

## 4.12.4 PUBLIC UTILITIES - SOLID WASTE

### 4.12.4.1 INTRODUCTION

This section evaluates the potential effects related to solid waste utilities related to development of the Amoruso Ranch Specific Plan (ARSP). In particular, this section analyzes the impacts to the Western Regional Sanitary Landfill (WRSL), which would serve the project site at buildout.

This solid waste analysis is based upon information within the following documents:

- *Creekview Specific Plan Final EIR*, April 2011 (City of Roseville, 2011a)
- *Draft ARSP*, February 2016 (City of Roseville, 2016); included as **Appendix A**

All of the above-listed documents are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at:

**City of Roseville Permit Center**  
311 Vernon Street  
Roseville, CA 95678

In response to the Notice of Preparation (NOP; **Appendix B**), the City of Roseville (the City) received comments from the Placer County Community Development Resource Agency (PCCDRA) requesting that the Draft Environmental Impact Report (EIR) discuss the amount of solid waste anticipated to be generated during construction as well as after project completion at build-out, with all homes, schools, and commercial buildings occupied. The PCCDRA also requested that the Draft EIR provide more detail about the plans and proposed operation of the recycling area<sup>1</sup>. Refer to **Appendix C** of this EIR to view the comments received in response to the NOP.

### 4.12.4.2 ENVIRONMENTAL SETTING

#### Solid Waste Collection and Disposal

Solid waste generated in the City of Roseville is collected and hauled by the City and delivered to the Western Placer Waste Management Authority (WPWMA) for processing and disposal. The WPWMA is a Joint Powers Authority (JPA) comprised of the cities of Roseville, Rocklin, and Lincoln; and Placer County. The WPWMA owns and operates the Materials Recovery Facility (MRF) and the WRSL, located on 320 acres at the southwest corner of Athens Avenue and Fiddymont Road in Placer County (see **Figure 2-1**), approximately 1.8 miles east of the ARSP Area. Nortech Waste, LLC, a private firm, operates the MRF and Nortech Landfill, Inc., a private firm, operates the WRSL under separate contracts to the WPWMA.

The City entered into a Flow Control Agreement with the WPWMA in 2005, which requires all waste generated within the city limits to be delivered to the MRF for sorting and disposal at the WRSL. Temporary construction and demolition (C&D) debris must go through the MRF. Any materials that are

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<sup>1</sup> As described in **Section 2.7.4**, the solid waste recycling area is planned within the ARSP on parcel AR-55.

collected through recycling programs that are established by the City, such as the collection of green waste, cardboard, newspaper, and other recyclables does not have to be delivered to the MRF. The City of Roseville retains the rights to market any collected recyclables. Collection of solid waste within the City is operated and managed by the City's Environmental Utilities Department. Residences and businesses pay fees for solid waste collection based on rates set in Section 9.12.100 of the Roseville Municipal Code. Permitted Non-Exclusive Franchise haulers may handle temporary refuse collection and disposal for C&D debris.

The majority of solid waste collected from within the service area is first delivered to the MRF for processing. The MRF, which opened in 1995, receives, separates, processes, and markets recyclable materials removed from delivered solid waste. The MRF has a mixed waste processing capacity of 2,000 tons per day, a permitted processing capacity of 1,750 tons per day, and a permitted vehicle capacity of 1,014 vehicles per day (MCG, 2016). In addition to processing mixed solid waste, the MRF includes a green waste compost facility. The compost portion of the facility has an annual processing capacity of 75,000 cubic yards. Based on an average density of 0.8 tons per cubic yard, this equates to an annual processing capacity of approximately 60,000 tons. Recyclables captured at the MRF include:

- Wood/green waste processed for compost & woodchips;
- Metal - ferrous/metallic items;
- Plastic - many grades;
- Glass - all colors; and
- Paper - newspaper, junk mail, phonebooks, magazines, scrap paper, paperboard and cardboard.

