

# 2019 – 2020 Civil Grand Jury

## GREEN WASTE DIVERSION FULFILLING ENVIRONMENTAL OBLIGATIONS

### Summary

#### What are Riverside County's Green Waste Protocols

Riverside County has both environmental and community responsibilities for its waste management practices and programs; yet the 2019-2020 Riverside County Civil Grand Jury (Civil Grand Jury) found there is an inconsistent patchwork of green waste management programs throughout all of the County's unincorporated areas. This inconsistency may have resulted in a lack of compliance with current State and County environmental regulations as well as a failure to minimize the environmental footprint of the County. There have been positive strides in the diversion of solid waste and the County is meeting some of its targets; yet there remain gaps, overlooked communities and a lack of conformity within the County's unincorporated areas in its green waste collection and deposit practices. Green waste material that is not being diverted to compost facilities, or available processing facilities, is causing an increase in the amount of waste going to County landfills. Organic and green waste breaks down in the landfills and creates methane gas, better known as greenhouse gas (GHG) that is many times more toxic to the environment than carbon dioxide<sup>1</sup>. After learning this, the Civil Grand Jury investigated further and discovered that remedies for this problem were available.

Correcting deficiencies in green waste disposal management by the County requires the exercise of options within Franchise Collection Agreements, which agreements are already in place for all of Riverside County's unincorporated areas. Additionally, it would be helpful for the County to consider creating a committee including County residents of the unincorporated areas and green waste processors to address additional missed opportunities for the proper means of handling and diverting green waste materials.

---

<sup>1</sup> <https://www.epa.gov/lmop/basic-information-about-landfill-gas>

## Background

### California and County Environmental Laws

Over the last several decades California has been on the leading edge of the country for implementation of environmental protection activities of which a focus on green waste has been a part. The California Integrated Waste Management Act of 1989 (IWMA) is the overarching State Law for waste management in California<sup>2</sup>. IWMA adopted regulations for the State to achieve specified targets for reducing organic waste in landfills. The act created the California Integrated Waste Management Plan and County-Level Integrated Waste Management Local Task Forces, which mandated compliance by each county. IWMA further required each county to establish its own task force to coordinate the development of both city and unincorporated area waste source reduction and recycling. With its enactment, IWMA also tasked every county within California to develop and maintain a program and a system for diversion of specified items from all landfills including organic green waste.

### Adoption by Riverside County

All these IWMA mandates were considered by the Riverside County Board of Supervisors and resulted in the enactment in 1992 of The Riverside County Source Reduction and Recycling Element and Household Hazardous Waste Element (The RCLaw)<sup>3</sup>. In response to IWMA, The RCLaw created a hierarchy of waste management practices for the County to promote the intent of IWMA in the following order: (1) source reduction by eliminating waste at the source before the waste is created (i.e. packaging); (2) recycling and composting (i.e. diverting organic green waste away from landfills and into processing facilities); and (3) enforcement of environmentally safe transformation of landfills by specified diversion percentages ( i.e. to lessen or eliminate greenhouse gas emissions). Annual reports for the Riverside County unincorporated areas' waste diversion for the years 2007-2018 can be reviewed on the CalRecycle website<sup>4</sup>.

### Follow-Up Laws Relating to Green Waste

Since the enactment in 1989 of the IWMA, over time California has established amendments to the IWMA, which imposed further reduction requirements on the counties. Notably in 2014, Assembly Bill (AB) 1594 was passed which increased the diversion requirement for green waste<sup>5</sup>. This

---

<sup>2</sup> <https://www.calrecycle.ca.gov>

<sup>3</sup> <https://www.rcwaste.org>

<sup>4</sup> <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator>

<sup>5</sup> <https://www.legalinfo.ca.gov/legislation/pub>

motivated the creation of the Anaerobic Digestion Facility in Riverside County discussed later in this report. 2014's AB1594 also provided that effective January 1, 2020, green waste material, which previously had been allowed to be added as a layer into landfills, could no longer be deposited into landfills and still be counted toward the County's "diversion" amount.

