PUBLIC DRAFT

DRAFT INITIAL STUDY/NEGATIVE DECLARATION

for the

MONTEREY ONE WATER

PLANNED SERVICE AREA EXTENSION

Prepared for:
Monterey One Water
5 Harris Ct # D
Monterey, CA 93940

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PROJECT DATA COVER SHEET

1. **Project Title:** Monterey One Water Planned Service Area Extension

2. **Lead Agency Name and Address:** Monterey One Water, 5 Harris Ct # D, Monterey, CA 93940

3. **Contact Person and Phone Number:** Mike McCullough, Government Affairs Administrator, (831) 645-4618

4. **Project Proponent:** Monterey One Water (M1W)

5. **Project Location:** The Project location includes all the current service areas of M1W in Monterey County, California (Figure 1) and the areas being considered for service area extension located in the northern end of the Salinas Valley near the City of Salinas.

6. **Project Background and Overview:** M1W is a Joint Powers Authority (JPA) serving Monterey County including the City of Salinas, Boronda County Sanitation District, Castroville Community Services District, City of Del Rey Oaks, City of Monterey, City of Pacific Grove, City of Sand City, City of Seaside, Marina Coast Water District, Moss Landing County Sanitation District, and the former Fort Ord. The agency provides wastewater treatment services to over 250,000 people and treats 18.5 million gallons each day.¹

   The Proposed Project is the M1W planned service area extension; the Project would extend regional wastewater collection and treatment services to the communities of Bolsa Knolls, Spreckels, Indian Springs Ranch and Las Palmas Ranch, and the Oak Hills Community of Castroville. The planned service area extension is being considered in two stages: 1) an initial service area extension to the areas specified above; and, 2) a potential future extension (further extending upon the initial planned service area). This future service extension would extend service to the areas of Chualar and the City of Gonzales (Refer to Figure 2). The Project areas are derived from the M1W 2017 Focused Wastewater Service Area Study (2017 Focused WWSA Study or Study) and a March 2018 Study Update which assessed regional opportunities for sewer extension and consolidation (both conducted by V.W. Housen & Associates and available online at https://montereyonewater.civicclerk.com/web/UserControls/DocPreview.aspx?p=1&aoid=60).

7. **Project Description:** The Proposed Project would extend M1W wastewater service areas to allow for future connection to the existing M1W regional collection and treatment system described as “Focused WWS Extension Areas” and “Future Potential Extension Area”, as outlined below:

   - **Focused service area extension into the Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, and the Oak Hills Community of Castroville areas, representing approximately 3,025 acres.** This extension of services is focused on those areas near regional M1W facilities; these areas were identified in the 2017 Focused WWSA Study as having “the highest need for an alternative approach to wastewater management.” The 2017 Focused WWSA Study describes issues with current wastewater system service provision in these communities and identifies the potential for service area extension by M1W. Some areas are served by failing

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¹ There exists a companion, or mirror, district to M1W: the Monterey Regional County Sanitation District (MRCSD). The MRCSD, a special district formed in the 1970s, is used to set the annexed boundaries of the Monterey Regional Water Pollution Control Agency (MRWPCA, now M1W) pursuant to the JPA agreement, and identifies the areas now served by M1W. M1W, the JPA, is the entity that provides the actual sewer services within M1W boundaries. (M1W, 2018)
or substandard wastewater infrastructure, which could fail under current or planned growth, other areas are seen as having a high cost of service, or a combination of these factors.

- The March 2018 Study Update proposed to extend future services to two additional communities south of Salinas for possible regional wastewater services through M1W. Specifically, these potential future wastewater service areas would extend M1W sewer collection services to the City of Gonzales and the community of Chualar, providing for connection to the existing collection and treatment system of M1W near Salinas. This future service area would consist of approximately 1,450 acres. The 2018 Study Update found there may be a future need for extension of services in these areas due to substandard wastewater infrastructure and/or planned growth. However, the 2018 Study Update found that a complete financial evaluation and initiation of discussions with stakeholders is required to determine if the costs for extension of M1W service into these areas would be appropriate or feasible.

The total proposed service area extension with the Focused WWS Extension Areas, as well as the Future Potential Extension Areas, would increase the total acreage within the M1W service area from 64,170 acres to approximately 68,645 acres. For a more detailed description of both these areas please refer to Figure 2 and Section 1.4.

8. **Agency Approvals:** M1W as the lead agency will consider the potential for service area extension considered under this Initial Study/Negative Declaration (IS/ND). This IS/ND was initially prepared to address the Project as a boundary adjustment for approval by both M1W and Monterey County Location Agency Formation Commission (LAFCO). LAFCO regulates boundary changes of special districts but does not regulate services provided by JPAs. In the past, language in M1W’s JPA agreement has been relied upon to provide the normal process that all new areas being added to M1W’s service area must first be annexed into MRCSD’s boundaries through the LAFCO process. More recently, further review of M1W’s JPA agreement indicates that in addition to the process of annexation to its boundaries, the M1W board also has discretion to enter into written agreements to extend its services to other areas outside its boundaries, within the County, without having to go through the LAFCO annexation process. M1W’s JPA agreement does not require that M1W obtain LAFCO annexation approval (of an MRCSD boundary change) for each individual area to which M1W’s services may be provided by agreement in the future.

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2 This Initial Study reviews the primary Proposed Project of the initial service area extension to the areas of Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, and the Oak Hills Community. The potential for the future extension of the M1W service area beyond these areas is considered in this IS/ND but at a lesser level of detail based upon the preliminary nature of this potential future extension.

3 Should LAFCO approvals be found necessary, in the event of an MRCSD annexation, this IS/ND will serve as the underlying California Environmental Quality Act (CEQA) document for this action.
Project Location & M1W Existing Service Area
Possible Areas for Extending Services

Title: Possible Areas for Extending Services
CHAPTER 1. INTRODUCTION AND PROJECT DESCRIPTION

1.1 INTRODUCTION

This IS/ND has been prepared by M1W⁴, as the Lead Agency, pursuant to CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). This document describes the extension of M1W’s existing service area (Project or Proposed Project) as shown on Figures 1 and 2. Studies conducted by M1W and the County of Monterey identified areas suitable for extension of sewer service based upon an evaluation of individual areas and determination of areas having the highest need for an alternative approach to wastewater management (due to substandard wastewater infrastructure, a potential for failure of systems, high cost of service, or a combination of these factors).

M1W is acting as the Lead Agency pursuant to CEQA Guidelines §15050(a) and is responsible for approving the proposed extension of the service area as described in this document. M1W was created in 1972 and currently serves a population of approximately 250,000. M1W operates a regional wastewater system that consists of treatment, disposal and reclamation facilities, as shown in Figure 3. M1W is considering extending their service area under the JPA agreement to “acquire, construct, maintain and operate facilities for the collection, transmission, treatment, disposal and reclamation of sewage and wastewater for the benefit of lands and inhabitants within their respective boundaries,” or with consent of the Board of Directors, and by agreement, outside of M1W’s boundaries (JPA 1972). As the Lead Agency, M1W prepared this IS/ND in accordance with State CEQA Guidelines §15063, §15070, and §15152. Pursuant to §15070, a “public agency shall prepare…a proposed negative declaration or mitigated negative declaration…when: (a) The Initial Study shows that there is no substantial evidence…that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level.”

The purpose of this document is to present to decision-makers and the public information about the environmental consequences of implementing the Project⁵. This Initial Study reviews the primary Proposed Project of the initial service area extension (as detailed in the 2017 Focused WWSA Study). The potential for the future extension of M1W’s service area into Chualar and Gonzales (as described in the 2018 Expanded WWSA Study Update) is addressed in this Initial Study at a cumulative level. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the Proposed Project.

The Draft IS/ND will be available for a 30-day public review period from July 3rd, 2019 to August 2nd, 2019 during which period comments concerning the analysis contained in the IS/ND should be sent to: Mike McCullough, M1W, 5 Harris Ct # D, Monterey, CA 93940, (831) 645-4618. E-mail comments may be addressed to: MikeM@my1water.org. If you wish to send written comments (including via e-mail), they must be received by August 6th, 2019. After comments are received from the public and reviewing agencies, M1W may (1) adopt the ND and approve the project; (2) undertake additional environmental studies; or (3) revise or abandon the project.

⁴ Formerly MRWPCA
⁵ The level of specificity of environmental analysis is commensurate with the level of project detail available at the time of this writing.
M1W Regional Wastewater System
1.2 PROJECT BACKGROUND

Monterey Regional Water Pollution Control Agency (MRWPCA) was established in 1972 under a JPA agreement between the City of Monterey, the City of Pacific Grove and the Seaside County Sanitation District (SCSD). In 2017, MRWPCA changed its name to Monterey One Water (M1W) and under this name, operates the Regional Treatment Plant (RTP), including a water recycling facility (collectively known as the Salinas Valley Reclamation Project (SVRP), and a recycled water distribution system known as the Castroville Seawater Intrusion Project (CSIP), and M1W also manages sewage collection pipelines, and 26 wastewater pump stations. Since 1972, the cities of Del Rey Oaks, Seaside, Sand City, Marina, and Salinas, and the unincorporated communities of Castroville, Moss Landing, and Boronda, in addition to other unincorporated areas in northern Monterey County have joined the JPA.

The M1W boundary currently encompasses approximately 60 square miles including a population of 250,000 in the service area (LAFCO 2007). The existing M1W service area is shown in Figure 1. The provision of sanitary sewer or wastewater service in the greater Monterey area is organized at two levels. Local cities and sanitation districts are responsible for maintaining sewer lines, and M1W is responsible for development, management and operation of pump stations, trunk main pipelines, and treatment facilities. M1W owns and operates the RTP and the ocean outfall. M1W currently provides services to: the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the SCSD; the Castroville, Moss Landing and Boronda Community Service Districts; and former Fort Ord lands. Several additional areas in the Las Palmas, Corral de Tierra, and San Benancio areas are included within the SOI of M1W, though they are not currently served by the regional treatment facilities.

M1W owns and maintains the conveyance system which includes force and gravity mains and pump stations. This infrastructure brings wastewater from the furthest parts of the service area through other member communities to the RTP in Marina. Today, M1W operates and maintains 25 pump stations, 35 pressure-vacuum stations, approximately 30 miles of pipeline from each pump station to the RTP (M1W 2017).

M1W’s RTP is located two miles north of the City of Marina, on the south side of the Salinas River, and has a permitted capacity to treat 29.6 million gallons per day (MGD) of wastewater effluent. At the RTP, wastewater is treated to two different standards: (1) Title 22 California Code of Regulations standards (tertiary filtration and disinfection) for unrestricted agricultural irrigation use within a facility known as the Salinas Valley Reclamation Plant, and (2) secondary treatment for permitted discharge through the ocean outfall. Influent flow that has been treated to a tertiary level is distributed to nearly 12,000 acres of farmland in the northern Salinas Valley for irrigation use (recycled water is delivered using the CSIP distribution system). The RTP primarily treats municipal wastewater, but also accepts some dry weather urban runoff and other discrete wastewater flows. Beginning in 2019, secondary treated water can also undergo advanced treatment via the new Advanced Water Purification Facility (AWPF) of the Pure Water Monterey Groundwater Replenishment (PWM) Project, which is currently under construction. Product water from the AWPF would then be transported and injected into the Seaside Groundwater Basin.

Construction of the RTP was completed in 1990; the plant currently treats 18.5 MGD average dry weather flow (ADWF), with a peak wet weather flow (PWWF) of 36.8 MGD (M1W 2016). The RTP is permitted for design flows of 29.6 MGD ADWF and 75.6 MGD PWWF, and therefore has additional capacity to accept wastewater from area outside its current boundaries.
1.3 BACKGROUND STUDIES & REPORT RECOMMENDATIONS

M1W has completed a series of studies addressing extension of their service areas in the past. In 1998, M1W completed a Wastewater Service Area Study (1998 WWSA Study) to evaluate the need for near- and long-term (i.e., 2020) wastewater services to existing and planned developments. The 1998 WWSA Study was updated in 2003 (2003 WWSA Study), and again in 2015 (2015 WWSA Study), to reflect changes in planning criteria and the study approach. In addition, in August 2010, M1W completed a Toro Park Planning Area Wastewater Service Area Study (Toro Park WWSA Study). The Toro Park WWSA Study reviewed alternatives and associated costs for conveying Toro Park Area wastewater flows to the regional treatment facility.

In January 2017, M1W contracted with V.W. Housen & Associates (VWH) to review and update the assumptions, findings, and recommendations from the 2015 WWSA Study and the Toro Park WWSA Study; this study is referred to as the M1W 2017 Focused Wastewater Service Area Study (2017 Focused WWSA Study). The 2017 Focused WWSA Study reviewed and consolidated information from prior reports related to wastewater infrastructure needs, priorities, and preliminary costing for six potential service areas: Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, Oak Hills, and Toro Park. The 2017 Focused WWSA Study separated and analyzed the six potential service extension areas geographically. Bolsa Knolls and Oak Hills are located north of the City of Salinas, and the remaining areas are grouped along Highway 68, south of the City of Salinas. Apart from Bolsa Knolls, these communities are located near the current M1W service area.

These areas were identified through prior studies by M1W as having the highest need for an alternative approach to wastewater management. For instance, these areas experience failing or substandard systems, there is the potential for system failure or high cost of service, or a combination of these factors. The 2017 Focused WWSA Study concluded that the opportunity for off-site treatment for each of these communities does not appear infeasible. Bolsa Knolls is currently unsewered. Oak Hills has a local treatment facility, and approximately one quarter of the parcels remain on septic systems. The 2017 Focused WWSA Study concluded that both communities have experienced challenges in maintaining the septic systems, and each requires an alternative wastewater approach to prevent future environmental compliance issues related to the aging septic systems.

For each of the remaining four planning areas of Spreckels, Indian Springs Ranch, Las Palmas Ranch, and Toro Park, the 2017 Focused WWSA Study concluded that the most cost effective and environmentally beneficial solution is a regional approach that conveys flows from all areas to the M1W Salinas pump station, for continued conveyance to the M1W regional treatment facility. The 2017 Focused WWSA Study concluded a “regional option has a high potential for reducing monthly service charges substantially for these communities.” In addition to reducing monthly service charges, the regional option would address the issue of aging infrastructure. The treatment facilities at Indian Springs Ranch and Las Palmas Ranch are also nearing 30 years old, which is a timeframe when the frequency of major renovations and replacements increase for many treatment facilities. Toro Park has facilities which are older than 30 years.

In January 2018, the scope of the 2017 Focused WWSA Study was expanded to include conceptual options to convey wastewater from two additional areas (Chualar and the City of Gonzales). This report was published in March 2018 and is referred to as the 2018 Study Update. The 2018 Study Update found that there is a need for upgraded treatment facilities in the community of Chualar due to deteriorating sewage system infrastructure and the susceptibility of the treatment ponds flooding due to their proximity to Salinas River. Furthermore, the 2018 Study Update found that although the City of Gonzales recently upgraded their wastewater treatment plant, the City’s 2010 General Plan anticipates significant growth that cannot be accommodated by the current wastewater treatment system. Therefore, the City of Gonzales will need to construct significant and costly improvements to the existing plant and pipelines. In lieu of completing a
major wastewater facility extension, the Study Update concluded the City has viable options for conveying either some future flows or all flows to the M1W system for treatment. As a result, the report recommended that M1W should complete financial evaluations and start initiating stakeholder discussions with both the City of Gonzales and community of Chualar to explore their interest and identify potential alternatives given pending infrastructure needs and Proposed Project costs. A table providing an overview of the 2017 Focused WWSA Study and 2018 Study Update service area locations, alternatives, engineering notes, and CEQA document recommendations for each study area is provided in Appendix A.

1.4 PROJECT OBJECTIVES

The Project would allow for a cost effective and environmentally beneficial regional approach to wastewater collection and treatment service for other areas which are not currently in M1W’s service area. The primary goal of the proposed service area extension is to address areas that may have either failing or substandard wastewater infrastructure, a potential for failure with planned growth, high cost of service, or a combination of these factors. Areas for the proposed service area extension were identified through prior studies by M1W as having the highest need for an alternative approach to wastewater management. M1W seeks an extension of its service area to possibly meet the wastewater treatment demands of other service areas from approved or planned development, as designated in approved and/or adopted plans and local jurisdictions’ General Plans and Area Plans. In addition, the Proposed Project would provide regional wastewater collection and treatment service from M1W into areas where there is a current or potential need.

1.5 PROJECT DESCRIPTION

M1W proposes to extend their service area to locations where M1W anticipates sewer service connection requests due to either failing or substandard wastewater infrastructure, a potential for failure with planned growth, high cost of service, or a combination of these factors failing. The extension areas from the 2017 Focused WWSA Study include the communities of Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, and Oak Hills. These areas were identified through several prior studies by M1W as having the highest need for an alternative approach to wastewater management due to either failing or substandard wastewater infrastructure, a potential for failure with planned growth, high cost of service, or a combination of these factors. Additionally, the 2018 Study Update analyzed potential future WWS extension areas within the City of Gonzales and the community of Chualar (refer to Figure 2)\(^6\). The proposed service area extension would increase the M1W service area from the existing area of 64,170 acres to approximately 68,645 acres as shown on Table 1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Area (Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Existing Service Area</td>
<td>64,170</td>
</tr>
<tr>
<td>Total Proposed Service Area Extension</td>
<td>4,475</td>
</tr>
<tr>
<td><strong>Focused WWS Extension Area Subtotals</strong></td>
<td></td>
</tr>
<tr>
<td>Bolsa Knolls</td>
<td>124(^1)</td>
</tr>
<tr>
<td>Indian Springs Ranch</td>
<td>297</td>
</tr>
<tr>
<td>Las Palmas Ranch</td>
<td>1,755(^2)</td>
</tr>
<tr>
<td>Oak Hills</td>
<td>541</td>
</tr>
</tbody>
</table>

\(^6\) M1W acknowledges that a complete financial evaluation and initial/further discussions with stakeholders would be required to determine if the costs for extension of M1W service to all of the proposed areas would be appropriate. However, by consolidating these areas that have expressed a need for wastewater service, the Proposed Project would facilitate the development of a regional long-term plan for wastewater service in an orderly manner. In facilitating future sewer service connections, the proposal will also help gradually reduce the number of individual septic systems in the area and address needed system upgrades due to either failing or substandard wastewater infrastructure.
The subareas identified in the 2017 Focused WWSA Study and 2018 Study Update as having the highest need for an alternative approach to wastewater management within M1W's service area extension proposal is shown in Figure 4. The following describes each of these potential areas.