#### **Summary of 2012 Operations**

In calendar year 2012, the MRF processed an average of 564 vehicles per day and received an average of 1,063 tons of waste per weekday. Of this amount, 857 tons consisted of mixed solid waste, 206 tons consisted of source separated green waste; the remainder consisted of wood waste and other source separate recyclables. During the same time period, the WPWMA received and processed a total of 58,250 tons of source separated green waste at its composting facility.

The WRSL is a Class II/III municipal solid waste (non-hazardous) landfill. The WRSL is permitted to accept 1,900 tons of solid waste per day and 624 vehicles per day. In calendar year 2008, the WRSL received an average of 932 tons and 130 vehicles per weekday. The WRSL has a total capacity of 36,350,000 cubic yards. As of July 1, 2013, a total of 10,672,400 cubic yards have been disposed at the WRSL, leaving a remaining capacity of 25,677,600 cubic yards. Under current projected development conditions, including buildout of General Plan and approved development plans, the WRSL has a projected lifespan extending through 2058 (MCG, 2016).

#### **Solid Waste Generation**

To estimate the amount of waste expected on an annual basis to be processed at the MRF and disposed of at the WRSL, the City uses waste generation, disposal, and diversion rates expressed as pounds per person per day. Solid waste generation, disposal, and MRF recycling rates were calculated based on actual 2012 data obtained from City of Roseville records, data maintained by the WPWMA, and data

maintained by the California Department of Resources Recycling and Recovery (CalRecycle). The generation rate includes C&D, green waste, and other municipal solid waste. The generation rates used for this analysis are based on 2012 data are considered appropriate, as they are estimated to represent a conservative level of disposal on an annual basis, as described later in this section. For purposes of this analysis, it is assumed that all waste would be processed and disposed of at WPWMA facilities as required by the City’s Flow Control Agreement.

**Table 4.12.4-1** summarizes the 2012 data used within this analysis. The data is categorized by the various waste streams as landfill waste, direct recyclables, or MRF recyclables. As shown in **Table 4.12.4-1**, the City generated approximately 145,790 tons of waste during 2012 (399 tons per day, rounded). This includes waste processed at the WPWMA MRF, Alternative Daily Cover (ADC), waste diverted through recycling purposes (direct and MRF recycling), C&D wastes, and green waste/wood disposal. Recycling is accomplished either through direct recycling opportunities or through the processing and recovery of recyclables at WPWMA facilities (including source-separated recycling of wood waste, green waste, and C&D; landfill recovery; and recyclables recovered from the MRF lines). The City offers various direct recycling opportunities, including cardboard, newspaper, materials eligible for California redemption value (CRV), battery drop-off locations, and e-waste pickup programs. These recyclable materials are not processed through the MRF.

As summarized in **Table 4.12.4-1** below, the City disposed of 145,790 tons of solid waste between the MRF, Recycling Programs, and through landfill burial in 2012. The WRSL used 12,275 tons of ADC for operational purposes. Total waste diverted away from WRSL disposal was 59,604 tons comprised of 8,388 tons of direct recycling opportunities, 30,412 tons of MRF recyclable diversions and 20,804 tons of greenwaste / compost / C&D (MCG, 2016).

**TABLE 4.12.4-1**  
2012 SOLID WASTE GENERATION DETAIL (TONS)

Waste Description	WRSL	Direct Recycling	MRF Recycling	GW Composting C&D
Cardboard	-	2,701	-	-
Newspaper	-	560	-	-
CRV	-	42	-	-
Residential Buy-back	-	45	-	-
MRF	-	-	18,137	-
Landfill	86,186	-	-	-
Alternative Daily Cover	-	-	12,275	-
Greenwaste/Compost/C&D	-	-	-	20,804
Other Programs	-	5,040	-	-
<b>Waste Generation Total (Tons)</b>	<b>145,790 (rounded)</b>	<b>8,388</b>	<b>30,412</b>	<b>20,804</b>
Source: MCG, 2016.				