Later came Senate Bill (SB) 1383 in 2016<sup>6</sup>, which updated the IWMA to require compliance with The California Global Warming Solutions Act, again targeting counties for greenhouse gas emissions<sup>7</sup>. This law required the State Air Resources Board in consultation with the Department of Food and Agriculture to adopt regulations to implement a comprehensive strategy to further reduce methane emissions, of which green waste is a cause. To the extent possible, counties within the State were directed to focus on areas affected by poor air quality due to methane gas emissions, Riverside County being one. Using the 2014 level as a baseline, SB 1383 required all counties collectively to accomplish a 50% reduction in the level of disposal of all organic waste by January 1, 2020; and a 75% reduction by 2025.

### **SB 1383 Requires Continuing Improvement**

Also of note, as early as 2016 the legislature under SB 1383 found and declared within Section 1 (c) that: "It is the intent of the Legislature that the disposal reduction targets established...shall serve as a statewide average target and not as a minimum requirement for each jurisdiction"<sup>8</sup>. In many of the unincorporated large-acre lot communities, as it relates to green waste disposal, these 2016 SB 1383 diversion practices have not even begun. Further diversion increases are required by 2025, which will be even more difficult to attain without comprehensive planning.

Because these laws are in place, the Civil Grand Jury evaluated the compliance efforts as well as the availability and consistency of green waste disposal service the County currently provides across Riverside's unincorporated communities.

### **Options Available to the County**

The Civil Grand Jury learned that several options for compliant disposal of green organic waste are available to the County. Riverside County is home to the nation's only commercial green waste Anaerobic Digestion Facility of its capacity<sup>9</sup>. The Anaerobic Digestion Facility is located in Perris and its advanced technology processes green waste such as lawn clippings, tree

---

<sup>6</sup> <https://www.legalinfo.ca.gov/legislation/pub>

<sup>7</sup> [https://www.en.wikipedia.org/wiki/Global\\_Warming\\_Solutions\\_Act](https://www.en.wikipedia.org/wiki/Global_Warming_Solutions_Act)

<sup>8</sup> <https://www.legalinfo.ca.gov/legislation/pub>

<sup>9</sup> <https://www.crrwasteservices.com>

branches, and other compostable waste, that would otherwise be sent to County landfills<sup>10</sup>. That material is processed into Compressed Natural Gas (CNG), a clean, renewable energy source. The CNG is then used to power vehicles and is also fed into the local gas company distribution network. The Anaerobic Digestion Facility also operates as a composting site where green and food waste are turned into nutrient-rich soil amendment and offered back out to residents. It is the largest and most advanced commercial facility of its type in the world and accepts waste from a variety of County cities and unincorporated areas. It was developed using corporate, County and State funds. This helps the County to comply with federal, state, and local laws that were put in place during the past three decades which required local governments to reduce and divert green waste products from filling up the landfills. In addition, a green waste disposal site exists in the Chino vicinity, which also operates as a composting facility converting the collected material into products for improving drainage in clay soils<sup>11</sup>. Concurrently at the Chino facility, a slurry is produced that dramatically increases the green energy production of waste water treatment plants<sup>12</sup>. Thus, Riverside County has an opportunity to further benefit from these existing local technologies.

## **METHODOLOGY**

In creating this Report, the 2019-2020 Riverside County Civil Grand Jury carried out the following:

### **Site Visits**

- Lamb Canyon Landfill
- El Sobrante Landfill
- Perris Anaerobic Digestion Facility

### **Interviews**

- Norco City Council Member
- One Norco City Council Member
- Norco Director of Public Works
- Corresponded with Two Riverside County Board of Supervisors
- Riverside County Director of the Department of Environmental Health
- Supervising Environmental Health Department Specialist
- Lamb Canyon Landfill Public Works Government Affairs Officer

---

<sup>10</sup> [https://www.cityofperris.org/news/2015\\_stories](https://www.cityofperris.org/news/2015_stories)

<sup>11</sup> <https://www.compostsystems.com/product-page/agromin-chino-ca>

<sup>12</sup> <https://www.wm.com>

- Lamb Canyon Public Works Regional Specialist
- El Sobrante Landfill Public Works District Manager
- The Perris Anaerobic Digestion Facility Environmental Services Officer

### **Legislation Reviewed**

- Assembly Bill (AB) 1594
- Senate Bill (SB) 1383
- Riverside County Source Reduction and Recycling Element and Household Hazardous Waste Element of 1992 (RCLaw)
- California Integrated Waste Management Act of 1989 (IWMA)