### Proposed Extended Service Area (2017 Focused WWSA Extension Areas)

The areas recommended for service area extension are defined and evaluated (addressed at a feasibility level) in the 2017 Focused WWSA Study. For all areas, the study concludes the “opportunity for off-site treatment for each of these communities does not appear infeasible. Therefore, it is recommended that M1W consider completion of a Basis of Design for each of these communities”. Additional engineering design will address level of improvements for service, including use of existing infrastructure, potential impacts on the receiving collection system infrastructure, and Project costs “including permitting, easements, and compensation for existing facilities”. The following describes each area of focused WWS extension areas:

- **Bolsa Knolls**: This area is located adjacent to the northeast border of the City of Salinas, along San Juan Grade Road, north of the intersection of Russell and Grant Roads. The Bolsa Knolls area is predominantly residential. This area is comprised of 168 acres of residential land use, four acres of commercial land use, with 37 acres of public/quasi-public land and additional farmland and resource conservation land within the general area. The Bolsa Knolls area and designated land uses are shown in Figure 5. Wastewater treatment is currently provided through on-site septic systems. The 1998 WWSA Study states that the septic tanks are close to full treatment capacity. The Monterey County Department of Public Health has expressed interest in connecting Bolsa Knolls to the M1W system in order to avoid groundwater and environmental contamination that may result from aging septic systems.  

- **Spreckels**: This area is located along the Salinas River east of Highway 68, approximately three miles south of the City of Salinas. The Spreckels community, including approximately 200 homes,
limited commercial, as well as a newly developed 800-unit seasonal farm labor housing facility, is served by a wastewater treatment plant which is owned and operated by California American Water Company (CalAm). The plant’s permitted capacity is 0.18 MGD. The 1998 WWSA Study reported no known issues with existing wastewater collection and treatment service. Since the recent development of the farmworker housing units and the age of the treatment facility may make regional treatment appropriate in the future.

Additionally, the 2017 Focused WWSA Study concluded that the proximity of this area to future facilities in the area is conducive to a regional collection system. The community is approximately one mile from the Las Palmas treatment facility, 2.8 miles from the City of Salinas collection system, and 4.1 miles from the M1W Salinas pump station. The 2016 Municipal Services Review prepared by LAFCO also encourages the Spreckels Community Services District to connect to M1W’s system, citing groundwater protection and the potential access to recycled water as the main benefits for this change. In addition to the 200 homes, the 2015 WWSA Study reports a population of 800. Land use is comprised of approximately 39 acres of high density residential, 8.7 acres of commercially zoned property, and 5.9 acres of public/quasi-public property. The Spreckels area and designated land uses are shown in Figure 5.

- **Indian Springs Ranch**: This is a gated residential community that consists of approximately 155-homes with 236 residents as reported in 2015. The development also has horse stables. The area is located to the south of Las Palmas Ranch on the west side of River Road. The community is comprised of approximately 71 acres of low density residential, 2.5 acres of public/quasi-public land, and 32.1 acres of resource conservation land. The Indian Springs Ranch area and designated land uses are shown in Figure 6. The development is served by the Indian Springs Wastewater Treatment Plant, which was constructed in the early 1980’s. The Indian Springs Wastewater Treatment Plant is owned and operated by CalAm.

- **Oak Hills**: This area is located north of Highway 156, approximately 1.5 miles east of Castroville and three miles from the M1W Castroville pump station. This area is predominantly residential with approximately 594 medium-sized residential lots on 227 acres. Of these, 146 have individual septic systems. The remaining parcels are served by a local wastewater treatment plant that was constructed in 1968; the plant is owned and operated by Cal-Am. The plant was designed and is permitted to treat 108,000 gallons per day (GPD) of flow. The community consists of 226.7 acres of medium density residential land, 15.5 acres zoned as special treatment area, 12 acres zoned as wetlands and coastal strand, and 0.06 acres zoned as public/quasi-public. Figure 6 shows the Oak Hills area and designated land uses.

- **Las Palmas Ranch**: This area is located on the hillsides on the south side of River Road, approximately 1.8 miles east of Highway 68 and three miles south of the City of Salinas. This residential area includes 1,029 homes, and the community is fully built-out. The community includes approximately 282 acres of low- and medium-density residential, 2.7 acres of public/quasi-public land, 1.6 acres of commercial, and 1,042 acres allocated to resource conservation. The Las Palmas Ranch area and designated land uses are shown in Figure 6. Las Palmas Ranch is served by an existing treatment plant that is nearing 30 years old; infrastructure improvements to the existing facility may likely be warranted soon due to the age of the facility (M1W, 2018).
Subareas from 2017 Focused Wastewater Service Study Area

Note Toro Area was deleted from the proposed extension areas after MRWPCA Board Review.
Bolsa Knolls and Spreckles Land Use Map

Source: V.W Housen, 2017
Oak Hills, Las Palmas, and Indian Springs Land Use Map
Future Potential Areas for Extended Service Area (2018 Study Update)

The 2018 Study Update identified potential future wastewater service extension areas, which included the City of Gonzales and the unincorporated community of Chualar. The 2018 Study Update concluded that due to failing systems in the Chualar community and inadequate capacity to serve planned growth in the City of Gonzales, future wastewater treatment improvements would be required to serve these areas. However, the 2018 Study Update also recommended further cost evaluation and discussions with stakeholders prior to M1W extending services to these areas. The following describes each area of potential future WWS extension areas:

- **Chualar**: This area is in an unincorporated area of Monterey County along Highway 101, approximately 11 miles south of the City of Salinas. According to the 2010 Census, Chualar has a population of 1,190. The community has been served since the mid-1960s by a publicly-owned sewer collection system and wastewater treatment plant located next to the Salinas River. The Chualar community was formed as part of County Service Area (CSA) 75. The Monterey County Board of Supervisors acts as the Board of Directors for the CSA.

  There are several issues that have been identified needing correction or improvements in the system. The treatment ponds are susceptible to flooding from the Salinas River and the Chualar sewage system infrastructure is deteriorating and requires upgrades. A 2013-14 Monterey County Civil Grand Jury report noted that construction of a new Chualar treatment facility may not be the most effective solution to current issues.

  In June 2016, County Service Area (CSA) 75 issued a Request for Qualifications (RFQ) for transfer of ownership for Chualar and other wastewater agencies. According to the 2016 RFQ, Chualar consists of 188 parcels with 171 connections, and 306 equivalent dwelling units. The plant has a capacity of 112,000 GPD average annual flow during a 100-year storm event year (RWQCB Order No. 01-038). The facility treated average annual daily flow of 66,000 gallons in 2016. The community consists of 35 acres of high-density residential land, 27 acres of commercial and industrial, 14 acres zoned as agriculture, and 28 acres zoned as public/quasi-public. Figure 7 shows Chualar designated land use.

- **City of Gonzales**: The City of Gonzales is located along Highway 101, approximately 17 miles south of the City of Salinas. The City of Gonzales has a population of 8,187 (U.S. Census, 2010). The City’s wastewater collection system includes gravity sewer mains, three (3) lift stations that convey flow from east to west across Highway 101, and a trunk system that conveys the flows east to the City’s wastewater treatment plant. The treatment plant is located approximately two miles west of the intersection of South Alta Road and Gonzales River Road, at the end of Short Road. The wastewater treatment plant operates under RWQCB Order No. R3-2006-0005. The plant was upgraded between 2006 and 2011 to provide 1 MGD average daily flow, which is sufficient to service the existing population plus planned infill. The current National Pollutant Discharge Elimination System (NPDES) discharge permit lists the treatment plant as having permitted capacity of 1.3 MGD after completion of the Phase I improvements.

  The community consists of 297 acres of low-density residential land, 41 acres of medium- and high-density residential land, 182 acres of commercial, industrial, and mixed use, 431 zoned as

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9 This IS/ND reviews the primary Proposed Project of the initial service area extension to the areas of Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, and the Oak Hills Community. The potential for the future extension of the M1W service area is reviewed in this IS/ND but at a lesser level of detail, as a potential future cumulative proposal.
public/quasi-public, and 27 acres of parks. Refer to Figure 7 for area land uses within and surrounding the City of Gonzales.

The extension of the M1W service area by itself will not result in physical impacts on the environment, as described herein. The proposed extension would result in inclusion of additional lands within M1W’s service area, which could result in future service areas to allow for M1W collection and treatment facilities in these areas. However, no development is proposed at this time as part of the proposed service area extension. If the service area extension is approved, the properties located within the area could be connected to the RTP with appropriate infrastructure to be developed for collection systems to convey wastewater to the M1W facilities in the future. The service area extension involves no direct changes to the existing wastewater system, or the associated system permits.

Infrastructure improvements and development that may be proposed in the future would be subject to future engineering design, as well as environmental review and permit approvals from Monterey County and other relevant permitting agencies, at which time the appropriate level of environmental review would be conducted.

1.6 PROJECT ACTIONS

The Proposed Project includes the following approvals and permits; this IS/ND covers the following Project actions:

- M1W: Board Approval of Planned Service Area Extension

No additional public agencies would need to provide a permit or approval for these extensions. In the future, depending on the level of improvements or connections to the M1W system, other M1W actions may be required to approve the specified infrastructure extension within specific jurisdictions. As no specifics are known at this time, the following are considered possible action that may be taken by other agencies: issuance of encroachment permits; coverage under the State General Stormwater Permit or use permits/discretionary permits associated with larger facility extension.

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10 This IS/ND by M1W expansion was originally anticipated to be used by LAFCO of Monterey County for a Sphere of Influence (SOI) amendment for a planned service area. However, upon review by LAFCO, and since this proposal does not include any annexation areas, LAFCO decided that an SOI expansion would not be required as the JPA is providing service and has authority to provide services in Monterey County. If it is decided at a later date that an SOI expansion is required, this IS/ND may also be used by LAFCO for an SOI expansion and would meet all the LAFCO requirements.
Photo 1. Chualar Land Use

Photo 2. Gonzales Land Use

Source: V.W Housen, 2017

Chualar and Gonzales Land Use Map
CHAPTER 2. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages. None of the environmental factors would be potentially affected by this project as discussed within Chapter 4 Evaluation of Environmental Impacts. Sources used for analysis of environmental effects are listed in Chapter 1.5 Earlier Analyses and Chapter 5 References. No impacts were identified as significant, as evidenced by the explanations, below.

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Resources
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities/Service Systems
- Mandatory Findings of Significance
CHAPTER 3. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the Proposed Project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the Proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

Signature: Mike McCullough

Date: 7/16/19

Printed Name: Mike McCullough

for
CHAPTER 4. INITIAL STUDY ENVIRONMENTAL CHECKLIST

This Initial Study is based on CEQA's Environmental Checklist Form (Appendix G of the CEQA Guidelines). As discussed below, each item on the checklist is considered as to whether the project would have “potentially significant impact”, “less than significant” or “less than significant with mitigation incorporated” or "no impact" depending on the anticipated level of impact. The checklist is followed by explanatory comments corresponding to each checklist item. The sources of information can be found following each checklist category.

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).

2. All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.

9. The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

**BACKGROUND AND METHODOLOGY**

The planning documents for the area, including the Monterey County General Plan, EIR and relevant Area Plans, recognize M1W as the primary wastewater service provider for the majority of the Monterey Peninsula and Salinas area. Certain areas proposed for service extension have some type of wastewater treatment and collection service under existing conditions. The 2017 Focused WWSA Study and 2018 Study Update identify potential concerns with age and need for infrastructure upgrades/treatment to address existing conditions. Specifically, regardless if M1W amends its service area to include the proposed areas, infrastructure improvement projects will be needed to address service in these areas. For this reason, these future improvement and infrastructure projects may independently cause future environmental impacts; however, they would occur with or without implementation of the Proposed Project described above. Implementation of policies in Monterey County General Plan and Land Use Plans govern the planning and development of the M1W area and Proposed Project area. M1W’s service area extension would not increase development potential beyond that envisioned in the adopted planning documents.

The following provides a general overview of pertinent planning documents and prior environmental review, as well as service reviews conducted by LAFCO. It is important to note that this IS/ND uses previously prepared EIRs and planning documents for background information and setting as discussed throughout but does not tier from the previous documents or rely on the conclusions in the previous documents for its conclusions regarding potential environmental impacts of the Project. The conclusions reached in the IS/ND are based on the updated setting, analysis and CEQA checklist discussion provided in Chapter 4 of the IS/ND.

**Local General Plans and Environmental Documentation**

Monterey County General Plan. The County Board of Supervisors adopted the 2010 Monterey County General Plan and certified the accompanying EIR on October 26, 2010. The EIR provides a comprehensive analysis of impacts of public services demand from development supported by the General Plan areas of Monterey County, in which the Project sites and M1W facilities are located. The 2010 Monterey County General Plan and EIR analysis provides policies on service expansion as well as background on the M1W service areas. General Plan EIR, Section 4.11.2.6 Wastewater, addresses future development and service demand within the Proposed Project area. While it does not specifically address the service area extension currently proposed by M1W, these documents provide policies and information on level of buildout of existing lots of record and regional development as well as potential impacts and mitigation at the general plan and policy-level. The Monterey County General Plan, EIR and technical documents are available on the County’s website at: [http://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/resources-documents/2010-general-plan](http://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/resources-documents/2010-general-plan). Environmental documents for properties within the Project areas can be found on the County of Monterey website at: [http://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects](http://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects).
City of Gonzales General Plan: The Gonzales 2010 General Plan and EIR was adopted and certified by the City of Gonzales City Council in January 2011. The City’s General Plan and EIR anticipates significant growth. To accommodate this level of growth, the EIR identifies a need to expand urban services, including development of a 1.25 million gallons per day (MGD) of wastewater treatment plant capacity. While it does not specifically address the service area extension currently proposed by M1W, it does outline policies/actions to meet the increasing demand for sewer capacity in a timely and cost-effective manner. Policies/action include improvements such as extension of existing capacity, extension of effluent disposal facilities, and construction of new collection mains and a gradual transition to higher levels of treatment. The Gonzales 2010 General Plan, EIR and technical documents are available online at: https://gonzalesca.gov/government/information-center/general-plan.

Municipal Services Reviews (MSRs) Conducted for M1W: California Government Code Section 56430 requires LAFCOs to conduct Municipal Services Reviews (MSRs) that describe the municipal services provided by the agencies that are subject to LAFCO authority. MSRs are comprehensive studies designed to collect and analyze information about service providers, to estimate their ability to meet current and future service needs, and to identify infrastructure needs or deficiencies, growth and population projections for the affected area, financing constraints and opportunities, opportunities for shared facilities, and government structure options. LAFCO’s 2007 M1W Adopted Municipal Services Review is available at http://monterey.lafco.ca.gov/.

In addition, the following data sources were reviewed as part of the 2017 Focused WWSA Study, 2018 Study Update, and this IS/ND.

- Monterey County GIS data (publicly available), including land use boundaries and parcel maps;
- AMBAG 2014 Regional Growth Forecast;
- Annual Reports for Indian Springs, Las Palmas, Spreckels, and Oak Hills;
- 2010 Monterey County General Plan Land Use Element;
- Monterey County Integrated Regional Water Management Plan;
- LAFCO maps for Indian Springs, Oak Hills, Las Palmas, and Salinas;
- Monterey Peninsula Municipal Services Review;
- Spreckels Municipal Services Review;
- Sewer Master Plans Salinas;
- August 2017 County of Monterey Chualar Consolidated (CSA 75) Wastewater Rate Study;
- Chualar RWQCB WDR Order No. 01-038;
- RFQ for Transfer to Ownership and Responsibility for All Services Provided by Chualar Sanitary System (and other systems);
- 2013-14 Monterey County Civil Grand Jury Interim Final Report No. 1 for the Chualar Sewer System, and Monterey County Response to this Report;
- LAFCO maps and Municipal Service Review including the Chualar area;
- City of Gonzales Wastewater System Conceptual Plan (AECOM, 2011);
- City of Gonzales RWQCB WDR Order No. R3-2006-0005; and,
- City of Gonzales General Plan.
- City of Gonzales Published Water and Sewer Rates
Approach to IS/ND

The extension of the M1W service area by itself will not result in physical impacts on the environment, as described herein. The service area extension involves no direct changes to the existing wastewater system, or the associated system permits. In addition, the underlying local jurisdictions and the County of Monterey have each adopted their own General Plans and Land Use Plans that govern the planning and development of the M1W area and Proposed Project area. Underlying land use designations of the proposed planned service area extension are shown above in Figures 5 & 6. M1W’s planned service area extension would not increase development potential beyond that envisioned in the adopted planning documents, and impacts related to such development would be anticipated to occur with or without the Proposed Project, as outlined in this Initial Study.
ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
</tbody>
</table>

Setting

Visual resources are classified into two categories: scenic vistas and scenic resources. Scenic vistas are typically broader viewsheds such as mountain ranges, valleys, and ridgelines, usually broader elements of a viewshed seen from a range of viewpoints, often along a roadway or other corridor. Scenic resources are specific features of a viewing area (or viewshed) such as trees, rock outcroppings and historic buildings. Scenic Vistas can be found along Highway 1, Highway 68 and Reservation Road in the project area in accordance with Monterey County 2010 General Plan.

The Salinas Valley is crisscrossed by a rectangular grid of roads. Highway 101 and the Union Pacific Railroad angle across this grid and provide the main transportation arteries through the valley to the areas. Views from the proposed extension areas provide a mix of urban and rural viewsheds with the most prominent views from the area along River Road and Highway 101 which provides expansive views across the valley.

Discussion/Conclusion

a) – c) The Proposed Project would extend the M1W service area. The Initial Focused WWS Extension Areas would expand the M1W service area from 64,170 acres to 67,194 acres; the Potential Future WWS Extension Areas would increase the area by another 1,450 acres for a total area of 68,645 acres. Currently, large portions of the area proposed for service area extension are developed with existing residential and agricultural land uses and limited commercial, open space, and public/quasi-public land uses. The current proposal would not directly result in physical improvements, such as additional infrastructure, improved facilities, or services extensions in the Proposed Project areas. Therefore, the Proposed Project would not directly affect a scenic vista, scenic resources, or the existing visual character of the area due to the extension of the M1W service area boundary. As there are no proposed improvements to be constructed due to the proposed...
service area extension, the proposed service area extension will not degrade the existing visual character or quality of the study area.

The Proposed Project would not result in any direct aesthetic-related effects and does not include the construction of any new facilities or infrastructure improvements. However, additional facilities may be warranted in the future. Future construction and operational activities associated with the proposed service area extension, including new, upgraded future treatment and collections systems and facilities, may result in indirect impacts to aesthetics depending on construction of any above-ground structures or equipment. Most future improvements would be underground (e.g. improved and/or new sewer lines, pipeline collections systems) and would not permanently impact views. The precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Future environmental review will be completed at the time actual facilities or infrastructure improvements are proposed to address any subsequent project-level impacts relating to aesthetics resources.

