls Memorial Post*  
4070 Jackson St., Riverside  
(951) 688-4320

*Ysmael R. Villegas Memorial Casa Blanca Post*  
7880 Casa Blanca, Riverside  
(951) 353-1071

*Corona Post*  
4151 Buchanan St., Riverside  
(909) 520-8551

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