### **Documents Reviewed**

- Specified Franchise Collection Agreement contracts including Exhibit H; Attachment 4 hereto
- County of Riverside community-needs Area Plan study as steered by ongoing Riverside County Vision Plan Papers discussing environmental needs
- Riverside County Franchise Area Maps to identify where green waste removal service is provided within the unincorporated areas; Attachment 2

### **Internet Resources**

- Conducted research of <https://CalRecycle.com>, California's specifically designated website for all waste management issues
- <https://bioenergyca.org> The Bioenergy Association of California established in 2013 to promote sustainable bioenergy development
- <https://www.scag.ca.gov> The Southern California Association of Governments which undertake a variety of planning and policy initiatives to encourage a more sustainable Southern California now and in the future
- <http://worldpopulationreview.com>

# INVESTIGATION

## The Civil Grand Jury's Focus

The Civil Grand Jury chose to focus on the County's green waste programs and policies. Each of the County's incorporated cities separately contract directly with waste haulers for collection of solid, recyclable, and green waste. However, the County of Riverside is tasked with its own contracting for waste collection services for all the unincorporated portions of the County. The Department of Environmental Health, with the approval of the Board of Supervisors, is the only County department that is authorized to enter into contracts with the three private waste haulers which service the 13 specific areas of unincorporated Riverside County. A map of the areas is included in this report as Attachment 1, which identifies areas and the three haulers that operate within the County of Riverside.

## What Has and Has Not Worked

The Civil Grand Jury also looked at the green waste service those same haulers have provided to the County's cities. The cities of Norco and Temecula have been proactive in implementing their green waste management programs. The Civil Grand Jury reviewed Norco's waste collection contract to determine how, when and why they were able to obtain recyclable waste, household solid waste, green waste as well as specified manure waste bins for their entire city. That helped to divert material from the landfills in compliance with IWMA, its amendments and The RCLaw. Norco did this through the combination of community input, contract negotiation and forward-thinking environmental law compliance, reflected in Chapter 6.42 of its Municipal Code<sup>13</sup>. Norco utilizes one of the three private waste haulers for its green organic waste collection and directs it to the facility in the Chino vicinity. This facility accepts organic green waste from all over the Inland Empire.

On the other hand, the City of Temecula chose to meet its diversion requirements by becoming integral in the development of the Anaerobic Digestion Facility by accepting above-competitive pricing for the city's green waste removal, thereby in part underwriting the building of the Anaerobic Digestion Facility. Currently two thirds of all the cities within Riverside County utilize the Anaerobic Digestion Facility to meet their green waste disposal needs, while others, like Norco have found an alternative location and method to deal with its environmental compliance requirements. However, the Civil Grand Jury determined that many unincorporated communities have been overlooked in terms of available green waste disposal; Attachment 2 is a series of photographs of household waste containers in those overlooked unincorporated areas that are filled with green waste. The failure to address

---

<sup>13</sup> <https://www.codepublishing.com/CA/norco>

all of the County's green waste needs directly impacts the environmental quality and cleanliness for all County residents.

## **Our Demographics**

Over the past 10 years, Riverside County's population has been growing at a rate of over 30,000 per year. Presently there are 385,953 residents living in the unincorporated areas<sup>14</sup>. Given the demographics of the County, many residents have chosen to live within communities enjoying large acreage lots, allowing a corresponding growth in amounts of tree, hedge, foliage and grass trimmings as well as livestock by-products. These properties also require large quantities of brush removal for fire protection, which generates even more green waste material. Yet green waste removal service has not been provided to all feasible unincorporated areas.

## **The Need to Exercise Available Options**

Areas of unincorporated communities have created, presented to the Board of Supervisors and published their own community-needs Area Plans. These Area Plans are meant to identify a unified direction for each of the communities, and topics such as transportation, housing, conservation and waste management needs are contained in each. Waste collection in cities is determined by their own individually negotiated contracts, while in the unincorporated areas of Riverside County, waste collection is divided into these 13 Franchise Areas, each of which is governed by its own identical Franchise Collection Agreement. Green waste collection is available under every one of those Franchise Collection Agreements by exercising Exhibit H under each of those agreements. Exhibit H reads in applicable part: "At any time during the term of this agreement, upon one hundred and eighty (180) days written notice from the Director [of Environmental Health Department], Franchisee [waste hauler] shall provide collection of Green Waste from Residential units throughout, or designated portions of its exclusive Franchise Area". Exhibit H appears verbatim as Attachment 3 hereto. The Department of Environmental Health is the only County agency authorized to exercise this option for the benefit of all unincorporated community areas. Currently, the Department of Environmental Health has not exercised the available provision in all Franchise Collection Agreements, notably in large acre communities needing green waste service. Therefore, green waste in the County continues to be hauled into County landfills. This accelerates filling up of County landfills, adds to the County's greenhouse gas emissions footprint and fails to fully comply with IWMA and the RCLaw that requires diversion and source reduction.