In January 2012, the City’s residential population was estimated to be 122,060 persons (MCG, 2016). Based on the data in **Table 4.12.4-1**, the City calculated various waste generation, disposal, and diversion rates. These are documented in **Table 4.12.4-2**.

**TABLE 4.12.4-2**  
SOLID WASTE GENERATION, DISPOSAL, AND DIVERSION RATES

Category	Rate
Generation Rate	6.5 lbs/person/day
Disposal Rate (WRSL only)	3.9 lbs/person/day <sup>1</sup>
MRF Recycling Diversion Rates	1.4 lbs/person day
Notes: 1 – It should be noted that CalRecycle reports a disposal rate of 4.1 lbs/person/day; however, this disposal rate includes solid waste disposed of at locations other than WRSL and includes disposal by self-haulers. The 3.9 lbs/person/day is considered a more accurate rate for the purposes of this analysis. Source: MCG, 2016.	

Review of the above data indicates that the City accomplished 40.9 percent diversion from the WRSL in 2012. The MRF accomplished 20.9 percent diversion rate of 1.4 lbs/person/day.

At buildout of the existing General Plan, the City estimates a total population of 174,120 people<sup>2</sup>. Using the generation, disposal and diversion rates reported in **Table 4.12.4-2**, buildout population would generate 206,550 tons of solid waste per year. Of this amount, it is estimated 123,930 tons per year would be disposed at the WRSL, and 82,620 tons per year would be redirected from the WRSL through processing at the MRF, direct recycling; and through the green waste / compost / C&D programs (MCG, 2016).

### 4.12.4.3 REGULATORY SETTING

#### Federal

##### ***Resource Conservation and Recovery Act (RCRA), Subtitle D***

Title 40 of the Code of Federal Regulations (CFR), Part 258 (Resource Conservation and Recovery Act [RCRA], Subtitle D) contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills. Federal requirements for disposal of biosolids are set forth in Title 40 CFR Part 503.

#### State

##### ***Integrated Waste Management Act***

The California Integrated Waste Management Act, also known as Assembly Bill (AB) 939 (Public Resources Code Section 41780), was enacted in 1989 and contains regulations affecting solid waste

<sup>2</sup> Buildout population of existing City through Creekview 169,901 plus additional residents associated with the Fiddymment-SP3 Rezone 4,219 = 174,120.

disposal in California. AB 939 is designed to increase landfill life and conserve other resources through increased source reduction and recycling. AB 939 requires cities and counties to prepare Solid Waste Management Plans and adopt Source Reduction and Recycling Elements (SRRE) to implement AB 939's goals. These goals include diverting approximately 50 percent of solid waste from landfills and identifying programs to stimulate local recycling in manufacturing and the purchase of recycled products.

The City's SRRE, which is part of the City of Roseville General Plan, contains goals and policies for solid waste disposal. Currently, the MRF diverts approximately 50 percent of the material received from going to the landfill, which meets AB 939's 50 percent reduction goal. To meet these goals, the SRRE specifies three methods: (1) source reduction, which is a net reduction in waste generation at the source; (2) recycling, which is a reuse of materials to produce new similar products or different products; and (3) composting, which is a process of biological decomposition of solid organic debris, such as leaves, grass clippings, and other organic material commonly found in the municipal waste stream to create useable material.

The Legislature amended the California Integrated Waste Management Act in 2007 through Senate Bill (SB) 1016. Previously, the Act had required CalRecycle, at least once every two years, to review a jurisdiction's SRRE and household hazardous waste element. Under SB 1016, which repealed that requirement, CalRecycle instead was required to make a finding whether each jurisdiction was in compliance with AB 939's diversion requirements for calendar year 2006 and to determine compliance for the 2007 calendar year and later years based on the jurisdiction's change in its per capita disposal rate. CalRecycle is also required to review a jurisdiction's compliance with those diversion requirements in accordance with a specified schedule, which would be conditioned upon the California Integrated Waste Management Board finding that the jurisdiction is in compliance with those requirements or has implemented its source reduction and recycling element and household hazardous waste element.