The Proposed Project would not alter the existing character, aesthetics, and views of the area. The Project does not include construction of new facilities and any future facilities or infrastructure improvements to serve these communities would be an indirect impact. By nature of the connections, future extension of pipelines will be placed underground and, therefore, will not permanently affect any scenic vistas or resources. Furthermore, any future facilities or infrastructure improvements will require further environmental review to analyze any potential aesthetic-related effects. Therefore, the Proposed Project would not result in: 1) a substantial adverse effect on a scenic vista, 2) substantial damage to scenic resources, or, 3) substantial degradation of existing visual characteristics of the Project site or its surroundings or conflict with applicable zoning and other regulations governing scenic quality. Accordingly, the Proposed Project would have no impact on aesthetic resources.

d) No new facilities or alterations to existing structures is proposed for the service area extension, thus no new sources of substantial light or glare which could adversely affect day or nighttime views in the area would occur.

Sources: (1, 2, 3, 4, 6 and 9)
4.2 AGRICULTURAL RESOURCES

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>
| 2. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | No | Yes | No | Yes |

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | No | Yes | No | Yes |

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | No | Yes | No | Yes |

d) Result in the loss of forest land or conversion of forest land to non-forest use? | No | Yes | No | Yes |

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | No | Yes | No | Yes |

Setting

In California, agricultural land is given consideration under CEQA. According to Public Resources Code §21060.1, “agricultural land” is identified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland as defined by the U.S. Department of Agriculture land inventory and monitoring criteria, as modified for California. CEQA also requires consideration of lands that are under Williamson Act contract. The California Department of Conservation, under the Farmland Mapping and Monitoring Program (FMMP), produces maps and statistical data that are used for analyzing impacts on California’s agricultural resources. The FMMP produces Important Farmland Maps, which identify five agricultural-related categories plus two non-agricultural listings, each category is summarized below:

- Prime Farmland is land that has the best combination of physical and chemical characteristics for crop production. It has the soil quality, growing season, and moisture needed to produce sustained high yields of crops when appropriately treated and managed.
Farmland of Statewide Importance is land other than Prime Farmland that has a good combination of physical and chemical characteristics for crop production.

Unique Farmland is land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance which has been used for the production of specific high economic value crops.

Farmland of Local Importance is either currently producing crops, or has the capacity of production, and does not meet the criteria of the categories above.

Grazing Land is land which the existing vegetation, grown naturally or through management, is suited for the grazing of livestock.

Urban Land is land which is currently occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel.

Other Land is land not included in any mapping category which may be low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than forty acres. Vacant and non-agricultural land surrounded on all side by urban development and greater than 40 acres is mapped as Other Land.

Discussion/Conclusion/Mitigation

a - b) The Initial Focused WWS Extension Areas would extend the M1W service area from the existing 64,170 acres to 67,194 acres; the Potential Future WWS Extension Areas would increase the area by another 1,450 acres for a total extension area of 68,645. Inclusion of an area in M1W’s service area could enable its future extension into the regional wastewater district and facilitate the provision of wastewater collection and treatment provided by M1W, although these would be subject to future determinations of specific engineering design as well as CEQA compliance and permitting.

There are lands zoned as farmlands, however there are no lands under Williamson Act contract within the planned service area extension areas. The planned service area extension would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the FMMP maps, to non-agricultural use, and would not conflict with existing zoning for agricultural use or Williamson Act contract. As previously discussed, the Proposed Project would not directly result in physical improvements in the proposed extension areas and therefore, would not conflict with existing zoning for agricultural use. Therefore, the Proposed Project would not result in conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) nor would the Project conflict with existing zoning for agricultural use or Williamson Act Contract.11

11 The original proposal for service area extension included a much larger area within Monterey County and included approximately 40,098 acres of Grazing Land, 72,692 acres of Prime Farmland, 10,427 acres of Unique Farmland, and 13,990 acres of Farmland of Statewide Importance (Farmland) within the study area. These areas of large farmland parcels or groups of agricultural parcels that have no probability of needing services and are not proposed for service area extension, as shown on Figure A-1 in Appendix B. Areas designated as Grazing Land, Prime Farmland, Farmland of Statewide Importance and Unique Farmland within the study area were identified utilizing the California Department of Conservation, FMMP maps and all such areas are specifically excluded from the extended service areas of the proposal.
c - e) No designated forest land or timberland is located within the service area extension. Therefore, the proposed service area extension will not conflict with existing zoning for, or cause rezoning of, forest or timber lands nor would the Proposed Project result in the loss of forest land or conversion of forest land to non-forest use. No other changes to the environment will occur from the proposed service area extension that will result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Thus, the proposed service area extension would not conflict with zoning to protect forest resources, result in direct conversion of forest land or involve other changes that could indirectly lead to such conversion.

Sources (1, 2, 3, 4, 5, 6 and 9)
4.3  **AIR QUALITY**

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>a) Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>c) Expose sensitive receptors to substantial pollutant concentrations?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
</tbody>
</table>

**Setting**

The federal Clean Air Act and the California Clean Air Act mandate the control and reduction of certain air pollutants. Under these Acts, the United States Environmental Protection Agency (EPA) and the California Air Resources Board have established ambient air quality standards for specific "criteria" pollutants. These pollutants are carbon monoxide (CO), ozone (O₃), sulfur dioxide (SO₂), nitrogen oxides (NOₓ), particulate matter less than 10 microns in diameter (PM₁₀), lead, and particulate matter less than 2.5 microns in diameter (PM₂.₅). The Project site is located within the North Central Coast Air Basin (NCCAB), which is comprised of Santa Cruz, San Benito, and Monterey Counties, and is regulated by the Monterey Bay Air Resources District (MBARD, formally known as Monterey Bay Unified Air Pollution Control District).

The NCCAB is in attainment for all National Ambient Air Quality Standards (NAAQS) and for all California Ambient Air Quality Standards (CAAQS) except O₃ and PM₁₀. The primary sources of O₃ and PM₁₀ in the NCCAB are from automobile engine combustion. To address exceedance of these CAAQS, the MBARD has developed and implemented several plans including the 2005 Particulate Matter Plan, the 2007 Federal Maintenance Plan, and the 2012-2015 Air Quality Management Plan (AQMP), a revision to the 2012 Triennial Plan. Monterey Attainment Status to National and California Ambient Air Quality can be found in Table 2 below.
### Table 2
North Central Coast Air Basin Attainment Status – January 2015

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>State Standards</th>
<th>National Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone (O₃)</td>
<td>Nonattainment²</td>
<td>Attainment/Unclassified³</td>
</tr>
<tr>
<td>Inhalable Particulates (PM₁₀)</td>
<td>Nonattainment</td>
<td></td>
</tr>
<tr>
<td>Fine Particulates (PM₂.₅)</td>
<td>Attainment</td>
<td>Attainment/Unclassified⁴</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>Monterey Co. – Attainment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>San Benito Co. – Unclassified</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Santa Cruz Co. – Unclassified</td>
<td></td>
</tr>
<tr>
<td>Nitrogen Dioxide (NO₂)</td>
<td>Attainment</td>
<td>Attainment/Unclassified⁵</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO₂)</td>
<td>Attainment</td>
<td>Attainment⁶</td>
</tr>
<tr>
<td>Lead</td>
<td>Attainment</td>
<td>Attainment/Unclassified⁷</td>
</tr>
</tbody>
</table>

Notes:
1) State designations based on 2010 to 2012 air monitoring data.
2) Effective July 26, 2007, the ARB designated the NCCAB a nonattainment area for the State ozone standard, which was revised in 2006 to include an 8-hour standard of 0.070 ppm.
4) This includes the 2006 24-hour standard of 35 µg/m³ and the 2012 annual standard of 12 µg/m³.
5) In 2012, EPA designated the entire state as attainment/unclassified for the 2010 NO₂ standard.
6) In June 2011, the ARB recommended to EPA that the entire state be designated as attainment for the 2010 primary SO₂ standard. Final designations to be addressed in future EPA actions.
7) On October 15, 2008 EPA substantially strengthened the national ambient air quality standard for lead by lowering the level of the primary standard from 1.5 µg/m³ to 0.15 µg/m³. Final designations were made by EPA in November 2011.
8) Nonattainment designations are highlighted in **Bold**.

### Discussion/Conclusion/Mitigation

a, b) The planned service area extension would not directly result in construction of infrastructure improvements that would result in any new emissions sources, there would be no violation of any air quality standard. For the same reasons, the planned service area extension would not directly contribute to a cumulatively considerable net increase of any criteria pollutant for which the Project region is in "non-attainment." The planned service area extension would not directly result in construction of infrastructure improvements; as a result, the planned service area extension would not result in direct impacts to air quality.

The 2008 AQMP addresses attainment of the State ozone standard and federal air quality standard. The AQMP accommodates growth by projecting growth in emissions based on population forecasts prepared by the Association of Monterey Bay Area Governments (AMBAG) and other indicators. Consistency determinations are issued for commercial, industrial, residential, and infrastructure related projects that have the potential to induce population growth. A project is considered inconsistent with the AQMP if it has not been accommodated in the forecast projections considered in the AQMP. The Proposed Project would not result in any direct air pollutant emissions.

The Proposed Project would not result in any direct air quality impacts and does not include the construction of any new facilities or infrastructure improvements. However, additional facilities may be warranted in the future. Future construction of infrastructure improvement could potentially result in temporary and/or permanent air quality effects. However, the extent of potential impacts would be contingent upon a variety of different project-specific factors. As a result, it would be considered speculative at this time to try and ascertain the extent of potential air quality related effects. If following approval of the proposed planned service area extension, projects that would include the construction of facilities are identified by M1W; they would be responsible for CEQA compliance per MBARD policies to address any subsequent project-level activities relating to air resources. At this project level stage, future improvement projects would be subject to their own...
project-level environmental review under CEQA where individual site characteristics, including emission sources, would be analyzed. Therefore, the planned service area extension would result in no impact under these criteria. Further, the Proposed Project does not conflict with the air quality plan or violate or contribute to any air quality standard.

Since the planned service area extension would not authorize any new emissions sources, there would be no violation of any air quality standard or any adverse impacts on air quality that would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Future construction and operational activities associated with the proposed service area extension, including new, upgraded future treatment and collections systems and facilities, may result in indirect impacts to aesthetics depending on construction of any above-ground structures or equipment. Most future improvements would be underground (e.g. improved and/or new sewer lines, pipeline collections systems) and would not permanently impact views. The precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Future environmental review will be completed at the time actual facilities or infrastructure improvements are proposed to address any subsequent project-level impacts relating to aesthetics resources.

c, d) Sensitive receptors may include population groups (i.e. children, senior citizens, acutely or chronically ill people) and/or facilities where these more susceptible population groups tend to reside or spend time (i.e. schools, retirement homes, hospitals). As previously stated, the proposed project would extend the existing service area, and will not include any new construction, proposed structures, or new sources of air emissions. Therefore, the planned service area extension would not expose sensitive receptors to substantial pollutant concentrations, or, result in other emissions (such as objectionable odors) adversely affecting a substantial number of people.

Sources (1, 2, 3, 4, 6, 7, 8 and 9)
## 4.4 Biological Resources

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<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
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<tr>
<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?</td>
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<tr>
<td>c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
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<tr>
<td>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
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<td>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
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<td>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</td>
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### Setting

As described in the Monterey County 2010 General Plan, the two most common types of natural habitat are oak woodland on middle and upper elevations and grassland in lower elevations such as valleys. There are numerous federally listed endangered and threatened species and other CEQA defined special-status species in the County. More than 70,000 acres in the County are designated as critical habitat by the U.S. Fish and Wildlife Service (USFWS).

The Monterey County 2010 General Plan and EIR identifies potential impacts to special status species, sensitive natural communities, riparian habitat and wetlands, and wildlife movement corridors with future development in the County. Numerous policies are included in the General Plan, which relate to protection of habitat and other biological resources. Implementations of these policies were found to result in less than significant impacts.
Discussion/Conclusion/Mitigation

a) - c) Currently, large portions of the area proposed for service extension are developed with existing residential and agricultural land uses and limited commercial, open space, and public/quasi-public land uses. The current proposal would not directly result in physical improvements, such as additional infrastructure, or improved facilities in the Project areas. Since the planned service area extension does not propose physical changes to the environment, it would not have a direct environmental effect upon the species categories noted above (or others which have yet to be identified); including riparian habitat or wetlands.

Although no direct impacts would occur, potential future construction and operational activities associated with the proposed service area extension, including new, upgraded future treatment and collections systems and facilities, may result in indirect impacts to biological resources. However, the precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Prior to approval of the construction of infrastructure improvements (once identified by M1W or underlying jurisdiction), the Lead Agency would be responsible for CEQA compliance and permitting to address any subsequent project-level activities relating biological resources.

Therefore, the planned service area extension would not: 1) have an adverse effect on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS; 2) have a substantial adverse effect to riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS; 3) have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruptions, or other means. There is no impact.

d) – e) The action of changing the M1W’s service area, by itself, will not result in physical impacts on the environment, as described herein. The planned service area extension involves no direct changes to the existing wastewater system, or the associated system permits. Inclusion of an extension area in the service area of M1W could facilitate the provision of new or expanded wastewater collection and treatment provided by M1W, although these would be subject to future determinations of specific engineering design as well as CEQA compliance and permitting. As such, the planned service area extension will not: 1) interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or, 2) impede the use of native wildlife nursery sites. Furthermore, the planned service area extension does not conflict with relevant County policies or regulations protecting biological resources.

f) There are no approved HCP’s within the Proposed Project Area, as a result the planned service area extension would not conflict with an HMP, HCP, Natural Community Conservation Plan, or other regional or State habitat conservation plans.

Sources (1, 2, 3, 4, 6 and 9)
4.5 CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

5. CULTURAL RESOURCES. Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?
   $$\square$$  $$\square$$  $$\square$$  $$\square$$  $$\square$$

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?
   $$\square$$  $$\square$$  $$\square$$  $$\square$$  $$\square$$

c) Disturb any human remains, including those interred outside of formal cemeteries?
   $$\square$$  $$\square$$  $$\square$$  $$\square$$  $$\square$$

Setting

Monterey County was first inhabited by the Costanoan then Esselen people. Spanish explorers first landed in Monterey Bay in the early 1600s; however, Franciscan missionaries did not establish missions in the county until the late 1700s. Americans began settling in the county in the 1800s during the Mexican period and especially after the Gold Rush of 1849. The unincorporated area of Monterey County contains several historic resources, including Mission Nuestra Señora de la Soledad and the Old Mission School near Soledad, the Site of the Battle of Natividad near Salinas, and the Glass House in Pajaro. Archaeological and paleontological resources have also been found at numerous sites in the county.

Discussion/Conclusion/Mitigation

a) As the Project consists of a service area extension and would not directly result in construction of infrastructure improvements, no significant effect would occur regarding any potentially eligible historic resources listed in government databases. Therefore, the planned service area extension would have no impact relative to a substantial adverse change in the significance of a historical resource.

b) The Proposed Project would extend services within the existing service areas for M1W. Currently, large portions of the area proposed for service area extension are developed with existing residential and agricultural land uses and limited commercial, open space, and public/quasi-public land uses. Furthermore, the planned service area extension would not directly result in physical improvements, such as additional infrastructure or improved facilities in the Proposed Project areas. Potentially significant archaeological and tribal cultural resources include, but are not limited to, the following: concentrations of artifacts or culturally modified soil deposits, modified stone, shell, bone, or other cultural materials such as charcoal, ash, and burned rock indicative of food procurement or processing activities, or prehistoric domestic features including hearths, fire pits, or house floor depressions or other such prehistoric artifacts. The planned service area extension would not cause a substantial adverse change in the significance of an archaeological resource as no physical improvements are proposed. Since the Proposed Project would not entail the construction of physical improvements or otherwise result in ground-disturbing activities, the planned service area extension would not cause any substantial adverse change in the significance of an archaeological resource.

c) The planned service area extension would not impact any human remains, since no construction is proposed by the service area extension. If any human remains are encountered during future underground wastewater line construction, compliance with §7050.5 of the Health and Safety Code...
and §5097.94 of the Public Resources Code of the State of California requires that in the event of the discovery of human remains during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Monterey County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the coroner determines that the remains are not subject to his authority, the coroner shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

**Sources (1, 2, 3, 4, 6 and 9)**
4.6  ENERGY

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<tr>
<th>ENVIRONMENTAL IMPACTS</th>
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<th>Less Than Significant with Mitigation Incorporated</th>
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<tr>
<td>6. ENERGY. Would the project:</td>
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<td>a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</td>
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<td>b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</td>
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Setting

Pacific Gas and Electric Company (PG&E) is the energy utility provider for Monterey County, furnishing both natural gas and electricity for residential, commercial, industrial, and municipal uses. PG&E generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. In 2017, natural gas facilities provided 20 percent of PG&E’s electricity delivered to retail customers; nuclear plants provided 27 percent; hydroelectric operations provided 18 percent; renewable energy facilities including solar, geothermal, and biomass provided 33 percent; and two percent was unspecified (PG&E, 2018).

Discussion/Conclusion/Mitigation

a, b) The action of changing the M1W’s service area, by itself, will not result in consumption of energy sources, as described herein. The planned service area extension involves no direct changes to the existing wastewater system, or the associated system permits. Inclusion of an extension area in the service area of M1W could facilitate the provision of new or expanded wastewater collection and treatment provided by M1W, although these would be subject to future determinations of specific engineering design as well as CEQA compliance and permitting. Furthermore, all future projects would be subject to existing State and local energy standards. As such, the planned service area extension will not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Sources (6 and 9)
4.7 GEOLOGY AND SOILS

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7. GEOLOGY AND SOILS. Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

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ii) Strong seismic ground shaking?

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iii) Seismic-related ground failure, including liquefaction?

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iv) Landslides?

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b) Result in substantial soil erosion or the loss of topsoil?

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c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

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d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

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e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

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f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

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Setting

Geologic structure in Central California is primarily the result of tectonic events that have occurred during the past 30 million years. It is widely believed that the numerous faults in this area are related to movements along the boundary between the Pacific and North American tectonic plates. The relative motion between these two tectonic plates is taken up largely along the northwest-trending San Andreas Fault system, which defines the regional boundary between the two plates. Changes in sea level and tectonic uplift resulted in a complicated depositional environment that produced the complex geology of the Monterey Bay region. Faulting and folding have deformed and displaced the geologic units in the region, and the granitic basement and overlying Tertiary deposits have been juxtaposed along many of the northwest/southeast-trending faults.

The Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. The Seismic Hazards Mapping Act addresses earthquake-related hazards,
including strong groundshaking, liquefaction, and seismically induced landslides. The state is charged with identifying and mapping areas at risk of strong groundshaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

The Monterey County 2010 General Plan and Area Land Use Plans provide policies for the protection of residents from geologic and soil hazards. Applicable policies are intended to ensure that native vegetation cover is maintained to reduce potential risks of runoff, soil erosion, and other geological processes. Chapter 16.08 of the Monterey County Code identifies rules and regulations to control all grading, including excavations, fills and embankments, and establishes the procedures for the issuances of grading permits. Chapter 16.08 is intended to minimize erosion as a result of ground disturbing activities.

**Discussion/Conclusion/Mitigation**

a) – d) The Initial Focused WWS Extension Areas would extend the M1W service area from the existing 64,170 acres to 67,194 acres; the Potential Future WWS Extension Areas would increase the area by another 1,450 acres for a total extension area of 68,645. Currently, large portions of the area proposed for extension are developed with existing residential and agricultural land uses and limited commercial, open space, and public/quasi-public land uses. Furthermore, the current proposal would not directly result in physical improvements, such as additional infrastructure or improved facilities in the Proposed Project areas improvements that would directly affect geology or soils. Therefore, since the extension areas are already largely developed, and the Project would not directly result in any construction of infrastructure improvements, there would be no direct impact to geology or soils. As a result, the Proposed Project would not: 1) expose people or structures to potential seismically induced hazards (i.e., fault ruptures, ground failure, liquefactions, landslides, etc.), 2) result in substantial soil erosion or the loss of topsoil, 3) be located on a geologic unit that is unstable, or, 4) be located on expansive soils. The Proposed Project would not have a direct impact on geology or soil resources.

No direct impacts to geology and soils would occur. However, additional facilities may be warranted in the future. Future construction and operational activities associated with the proposed service area extension, including new, upgraded future treatment and collections systems and facilities, may result in indirect impacts to geology and soils depending on construction of any above-ground structures or equipment. The precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Future environmental review will be completed at the time actual facilities or infrastructure improvements are proposed to address any subsequent project-level impacts relating to geology and soils. Moreover, potential indirect effects would be addressed on a project-specific basis through standard construction best management practices, applicable conditions of approval, and project-specific mitigation (if applicable) identified during the development review process.

The Project does not include construction of new facilities and any future facilities or infrastructure improvements to serve these communities would be an indirect impact. Furthermore, any future facilities or infrastructure improvements will require further environmental review to analyze any potential geology and soils related effects. Therefore, the Proposed Project would not result in: 1) exposure of people or structures to potential substantial adverse effects, including the risk of
loss, injury, or death involving, rapture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides, 2) substantial soil erosion or the loss of topsoil, 3) on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, or 4) substantial risk to life or property due to expansive soils. Accordingly, the Proposed Project would have no impact on geology and soils.

e) The planned service area extension would not result in any potential adverse effects due to soils being incapable of supporting septic disposal since the Proposed Project would not involve the construction of any septic systems. Furthermore, the 2017 Focused WWSA Study concluded that both the communities of Bolsa Knolls and Oaks Hills proposed included in the service area extension areas have experienced challenges in maintaining the septic systems, and each requires an alternative wastewater approach to prevent future environmental compliance issues related to the aging septic systems. The planned service area extension would offer a solution for these communities experiencing challenges with maintaining septic systems by gradually reduce the number of individual septic systems in the area.

f) Please see response b) in Section 4.5 Cultural Resources. As stated above, the Proposed Project would extend services within the existing service areas for M1W and would not directly result in physical improvements, such as additional infrastructure or improved facilities in the Proposed Project areas. Indirect impacts associated with potential future development will be subject to future project level environmental review once project specifics are determined. Since the Proposed Project would not entail the construction of physical improvements or otherwise result in ground-disturbing activities, and indirect impacts associated with project construction will be evaluated on a project level basis, the planned service area extension would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Sources (1, 2, 3, 4, 6 and 9)
4.8 GREENHOUSE GASES

Various gases in the earth’s atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the earth’s surface temperature. Solar radiation enters the atmosphere from space and a portion of the radiation is absorbed by the earth’s surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, the radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect, or climate change, are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect. In California, the transportation sector is the largest emitter of GHGs.

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<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
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<tbody>
<tr>
<td>8. GREENHOUSE GAS EMISSIONS. Would the project:</td>
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<tr>
<td>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
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<tr>
<td>b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
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Setting

See Section 4.3 Air Quality above.

Discussion/Conclusion/Mitigation

a) The current proposal would not directly result in physical improvements, such as additional infrastructure or improved facilities in the Proposed Project areas. Therefore, the planned service area extension would not increase or generate any GHG emissions. For the same reason, the Proposed Project would not conflict with any applicable Federal, State, or local plans for reducing GHG emissions. Furthermore, wastewater systems can result in emissions of GHGs from wastewater treatment systems (e.g., in this case, individual septic systems). In the future, if all the properties currently using septic systems are connected to M1W for public wastewater disposal, there will be a reduction of the GHG (methane gas emissions) from use of these septic systems.

No direct impacts due to greenhouse gas emissions would occur. However, additional facilities may be warranted in the future. Potential future construction and operational activities associated with proposed extension of properties, including new, upgraded future treatment and collections systems and facilities may result in indirect impacts to GHG emissions. The precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Future environmental review will be completed at the time actual facilities or infrastructure improvements are proposed to address any subsequent project-level impacts relating to GHG. Furthermore, all future projects would be subject to MBARD standards and potential indirect effects would be addressed through standard construction best management practices (i.e., MBARD CEQA Guidelines), applicable conditions of approval,
and project-specific mitigation (if applicable). Therefore, the planned service area extension would not generate GHG emissions, there is no impact.

b) The proposed service area extension will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, as described above.

Sources (1, 2, 3, 6, 7, 8 and 9)
### HAZARDS AND HAZARDOUS MATERIALS

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Setting**

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. Hazardous materials and waste can result in public health hazards if improperly handled, released into the soil or groundwater, or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Department of Toxic Substances Control (DTSC) EnviroStor Database indicates that there were 28 contaminated sites in Monterey County that are listed in federal or state databases (Monterey County 2010).
Discussion/Conclusion/Mitigation

a) – b) The Project would not directly result in any construction of infrastructure improvements that would directly expose people hazards or hazardous materials. Inclusion of an area into the M1W service area could enable its future extension into the regional wastewater district and facilitate the provision of new or extended wastewater collection and treatment provided by M1W. These potential new or extended wastewater collection and treatment systems would require specific engineering design as well as be subject to standard conditions of approval. Standard conditions of approval would include General Plan policies that limit impacts due to hazards and hazardous materials as well as CEQA compliance and permitting. Therefore, the Proposed Project would not: 1) create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or 2) create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) There are many schools within the planned service extension areas as well as within one-quarter of a mile. However, the Proposed Project would extend M1W’s service area and would not result in any direct construction. As a result, would not have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of a school.

d) The planned service extension areas also include sites listed on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.5. There are more than 450 hazardous waste generators and more than 28 contaminated sites within Monterey County, many of which are located within the current M1W service area boundary, for example Fort Ord (Monterey County 2010). However, the Proposed Project would not directly result in any construction of infrastructure improvements that would directly expose people to hazards or hazardous materials. Additional facilities which may be warranted in the future would be subject to environmental review at the time actual facilities or infrastructure improvements are proposed to address any subsequent project-level impacts relating to significant hazard to the public or the environment, there is not impact.

e) The Monterey Regional Airport, Salinas Municipal Airport, and Marina Municipal Airport are within the existing M1W service area, there would be no change to wastewater service to these airports per this proposal. Therefore, the planned service area extension would have no impact to any airport facility, their staff, or passengers.

f) The major evacuation route in the vicinity of the planned service extension areas is State Highway 1, State Highway 68, and U.S. Highway 101. The planned service area extension would not alter the design or geometrics of these highways or, any public roads with ingress or egress to State Highway 1, State Highway 68, or U.S. Highway 101. The planned service area extension, from a vehicular traffic perspective, is benign; no new facilities, roads, or activities are proposed that would alter, impede, or otherwise impair vehicle movement. Therefore, implementation of the planned service area extension would not interfere with an adopted emergency response plan or emergency evacuation plan and would have no impact in this regard.

g) The planned service area extension would not develop new structures, change existing operations, or result in attracting additional people to the area. No additional risks of or, exposure of people to wildland fire hazards would result from the Project. Accordingly, the planned service area extension would have no impact on existing wildland fire risks or conditions.

Sources (1, 2, 3, 4, 6 and 9)
### 4.10 Hydrology and Water Quality

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. HYDROLOGY AND WATER QUALITY. Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Result in substantial erosion or siltation on- or off-site;</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>iv) Impede or redirect flood flows?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Setting**

Monterey County has three major watersheds the Salinas River watershed (by far the largest), Pajaro River Watershed (only partially within Monterey County), and the Carmel River watershed. The M1W service area is located within the Salinas River and Pajaro River Watersheds. Some constraints associated with the Salinas River and Pajaro River Watersheds including erosion associated with agriculture has deteriorated surface water quality in the Salinas Watershed, high nitrate levels, groundwater overdraft, and seawater intrusion. Flood hazards are present along the major drainages and tsunami inundation areas are in the coast (Monterey County 2010).

The Monterey County derives most of its total water supply from groundwater storage. The Proposed Project is primarily located within the Salinas Valley Groundwater Basin (which consists of four subbasins) and the Seaside Basin. **Figure 8** shows the relationship between the groundwater basins and the Proposed Project area that overlies each basin. The California Department of Water Resources (DWR), in its Bulletin...
118 (California Groundwater), has delineated the hydrogeologic boundaries of groundwater basins in California; all these basins are identified in Bulletin 118 (DWR 2015).

Three major water resource agencies have somewhat overlapping daily responsibilities in overseeing and managing surface- and groundwater within the County.12

- The Monterey County Water Resources Agency (MCWRA) has countywide jurisdiction over flood control and water resources management. The MCWRA is also responsible for regulation and supply of water from the Salinas Valley Groundwater Basin.

- The Monterey Peninsula Water Management District (MPWMD) manages water resources on the peninsula, primarily the Carmel River, its tributaries, and impoundments, as well as the groundwater beneath its management area. The MPWMD is also responsible for regulation and supply of water from the Seaside groundwater basin13.

The Pajaro Valley Water Management Agency (PVWMA) manages surface and groundwater along the Pajaro River, both in the North County area of Monterey County and in Santa Cruz County.

The Sustainable Groundwater Management Act (SGMA) of 2014 established a framework for sustainable, local groundwater management. Upon passage of SGMA, DWR launched the Sustainable Groundwater Management (SGM) Program to implement the law and provide ongoing support to local agencies around the State. SGMA requires, by June 30, 2017, the formation of locally-controlled groundwater sustainability agencies (GSAs) in the State’s high- and medium-priority groundwater basins and sub-basins. A GSA is responsible for developing and implementing a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. Current GSA formation within the two groundwater basins which are within or overlap the Proposed Project area are described below:

- The Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) has been granted exclusive GSA status for the Langley Area and East Side Aquifer sub-basins.

- The Arroyo Seco Groundwater Sustainability Agency (ASGSA), a joint powers authority formed by the City of Greenfield and the Clark Colony Mutual Water Company, management area covers the City of Greenfield's jurisdictional boundary. The ASGSA includes a portion of the Forebay Aquifer sub-basin, which is also a part of the SVBGSA, creating an “overlap state” with both ASGSA and SVBGSA. The ASGSA and SVBGSA have signed a Coordination Agreements, whereby the SVBGSA agrees to manage a specific portion of the Forebay Aquifer sub-basin (e.g., that portion outside of the City of Greenfield), and the ASGSA will manage the portion of the Forebay Aquifer within the Greenfield city limits.

The Marina Coast Water District (MCWD) has been granted exclusive GSA status within its jurisdictional boundaries within the Monterey sub-basin and the 180/400 sub-basin.

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12 Because of their overlapping areas of responsibility and the need to coordinate water resources management on a larger scale, these agencies have Memoranda of Understanding (MOUs) with each other that outline how they will coordinate planning and engineering, policy development, and program development and implementation.

13 The southern portion of the Seaside sub-basin was formally adjudicated by the State in 2006 and is managed by the Seaside Basin Watermaster.
Groundwater Basins and Subareas Map
Portions of the Monterey sub-basin and the 180/400 are currently in an "overlap state" as both the MCWD and SVBGSA have filed notifications with DWR to be the exclusive GSA over these areas. The MCWD has signed a Coordination Agreement with the SVBGSA to facilitate a positive working relationship and streamline efforts and resources moving forward.\(^{14}\)

Overdrafting and diversion or loss of recharge water, as well as periodic droughts, has caused historical declines in the groundwater table and resultant seawater intrusion into coastal aquifers. Long-term approaches toward management of the overdraft problem have been focused on large capital projects and programs, water conservation and recycling, and protection of the prime recharge areas for important aquifers. The MCWRA and its agency partners, including M1W, have two major capital projects that are managed to provide improvements to groundwater quality and address the long-term trend of seawater intrusion and groundwater level declines in the SVGB. They include the CSIP and the Salinas Valley Reclamation Project. The Salinas Valley Reclamation Project included reoperation of the Nacimiento, and San Antonio reservoirs and construction and operation of a new seasonal diversion facility called the Salinas River Diversion Facility (SRDF or rubber dam) has been providing river water for irrigation since 2010. The CSIP provides treated (recycled) wastewater from the RTP to agricultural growers in the unincorporated Castroville area of Monterey County. Additionally, the PWM Project once implemented will provide approximately up to 4,400 AFY of recycled water for irrigation in the CSIP area, reducing the need for pumping in this area of the Salinas Valley Groundwater Basin.

An accurate accounting of groundwater recharge for the Salinas Valley Groundwater Basin is difficult to compile due to its large size, variations of rainfall each season and the proactive management of recharge activities by the Monterey County Water Resources Agency (MCWRA 2006). Using DWR basin boundaries, Bulletin 118 provided generalized estimates of groundwater recharge within the Salinas Valley Groundwater Basin and subbasins, of which the Seaside Area was considered a subbasin. DWR estimated the overall basin inflow at 532,000 acre-feet per year (AFY) in the mid 1990’s (MCWRA 2006). However, these estimates do not apply directly to the groundwater basins as they are currently defined and managed by Monterey County. The MCWRA has estimated that in the northern portions of the Salinas Valley, recharge is by infiltration along the channel of the Salinas River (30%) and its tributaries (20%), irrigation return water (40%), and infiltration and precipitation over the valley floor, subsurface inflow, and seawater intrusion (10%) (MCWRA 2006).

Within Monterey County, groundwater is the primary source of water supply for municipal and agricultural use. Groundwater extraction is monitored closely and reported on an annual basis for groundwater basins. Table 3, Groundwater Extraction Summary for the Salinas Valley Groundwater Basin excerpted from the PWM summarizes groundwater extraction within the northern Salinas Valley Groundwater Basin.

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>180/400 Foot Aquifer Subbasin</td>
<td>130,139</td>
<td>121,165</td>
<td>103,544</td>
<td>105,172</td>
<td>113,898</td>
<td>117,242</td>
</tr>
<tr>
<td>Eastside Subbasin</td>
<td>108,696</td>
<td>98,988</td>
<td>91,300</td>
<td>89,052</td>
<td>95,543</td>
<td>97,622</td>
</tr>
</tbody>
</table>

All values in acre-feet (AF)

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\(^{14}\) As part of the agreement, both agencies will join forces to apply for grant funds with MCWD being the responsible party for submitting proposals and applications for the Monterey Subbasin and the SVBGSA responsible for submitting the application for the 180/400 Subbasin. The agencies will also form a new coordination committee including representatives from MCWD and SVBGSA and will share data and resources.
Historical and recent accounts of groundwater withdrawal within the Salinas Valley Groundwater Basin documents that withdrawals have outpaced groundwater recharge of fresh water and has resulted in overdraft and seawater intrusion conditions (Brown and Caldwell, 2014; California DWR, 2004b; MCWRA, 2012a, 2012b; Kennedy/Jenks, 2004; HydroMetrics WRI, 2013). Seawater intrusion in the Salinas Valley Groundwater Basin was first detected in 1938 and documented in 1946 when the State Department of Public Works (now known as DWR) published Bulletin 52 (California DWR, 2004b). Seawater intrusion is typically inferred when chloride concentrations detected in groundwater monitoring and production wells are greater than 500 milligrams per liter (mg/L) because these concentrations exceed the California Secondary Maximum Contaminant Level (MCL) for drinking water. In Monterey Bay, there are offshore ocean outcrops of the 180-Foot and 400-Foot Aquifers a few miles offshore, as identified by Greene (1970). These ocean floor outcrops facilitate the recharge of seawater into those aquifers along the coast when groundwater extraction exceeds onshore recharge. More recent work by Eittreim, et. al., (2000) maps the Purisima Formation farther offshore than the locations of the 180-Foot Aquifer and 400-Foot Aquifer outcrops mapped by Greene. However, Eittreim did not specify correlations, if any, to specific aquifers, and Greene did not specify correlations to specific geologic units. In any case, various reports have confirmed that the 180-Foot and 400-Foot Aquifers do have ocean floor outcrops in Monterey Bay.

The offshore recharge area was investigated in a study that evaluated the mechanisms of seawater intrusion into the Salinas Valley Groundwater Basin, as based on the physical setting of the coastal portions of the aquifer systems and previous groundwater studies on seawater intrusions (Kennedy/Jenks, 2004). The study concluded that the core condition for seawater intrusion into the groundwater basin is the direct hydraulic contact of the aquifers with the Monterey Bay. The secondary condition for seawater intrusion into the 180-Foot and 400-Foot Aquifers is that inland groundwater levels are below sea level in some areas and the normal landward to seaward gradient has been reversed in the 180-Foot and 400-Foot Aquifers since the early 20th century. The seawater intrusion has resulted in the degradation of groundwater supplies, requiring urban and agricultural supply wells within the affected area to be abandoned or destroyed (MCWRA, 2001).

Additionally, as noted above, the Salinas Valley Groundwater Basin is hydrologically connected to the ocean, thus providing a constant source of both pressure and direct recharge of seawater. Because groundwater elevations along the coast and directly inland have been at or below sea level in the basin, a landward groundwater gradient has developed and induced groundwater recharge from the ocean. The consequence of the overdraft conditions has led to degradation of groundwater quality along the coast within the Salinas Valley Groundwater Basin.