---

<sup>14</sup> <http://worldpopulationreview.com>



## **Which Franchise Areas Have Green Waster Service and Which Do Not**

An investigation led the Civil Grand Jury to find that Gavilan Hills, older Mead Valley, and Good Hope do not have green waste service, while nearby Woodcrest does. These are comparable large acre lot communities allowing multiple kinds and numbers of livestock. Additionally, the unincorporated areas around Morongo Casino, Gilman Springs and up along the Riverside County section of the Highway 71 corridor do not have green waste residential service, nor does the area northeast of Moreno Valley. Yet portions of the unincorporated Wine Country do. Attachment 2 page 5 reflects an area where green waste service is being provided. Given the inconsistencies of managing the Franchise Collection Agreements by failing to exercise Exhibit H, there may be other unincorporated areas the Civil Grand Jury was not able to identify.

The Franchise Collection Agreements allow the hauler the option to provide or not provide green waste bins in what it may determine to be hard to service areas. However, such areas identified in this report cannot be justified as hard to service because regular trash collection is currently being provided; and in its investigation the Civil Grand Jury determined the same type of collection truck, all side loaders for all residential service, are used for regular trash and green waste<sup>15</sup>. If the Department of Environmental Health exercised Exhibit H in the overlooked unincorporated areas, and insisted on its implementation, Riverside County would be closer to meeting its legally mandated environmental requirements.

## **How an Inconsistent Definition of Green Waste Hurts the County**

In 2016, SB 1383 also called for counties to incorporate and prioritize potentials for new and innovative technology, of which the Anaerobic Digestion Facility and the Chino facility are examples. However, this is only a part of meeting the laws' requirements. The Civil Grand Jury also found that even within certain County areas, content allowed for green waste bins was different: some allow yard trimmings and uncooked fruits and vegetables, but not horse excrement, while others do allow excrement but prohibit wood scraps and pine needles; Attachment 4 shows this discrepancy as printed on the bins themselves. Yet the RCLaw itself identifies as green waste "yard, vegetable and wood wastes, agricultural crop residue, manure and food waste". The County needs to adhere to that identification with consistency. Doing so will ensure compliance and further the intent of all of the laws discussed above. The input by a representative of all potentially impacted groups, including that of the Anaerobic Digestion Facility, to assess immediate and best available practices for the County's future environmental compliance is needed.

---

<sup>15</sup> <https://www.wm.com>





## **The Conclusion**

The Civil Grand Jury investigation determined that Riverside County's current and future environmental obligations are hindered by:

- Incomplete coverage of green waste service in the unincorporated franchise areas.
- Inconsistency in determining which green waste material is considered for diversion.
- Reluctance to invoke franchise contract provisions that would increase green waste collection in the County's unincorporated franchise areas.

# Riverside County Franchise Areas

-  SUPERVISORIAL DISTRICTS
-  DeLuz CSD

## FRANCHISE\_AREAS\_UPDATE

### FRANCHISE\_AREA

-  FRANCHISE AREA - 1A
-  FRANCHISE AREA - 1B
-  FRANCHISE AREA - 1C
-  FRANCHISE AREA - 2
-  FRANCHISE AREA - 3A
-  FRANCHISE AREA - 3B
-  FRANCHISE AREA - 3C
-  FRANCHISE AREA - 4A
-  FRANCHISE AREA - 4B
-  FRANCHISE AREA - 5
-  FRANCHISE AREA - 6
-  FRANCHISE AREA - 7
-  FRANCHISE AREA - 8
-  FRANCHISE AREA - 9
-  FRANCHISE AREA - 10
-  FRANCHISE AREA - 12
-  FRANCHISE AREA - 13
-  SCCSD

