

Section 15

Generation of Solid Waste

This section describes how development associated with the *City of Modesto Urban Area General Plan* (UAGP) would increase the demand for solid waste collection and disposal services, and increase the potential need for additional landfill capacity.

A. ENVIRONMENTAL SETTING

The following information is provided in accordance with Section 15125 of the California Environmental Quality Act (CEQA) Guidelines. This environmental setting is the baseline for determining whether an impact included in the UAGP is significant.

1. Study Area for Direct Impacts

The study area for direct impacts related to generation of solid waste is the UAGP planning area.

2. Study Area for Cumulative Impacts

This analysis will be based on the plan or projection approach to examining cumulative effects, as provided under State CEQA Guidelines Section 15130(b)(1)(B). The pertinent plan used for this purpose is the UAGP. The study area for cumulative impacts on solid waste is all of Stanislaus County.

3. Existing Physical Conditions in the Study Area

a. Overview

In 2014, the City of Modesto had a population of approximately 207,000, and generated approximately 400,000 tons of solid waste. This number is projected to increase to a total waste generation of approximately 650,000 tons per year by 2040 (Rodriguez pers. comm.).

The City's approximately 75,300 households account for approximately 28 percent of the City's total waste generation. The remaining 72 percent of generation is attributable to commercial, industrial, agricultural, and public facility operations. The projected 2040 level of waste generation assumes that generation rates will remain the same.

b. Solid Waste Collection and Transport

Two private firms are currently engaged in collection and transport of solid wastes in Modesto. Gilton Solid Waste Management and Bertolotti Disposal provide hauling and

interim transfer stations for Modesto's waste disposal, transformation, and diversion streams. A third hauler, Bonzi Disposal, hauls industrial waste. The Gilton transfer station has a capacity of 1,200 tons per day, and Bertolotti Disposal has a permitted capacity of 1,300 tons per day. (Rodriguez pers. comm.)

c. Waste Disposal

Waste generation information was obtained from the CalRecycle website as well as through personal communication with official jurisdiction representatives. The most recent per-capita disposal rate is dated 2013.

Solid waste generated by the City is primarily disposed of at the Stanislaus Resource Recovery Facility (SRRF), the adjoining Fink Road Landfill located near Crows Landing, approximately 25 miles southwest of Modesto, and Forward Landfill, Inc., located in the City of Manteca. Various other landfills accepted approximately 5,889 tons of the City's solid waste in 2013. These other landfills include Altamont Landfill, American Avenue Disposal Site, Vasco Road Sanitary Landfill, Avenal Regional Landfill, Azusa Land Reclamation, Recology Hay Rd., Highway 59 Disposal Site, Keller Canyon Landfill, Portero Hills Landfill, Sacramento County Landfill, Bill Wright Disposal Site, Foothill Sanitary Landfill, North County Landfill and L&D Landfill (Rodriguez pers. Comm.).

In 2013, the City of Modesto disposed of approximately 60 percent (120,500 tons) of its solid waste by incineration at the SRRF, a waste-to-energy facility operated by Covanta Stanislaus Inc., for the City of Modesto and Stanislaus County (Rodriguez pers. comm.). The facility has a designated refuse capacity of 800 tons per day and an estimated closure date of 2036 (Wilhelm pers. comm.).

Approximately nine percent (18,442 tons) of the City's solid waste is disposed of at the Fink Road Landfill (CalRecycle 2013). Pursuant to its permit from the CIWMB, the Fink Road Landfill has a design capacity of approximately 10.5 million cubic yards (cy) for Class III waste and approximately 4.1 million cy for Class II waste (Kumimoto pers. comm.). As of June 2015, the landfill has approximately 2.2 million cy of remaining Class II waste capacity and 5.2 million cy remaining Class III waste capacity. Applying a 2 cy per ton conversion rate, the landfill has a capacity of approximately 2.6 million tons of Class III waste. At current disposal rates, the landfill has an estimated closure date of 2029. However, Stanislaus County is currently planning a 129-acre expansion of the landfill and a reconfiguration of the existing facility to occur prior to the estimated closure date. These improvements would extend the landfill's useful life by approximately 40 years (Kumimoto, Garcia pers. comm.).