Discussion/Conclusion/Mitigation

a) The Project would not violate any water quality standards or waste discharge requirements, nor would it otherwise substantially degrade surface or groundwater quality, since the Proposed Project does not include any construction of infrastructure improvements or capacity increases.

The proposed service area extension would not result in any direct hydrology and water quality impacts. However, additional facilities may be warranted in the future. Potential future construction and operational activities associated with the proposed service area extension, including new, upgraded future treatment and collections systems and facilities may result in indirect impacts. The precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Future environmental review will be completed at the time actual facilities or infrastructure improvements are proposed to address any subsequent project-level impacts relating to aesthetics resources. Additionally, future infrastructure improvements would also be subject to mandatory water quality standards

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15 This value represents the Upper Range Consumer Acceptance Contaminant Level pursuant to Title 22 of the California Code of Regulation, Section 64449(a).
implemented through NPDES permit requirements and CEQA compliance to address any subsequent project-level activities relating to hydrology and water quality. Specifically, earth-disturbing activities during construction would be subject to the NPDES Permit Program, administered by the Central Coast RWQCB, which helps control pollution in stormwater by regulating sources of pollution at construction sites that would result in the discharge of pollutants into the stormwater and subsequent receiving waters during both construction and operations activities. As required by NPDES process, future qualifying construction projects would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). The NPDES Construction General Permit identifies limits on can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality or people's health (EPA 2017). Construction activities subject to the Construction General Permit include clearing, grading, and other ground-disturbing activities such as stockpiling or excavation. The Construction General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and BMPs such as maintaining or creating drainages to convey and direct surface runoff away from bare areas, and installing physical barriers such as berms, silt fencing, waddles, straw bales, and gabions.

Therefore, the Proposed Project would not result in discharges that would potentially violate water quality standards or waste discharge requirements. The Project would have no direct effect on wastewater treatment requirements and would result in no impact. Indirect impacts from future construction of improvement would be addressed by construction project compliance with the provisions of the Construction General Permit, including preparation of a SWPPP and implementation of all identified BMPs; these would ensure short-term construction impacts associated with water quality standards and waste discharge requirements would be minimized.

b) The Project is an extension of M1W service area to provide wastewater service and as such, would not deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Groundwater recharge in the Salinas Valley Groundwater Basin is principally from infiltration from the Salinas River, from Arroyo Seco, and, to a much lesser extent, from deep percolation of rainfall. As stated previously, the Salinas Valley Groundwater Basin and Seaside Basin functions as water supply sources for a large portion of the local area. The primary consumptive use in the Seaside Basin is from pumping of the aquifers for domestic use.

The potential reduction of septic systems in the Bolsa Knolls and Oak Hills communities after future extension could reduce the portion of the return flow from existing septic tanks in single family homes. However, groundwater quality has also been affected by seepage from these septic systems. Additionally, the contribution of recharge from infiltration of septic systems in these homes in comparison to the other sources is small and the timeframe for removal of septic systems by individual homeowners is likely to occur over time. Therefore, the contribution is small and the timing unknown. The potential future indirect impacts from reduction of septic systems on the
water system will thus not result in the depletion of groundwater or the groundwater system which would impede sustainable groundwater management of the basin\textsuperscript{16,17}.

Additionally, as described above, influent flow to the M1W RTP that is treated to a tertiary level is distributed to nearly 12,000 acres of farmland in the northern Salinas Valley for irrigation use (recycled water is delivered using the CSIP distribution system). Furthermore, beginning in 2019, secondary treated water can also undergo advanced treatment via the new AWTF of PWM Project currently under construction. Product water from the AWTF would then be transported and injected into the Seaside Groundwater Basin. Therefore, the inclusion of an area in the M1W service area could enable its future extension into the regional wastewater district and facilitate the provision of wastewater collection and treatment for recycled and advanced treated water provided by M1W, although these would be subject to CEQA compliance. The potential for additional water supply represents a potential beneficial impact.

ci - civ) As previously stated, M1W operates and maintains 25 pump stations, 35 pressure-vacuum stations, approximately 30 miles of pipeline from each pump station to the RTP (M1W 2017). There would be no water system improvements or capacity increases through this boundary adjustment. No change is proposed in existing or proposed area water system improvements. Therefore, the Proposed Project does not propose any physical changes to the environment (e.g., alter the existing drainage pattern or contribute additional runoff water). The proposed boundary adjustments would have no effect on streams or watercourses in the vicinity. Therefore, the Proposed Project would result in no impact regarding alteration of drainage patterns and watercourses and potential subsequent erosion, siltation, or flooding. Furthermore, the proposed boundary adjustments would have no effect on or increase in runoff. The extension would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding and would not substantially alter the existing drainage pattern of the site.

Each of the local jurisdictions within the Proposed Project area have adopted their own General Plans, Master Plans, Ordinances and development standards that govern the planning and future development of the Proposed Project area. Individual jurisdictions are responsible for performing several permit-related activities that collectively are intended to address water quality, stormwater systems and to reduce pollutants that enter and are discharged from the storm drain systems within the area. Additionally, the Central Coast Regional Water Quality Control Board (RWQCB) relies on its adopted “Water Quality Control Plan for the Central Coast Basin Plan” (Basin Plan) to manage surface and groundwater in order to provide water quality standards (CCRWQCB, 2009). The Central Coast RWQCB implements the Basin Plan by issuing and enforcing pollution standards: 1) waste discharge requirements (non-water body discharges); 2) NPDES permits (surface water body discharges) for point source discharges, water-quality based effluent limitations, prohibitions of discharge, and the review and establishment of Total Maximum Daily Loads. Monitoring for compliance is accomplished through various programs and agencies: discharger self-monitoring is required under WDRs and NPDES permits; the Central Coast Ambient Monitoring Program (CCAMP), Surface Water Ambient Monitoring Program (SWAMP),

\textsuperscript{16} CEQA references an impact in this category as “a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)”.

\textsuperscript{17} The use of septic systems has also been linked to increased pollutants in groundwater. Pollutants that are not removed by septic systems can migrate into groundwater by leaching through the soil resulting in potential contamination of ground water resources. This problem can be magnified as the number of older failing systems increases over time.
and the Groundwater Ambient Monitoring and Assessment (GAMA) Program are used by the RWQCB.

As stated above, although no direct impacts would occur, potential future construction and operational activities associated with proposed extension of services, including new, upgraded future treatment and collections systems and facilities, may result in indirect impacts to drainage systems and water quality or otherwise impact hydrology. However, the precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Prior to approval of the construction of infrastructure improvements (once identified by M1W or underlying jurisdiction), the Lead Agency would be responsible for CEQA compliance to address any subsequent project-level activities relating to drainage patterns and water quality.

Therefore, implementation of the Proposed Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: 1) result in erosion or siltation on- or offsite, 2) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, 3) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or 4) impede or redirect flood flows.

d) The project site is not located in an area subject to significant seiche or tsunami. However, certain portions of the Proposed Project area located in areas designated within flood hazard zones by the Federal Emergency Management Agency (FEMA) flood maps. As stated above, the Proposed Project would not result in any direct development. Furthermore, any indirect development as a result of the project would be subject to CEQA review, standard conditions of approval, and local and state policies which would protect against impacts associated with the release of pollutants due to project inundation in a flood hazard zone. There is no impact.

e) As described above, the project would not result in significant water quality or groundwater quality impacts that would conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Sources (1, 2, 3, 6 and 9)
4.11 LAND USE AND PLANNING

Table 1, above, summarizes the acreages of the proposed service area extension, the existing service area of the M1W area is 64,170 acres and the proposed service area extension totals 68,645 acres. Parcels designated as Grazing Land, Prime Farmland, Farmland of Statewide Importance and Unique Farmland have been excluded from the proposal.

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. LAND USE AND PLANNING. Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☐</td>
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</tbody>
</table>

Setting

Underlying local jurisdictions and the County of Monterey have each adopted their own General Plans and Land Use Plans that govern the planning and development of the M1W area and Proposed Project area. Underlying land use designations of the proposed planned service area extension are shown above in Figure 5 & 6.

The largest land group in Monterey County is agricultural land, followed by public and quasi-public lands (consisting mostly of federal and state lands). Urban development is primarily located along Monterey Bay and in the Salinas Valley. Rural and semi-rural development is scattered throughout the County (Monterey County 2010). As noted above, the Proposed Project area is located within the boundaries of multiple jurisdictions, including Salinas and Gonzales. Land use for areas analyzed in the 2017 Focused WWSA Study and identified as needing an alternative solution to wastewater service are further described below.

- **Bolsa Knolls:** The land use designations for Bolsa Knolls comprise approximately 168 acres of low-, medium-, and high-density residential parcels, approximately 4 acres of commercial property, 37 acres of public/quasi-public land, and additional farmland and resource conservation land. Bolsa Knolls land use is shown in Figure 5.

- **Spreckels:** Land use in this community is comprised of approximately 39 acres of residential high density, 8.7 acres of commercially zoned property, and 5.9 percent of public/quasi-public property. Spreckels land use is shown in Figure 5.

- **Indian Springs Ranch:** The community is comprised of approximately 71 acres of residential low density, 2.5 acres of public/quasi-public land, and 32.1 acres of resource conservation land, after adjustment for flow calculations. Indian Springs Ranch land use is shown in Figure 6.

- **Oak Hills:** The community consists of 226.7 acres of medium density residential land, 15.5 acres zoned as special treatment area, 12 acres zoned as wetlands and coastal strand, and 0.06 acres zoned as public/quasi-public. Figure 6 shows Oak Hills designated land use.
- **Las Palmas Ranch**: The community includes approximately 282 acres of low- and medium-density residential, 2.7 acres of public/quasi-public land, 1.6 acres of commercial, and 1042 acres allocated to resource conservation. Las Palmas Ranch land use is shown in **Figure 6**.

**Discussion/Conclusion/Mitigation**

a) The local jurisdiction within the Proposed Project area each have adopted their own General Plans and Land Use Plans that govern the planning and development of the M1W area and Proposed Project area. The approval of the Proposed Project would extend wastewater services and not change the area’s General Plan land use designations or impact an established community. Therefore, the action of changing M1W’s boundaries and service area extensions will not divide an established community. Thus, no impact would result with implementation of the Proposed Project.

b) The Proposed Project will result in extending services of additional lands within the M1W’s service area and would not conflict with any applicable land use plans, policies or regulations. Within the M1W service area the provision of sanitary sewer or wastewater service is organized at two levels. Local cities and sanitation districts are responsible for maintenance and extension of sewer lines, and M1W is responsible for development and operation of treatment facilities, trunk main pipelines and pump stations. M1W does not possess land use authority. **Section 1.5 Earlier Analysis** outlines local planning documents governing development and planning within the Proposed Project area and the Project’s consistency with these planning documents. Land use designations within the proposed service area extension vary and each provide specified regulations and policies, inclusion of additional lands into the M1W service area does not change or conflict with these policies; therefore, there is no impact. **Sources (1, 2, 3, 4, 6 and 9)**
4.12 MINERAL RESOURCES

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. MINERAL RESOURCES. Would the project:</td>
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<tr>
<td>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
</tbody>
</table>

Setting

Historic mineral production in Monterey County included sand and gravel mining for construction materials, mining for industrial materials (diatomite, clay, quartz, and dimension stone) and metallic minerals (chromite, placer gold, manganese, mercury, platinum, and silver). Using the State Geologist aggregate resources classification system, the Monterey County 2010 General Plan identifies areas of mineral resource significance in the vicinity of Marina, Sand City and Seaside, these areas are contained within the existing M1W service area. All other areas either do not contain aggregate resources or have not been classified. The Monterey County 2010 General Plan and EIR identifies potential impacts to mineral resources with future development in the County however with implementation with policies contained in the General Plan these impacts were found to result in less than significant impacts.

Discussion/Conclusion/Mitigation

a) – b) Any known mineral resources are already contained within the existing M1W service area and the Proposed Project, would not use or extract any mineral resources or restrict access to any resource area. Therefore, the Project would not result in: 1) the loss of availability of a known mineral resource that would be of value to the region and residents of the state or 2) the loss of availability of a locally important mineral resources recovery site delineated on a local general plan, specific plan or other land use plan.

Sources (1, 2, 3, 4, 6 and 9)
4.13 NOISE

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. NOISE. Would the project:</td>
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</tr>
<tr>
<td>a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>b) Generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>c) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
</tbody>
</table>

Setting

Existing sources of noise in Monterey County include highways, airports, railroads, industrial areas, agricultural areas and recreational venues. The predominant source of noise in the county is vehicular traffic on roads and highways. Motor sports events at Laguna Seca Raceway also produce substantial noise. The Monterey County 2010 General Plan and EIR identified noise impacts on future development related to exposure to noise, including airport and construction noise. However, with implementation of the policies contained in the General Plan, impacts were found to be less than significant.

Discussion/Conclusion/Mitigation

a, b) The Project would not directly result in construction of infrastructure improvements that would generate temporary or permanent increase in ambient noise levels, or groundborne vibrations/noise. Extending services to an area outside the M1W service area could enable and facilitate the provision of new or expanded wastewater collection and treatment provided by M1W, although these would be subject to future determinations of specific engineering design and construction. Future improvements will be subject to Monterey County 2010 General Plan policies that limit noise impacts through CEQA compliance and permitting. Potential noise from construction activities can be regulated by standard mitigation practices, conditions of approval and best management practices that are imposed as part of a permit process.

Therefore, the Proposed Project would not result in: 1) generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or, 2) generation of excessive groundborne vibration or groundborne noise levels.

c) The Monterey Regional Airport, Salinas Municipal Airport, and Marina Municipal Airport are within the Project area; thus, these airports are already located within the existing M1W service area and are not proposed for service area extension. The Proposed Project does not involve any direct development-related impacts to the land, therefore the Proposed Project would have no impact exposing people residing or working in the Project area to excessive noise levels.

Sources (1, 2, 3, 4, 6 and 9)
## 4.14 Population and Housing

<table>
<thead>
<tr>
<th>Environmental Impacts</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Population and Housing</td>
<td>Would the project:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

### Setting

In 2014, AMBAG published a new regional growth forecast that projects a 2020 population of 447,516 and 2035 population of 495,086 for Monterey County. Projected population for the M1W service area is 260,563 in 2020 and 291,675 in 2035, with most of the population residing within the City of Salinas (V.W. Housen & Associates 2017). The Proposed Project would not include any new housing or result in the need for any new housing.

### Discussion/Conclusion/Mitigation

a) The Proposed Project would not involve any construction activities, such as new homes, businesses or, the modification of existing infrastructure at the Project site. No new streets/roads would be constructed, widened or extended as a result of the Proposed Project. Furthermore, the Proposed Project would not result in the conversion of land use designations under applicable local jurisdiction General or Area Plans or, be applicable to a zoning change.

Currently, most of the area proposed for the extension of services are developed with existing residential and agricultural land uses and limited commercial, open space, and public/quasi-public land uses. Extension of service area boundaries to allow for future wastewater provision under M1W would not necessarily promote or foster development of existing lots of record, extension of existing uses, residential and commercial remodels, and similar purposes. There is currently a major constraint for water available for new residential or commercial subdivisions, new large-scale commercial development, and projects that are inconsistent with existing site zoning and general plan designations.

The proposal, on its own, would not enable new development that is otherwise unable to proceed. Extending services to areas outside the M1W service area would facilitate the provision of wastewater collection and treatment provided by M1W, although these would be subject to CEQA compliance. (availability of potable water is the primary physical constraint).

The Project would eventually reduce use of septic systems in select areas which have been acknowledged as a potential source of pollutants in groundwater. Future development that does receive the necessary local jurisdiction approvals will be able to connect to wastewater treatment infrastructure rather than individual septic systems.

Any future development of the areas to receive extended service would still require individual County and CEQA clearance, permitting, and any other required approvals.
As a direct population growth or growth inducement project, this Project has none of the traditional features or elements that would promote or encourage such urban development. There is no housing, development of buildings and no permanent jobs would be added to the area. Therefore, the Project would not induce substantial population growth. The Project would not physically extend infrastructure but would allow for extension of the service area for M1W. Future applications to M1W and the County would require wastewater distribution upgrades to provide reliable service but does not represent a major upgrade in services overall compared to existing conditions that would directly or indirectly facilitate growth. The extension of the M1W service area by itself will not result in physical impacts on the environment, as described herein.

b, c) The Proposed Project would not displace any individuals or result in the requirement of replacement housing elsewhere in the community. The Proposed Project does not involve any new housing or infrastructure, nor does it propose any activities that would change, or otherwise affect regional communities, populations, or residences; therefore, there is no impact.

Sources (1, 2, 3, 4, 6, 9 and 10)
### 4.15 PUBLIC SERVICES

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. PUBLIC SERVICES.</td>
<td>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</td>
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<tr>
<td>a) Fire protection?</td>
<td>☐</td>
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<tr>
<td>b) Police protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
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<tr>
<td>c) Schools?</td>
<td>☐</td>
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<td>☐</td>
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</tr>
<tr>
<td>d) Parks?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>e) Other public facilities?</td>
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</tbody>
</table>

### Setting

Several public service agencies and utility providers serve the unincorporated areas of Monterey County. These agencies and providers include nearly 20 fire protection agencies, the Monterey County Sheriff’s Office, three dozen school districts, various County departments, and multiple water and wastewater districts (Monterey County 2010). The Monterey County 2010 General Plan identifies all impacts related to public services and utilities as less than significant and would not require mitigation beyond implementation of the polices outlined in the General Plan.

### Discussion/Conclusion/Mitigation

a) – e) The Proposed Project would not result in new population growth or demands for provision of or new government structures. The Project does not involve new habitable structures and will bring no new students to the area, require no new school facilities, or impact parks/recreation facilities or other governmental services. There is no impact.

### Sources (1, 2, 3, 4, 6 and 9)
4.16 RECREATION

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. RECREATION. Would the project:</td>
<td></td>
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</tbody>
</table>

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Setting

Multiple federal, state, county governments and local districts own and operate parks, recreational facilities, and open space in Monterey County. Management agencies include the U.S. National Parks Service (NPS), the U.S. Forest Service (USFS), Bureau of Land Management (BLM), California State Parks (CSP), Monterey County, and local park agencies and districts. The County parks system encompasses about 10% of Monterey County’s total park acreage (Monterey County 2010). Trails in the county include the Monterey Bay Coastal Trail, which spans 29 miles of the coast between the City of Marina and the community of Pebble Beach (Monterey County 2010). The Monterey County 2010 General Plan identified potential impacts on recreational resources associated with future development, however with the policies and mitigations outlined in the General Plan and EIR these potential impacts are reduced to less than significant.