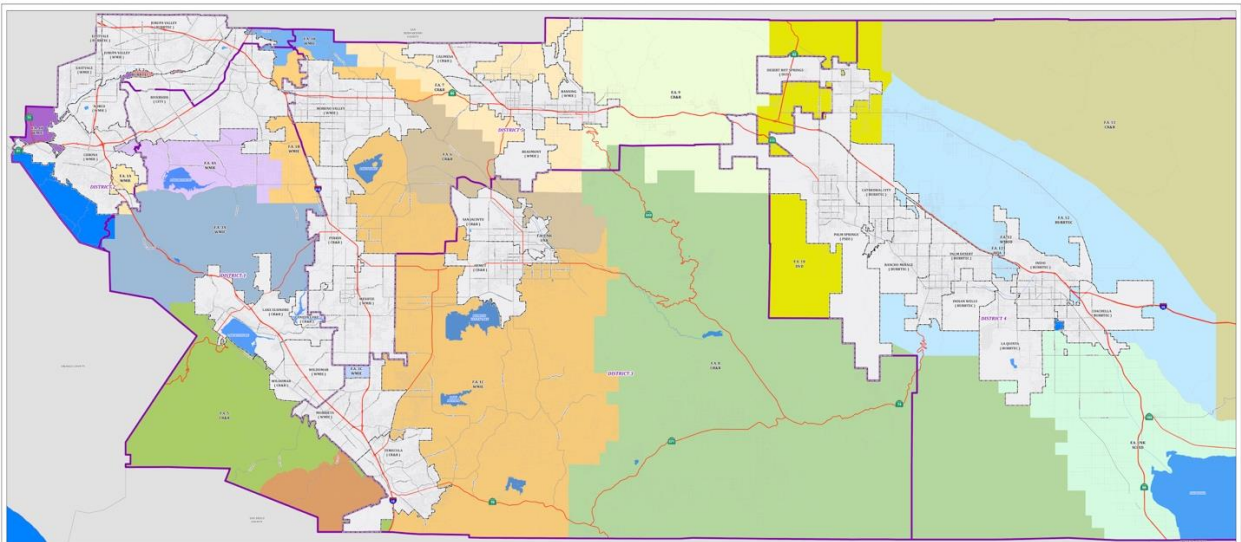


MARCH 15, 2019

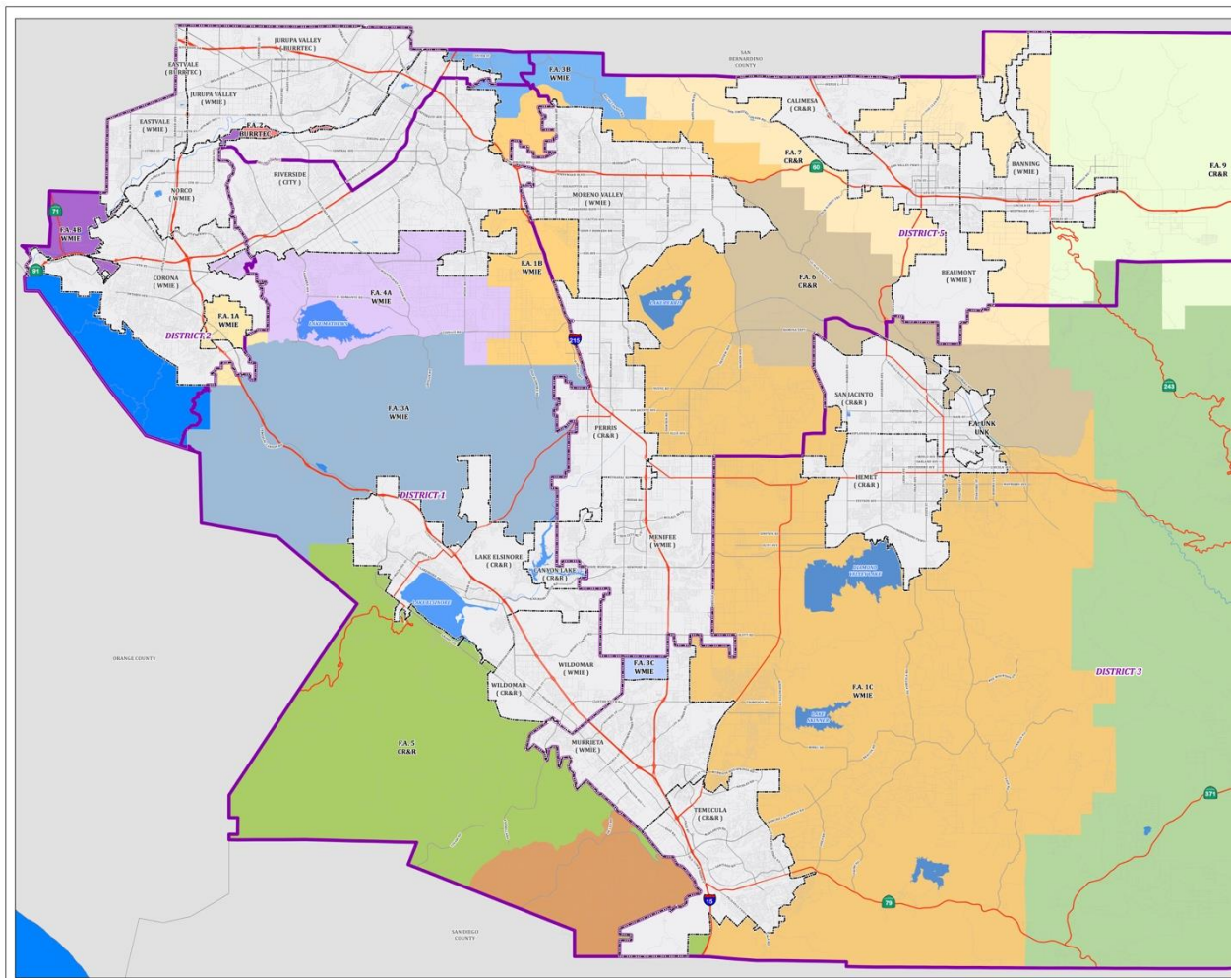


Attachment 1

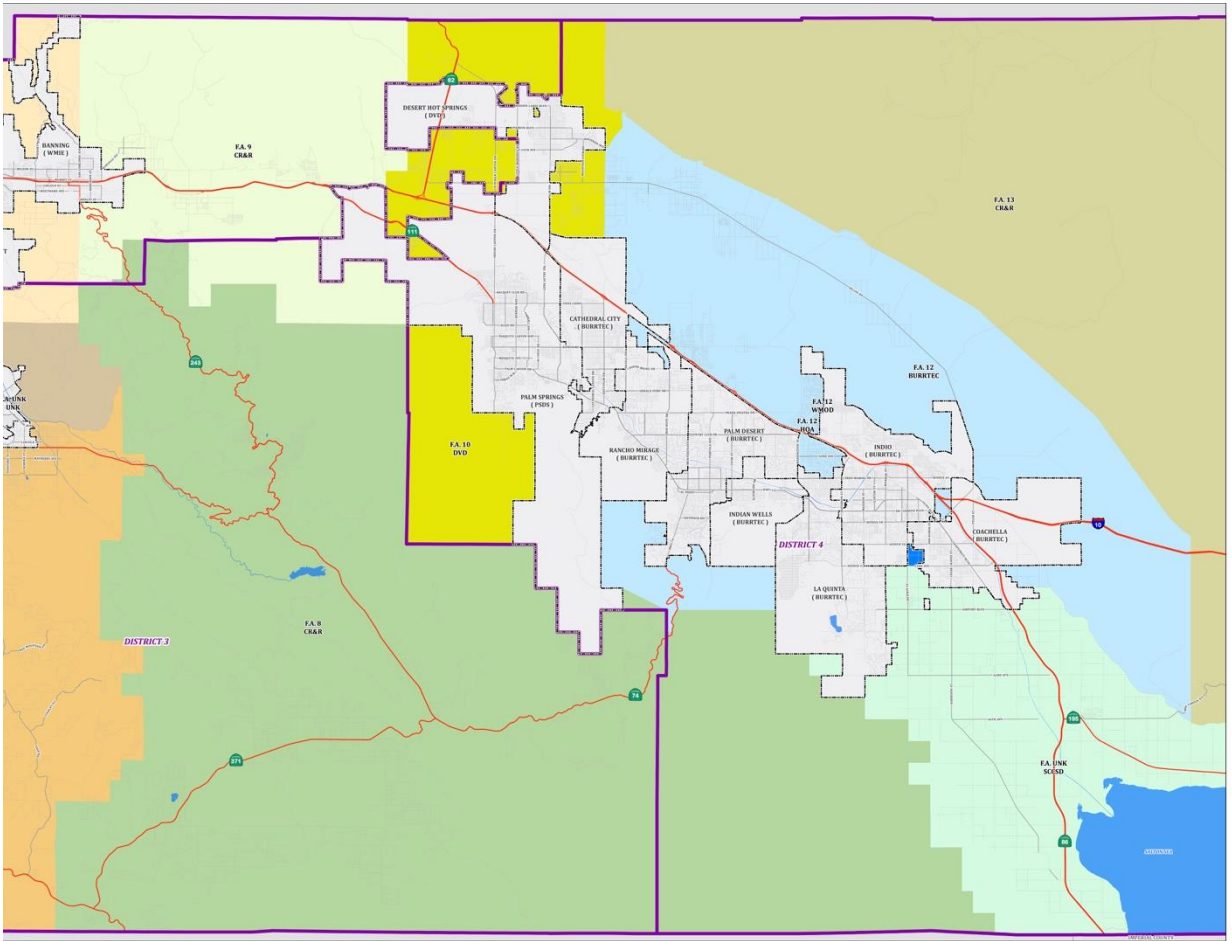
Pages 9 – 11 are part of Attachment 1 that list the waste disposal Franchise Areas in Riverside County and each area's service provider.