SB 1016 also requires CalRecycle to issue an order of compliance if it finds that the jurisdiction has failed to make a good faith effort to implement its source reduction and recycling element or its household hazardous waste element pursuant to a specified procedure. CalRecycle is required to comply with certain requirements in making this determination, including considering the extent to which the jurisdiction has maintained its per capita disposal rate.

SB 1016 repeals this review schedule on January 1, 2018, and, after that date, requires CalRecycle to review each jurisdiction's source reduction and recycling element and household hazardous waste element at least once every 2 years.

### ***Solid Waste Reuse and Recycling Access Act of 1991***

AB 1327 (Solid Waste Reuse and Recycling Access Act), enacted in 1991, requires jurisdictions to adopt ordinances that require development projects to provide adequate storage areas for collection and removal of recyclable materials.

### ***Assembly Bill 341***

AB 341, which was enacted in 2011, states that it is the policy goal of the state that not less than 75 percent of solid waste generated be reduced, recycled, or composted by the year 2020. The bill also

requires that a business, defined to include a commercial or public entity that generates more than four cubic yards of commercial solid waste per week or is a multifamily residential dwelling of five units or more on and after July 1, 2012, arrange for recycling services. Jurisdictions, on and after July 1, 2012, are required to implement a commercial solid waste recycling program or revise their SRRE to meet this requirement. The City has revised its SRRE to include this requirement and has a commercial solid waste recycling program in place.

### ***Department of Resources Recycling and Recovery***

CalRecycle is the new home of California's recycling and waste reduction efforts. Officially known as the Department of Resources Recycling and Recovery, CalRecycle is a department within the California Natural Resources Agency and administers programs formerly managed by the State's Integrated Waste Management Board and Division of Recycling. CalRecycle is the State agency charged with the primary responsibility for permitting of solid waste facilities. CalRecycle operates through its designated Local Enforcement Agencies (LEAs), which typically are County Health Departments. Air pollution from solid waste facilities is regulated by local air pollution control districts or air quality management districts, while water pollution is regulated by both state and regional water quality control boards.

### ***Universal Waste Rule - February 9, 2006***

Universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. Universal wastes include televisions, computers and other electronic devices as well as batteries, fluorescent lamps, mercury thermostats, and other mercury containing equipment, among others. The hazardous waste regulations (California Code of Regulations [CCR], Title 22, Section 66261.9) identify seven categories of hazardous wastes that can be managed as universal wastes. Any unwanted item that falls within one of these waste streams can be handled, transported, and recycled following the simple requirements set forth in the universal waste regulations (UWR; CCR, Title 22, Division 4.5, Chapter 23).

### ***AB 32 - California Global Warming Solutions Act - Mandatory Commercial Recycling***

The Mandatory Commercial Recycling measure, which is part of AB 32, is designed to achieve a reduction in greenhouse gas emissions of five million metric tons of carbon dioxide equivalents. It will increase waste diversion from landfills beyond the previous state-mandated rate of 50 percent to a goal of 58 percent by January 2020. The commercial sector generates well over half of the solid waste in California, at 68 percent, according Statewide Waste Characterization data from 2008. Yet that sector is not directly subject to the requirements of another bill that attempted to divert waste from landfills – AB 939, the Integrated Waste Management Act of 1989.

The Mandatory Commercial Recycling regulation, adopted in 2012, establishes a statewide mandatory commercial recycling program which requires that business and multifamily residential dwellings (of five units or more) that generate four cubic yards or more of commercial solid waste per week to arrange for recycling services. In order to achieve the 58 percent commercial recycling goal, an additional two million to three million tons of materials will need to be recycled from the commercial sector by 2020, according to CalRecycle.