Discussion/Conclusion/Mitigation

a,b) The proposed service extension would not include development of any residential components, and no neighborhood or community parks are planned as part of the Proposed Project. The Proposed Project would not result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would not occur. There is no construction or expansion of recreational facilities as part of the Proposed Project; therefore, there is no impact.

Sources (1, 2, 3, 4, 6 and 9)
### 4.17 TRANSPORTATION

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</thead>
<tbody>
<tr>
<td>17. TRANSPORTATION. Would the project:</td>
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<tr>
<td>a) Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?</td>
<td></td>
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</tr>
<tr>
<td>b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?</td>
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<tr>
<td>c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
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<tr>
<td>d) Result in inadequate emergency access?</td>
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</tbody>
</table>

**Setting**

According to the Monterey County 2010 General Plan, Monterey County owns and maintains 1,240 miles of roads. In addition, there are 575 miles of private roads, two minor highways (25 and 146), and five major highways that include Highways 1, 68, 101, 156, and 183. Public transit services are provided by Monterey-Salinas Transit (MST) which services the greater Monterey and Salinas areas plus routes to Carmel Valley and North County. The Monterey County 2010 General Plan EIR identifies potential significant impacts related to increased traffic volumes exceeding level of service standards, and future needed improvements. The 2010 General Plan and Area Plans establish policies to mitigate or reduce these impacts. These policies encourage alternative modes of travel including public transit, bicycle, and pedestrian modes to reduce the use of automobiles. They encourage compact, mixed-use, and transit-oriented development in developed areas in patterns that have been demonstrated to reduce traffic.

**Discussion/Conclusion/Mitigation**

a) – f) The Project would not directly result in any construction of infrastructure improvements that would directly impact traffic/transportation or conflict with applicable General Plan and Area Plan policies or a congestion management plan. Therefore, the Proposed Project would not result in any significant transportation/traffic related impacts. As a result, the Proposed Project would not: 1) conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, 2) conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), 3) substantially increase potential hazards due to a design feature (e.g., dangerous intersections), or 4) result in inadequate emergency access.

**Sources** (1, 2, 3, 4, 6 and 9)
4.18 TRIBAL CULTURAL RESOURCES

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, define in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</td>
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<tr>
<td>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k), or (Source: 1, 2, 3, 4, 5, 7, 15)</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (Source: 1, 2, 3, 4, 5, 7, 15)</td>
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</tbody>
</table>

Setting

See Section 4.5 Cultural Resources, above.

Discussion/Conclusion/Mitigation

a) As indicated above in Chapter 4.5 Cultural Resources, above, the Proposed Project would not result in any adverse impacts to historical resources within the Project area.

b) The Proposed Project would not directly result in construction of infrastructure improvements that would directly affect the environment. Since the Proposed Project would not entail the construction of physical improvements or otherwise result in ground-disturbing activities, the Proposed Project would not directly affect tribal cultural resources.

In addition, pursuant Public Resources Code Section 21080.3.1, a Sacred Lands File search and tribal consultation was initiated by M1W. The record search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the proposed project and the results were positive for the Costanoan Ohlone Rumsen-Mutsun Tribe. Further, a Tribal Consultation List was requested by NAHC. The list obtained from the NAHC included nine Native American groups and individuals and all were contacted in a letter containing Project information including the project description and objective, results of the Sacred Lands File search, a summary of the historical records search, and a project location map. The consultation process resulted in direct contact with three of the nine Native American contacts on the list provided by NAHC and no significant resources were identified in correspondence with the relevant Native American contacts. A record of the consultation process and results is attached to this report as Appendix B.

Sources (1, 2, 3, 4 6, and 9)
4.19 UTILITIES AND SERVICE SYSTEMS

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>19. UTILITIES AND SERVICE SYSTEMS. Would the project:</td>
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</tr>
<tr>
<td>a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>e) Comply with federal, state, and local statutes and regulations related to solid waste?</td>
<td>☐</td>
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</tbody>
</table>

Setting

Potable Water Service

Potable water service to the Project area is provided and/or managed by three public agencies, and delivery of water is provided by two public agencies and two private water companies, as summarized on Table 4 Water Supply and Agencies. A brief description of these agencies/water companies is provided below:

- The MCWRA oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County. Primary responsibilities are management of water supply resources in the Salinas Valley reservoir system, including San Antonio and Nacimiento Reservoirs, and management and permitting of water projects in the Salinas Valley. MCWRA is responsible for the regulation of water from the Salinas Valley Groundwater Basin and manages release flows from San Antonio and Nacimiento reservoirs to provide groundwater recharge throughout the year (M1W 2016).

- The MPWMD manages groundwater and surface water resources and water provision for approximately 100,000 people in the Monterey Peninsula. MPWMD's jurisdictional area

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18 The Monterey Peninsula derives a majority of its total water supply from groundwater storage. The Proposed Project is primarily located within the Salinas Valley Groundwater Basin, of which portions are managed by the Salinas Valley Basin Groundwater Sustainability Agency (SVBGS). The SVBGS is a JPA formed by the County of Monterey, the Monterey County Water Resources Agency, the Cities of Salinas, Soledad, Gonzales, and King, the Castroville Community Services District, and Monterey One Water (formerly the Monterey Regional Water Pollution Control Agency, itself a JPA). For more information on groundwater please refer to Section 4.9 Hydrology and Water Quality.

- The Monterey Peninsula Regional Water Authority (MPRWA) is a Joint Powers Authority that consists of six cities, the Cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City and Seaside. The purpose is to study, plan, develop, finance acquire, construct, maintain, repair, manage, operate, control and govern water projects either alone or in cooperation with other public or private non-member entities (M1W 2016).

- CalAm supplies water to most of the jurisdictions in the Project area. CalAm is an investor-owned utility that owns and operates wells, infrastructure, and water distribution systems that provide municipal water service to customers in the Monterey Peninsula area. CalAm operates a network of water facilities, including production wells, dams and associated reservoirs, and other conveyance infrastructure along the Carmel River, as well as an aquifer storage and recovery system in the Seaside Groundwater Basin. CalAm’s Monterey District includes a "main" system and several satellite systems and has approximately 38,500 connections. CalAm provides water service to most of the Monterey Peninsula, including the cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, and the unincorporated areas of Carmel Highlands, Carmel Valley, and Pebble Beach via the Monterey District’s water distribution system, known as the Main Monterey System. In addition to the main system, CalAm also operates the following satellite water systems that provide water to customers within Monterey County: Bishop/Pasadera, Ambler, Hidden Hills, Ryan Ranch, Toro, Chualar, and Ralph Lane (M1W 2016).

- California Water Services Company serves the majority of the City of Salinas and the unincorporated communities of Bolsa Knolls, Las Lomas, Oak Hills, Country Meadows, Salinas Hills, and Buena Vista. All water delivered to the Salinas District customers is from aquifers of the Salinas Valley Groundwater Basin known as the Pressure Area and Eastside Area (M1W 2016).

- MCWD is a County water district formed and authorized by Division 12 of the California Water Code. In 1996, MCWD was selected by the Fort Ord Reuse Authority (FORA) to take over conveyance of the water supply and wastewater systems at the former Ford Ord community, consisting of approximately 28,000 acres, including federal and state land, and portions of the cities of Seaside, Monterey, Del Rey Oaks, Marina and portions of unincorporated Monterey County. In November of 2001, water supply and wastewater systems were conveyed through a Public Benefit Conveyance to MCWD; the District is responsible for providing water supply and wastewater collection service throughout the former Fort Ord military base.

- The Seaside Municipal Water System, which is operated and maintained by the City of Seaside, provides water service to a limited number of residents on the east side of the city along the west side of General Jim Moore Boulevard. The system includes one groundwater production well and two 500,000-gallon water tanks (City of Seaside 2013).

- The Sand City Coastal Desalination Plant, completed in April 2010, is owned by the Sand City and operated by CalAm. The Sand City Coastal Desalination Plant can produce up to 300 acre-feet per year of potable water supplies, of which 94 acre-feet per year is committed to be served to the CalAm Monterey District service area (CalAm 2012).
### Table 4: Water Supply and Agencies

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Monterey County Water Resources</th>
<th>Monterey Peninsula Water</th>
<th>Monterey Peninsula Regional Seaside County Sanitation District</th>
<th>CalAm Company</th>
<th>California Water Services Company</th>
<th>City of Seaside Municipal Water</th>
<th>Marina Coal Water District</th>
<th>Sand City Coastal Desalination Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unincorporated Monterey County</td>
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<td>✓</td>
<td>(1)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Salinas</td>
<td>✓</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>City of Marina</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Seaside</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Del Rey Oaks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Sand City</td>
<td>(2)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Monterey</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Pacific Grove</td>
<td>(2)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Lands</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
(1) Although this JPA was established to coincide with CalAm’s Monterey District, customers within the unincorporated areas of Monterey County do not have representation on the board.
(2) These municipalities are within the MCWRA’s jurisdiction for flood control; however, not for water supplies management.

**Source:** M1W 2016

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**Wastewater and Recycled Water Service**

As previously described, within the M1W service area the provision of sanitary sewer or wastewater service is organized at two levels. Local cities and sanitation districts are responsible for maintenance and expansion of sewer lines, and M1W is responsible for development and operation of treatment facilities, trunk main pipelines and pump stations. M1W provides wastewater treatment for municipalities along the Monterey Bay from Pacific Grove north to Moss Landing, and inland to the City of Salinas. M1W owns and operates the RTP, where community wastewater is currently treated for use as recycled water or discharged to the ocean. M1W also owns and operates the ocean outfall.

The MRWPCA was created in 1972, and now as M1W, currently serves a population of approximately 250,000 and operates a regional wastewater system that consists of treatment, disposal and reclamation facilities. The M1W regional wastewater system is shown in **Figure 3**. The system provides centralized wastewater treatment for cities and communities of northern Monterey County through a network of wastewater pump stations and pressure pipelines that convey wastewater to the RTP for treatment, disposal and recycling. M1W provides services to: the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the Seaside Sanitation District; the Castroville, Moss Landing and Boronda Community Service Districts; and former Fort Ord lands.
As stated above, at the RTP, wastewater is treated to two different standards: (1) Title 22 California Code of Regulations standards (tertiary filtration and disinfection) for unrestricted agricultural irrigation use within a facility known as the Salinas Valley Reclamation Plant, and (2) secondary treatment for permitted discharge through the ocean outfall. Influent flow that has been treated to a tertiary level is distributed to nearly 12,000 acres of farmland in the northern Salinas Valley for irrigation use (recycled water is delivered using the CSIP distribution system). The RTP primarily treats municipal wastewater, but also accepts some dry weather urban runoff and other discrete wastewater flows. Beginning in 2019, secondary treated water can also undergo advanced treatment via the new AWTF of the PWM Project currently under construction. Product water from the AWTF would then be transported and injected into the Seaside Groundwater Basin.

Specific current wastewater service information for the five areas proposed in the 2017 Focused WWSA Study for service area expansion to allow for alternative forms of wastewater service is described further below:

- **Bolsa Knolls**: Wastewater treatment is currently addressed through on-site septic systems that are close to full treatment capacity.
- **Spreckels**: The Spreckels wastewater treatment plant is owned and operated by CalAm, with new development (Tanimura & Antle farmworker housing facility) and planned future development plant capacity is likely insufficient.
- **Indian Springs Ranch**: The development generates approximately 21,800 gallons of wastewater per day, which is treated at the Indian Springs Wastewater Treatment Plant. The plant was constructed in the early 1980’s and is owned and operated by CalAm. The permitted capacity of the wastewater treatment plant is 85,000 GPD.
- **Oak Hills**: Much of the residential development is on individual septic tanks and the remaining parcels flow to a local wastewater treatment plant which was constructed in 1968 and is owned and operated by CalAm.
- **Las Palmas Ranch**: Average dry weather flow is approximately 140,000 gallons per day. Permitted capacity is 195,000 GPD. The Las Palmas Ranch treatment plant was constructed in 1989.

The 2017 Focused WWSA Study projected flows using master planning flow factors as guidance, the results of this analysis are shown in Table 5, below. In addition, the 2018 Study Update estimated a total 0.095 MGD flows for the Chualar community and an average daily flow of 4.75 MGD and peak flow of 14.25 MGD at buildout for the City of Gonzales.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolsa Knolls</td>
<td>0.100&lt;sup&gt;19&lt;/sup&gt;</td>
<td>Not provided</td>
<td>0.275</td>
</tr>
<tr>
<td>Spreckels</td>
<td>0.071</td>
<td>0.400</td>
<td>0.121</td>
</tr>
<tr>
<td>Indian Springs Ranch</td>
<td>0.022</td>
<td>0.040</td>
<td>0.049</td>
</tr>
<tr>
<td>Las Palmas Ranch</td>
<td>0.139</td>
<td>0.235</td>
<td>0.208</td>
</tr>
<tr>
<td>Oak Hills</td>
<td>0.032&lt;sup&gt;20&lt;/sup&gt;</td>
<td>0.100</td>
<td>0.181</td>
</tr>
</tbody>
</table>

Source: V. W. Housen & Associates 2017

<sup>19</sup> Bolsa Knolls flow estimate from 2015 Study.
<sup>20</sup> Oak Hills flow from 2015 Annual Report.
Preliminary flow values were reviewed with M1W staff. Based on these discussions, it was concluded that water conservation has, and will continue to result in reduced per capita wastewater flows. M1W’s RTP has an existing capacity of 29.6 MGD, but currently treats an average of 18.5 MGD, as reported on M1W’s website. Should these areas be included in an extended service area and connected to the RTP, the buildout flows calculated in the 2018 Study Update would add approximately 6 MGD of flow to the treatment plant, for a total flow of 24.5 MGD. The largest contributor to this flow would be from the City of Gonzales. With M1W’s RTP existing capacity of 29.6 MGD, approximately 10.1 MGD excess capacity is available.

As noted above, the 2017 Focused WWSA Study noted that additional engineering design is needed to determine potential improvements for service to these areas as well as the approach for provision of services. Engineering design would determine the level of improvements including use of existing infrastructure, potential impacts on the receiving collection system infrastructure, and project costs “including permitting, easements, and compensation for existing facilities.” As engineering design and selected approach for service expansions have not yet been defined, potential improvements associated with the areas proposed for service area expansion are not known at this time. The Proposed Project would allow the properties located within the area to potentially be connected to the RTP with appropriate infrastructure to be developed for collection systems to convey wastewater to M1W facilities in the future. If following approval of the proposed service area extension, projects that would include the construction of facilities are identified by M1W; they would be responsible for CEQA compliance to address any subsequent project-level activities. Infrastructure improvements that may be proposed in the future would also be subject to review and permit approvals from Monterey County. In either approach, CEQA, M1W and County requirements would mandate appropriate level of environmental review be conducted.

Discussion/Conclusion/Mitigation

a) The M1W Master Capital Improvements Plan, and applicable M1W improvements will occur as needed for service provision under current M1W authority and responsibility. The Proposed Project would extend the existing M1W service area from 64,170 acres to 68,645 acres. The Project would not directly result in construction of infrastructure improvements, including construction or expansion of new water or wastewater treatment facilities, or construction of new storm water drainage facilities, electric power, natural gas, or telecommunications facilities. Indirect impacts associated with development of new wastewater facilities, storm drainage facilities or associated utilities, may occur regardless of the implementation of the Proposed Project due to failing or substandard wastewater infrastructure, which could fail under current or planned growth, or a high cost of service. The precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Therefore, these projects are not evaluated herein. All future projects would be subject to CEQA. Therefore, the Proposed Project would not necessarily promote or foster development of new water or wastewater facilities, or new stormwater drainage facilities, electric power, natural gas, or telecommunications facilities within the Proposed Project area.

b) The Project is a proposal to extend services for additional lands into the M1W service area for wastewater services provisions. Water services are not being proposed and thus the Project would not have a direct impact on water use.

However, as described above, influent flow that has been treated to a tertiary level is distributed to nearly 12,000 acres of farmland in the northern Salinas Valley for irrigation use (recycled water is delivered using the CSIP distribution system). Furthermore, beginning in 2019, secondary treated water can also undergo advanced treatment via the new AWTF of the PWM Project currently under construction. Product water from the AWTF would then be transported and injected into the Seaside Groundwater Basin. Inclusion of an area in the M1W service area could enable its future provision of services by M1W, the largest regional wastewater district in Monterey County, and facilitate the
provision of wastewater collection and treatment for recycled and advanced treated water provided by M1W.

The Proposed Project does not involve any direct development-related impacts to the land or additional water use. Extending services to the Project areas into the M1W service area would facilitate future service provision by M1W within this area of Monterey County. The design and location of any physical improvements to extend the wastewater and other services associated with M1W has not yet been determined and would be subject to CEQA compliance. The potential for additional recycled water availability represents a beneficial impact.

c) As explained above, M1W’s RTP has an existing capacity of 29.6 MGD, but currently treats an average of 18.5 MGD. The buildout flows calculated in the 2017 Focused WWSA Study would add approximately 1 MGD of flow to the treatment plant, for a total flow of 19.5 MGD and thus would not result in inadequate capacity to serve the Proposed Project area; there is no impact.

d, e) The Project will not generate solid waste; any future development in the Project area must comply with all federal, state, and local statutes and regulations related to solid waste where applicable; there is no impact. Two agencies oversee solid waste disposal in Monterey County. The Monterey Regional Waste Management District (MRWMD) serves the western coastal areas of Monterey County. MRWMD’s service area includes the cities of Carmel-by-the-Sea, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City, and Seaside; and the unincorporated areas of Big Sur, Carmel Highlands, Carmel Valley, Castroville, Corral De Tierra, Laguna Seca, Moss Landing, Pebble Beach, San Benancio, and Toro Park. The District covers a total of 853 square miles. The MRWMD is currently installing a new landfill module that will provide adequate capacity through 2028; the landfill has adequate capacity to serve the existing and future planned development in the region. The Salinas Valley Solid Waste Authority (SVSWA) serves the eastern inland portions of Monterey County. Currently, the SVSWA has the capacity to provide service for up to the next 50 years. Further, efforts to expand their service capacity to 70 years are ongoing. Therefore, there is no impact.

Sources (1, 2, 3, 4, 6, and 9)
4.20  WILDFIRE

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Substantially impair an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Setting

The California Department of Forestry and Fire Protection is mandated by the state to prepare wildland fire hazard maps for each county. Monterey County is a fire prone area in general, however none of the proposed expansion areas are located within lands classified as very high fire hazard severity. Specifically, Las Palmas Ranch and Indian Springs are located in an area mapped as medium to high fire severity. Oak Hills, Bolsa Knolls, and Spreckels are not within a mapped fire risk area.