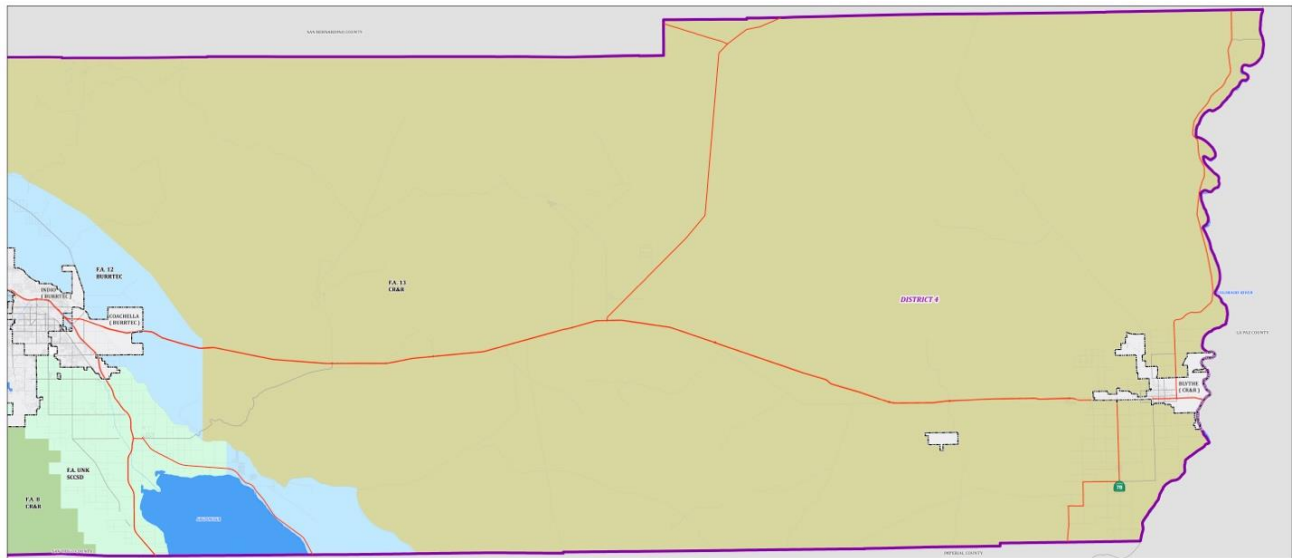
Attachment 1; Map of Waste Disposal Franchise Areas of Riverside County



Attachment 1; Eastern Expanded View of Waste Disposal Franchise Areas of Riverside County



Attachment 1; Central Expanded View of Waste Disposal Franchise Areas of Riverside County



Attachment 1; Western Expanded View of Waste Disposal Franchise Areas of Riverside County





Attachment 2; Photo taken on February 9, 2020

Green waste in six regular solid household waste trash bins from Franchise Area 3A residence. All six bins go directly to a household waste landfill and all six are filled primarily with tree and branch clippings.