Additionally, the City of Modesto disposes of 30 percent (60,283 tons) of its solid waste at the Forward, Inc., Landfill. (CalRecycle 2013) Operating under a permit from CalRecycle, the Forward Landfill has a site capacity of 51 million cy for solid waste disposal. As of February 2014, the landfill had approximately 20 million cy remaining available for Class III waste. A proposed expansion of the Forward Landfill would result in an additional eight (8) million cy of capacity, and extension of disposal activities until approximately 2031, although this expansion is only a proposal and has not been approved. (Funderburg pers. comm.)

AB 939 required that counties and municipalities divert at least 25 percent of their solid waste from landfills by 1995 and at least 50 percent by 2000. In 2004, the City achieved a 54

percent diversion rate, due in part to the use of programs and education aimed at promoting recycling, composting, and overall waste reduction. SB 1016 then further built upon AB 939 by implementing modified performance measures. To continue to meet this mandate, the City's plan calls for the following programs:

1. promotion of source reduction;
2. development of material recovery facilities;
3. active curbside recycling and local buy-back programs;
4. composting of organics;
5. business/industrial recycling;
6. cannery waste diversions for animal feed, land spreading, or alternative fuel production;
7. recycling in schools and recycling education;
8. wood waste diversion (wood is ground and sold as fuel);
9. diversion of inert materials such as concrete for use as road base materials; and,
10. establishment of markets for recycling/composted material. (Reed pers. comm.)

Under Assembly Bill (AB) 939, waste-to-energy facilities, such as the SRRF, are considered to be transformation facilities (as opposed to recycling facilities). Consequently, the City receives diversion credit for 10 percent of the volume of waste diverted to the SRRF (Rodriguez pers. comm.).

An estimated 10,000 to 20,000 dry tons of biosolids are generated each year at the City's wastewater treatment plant and are beneficially reused as soil amendment under Waste Discharge Requirements Order 94-030 (Rodriguez pers. comm.).

4. Existing Policies Applying to the Study Area

Below is a comprehensive list of major federal, state, and local policies, or summaries of policies, in effect that apply to the study area. This list provides the full range of applicable policies that a project within the study area would potentially need to comply with, including policies beyond the jurisdiction of the City. This list of laws, regulations, and programs also serves to describe the circumstances under which this environmental topic was analyzed in this Master Environmental Impact Report (EIR).

A discrete reference number, following the initials of the resource topic, is assigned to each policy or policy summary listed to facilitate their identification elsewhere in this Master EIR or, where appropriate, their incorporation as a mitigation measure into subsequent projects analyzed under this Master EIR (e.g., Solid Waste policies are designated SW-*X*, where *X* is the discrete number).

a. Federal Regulations

There are no applicable federal regulations.

b. State Policies

SW-1: The California Integrated Waste Management Act, AB 939 requires that counties and municipalities divert at least 25 percent of their solid waste from landfills by 1995 and at least 50 percent by 2000. Programs to reach these goals include the promotion of source reduction, development of materials-recovery facilities, curbside recycling and local buy-back programs, cannery-waste diversions for animal feed and land spreading and alternative fuel production, recycling in schools and recycling education, composting of organics, business/industrial recycling, wood waste diversion, diversion of inert materials such as concrete, and establishment of markets for recycling / composted material. Landfills operate under permits issued by CalRecycle.

c. Stanislaus County Policies

The territory outside the City limits is under Stanislaus County jurisdiction. The *Stanislaus County General Plan* has the following applicable policies.

- SW-2:** Future growth shall not exceed the capabilities / capacity of the provider of services such as sewer, water, public safety, solid waste management, road systems, schools, health care facilities, etc. (County General Plan, Land Use Element, Policy Twenty-Four)
- SW-3:** Support efforts to minimize the disposal of solid waste through source reduction, reuse, recycling, composting, and transformation activities. (County General Plan, Conservation and Open Space Element, Goal Seven)
- SW-4:** The County will protect existing solid waste management facilities, including the waste-to-energy plant, unless such projects would have no adverse impacts on those facilities and vice-versa. (County General Plan, Conservation and Open Space Element, Policy Twenty-Three)
- SW-5:** Conserve resources through promotion of waste reduction, reuse, recycling, composting, ride-share programs, and alternative energy sources such as mini-hydroelectric plants, gas and oil exploration, and transformation facilities such as waste-to-energy plants. (County General Plan, Conservation and Open Space Element, Goal 11)

d. City of Modesto Policies

The UAGP provides the following policies related to solid waste.