Discussion/Conclusion/Mitigation

a-d) The current proposal is not within an area mapped as very high fire hazard severity and would not directly result in physical improvements, such as additional infrastructure, or improved facilities in the Project areas. Since the planned service area extension does not propose physical changes to the environment, it would not have a direct environmental effect related to wildfire.

Although no direct impacts would occur, the proposed project may place potential future construction and operational activities associated with the proposed service area extension, including new, upgraded future treatment and collections systems and facilities, adjacent to wildlands resulting in indirect impacts due to wildfire. However, the precise nature and extent of future infrastructure improvements in the area cannot be determined at this time until future engineering designs and studies are completed. Prior to approval of the construction of infrastructure improvements (once identified by M1W or underlying jurisdiction), the Lead Agency would be responsible for CEQA compliance and permitting to address any subsequent project-level activities relating biological resources. In addition, future projects would be required to incorporate standard building codes and Monterey County Codes which protect against impacts due to wildfire.
Therefore, the planned service area extension would not: 1) substantially impair an adopted emergency response plan or emergency evacuation plan; 2) exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; 3) require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; and 4) expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. There is no impact.

Sources (1, 4, 6, and 9)
### 4.21  Mandatory Findings of Significance

<table>
<thead>
<tr>
<th>ENVIRONMENTAL IMPACTS</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>b) Have impacts that are individually limited, but cumulatively considerable? (&quot;Cumulatively considerable&quot; means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
<tr>
<td>c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>■</td>
</tr>
</tbody>
</table>

**Discussion/Conclusion/Mitigation**

a) The Proposed Project would not: 1) degrade the quality of environment, 2) substantially reduce the habitat of a fish or wildlife species, 3) cause a fish or wildlife population to drop below self-sustaining levels, 4) threaten to eliminate a plant or animal community, 5) reduce the number or restrict the range of a rare or endangered plant or animal, or 6) eliminate important examples of major periods of California history or prehistory. Moreover, the Proposed Project would not adversely impact a cultural or historic resource that is an important example of a major period in California history. As the Proposed Project would not require the construction of any new facilities, the proposed service area extension would not result in negative effects. If following approval of the Proposed Project, projects that would include the construction of facilities are identified, they would be responsible for CEQA compliance to address any subsequent project-level impacts to environmental quality of the specific site.

b) A cumulative impact consists of an impact that is created as a result of the combination of the Proposed Project together with other projects causing related impacts. The potential for cumulative impacts occurs when the independent impacts of the project are combined with impacts of past projects, the effects of other current projects, and the effects of probable future projects to result in impacts that are greater than the impacts of the project alone. The fact that a cumulative impact is on the whole significant does not necessarily mean that the project-related contribution to that impact is also significant. Instead, under CEQA, a project-related contribution to a significant cumulative impact is only significant if the contribution is cumulatively considerable. An EIR may also determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project’s contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact (CEQA Guidelines §15130(a)(3)).
With regard to cumulative effects for the following issues, Chapter 4, Sections 4.1 to 4.18 indicate that these areas would not result in a potentially significant impact: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, mineral resources, population and housing, land use and planning, noise, and transportation and circulation, public services, recreation, utilities, and energy resources. The Project would not combine with related projects or other cumulative growth to result in significant cumulative impacts. The Proposed Project does not include physical changes to the environment and would also not change land uses or policies as previously analyzed in area plans or development approved through the County of Monterey entitlement process consistent with certified EIRs. The adoption of the Proposed Project will not result in direct development. Additionally, future development projects will be subject to site-specific environmental review as discussed above. Overall, based on the analysis provided in this Initial Study, the Proposed Project will not significantly contribute to cumulative impacts.

The Proposed Project would extend services outside of the existing service area of the M1W from 64,170 acres to 68,645 acres. Extending services to the Project areas into the M1W service area would facilitate future service provision by M1W within this area of Monterey County. The design and location of any physical improvements to extend the wastewater and other services associated with M1W has not yet been determined. Potential impacts from construction activities will be regulated by standard mitigation practices, conditions of approval and best management practices that are imposed during a permit process once engineering design and improvements are determined.

c) The Project would not have a substantial adverse effect on human beings, either directly or indirectly. The Project would not result in significant impacts associated with the CEQA mandatory findings of significance. Based on the analysis provided in this Initial Study, the Proposed Project will not substantially degrade or reduce wildlife species or habitat, impact historic or other cultural resources, result in significant cumulative impacts, or cause adverse effects on humans with incorporation of all standard and mitigation measures identified herein.
CHAPTER 5. DOCUMENT PREPARATION/REFERENCES

LEAD AGENCY

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Mike McCullough, MPA, Government Affairs Administrator

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Denise Duffy & Associates, Inc.
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Robyn Simpson Production Manager

ENGINEERING

V. W. Housen & Associates
Vivian Housen Principal, P.E.

PERSONS CONTACTED

Darren McBain, Monterey County LAFCO
Kate McKenna, Monterey County LAFCO

REFERENCES


6. Professional Expertise of Consultant and/or Personal Communication with M1W.

7. Monterey Bay Unified Air Pollution Control District (MBUAPCD), CEQA Air Quality Guidelines, February 2008.


10. Association of Monterey Bay Area Governments. 2014. 2014 Regional Growth Forecast

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[LAFCO] Local Agency Formation Commission of Monterey County. 2016. Municipal Services Review and Sphere of Influence Study for the Spreckels Community Services District.

Monterey Bay Unified Air Pollution Control District (MBUAPCD), CEQA Air Quality Guidelines, February 2008.


Appendix A
Summary of Focused Wastewater Area Study Alternatives and Options
### Summary of Focused Wastewater Study Alternatives and Options

<table>
<thead>
<tr>
<th>Planning Area-Service Area Expansion</th>
<th>Preferred Alternative (Future Improvements*)</th>
<th>Description and Locations of Conceptual Improvements by Preferred Alternative known to date</th>
<th>Notes on additional engineering design and project definition required (Per Wastewater Study Recommendations in March 2018 Update)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bolsa Knolls</strong></td>
<td>Option 1. Convey flow to Monterey One Water via City of Salinas collection system. The 1998 Study identified two wastewater approaches for Bolsa Knolls. Both options include the construction of a new local wastewater collection system, and the abandonment of the onsite septic systems. Bolsa Knolls is currently unsewered and has or will face challenges with environmental compliance issues related to the aging septic systems.</td>
<td>Option 1 conveys flows to Monterey One Water via the City of Salinas collection system. The Bolsa Knolls community would be severed, and flow would be conveyed south on San Juan Grade Road to Van Buren Avenue and the City of Salinas Santa Rita pump station, where it would enter the City of Salinas sewer system. Generally, the construction of the Option 1 alternative project would require 24,000 lineal feet of gravity sewer pipelines, laterals to connect each home to the gravity sewer system, a new pumping station, 5,500-foot forcemain, and demolition of existing septic systems.</td>
<td>Option 1 is accounted for in the 2011 Salinas Sanitary Sewer Master Plan (SSMP). Considering Bolsa Knolls and the West Future Growth Area, the SSMP recommends upsizing City sewer lines L01, L04, and L05. However, a capacity analysis should be completed to confirm specific project needs. More defined level of improvements on the upsizing and upgrades to the City of Salinas sewer pipelines may be required.</td>
<td>Additional project-level CEQA analysis should be conducted when project specifics are available to address ability to maximize use of existing infrastructure, potential impacts on the receiving collection system infrastructure, and permitting, easements, and existing facilities.</td>
</tr>
<tr>
<td><strong>Oak Hills</strong></td>
<td>2003 Study Option 2. Convert homes on septic to sewered system and convey flow to Castroville collection system. Oak Hills has a local treatment facility, and approximately one quarter of the parcels remain on septic. Oak Hills has experienced challenges in maintaining the septic systems and requires an alternative wastewater approach to prevent future environmental compliance issues related to the aging septic systems.</td>
<td>The Study found the existing Oak Hills community septic systems require replacement, and should be replaced by a sewered collection system including upsizing the existing Castroville pump station. This Option assumes additional lift stations and forcemains and gravity sewer pipeline (additional to the 1998 Study approach), and also may require possible Castroville pump station improvements. Projected improvements (from 2003 and earlier studies) show approximately 17,400 lineal feet of gravity sewer pipelines and gravity main, additional manholes, laterals and connections.</td>
<td>Previous wastewater alternatives study (2015 Study) indicates significant costs to acquire the existing wastewater system. The 2018 Study recommends additional engineering to update engineering needs, refine project scope and reduce costs.</td>
<td>Same as Bolsa above: Additional project-level CEQA analysis should be conducted when project specifics are available.</td>
</tr>
<tr>
<td><strong>Spreckels</strong></td>
<td>Option 2 if addressed as a standalone project. Convey flow to City of Salinas collection system. Regional Option 4 if addressed with Indian Springs Ranch, Las Palmas Ranch, and Toro Park.</td>
<td>Option 2 proposes conveyance to the City of Salinas collection system, and includes a pump station and 15,000 lineal feet of new forcemain pipe. Study Regional Option 4 is preferred if Spreckels were to be addressed in conjunction with Las Palmas and Indian Spring. See Regional Option 4 below under Indian Springs Ranch.</td>
<td>Option 2 includes alternatives from 2015 Study and new alignments that were evaluated in March 2017. Necessary improvements to the City of Salinas Harkins Pump Station or City sewer lines L20 and part of L15, which may require upsizing have not yet been determined. Additionally, per 2015/2018 Study: additional costs and need to acquire existing wastewater system including negotiations with current owner.</td>
<td>Additional design and determination needed to address. Project-level CEQA analysis should be conducted when project specifics are available to address ability to maximize use of existing infrastructure, potential impacts on the receiving collection system infrastructure, and permitting, easements, and existing facilities.</td>
</tr>
<tr>
<td><strong>Indian Springs Ranch</strong></td>
<td>Option 1 if addressed as a standalone project. Convey to Las Palmas treatment plant. The 1998 Study identified two wastewater approaches for the Indian Springs Ranch area. Regional Option 4 if addressed with Spreckels and Las Palmas Ranch.</td>
<td>Standalone Option 1 would provide conveyance to the Las Palmas Treatment plant (Option 1) and conveyance to Monterey One Water via the Salinas pump station (Option 2). Both options require pumping stations and forcemains. Option 4 provides a regional solution for Indian Springs Ranch. In March 2017, M1W staff reviewed two new alignments for this project. The first option comprises three new pump stations and approximately 7.2 miles of new forcemain to the M1W Salinas Pump Station. The forcemain between Las Palmas Ranch and the Salinas Pump Station could be sized to also include Spreckels flows. The second option comprises three new pump stations and approximately 5.3 miles of new forcemain from Las Palmas Ranch and Indian Springs Ranch to Spreckels, and then north to the City of Salinas Harkins Road Pump Station.</td>
<td>Additional revision likely needed to compare historical options to March 2017 project alignments. Implementation of this project may require the Harkins Road Pump Station and City sewer lines L20 and part of L15 to be upsized. In addition, an updated capacity analysis would be required.</td>
<td>Additional design and determination needed to address. Project-level CEQA analysis should be conducted when project specifics are available to address ability to maximize use of existing infrastructure, potential impacts on the receiving collection system infrastructure, and permitting, easements, and existing facilities.</td>
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Summary of Focused Wastewater Study Alternatives and Options

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<th>Description and Locations of Conceptual Improvements by Preferred Alternative known to date</th>
<th>Notes on additional engineering design and project definition required (Per Wastewater Study Recommendations in March 2018 Update)</th>
<th>Notes</th>
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<td>Las Palmas Ranch</td>
<td>Option 2 if addressed as a standalone project. Convey to City of Salinas collection system. Regional Option 4 if addressed with Spreckels, Indian Springs Ranch, and Toro Park.</td>
<td>Option 2 conveys wastewater to City of Salinas collection system. Option 2 requires a connection to the Salinas collection system in lieu of the M1W Salinas pump station. The City of Salinas has indicated that portions of the collection system may require upsizing in order to implement this option. See above for Regional Option 4.</td>
<td>Option 2 costs do not include any necessary costs to upsize the City of Salinas collection system upstream of the M1W Salinas pump station. Additional review may be needed to compare historical options to March 2017 project alignments. 2015 Study estimates cost to acquire existing wastewater system.</td>
<td>Additional design and determination needed to address. Project-level CEQA analysis should be conducted when project specifics are available to address ability to maximize use of existing infrastructure, potential impacts on the receiving collection system infrastructure, and permitting, easements, and existing facilities.</td>
</tr>
<tr>
<td>Chualar</td>
<td>Only one alternative was evaluated for Chualar. This alternative, shown in Figure 20 in the WWSA Study, includes a new pump station and pipeline to convey wastewater flows to the City of Salinas, and ultimately, to the M1W Salinas Pump Station.</td>
<td>The Chualar Pipeline Alternative constructs a new pump station at the site of the existing facility at Main and Grant Street, and pumps Chualar flows approximately 900 feet north on Grant Street, east on Chualar Road for 1.4 miles, and then north on Old Stage Road for approximately 1.7 miles. At this location, flow converts to gravity, and continues approximately 8.2 miles on Old Stage Road to a connection with the City of Salinas sewer collection system. Flows are then conveyed through the City or Salinas system to the Monterey One Salinas Pump Station, and then to the Monterey One treatment facility for treatment.</td>
<td>Upgrades to the City of Salinas sewer pipelines may be required. The conceptual drawings shown do not include these improvements. A field survey is required to confirm that field elevations will support a gravity interceptor up to and including a connection with the City of Salinas system. Additional design is needed for this project once further engineering designs and details are available.</td>
<td>Additional design engineering and CEQA analysis will be required for this project.</td>
</tr>
<tr>
<td>City of Gonzales</td>
<td>No specific recommendation was offered in the Study. The City of 2011 Wastewater Plan states that the existing treatment plant has sufficient capacity to treat flows from the existing service area, including planned infill. However, the existing plant and wastewater collection system require significant upgrades to handle buildout flows from future buildout.</td>
<td>The existing treatment plant has sufficient capacity to treat flows from the existing service area, including planned infill. However, the existing plant and wastewater collection system require significant upgrades to handle buildout flows from future buildout. The preferred option would depend on the anticipated timeline for growth and other factors. Three scenarios are addressed in the 2017 Focused Wastewater Study as updated by the 2018 Expanded Areas of Chualar and Gonzales.</td>
<td>Upgrades to the Monterey One Salinas Pump Station may be required. Additional determination of the preferred alternative is needed; once confirmed further design engineering will be required. Additional stakeholder discussions with affected jurisdiction/City also needed.</td>
<td>Additional CEQA analysis would occur for this project alternative once further engineering designs and details are available.</td>
</tr>
</tbody>
</table>

1. Options are recommendations for improvements from the 2017 Focused Wastewater Study as updated by the 2018 Expanded Areas of Chualar and Gonzales. Option numbers are from the March 2018 Wastewater Study Update, and originally provided/taken from 1998 Study, unless noted otherwise.
Figure A-1
Farmlands Map Appendix A
Appendix B
Tribal Consultation
Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested
☑ CEQA Tribal Consultation List (AB 52) – Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2
☐ General Plan (SB 18) - Per Government Code § 65352.3.

Local Action Type:
___ General Plan   ___ General Plan Element   ___ General Plan Amendment
___ Specific Plan   ___ Specific Plan Amendment   ___ Pre-planning Outreach Activity

Required Information

Project Title: Monterey One Water Planned Service Area Extension

Local Government/Lead Agency: Monterey One Water

Contact Person: Mike McCullough, Government Affairs Administrator

Street Address: 5 Harris Ct # D
City: Monterey Zip: 93940
Phone: (831) 645-4618
Fax: (831)883-0516
Email: MikeM@my1water.org

Specific Area Subject to Proposed Action

County: Monterey County  City/Community: Various See Project Description below.

Project Description: The proposed project includes all the current service areas of M1W in Monterey County, California and the areas being considered for service area extension located in the northern end of the Salinas Valley near the City of Salinas. The proposed project would extend M1W wastewater service areas to allow for future connection to the existing M1W regional collection and treatment system as follows: 1) Focused service area extension into the Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, and the Oak Hills Community of Castroville areas, representing approximately 3,025 acres; and 2) a potential future wastewater service areas extending M1W sewer collection services to the City of Gonzales and the community of Chualar, this future service area would consist of approximately 1,450 acres.

Additional Request
☐ Sacred Lands File Search - Required Information:

USGS Quadrangle Name(s):__________________________________________________________

__________________________________________________________

Township:____________ Range:_____________ Section(s):_________________________
April 4, 2019

Mike McCullough, Government Affairs Administrator
Monterey One Water

VIA Email to: mikem@my1water.org

RE: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Monterey One Water Planned Service Area Extension Project, Communities of Bolsa Knolls, Spreckles, Indian Springs Ranch, Las Palmas Ranch, Oak Hills (Castroville), Chualar and Gonzales; Monterey County, California.

Dear Mr. McCullough:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) (“Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.”)

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe’s areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:
1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
   - A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
   - Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
   - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:
   - Any report that may contain site forms, site significance, and suggested mitigation measures. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission. The request form can be found at http://nahc.ca.gov/wpcontent/uploads/2015/08/Local-Govenment-Tribal-Consultation-List-Request-Form-update.pdf.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, B.S., M.A., Ph.D.
Associate Governmental Program Analyst

Attachment
Native American Heritage Commission
Native American Contact List
Monterey County
4/4/2019

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA, 95632
Phone: (916) 743 - 5833
vlopez@amahmutsun.org

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road
Woodside, CA, 94062
Phone: (650) 851 - 7489
Fax: (650) 332-1526
amahmutsuntribal@gmail.com

Costanoan Rumsen Carmel Tribe
Tony Cerda, Chairperson
244 E. 1st Street
Pomona, CA, 91766
Phone: (909) 629 - 6081
Fax: (909) 524-8041
rumsen@aol.com

Esselen Tribe of Monterey County
Tom Nason, Chairman
P. O. Box 95
Carmel Valley, CA, 93924
Phone: (831) 659 - 2153
TribalChair@EsselenTribe.com

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA, 95024
Phone: (831) 637 - 4238
ams@indiancanyon.org

Ohlone/Costanoan-Esselen Nation
Louise Miranda-Ramirez, Chairperson
P.O. Box 1301
Monterey, CA, 93942
Phone: (408) 629 - 5189
ramirez.louise@yahoo.com

Ohlone/Costanoan-Esselen Nation
Karen White, Chairperson
P. O. Box 7045
Spreckels, CA, 93962
Phone: (831) 238 - 1488
xolon.salinan.heritage@gmail.com

Ohlone/Costanoan-Esselen Nation
Christanne Arias, Vice Chairperson
519 Viejo Gabriel
Soledad, CA, 93960
Phone: (831) 235 - 4590

Xolon-Salinan Tribe
Donna Haro, Tribal Headwoman
P. O. Box 7045
Spreckels, CA, 93962
Phone: (925) 470 - 5019
dhxolonaakletse@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Monterey One Water Planned Service Area Extension Project, Monterey County.