## Local

### ***Western Placer Waste Management Authority***

The WPWMA is a regional agency comprised of Placer County and the Cities of Roseville, Rocklin, and Lincoln. The WPWMA provides recycling and waste disposal opportunities to those communities, as well as to the City of Auburn and the Town of Loomis. The WPWMA oversees operations of the MRF, the WRSL, and the Permanent Household Hazardous Waste Collection Facility (PHHWCF). The MRF receives, separates, processes, and markets recyclable materials removed from delivered solid waste.

The City of Roseville’s Flow Control Agreement with the WPWMA states that any waste generated within the City must first be processed at the MRF for sorting and then sent to the WRSL for disposal. Temporary C&D must go through the MRF. Any materials that are collected through recycling programs established by the City, such as the collection of green waste, cardboard, newspaper, and other recyclables, does not have to be delivered to the MRF. The City of Roseville retains the rights to market any collected recyclables.

### ***Placer County Solid Waste Local Enforcement Agency***

Placer County Environmental Health Services has been certified by CalRecycle as the LEA to enforce state solid waste statutes and regulations within the County. The LEA’s primary functions are permitting, inspection and enforcement at solid waste operations and facilities such as landfills/disposal sites (active and closed), including sites for disposal of construction/demolition debris and inert materials; transfer stations, including MRFs; and composting facilities.

### ***City of Roseville General Plan and Zoning Ordinance***

As described previously, the City’s SRRE is part of the City of Roseville General Plan, Public Facilities Element, and contains goals and policies for solid waste disposal. Chapter 9.17 of the Municipal Code includes provisions for refuse hauling and recycling. The Environmental Utilities Department has also prepared a Household Hazardous Waste Plan and a Non-Disposal Facilities Plan, which have been approved by the California Integrated Waste Management Board.

Applicable goals and policies from the City’s General Plan are listed below:

- Goal 2** Provide solid waste collection and disposal services to all existing and future Roseville development through the City’s Solid Waste Utility. The provision of services by another provider may be considered where it is determined that such service is beneficial to the City and its customers or the provision of City services is not feasible.
- Goal 3** Continue to participate in local and regional approaches to source reduction, material recovery, recycling, and solid waste disposal.
- Policy 2** Comply with the source reduction and recycling standards mandated by the State by reducing the projected quantity of solid waste disposed at the regional landfill by 50 percent, as well as any mandated future reductions.

## 4.12.4.4 IMPACTS

### Method of Analysis

This solid waste analysis considers waste processing demands on the MRF and disposal demands on the WRSL. These demands were estimated based on the total tonnage of waste projected to be generated by the City plus the Proposed Project and by evaluating the impacts from this demand on processing capabilities at the MRF and the lifespan of the WRSL. Because all waste collected and processed at WPWMA facilities is first tipped onto the MRF floor for processing, impacts on the MRF are evaluated based upon total waste generation. This analysis is considered conservative in that it does not reduce the amount of waste based upon direct recycling (i.e., privately conducted and City recycling programs such as cardboard, newspaper, CRV, battery dropoff, and e-waste pickup) that does not impact operations of the MRF. To estimate the amount of waste expected on an annual basis, the City uses the solid waste generation rates shown in **Table 4.12.4-2**, above.

### Thresholds of Significance

For the purpose of this EIR, a significant impact would occur if the development of the Proposed Project would do the following:

- Be served by a landfill or MRF with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Fail to comply with federal, state, and local statutes and regulations related to solid waste.

### Impacts

<b>IMPACT 4.12.4-1</b>	<b>INCREASE DEMAND FOR SOLID WASTE SERVICES AT THE MATERIALS RECOVERY FACILITY</b>
<b>Applicable Policies and Regulations</b>	Assembly Bill 939, Senate Bill 1016, City's Source Reduction and Recycling Element
<b>Significance with Policies and Regulations</b>	Less than Significant
<b>Mitigation Measures</b>	None Required
<b>Significance After Mitigation</b>	Less than Significant