- SW-6:** Continue to comply with the requirements of Assembly Bill 939 which mandates the diversion of solid waste of 50% by 2000, by way of source reduction, recycling, composting, and transformation. (UAGP Policy VI.L.1)
- SW-7:** Continue to participate in the existing Household Hazardous Waste Programs, including support of the drop-off facility, continued public information, participation

in the oil and battery collection programs, and implementation and enforcement of existing and new regulations regarding electronic and universal waste legislation. (UAGP Policy VI.L.2)

- SW-8:** Continue to comply with Stanislaus County’s Hazardous Waste Management Plan. (UAGP Policy VI.L.3)
- SW-9:** Provide for the safe collection and disposal of all solid waste generated in the City of Modesto, at rates comparable to or less than elsewhere in the state, and ensure that there is access to the appropriate disposal facilities for the City’s long-term needs. Garbage service should be provided to all residences and businesses within the City of Modesto. (UAGP Policy VI.L.4)
- SW-10:** To meet the waste-disposal demands of the growing population, continue to seek alternative waste disposal methods for solid waste, including transformation, composting, and alternative energy conversion technologies. (UAGP Policy VI.L.5)
- SW-11:** In addition to the Solid Waste Disposal Policies in place for the Baseline Developed Area, as outlined above, the City should also consider implementing local land-use incentives and zoning / building code modifications to encourage source reduction, recycling, and composting and to provide adequate space for containers. Such measures to be considered include a Construction and Demolition Recycling Ordinance, an ordinance and incentive program for Green Building Projects, and compliance with mandatory recycling for commercial / industrial waste and organics recycling per AB 341 and AB 1826. (UAGP Policy VI.L.6)

5. Policies That Avoid Impacts

The following policies are in effect and have been determined to reduce, avoid, or mitigate environmental impacts within the existing City limits and within the Planned Urbanizing Area. County policies are included because they reduce or avoid cumulative impacts, as well as implement AB 939. The policy reference numbers are listed, and the full text of these policies is found above in Section A-4, *Existing Policies Applying to the Study Area*.

a. Stanislaus County Policies

The territory outside the city limits is under Stanislaus County jurisdiction and is subject to County policies, ordinances, and regulations. The *Stanislaus County General Plan* has the following applicable policies: SW-2 through SW-5.

b. City of Modesto Policies

SW-6 through SW-11, shown above.

B. CONSIDERATION AND DISCUSSION OF SIGNIFICANT IMPACTS

The following information is provided in accordance with State CEQA Guidelines Section 15126.2.

1. Thresholds of Significance

The proposed General Plan amendment Project would have a significant impact if solid waste generation exceeds the projected capacity of existing landfills and waste-reduction facilities, or if it would result in non-compliance with any federal, state, or local statutes or regulations related to solid waste.

2. Significant Direct Impacts

The project would result in a maximum population of approximately 390,000 residents in the project area and the generation of a total of approximately 650,000 tons of solid waste per year in 2040. Per 2004 CIWMB-accepted diversion rate, the City is diverting approximately 54 percent of its solid waste stream through source reduction, recycling, composting, and transformation. The City can expect to send approximately 2.5 million tons of waste to the SRRF to Covanta Stanislaus, Inc., and deposit approximately 2.5 million tons of waste into landfills by 2025 (California Integrated Waste Management Board 2006a). At the current loading rate, the Fink Road Landfill has a remaining life of 15 years, and given the expansion being planned by the County its lifespan would be extended by approximately 40 years (Grider pers. comm.). Similarly, Forward Landfill, Inc. is not expected to reach capacity for another 12 years. Because growth and development consistent with the proposed General Plan amendment project would not exceed the combined available capacities of these landfills through 2040, any related impact(s) would be less than significant.

Provision of solid waste disposal services that would be associated with growth and development consistent with the proposed General Plan amendment would not violate any existing federal, state or local statute or regulation related to solid waste. The proposed Project's compliance with all applicable federal, state and local statutes and regulations would avoid any related impacts.