Attachment 2; Photo taken on December 30, 2019

Overflowing with tree cuttings, these three solid household waste bins also Franchise Area 3A are brimming with green waste that is going into a solid household waste landfill.



Attachment 2; Photo take on January 4, 2020

Nine solid household waste bins in Franchise Area 3A, each filled with both household waste and green waste of raked leaf and tree and lawn cuttings, some of which has been placed in tied plastic bags, all going to the household waste landfill.





Attachment 2; Photo take on March 3, 2020

Franchise Area 9, green waste entirely fills garden-size plastic bag where all curbside waste goes to household waste landfill.





Attachment 2; Photo taken on April 26, 2020

Green waste bins in Franchise Area 1C, which have green waste placed in appropriate bins.

## EXHIBIT H

## DIVERSION SERVICES

1  
2  
3  
4  
5 At any time during the term of this agreement, upon one hundred and eighty (180) days  
6 written notice from the Director, Franchisee shall provide collection of Green Waste from  
7 Residential units throughout, or in designated portions of its exclusive Franchise Area.  
8 Franchisee's rates for this service shall be as established in Exhibit E as adjusted by the  
9 methodology established in exhibit F. The rates as shown in exhibit E are to be applied only  
10 to customers in the areas designated by the Director. If the Franchise has proposed green  
11 waste rates based on automated service, manual green waste collection may be utilized, at  
12 the Franchisee's discretion, for up to one year from the implementation of the source  
13 separated green waste collection program.

14 {This balance of this Exhibit to be completed by Franchisee}

Attachment 3; Exhibit H to Franchise Collection Agreements.





Attachment 4; CR&R green waste bin. Note statement horse excrement allowed.



Attachment 4; Waste Management green waste bin. Note statement animal waste disallowed.

## **FINDINGS**

1. The current patchwork of Franchise Area Agreements for green waste collection in unincorporated areas leaves several underserved rural, agricultural, ranching, and equestrian communities with no green waste disposal option, other than to send the green waste to County landfills instead of diverting it as the laws require.
2. The failure to provide green waste service to all feasible unincorporated communities impacts the County's ability to meet diversion requirements under the law.
3. The Department of Environmental Health has not exercised the option available now and historically under Exhibit H of the Franchise Collection Agreements that would provide green waste service for residents of all feasible unincorporated areas of the County where trash is currently collected.
4. There are inconsistencies in the material that is allowed to be included in green waste bins, which contributes to organic green waste identified for diversion as defined in The RCLaw, being added to our landfills.

## **RECOMMENDATIONS**

1. The Department of Environmental Health should provide the Board of Supervisors with all feasible recommendations to include the exercise of every available green waste option under Exhibit H previously unexercised under the Franchise Collection Agreement contracts. This should be completed by 3/1/2021 (Findings 1 – 3).
2. The Department of Environmental Health should standardize the labeling of the green waste bin containers throughout all of the unincorporated areas of the County to ensure the consistent collection of green waste material. This should be completed by 3/1/2021 (Findings 4).
3. The Civil Grand Jury recommends the Board of Supervisors direct the Department of Environmental Health to create a waste management committee including County unincorporated residents and green waste processors to implement comprehensive organic waste diversion and disposal programs that meet the needs of residents within all feasible unincorporated areas; and to publish an annual review detailing the progress in meeting the State and County green waste diversion and disposal legal requirements. This committee should be established by 3/1/2021 (Findings 1 – 3).

## REQUIRED RESPONSES

Pursuant to Penal Code sections 933 and 933.05, the Grand Jury requests responses as follows:

From the following elected County officials within 60 days:

- The Riverside County Board of Supervisors; Findings 1, 2, 3 and 4, and Recommendation 3.

From the following County Department within 90 days:

- The Department of Environmental Health; Findings 1, 2, 3 and 4, and Recommendation 1 and 2.

## BIBLIOGRAPHY

- [IWMA ASSEMBLY BILL 939 \(1989\)](#)
- [ASSEMBLY BILL AB 1594 \(2014\)](#)
- [SENATE BILL SB 1383 \(2016\)](#)
- [RIVERSIDE COUNTY SOURCE REDUCTION & RECYCLING ELEMENT AND HOUSEHOLD HAZARDOUS WASTE ELEMENT \(1992\)](#)

Report Issued: 07/21/2020  
Report Public: 07/24/2020  
Response Due: 10/26/2020