Development of the ARSP would result in solid waste generated by residences, retail and commercial establishments, offices, schools, and recreational facilities. Development of the project site would include 2,827 residential units resulting in a population of approximately 7,379 people (2.61 people per unit). Using the waste generation factor of 6.5 pounds per person per day (**Table 4.12.4-2**), the Proposed Project is expected to generate approximately 8,753 tons per year (24.0 tons per day) of solid waste to be processed at the MRF. The City currently processes approximately 145,790 tons per year (399 tons per day) at the MRF. This is the sum of landfill disposal and ADC at WRSL facilities plus MRF recycling (86,186 tons WRSL disposal + 12,275 tons ADC + 47,329 tons MRF, recycling, composting, green waste,

and C&D). At buildout of the General Plan, that number is expected to be as high as 206,550 tons per year (566 tons per day), conservatively assuming no direct recycling efforts. The total solid waste expected to be produced for processing at the MRF by the City, including the ARSP, at buildout would be as much as 45,643 tons per year (125 tons per day).

Placer County indicates that the MRF processed an average of 1,063 tons per day in 2012, and the facility has a permitted processing capacity of 1,750 tons per day and is designed to receive up to 2,200 tons per day. The peak tonnage received at the MRF would continue to increase as growth occurs in the service area. The MRF is currently operating at approximately 48.3 percent of permitted capacity.

At buildout of the City and the ARSP, an additional 42 tons per day (total at buildout [125] – current [83]) of waste would be processed at the MRF. Adding this to the current processing rate of 1,063 tons per day yields an estimated capacity need of 1,105 tons per day. This would represent approximately 50.2 percent of the MRF’s permitted capacity at buildout. Thus, the MRF has adequate capacity to serve the ARSP; therefore, this would be considered a **less-than-significant** impact.

IMPACT 4.12.4-2	INCREASED DEMAND FOR SOLID WASTE SERVICES AT THE LANDFILL
<b>Applicable Policies and Regulations</b>	Assembly Bill 939, Senate Bill 1016, City’s Source Reduction and Recycling Element
<b>Significance with Policies and Regulations</b>	Less than Significant
<b>Mitigation Measures</b>	None Required
<b>Significance After Mitigation</b>	Less than Significant

Development of the ARSP would result in solid waste generated by residences, retail and commercial establishments, offices, schools, and recreational facilities. Using the factors shown in **Table 4.12.4-2**, above, a total of 8,753 tons per year (24.0 tons per day) of solid waste would be generated by the ARSP. Of this amount, 5,252 tons per year (based on a disposal rate of 3.9 pounds per person per day), including ADC, would require disposal through direct burial at the WRSL. At buildout of the City’s General Plan, it is anticipated that WRSL disposal will reach 206,550 tons per year (566 tons per day). At buildout of the ARSP, City WRSL disposal needs would reach 215,303 tons per year (590 tons per day).

The WRSL has a remaining capacity of approximately 25,677,600 cubic yards (MCG, 2016). According to WPWMA staff, 1,200 pounds of solid waste take up approximately one cubic yard of landfill space. Thus, considering the remaining capacity estimates cited above yields a remaining WRSL capacity of 15,406,560 tons. The County estimates the WRSL is projected to be able to accept waste until 2058 (MCG, 2016).

However, the final closure date could be affected by several factors, including regional growth rates, economic conditions, and the efficiency of waste recovery. Conservatively assuming the entire ARSP would be built out and generating waste by 2017, it would generate approximately 358,873 tons of solid waste of which 215,332 tons would be disposed at the WRSL over 41 years (between 2017 and 2058). This waste would require 1.40 percent of the WRSL’s remaining capacity and would shorten the life time of the WRSL by approximately 7.5 months based on a remaining life span of 45 years (between 2013 and 2058).