3. Significant Cumulative Impacts

CEQA and the State CEQA Guidelines require the disclosure of significant cumulative environmental effects, whether the project will make a cumulatively considerable contribution to any such effects, and, if so, mitigation measures intended to reduce the project's contribution (State CEQA Guidelines Section 15130). A cumulative effect is one that results from past, present, and probable future projects. A project that has a less than significant direct effect on the environment may nonetheless make a considerable contribution to a cumulative effect.

A cumulative impact analysis first identifies whether there exists a cumulatively significant effect in the given resource area. If so, it determines whether the project will make a considerable contribution to that effect. Where a cumulative impact is severe, even a small contribution may be considerable. Where a project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact, its contribution will be rendered less than considerable. (State CEQA Guidelines Section 15130(a))

The total projected population of Stanislaus County (including the City of Modesto, with a potential population projection of 390,000 in 2040) will be approximately 699,000 in 2040 (California Department of Finance, 2017). The addition of people and structures associated with this population will generate approximately 1.3 million tons of solid waste annually.

All cities within Stanislaus County jurisdiction, excluding the City of Modesto, have formed the Stanislaus County Regional Solid Waste Planning Agency, which adheres to a diversion rate of 50 percent or higher for solid waste per year. In 2004, the Regional Agency achieved a 64 percent diversion rate for solid waste, of which approximately 43 percent was sent to Covanta Stanislaus, Inc. to be incinerated (Kumimoto pers. comm.). The County currently sends a majority of its solid waste to the Fink Road Landfill. Out-of-county landfills, such as Forward Landfill, Inc. and the Highway 59 Disposal Site, are used as well (California Integrated Waste Management Board). In 2004, Stanislaus County had a population of 502,123 and generated approximately 1.1 million tons of solid waste (California Department of Finance 2007d, California Integrated Waste Management Board 2006b). Using the projected population in 2040 to represent each year as well as a conservative diversion rate of 50 percent, the County will be disposing of a total of approximately 13 million tons of solid waste to landfills by 2040.

Because both the City and the Stanislaus County Regional Solid Waste Planning Agency use the SRRF for the disposal of garbage, which is not source reduced, recycled, or composted (approximately 43 percent of total solid waste), they both expect to meet a diversion rate of at least 50 percent for solid waste over the next 20 years. Based on these figures, the maximum amount of garbage that will require landfill disposal will be approximately 13 million tons. With the proposed 129-acre expansion of the Fink Road Landfill currently underway, and the remaining 24 million tons of available solid waste disposal at Forward landfill, Inc., Stanislaus County can expect to meet its disposal rates over the next 20 years (California Integrated Waste Management Board 2007c). Thus, there would be no significant cumulative impact to solid waste facilities.

Provision of solid waste disposal services that would be associated with growth and development consistent with the proposed General Plan amendment would not violate any existing federal, state or local statute or regulation related to solid waste. The proposed Project's compliance with all applicable federal, state and local statutes and regulations would avoid any related impacts.

C. POLICIES ADOPTED TO MINIMIZE SIGNIFICANT EFFECTS

The following information is provided in accordance with State CEQA Guidelines Section 15126.4.

1. Policies That Reduce Direct Impacts

The proposed UAGP Policies (SW-6 through SW-11) listed in Section A-4.d above, would avoid impacts by reducing the quantity of solid waste generated so that state diversion objectives continue to be met and solid waste does not exceed landfill capacity during the planning period.

2. Policies That Reduce Cumulative Impacts

The adopted policies of the County General Plan, listed in Section A-4.c. above, would reduce (but not eliminate) cumulative impacts by allowing for future development of a landfill site. The actions of the Regional Solid Waste Planning Agency would avoid any cumulative impact(s) relative to solid waste by providing additional future capacity beyond 2040.

D. MONITORING POLICIES THAT REDUCE IMPACTS

The following information is provided in accordance with PRC Section 211081.6. The policies identified in this Master EIR have been drawn from the proposed UAGP amendment, and they are implemented by that plan. City staff provides the City Council with an annual report on UAGP implementation; therefore, no separate mitigation monitoring program is required for the UAGP Master EIR.