Approximately 465 acres west of the WRSL are available for a landfill expansion. Additionally, the WPWMA has also purchased the parcel east of the WRSL. Both parcels provide opportunity for expanding the WRSL to increase capacity; however, plans for expansion of WRSL capacity beyond 2058 have not been developed or approved to date. As additional WRSL capacity is needed, WPWMA staff will manage the development of the appropriate environmental evaluations and acquire the appropriate permits to utilize expansion property. As with all residences and businesses in the City, the residences and businesses within the ARSP will pay fees for solid waste collection based on rates set in Section 9.12.100 of the Roseville Municipal Code. Fees collected from the City’s residences and businesses and tipping fees paid by those disposing of waste at the WRSL / MRF would be used in part to fund the expansion of the WRSL. This will allow for capacity expansion of the WRSL as necessary to accommodate development within the ARSP; therefore, this would be considered a **less-than-significant** impact.

IMPACT 4.12.4-3	CONSTRUCTION DEBRIS CREATING INCREASED DEMAND FOR SOLID WASTE SERVICES
<b>Applicable Policies and Regulations</b>	Assembly Bill 939; Senate Bill 1016; City’s Source Reduction and Recycling Element
<b>Significance with Policies and Regulations</b>	Less than Significant
<b>Mitigation Measures</b>	MM 4.12.4-1 Divert Construction Debris
<b>Significance After Mitigation</b>	Less than Significant

Development of the project site would involve removal of debris from the site and construction of new buildings and infrastructure that would generate C&D debris that requires disposal. C&D activities can generate significant amounts of waste.

As described in **Section 4.12.4.2**, the solid waste generation rate is inclusive of C&D. The City generated 145,790 tons of solid waste during 2012 as shown in **Table 4.12.4-1**. This is equivalent to approximately 399 tons per day of solid waste. During the same time period (2012), the City disposed a total of 20,804 tons of C&D; which would represent 14.3 percent of the total annual waste generation rate within the City. This is equivalent to approximately 57.0 tons per day of C&D waste generated by the City.

As shown in **Table 4.12.4-2**, the waste generation rate of 6.5 pounds per person per day includes C&D debris. However, it is unclear if the amount of C&D debris included in the waste generation rate adequately represents future C&D generation as the City and ARSP develop. Therefore, an analysis of the City's future absorption rates for residential and non-residential construction was prepared to estimate potential future C&D debris generation on a yearly basis. This yearly estimated C&D generation rate is then compared to the estimated volume of C&D generated in 2012 to determine if the levels of C&D waste in the waste generation rate of 6.5 pounds per person per day adequately accounts or potential future C&D waste volumes.

The City has estimated, based on absorption studies, that 23,734 dwelling units will be constructed between 2010 and 2039 (30 years) with a maximum of 2,087 homes (3,735,938 square feet) constructed in 2022, 2023, and 2024. The absorption information also estimates that 24,714,377 square feet of non-residential construction will be built over this same time period with the maximum of 1,343,400 square feet constructed in 2038. However, during 2038 it is expected that residential construction will only result in 300,000 square feet of residential development as the City reaches residential buildout. It is projected that the year 2024 will generate the maximum square footage of construction, including C&D debris (when considering both residential and non-residential absorption rates) through the year 2039. In 2024, residential C&D is estimated at 22.5 tons per day and non-residential C&D is estimated at 4.7 tons per day, for a total C&D generation of 27.2 tons per day (MCG, 2016). This is 10.7 tons per day less than the estimates included in the annual waste generation rates of 57.0 tons per day. Therefore, the waste generation rate of 6.5 pounds per person per day more than adequately accounts or potential future C&D waste volumes.

As discussed above, the estimates of solid waste that would be generated due to buildout of the project site include C&D waste and would increase processing demands at the MRF and shorten the life of the WRSL. As determined within **Impact 4.12.4-2**, this impact is considered less than significant.

Consistent with the requirements of AB 939, **MM 4.12.4-1** requires 50 percent of the construction debris from the ARSP to be diverted from the WRSL. Developers must submit all diversion and disposal records to the City's Environmental Utilities Department to demonstrate that the 50 percent diversion requirement has been satisfied. This construction diversion would further ensure that the impacts from the construction of ARSP are **less than significant**.

IMPACT 4.12.4-4	FAIL TO COMPLY WITH FEDERAL, STATE, AND LOCAL STATUTES AND REGULATIONS RELATED TO SOLID WASTE
<b>Applicable Policies and Regulations</b>	AB 939 SB 1016 City of Roseville General Plan
<b>Significance with Policies and Regulations</b>	Less than Significant
<b>Mitigation Measures</b>	None Required
<b>Significance After Mitigation</b>	Less than Significant

The Proposed Project would comply with all federal, state, and local requirements that relate to the disposal and recycling of solid waste. Once annexed, the ARSP will be subject to the City's SRRE, which is part of the City of Roseville General Plan. Currently, the MRF diverts approximately 50 percent of the material received from going to the landfill, which meets AB 939's 50 percent reduction goal. To further assist the City in complying with AB 939, a solid waste recycling area is planned within the ARSP on parcel AR-55, which is a larger utility site that also includes a municipal well. This site will provide residents with a location to off-load recyclable materials. Vehicular access to the site is at the intersection of Road A and Road B, east of Westbrook Boulevard. This is a **less-than-significant** impact.

IMPACT 4.12.4-5	CUMULATIVE SOLID WASTE IMPACTS
<b>Applicable Policies and Regulations</b>	Title 40 CRF, Part 258; California Integrated Waste Management Act; Placer County General Plan
<b>Significance with Policies and Regulations</b>	Significant
<b>Mitigation Measures</b>	None Available
<b>Significance After Mitigation</b>	Significant and Unavoidable

While the project-level analysis of impacts on solid waste disposal considers conditions at buildout of the City's General Plan, the following cumulative analysis also considers any proposed and anticipated development within the service area for the WRSL and MRF beyond the City's boundaries.

Currently the MRF has permitted processing capacity up to 1,750 tons per day and the WRSL is anticipated to be able to accept waste until 2058. However, the need for processing capacity at the MRF and for a final closure date at the WRSL would be influenced by several factors including: regional growth rates, economic conditions, and the efficiency of waste recovery. Depending on these factors, waste from the Proposed Project in combination with other cumulative development, would shorten the lifespan

of the MRF and the WRSL. As a result both facilities would need to be expanded and/or solid waste would need to be transported elsewhere. Similar to the Proposed Project, development within the service area of the WRSL would be required to pay collection fees, a portion of which is used to service bonds necessary to fund WRSL expansions. However, expansion of the WRSL would create environmental effects. Plans for expansion of WRSL capacity beyond 2058 have not been developed; therefore, specific impacts cannot be identified at this time. Because of the identified expansion site's proximity to the existing WRSL, however, it can be anticipated that the impacts of an expansion would be similar to those attributed to the existing WRSL. There would be construction-related impacts such as air pollutant emissions, noise, and erosion. In addition, agricultural land and biological resources, including wetlands, could be lost. Once constructed, the expanded WRSL could create additional odors; traffic; operational air pollutant emissions, including increased emissions of WRSL gas and combustion flare emissions; litter; night lighting and other changes in visual character; and degradation of surface and groundwater quality. These impacts would be similar to those of the existing WRSL and, where significant, could be reduced by mitigation measures already required of the WRSL and the solid waste facilities permitting process. However, there could be impacts, such as the loss of biological and agricultural resources that would remain significant and unavoidable even after mitigation. Further, since the City of Roseville does not control the WPWMA and the ability to expand the WRSL, the Proposed Project's contribution to this cumulative impact is considered **significant and unavoidable**.

#### 4.12.4.5 MITIGATION MEASURES

##### MM 4.12.4-1 Divert Construction Debris (Impact 4.12.4-3)

Developers of the ARSP shall ensure a 50 percent diversion of the construction waste stream from WRSL disposal. In developer contracts with construction contractors and their sub-contractors, the developer shall require that the amount of construction waste be diverted from WRSL disposal be no less than 50 percent. The developer shall further require that contractors and sub-contractors submit records of diversion and disposal to the City's Environmental Utilities Department in order to verify compliance with this requirement.