PROJ-2019-002011
04/04/2019 09:05 AM 1 of 1
Good Day Mr. McCullough,

Thank you for the notification.

There are several areas within the map, that fall under the Xolon Salinan Tribal ancient territories and boundaries, (Spreckels, Chaular, Gonzales.)
Back and forth areas, Indian Springs and Las Palmas Locations.

At this time we do not know of any specific sensitive areas within these lands.

In the future, if you foresee substantial ground disturbance will take place, we would advise a Phase 1 surface survey review, to ensure there are no sensitive sites within project.

Thank you,
Karen R White
Xolon Salinan Tribe

Visit our new website at:
www.xolonsalinantribe.org

On Fri, Apr 26, 2019 at 4:38 PM Mike McCullough <MikeM@my1water.org> wrote:

Ms. White,

Please consider this letter and preliminary project information as the notification for a Proposed Project under the CEQA guidelines pursuant to AB 52.

Thank you,

Mike McCullough, MPA

Government Affairs Administrator
Warning: This email originated from outside of Monterey One Water. Unless you recognize the sender and are expecting the message, do not click links or open attachments.
April 25, 2019

Chairperson Karen White
Xolon-Salinan Tribe
P. O. Box 7045
Spreckels, CA, 93962
Phone: (831) 238 – 1488
xolon.salinan.heritage@gmail.com

Subject: Notification of Proposed Project Under AB52 Amendment to CEQA for the Monterey One Water Planned Service Area Extension Project

Dear Chairperson White:

Monterey One Water (M1W) is the lead agency for the Planned Service Area Extension Project (Proposed Project), which could extend regional wastewater collection and treatment services to the communities of Bolsa Knolls, Spreckels, Indian Springs Ranch and Las Palmas Ranch, and the Oak Hills Community of Castroville. The planned service area extension is being considered in two stages: 1) an initial service area extension to the areas specified above; and, 2) a potential future extension (further extending upon the initial planned service area). The future service extension could extend service to the areas of Chualar and the City of Gonzales. It is important to note, the current proposal would not directly result in physical impacts on the environment or physical improvements, such as additional infrastructure, improved facilities, or services extensions, in the Proposed Project areas. A map showing the Proposed Project area is attached.

A sacred lands search conducted by the Native American Heritage Commission indicated a positive result for tribal resource(s) associated with the Costanoan Ohlone Rumsen-Mutsun Tribe. Before this Proposed Project begins, M1W is interested in obtaining additional information regarding the presence of cultural resources within or adjacent to Proposed Project locations and in learning of any concerns you or other tribal members may have regarding this Project. Please provide your comments and if you feel that other groups or individuals should be contacted, please let me know at:

Monterey One Water
Attention: Mike McCullough, Government Affairs Administrator
5 Harris Ct #D, Monterey, CA 93940
(831) 645-4618,
MikeM@my1.water.org

Please consider this letter and preliminary project information as the notification of a Proposed Project as required under the California Environmental Quality Act, specifically Public Resources Code (PRC) 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB 52). Please respond within 30 days, pursuant to PRC 21080.3.1 (d) if you would like to consult on this Project. Additionally, with your response, please provide a designated contact person.

Very Respectfully,

[Signature]
Mike McCullough,
Government Affairs Administrator, M1W

Enclosure: Proposed Project Area Map
Note Toro Area was deleted from the proposed extension areas after MRWPCA Board Review.
Focused Wastewater Service Area Study Update
for the
Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, Oak Hills,
Chualar, Gonzales, and Toro Park Areas

Final Report

July 2018

Prepared by

V.W. Housen & Associates
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Appendix C  2011 City of Gonzales Draft Wastewater System Conceptual Plan
1.0 INTRODUCTION

In 1998, Monterey One Water (formerly Monterey Regional Water Pollution Control Agency) completed a Wastewater Service Area Study (1998 Study) to evaluate the need for near- and long-term (i.e., 2020) wastewater services to existing and planned developments. The 1998 Study was updated in 2003, and again in 2015 to reflect changes in planning criteria and the study approach. In addition, in August 2010, Monterey One Water completed a Toro Park Planning Area Wastewater Service Area Study (2010 Toro Park Study). The Toro Park Study reviewed alternatives and associated costs for conveying Toro Park Area wastewater flows to the Monterey One Water regional treatment facility.

In January 2017, Monterey One Water contracted with V. W. Housen & Associates (VWHA) to review and update the assumptions, findings, and recommendations from the 2015 Study and the 2010 Toro Park Study. This report summarizes and consolidates key information from the 1998, 2003, and 2015 Service Area Studies and the 2010 Toro Park Study, and presents updated recommendations and costs for the provision of wastewater service to six communities outside of the Monterey One Water service area.

The scope of work for this project originally included preliminary design of the preferred solution for conveying Toro Park area wastewater to the Monterey One Water Salinas pump station. However, no information on the community wastewater collection systems or the Toro Park wastewater treatment facility was made available from the system owner for review. Further, a site inspection of the facility was not granted. VWHA contacted the author of the 2010 Toro Park Study, Wallace Group, to obtain additional background information. Wallace Group reported that they were also not provided with any facility information, and were only provided a single, limited opportunity to view the plant. In summary, no additional information could be gathered for the facilities beyond the information that is available in the existing Wallace Group reports.

In the absence of this data, to complete this report, VWHA reviewed and compared the Wallace Group recommendations to those presented in the three service area studies, and using this information, developed updated recommendations and costs. During this effort, a new Toro Park alignment was identified by Monterey One staff. This alignment conveys flow from the Toro Park treatment plant south, east, and then north on Davis Road to the Monterey One facilities (Davis Road Alignment).

In January 2018, the scope of this project was expanded to include conceptual options to convey wastewater from two additional areas, Chualar and the City of Gonzales, to the Monterey One Water service area. Also in January 2018, Monterey One authorized VWHA to complete a Toro Park area pump station preliminary design report for the Davis Road Alignment. The Toro Park - Davis Road Alignment preliminary design report will be provided to Monterey One as a standalone document.

Comments from the City of Salinas, Monterey County, and Castroville Community Services District were requested after the initial project phase (i.e., prior to the recent work involving Chualar and City of Gonzales). These comments have been incorporated into this report. The Focused Wastewater Service Area Study (Current Study) is organized as follows:

- Introduction
- Background
- Study Area
- Population Forecasts
- Wastewater Flow Projections
- Wastewater Service Evaluation, Alternatives, and Costs
- Summary and Recommendations
• Appendices
  – Appendix A. 1998, 2003, and 2015 Wastewater Sewer Area Studies
  – Appendix B. 2010 Wastewater Service Study for Toro Park Planning Area and 2015 Toro Area Wastewater Service Feasibility Study
  – Appendix C. Background Materials for Chualar and Gonzales Service Areas
2.0 BACKGROUND

This section summarizes and compares the information contained in the prior wastewater service area studies. Additional detail can be found in each of the studies, which are included in Appendix A.

2.1 1998 Wastewater Service Area Study (1998 Study)

Monterey One Water provides wastewater collection and conveyance service to the cities of Pacific Grove, Monterey, Seaside, Del Rey Oaks, San City, Marina, and Salinas; unincorporated communities of Castroville, Moss Landing, and Boronda; and Fort Ord. The 1998 Wastewater Service Area Study (Kennedy Jenks, July 1998) reviewed wastewater needs for 14 planning areas, which included the City of Salinas and 13 unincorporated areas within the current Monterey One Water service area boundary, Sphere of Influence (SOI), and adjacent areas outside of the SOI. The 13 unincorporated areas currently have on-site septic systems or flow to sub-regional treatment facilities; the 1998 Study evaluated the feasibility and cost of conveying these community flows to Monterey One Water for treatment. The areas within the SOI that were reviewed in the 1998 Study included the following:

- Corral de Tierra Canyon Road and San Benancio Canyon Road (Highway 68 Area)
- Las Palmas Ranch and Indian Springs Ranch (River Road Area)
- Twin Bridges, Oak Hills, Laguna Seca, Spreckels, Toro Park

Areas outside of the Sphere of Influence included the following:

- Armstrong Ranch and Mt. Valley/Sconberg Ranch (Salinas SOI)
- Bolsa Knolls and Rancho San Juan (Salinas SOI)
- City of Salinas

The 1998 Study estimated buildout wastewater flows using 1997 Association of Monterey Bay Area Governments (AMBAG) population forecasts. The AMBAG forecast assumed an increase in population in Monterey County from 390,645 in 2000 to 523,285 by 2020. Similarly, the Monterey One Water service area was projected to increase in population from 236,398 to a population of 322,899 by 2020. Most of the population growth was projected for the cities of Salinas and Marina.

The 1998 Study calculated an average annual wastewater flow of 84 gallons per capita per day (gcpd), based on flow records from a seven-month dry weather period in 1997. Flows during this period ranged from 57 gcpd to 134 gcpd. In 1998, total average annual flow from the skewed portions of the study was 20.1 million gallons per day (mg). Using these unit flows, and the AMBAG population projections, the 1998 Study projected a 45.7 percent increase in flow from 20.1 million gallons per day (MGD) to 29.29 MGD by the year 2020. Of this amount, 26.8 MGD was projected from the Monterey One Water service area, and 2.48 MGD from independent and subregional wastewater treatment plants outside of the current service area. By contrast, in 2016, the plant received average annual influent flow of 18.3 MGD. The plant has a dry weather design capacity of 29.6 MGD.

For each potential new planning area, the 1998 Study evaluated and compared infrastructure needs and costs associated with implementing a more regional management solution to replace current localized wastewater collection and treatment. Capital and O&M costs were then translated into a potential estimated monthly sewer charge.

---

1 By comparison, the 2014 AMBAG Regional Growth Forecast projects a population of 447,516 for Monterey County in year 2020.
Of the original 14 planning areas reviewed, four areas, San Benancio Canyon, Corral de Tierra, Mt. Valley/Sconberg Ranch, and Salinas, were determined to not warrant further evaluation in the study. A total of 23 alternative wastewater service approaches were developed for the remaining 10 planning areas.

### 2.2 2003 Wastewater Service Area Study Update (2003 Study)

The 2003 Wastewater Service Area Study Update (Robert Jaques, August 2003) reviewed wastewater needs for the same communities as the 1998 Study, and added Pasadera, Laguna Seca Raceway, Prunedale and North Monterey County, Buena Vista Terrace, Marks Ranch, Bollenbecker and Kelton Site, San Jerardo, Monterey Dunes Colony, Gabilan Acres, Piini Development (Country Meadows), and Chualar. The 2003 Study proposed a slightly larger population increase, and predicted 2020 Monterey County population of 536,609. The 2003 Study did not provide an updated population estimate for the Monterey One Water service area.

The 2003 Study also projected a higher average unit wastewater flow of 90 gcpd, following a separate study prepared by Monterey One Water using data from 1996-1998. The unit flow factors assigned to the various communities ranged from 6 to 134 gcpd. However, the 2003 Study also assumed that water conservation measures would help reduce sewer flows over time, and projected a total flow of 29.2 MGD and service area flow of 26.6 MGD. These flows were very close to the 1998 Study projections.

The 2003 Study provided an initial review of each service area, and concluded that detailed evaluations for most of the planning areas were not justified. New project alternatives and associated costs were developed for nine of the planning areas: these areas included Spreckels, Las Palmas Ranch, Indian Springs Ranch, Toro Park, Oak Hills, Laguna Seca and Pasadera, Bolsa Knolls, Rancho San Juan, and Twin Bridges. In general, the 2003 study carried forward recommendations from the 1998 study, but applied significantly reduced unit costs, which resulted in lower project cost estimates. Where applicable, the 2003 study added the cost to purchase existing wastewater treatment systems to the capital cost estimates. Estimated costs were then translated to monthly sewer costs for the potential future customers.

The 2003 Study recommended more detailed studies of pipeline alignments and costs, further discussions regarding permitting, amending the Monterey One Water SOI, and updating flows after completion of the AMBAG 2003 population projections.

### 2.3 2015 Wastewater Service Area Study Update (2015 Study)

The 2015 Wastewater Service Area Study Update (Robert Jaques, September 2015) reviewed wastewater needs for the Oak Hills, Spreckels, Las Palmas Ranch, Indian Springs Ranch, Toro, and Bolsa Knolls areas. The Toro service area includes Serra Village, Creekside, The Villas, The Oaks Condominiums, Toro Park, The Meadows, and Markham Ranch located along Corral de Tierra Road. All of these areas are outside of the Monterey One Water service area. However, only Bolsa Knolls is outside of the current Monterey One Water SOI.

The 2015 Study did not calculate projected flows for the communities, and determined that these outlying community flows would be inconsequential when compared to the capacity of the Monterey One Water regional treatment plant. However, the 2015 Study reports an average per capita flow of 64 gcpd\(^2\). This unit flow value is 24 percent lower than the 1998 projection, and 29 percent lower than the 2003 projection. In speaking with Monterey One Water staff, 64 gcpd may be a realistic updated per capita

\(^2\) Infrastructure needs were carried forward from the 1998 and 2003 Studies. Therefore, although a per capita flow of 64 gallons per day was reported in the 2015 Study, infrastructure requirements do not appear to have been adjusted for this flow.
sewer flow projection, in light of substantial water conservation that has occurred in the region over the past several years.

The 2015 Study concluded that three planning areas could benefit from projects to convey wastewater to the Monterey One Water treatment facility: Las Palmas Ranch, Indian Springs Ranch, and the Toro Area.

2.4 Other Documents Reviewed

In addition to three Wastewater Service Area Studies described above, VWHA reviewed the following information in preparation for the first phase of the Current Study, which did not include Chualar or the City of Gonzales:

- Toro Area Wastewater Service Area Feasibility Study, prepared for Monterey County (Wallace Group, May 2013)
- Wastewater Service Study for Toro Park Planning Area (Wallace Group, August 2010)
- Monterey County GIS data (publicly available), including land use boundaries and parcel maps
- AMBAG 2014 Regional Growth Forecast
- 2014 Annual Reports for Indian Springs, Las Palmas, Spreckels, and Oak Hills
- 2015 Annual Reports for Indian Springs, Las Palmas, Spreckels
- 2016 Annual Reports for Indian Springs, Spreckels
- 2014, 2015, and 2016 Annual Reports for Toro Park
- 2010 Monterey County General Plan Land Use Element
- Ferrini Ranch Subdivision Draft EIR
- Monterey County Integrated Regional Water Management Plan
- LAFCO maps for Indian Springs, Oak Hills, Las Palmas, and Salinas
- Monterey Peninsula Municipal Services Review
- Spreckels Municipal Services Review
- Sewer Master Plans for the Cities of Salinas, Gilroy, and Morgan Hill, and the Marina Coast Water District (for development of wastewater flow factors)

To further understand the wastewater needs for Chualar and the City of Gonzalez, VWHA reviewed the following:

- August 2017 County of Monterey Chualar Consolidated (CSA 75) Wastewater Rate Study
- Chualar Flow Trends Table (from Monterey One for 2005-2016)
- Chualar RWQCB WDR Order No. 01-038
- RFQ for Transfer to Ownership and Responsibility for All Services Provided by Chualar Sanitary System (and other systems)
- 2013-14 Monterey County Civil Grand Jury Interim Final Report No. 1 for the Chualar Sewer System, and Monterey County Response to this Report
- LAFCO maps and Municipal Service Review including the Chualar area
- City of Gonzales Wastewater System Conceptual Plan (AECOM, 2011)
- City of Gonzales RWQCB WDR Order No. R3-2006-0005
- City of Gonzales General Plan
- City of Gonzales Published Water and Sewer Rates
- 2015 and 2016 Annual Reports for the Gonzales Wastewater Treatment Plant
- Third Quarter 2017 Report for the Gonzales Wastewater Treatment Plant
- 2016 Wastewater Treatment Plant Capacity Study (MKN, 2016)
3.0 CURRENT STUDY AREA

The study area for this report lies in the northern end of the Salinas Valley, near the City of Salinas, and includes the communities of Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, Oak Hills, Chualar, City of Gonzales, and the Toro Area. The communities of Bolsa Knolls and Oak Hills are situated in the low hills north of Salinas, bisected by Highway 101. Spreckels, Las Palmas Ranch, Indian Springs Ranch, and the Toro Area are located south of Salinas near the intersection of Highway 68 and the Salinas River. Chualar and the City of Gonzales are located approximately 11 and 17 miles south, respectively, of the City of Salinas along Highway 101. With the exception of Bolsa Knolls, Chualar, and Gonzales, these communities are located near the current Monterey One Water sphere of influence (SOI); Monterey One Water will be evaluating the expansion of their SOI in the near future. Bolsa Knolls is located within the Salinas SOI. Figure 1 shows the location of the eight communities, and their relation to the Monterey One Water Regional Treatment Plant.

Figure 1. Communities Reviewed for Focused Wastewater Service Area Study
Focused Wastewater Service Area Study

Study Area

Each of the communities, their land use, flows, and current wastewater system are described below.

3.1 Bolsa Knolls

The Bolsa Knolls area is located adjacent to the northeast border of the City of Salinas, along San Juan Grade Road, north of the intersection of Russell and Grant Roads. The area is less than a mile from the City of Salinas collection system. The land use designations for Bolsa Knolls, after adjustments related to flow calculations, comprise approximately 168 acres of low-, medium-, and high-density residential parcels, approximately 4 acres of commercial property, 37 acres of public/quasi-public land, and additional farmland and resource conservation land. Bolsa Knolls land use is shown in Figure 2.

Figure 2. Bolsa Knolls Land Use

The County’s GIS layer shows 517 medium density residential parcels. However, the 2015 Study reports that the area is built-out, with approximately 400 dwellings. The 2015 Study estimates average dry weather wastewater flow of 100,000 gallons per day (GPD), assuming 250 GPD per dwelling unit. This estimate is high, when compared to the 2015 Study allocation of 64 gcpd. However, a higher estimate of flow provides some allowance for commercial and other flows, which would not be captured through a parcel count. Wastewater treatment is currently addressed through on-site septic systems. The 1998 Report states that the septic tanks are close to full treatment capacity. The Department of Public Health has expressed interest in connecting Bolsa Knolls to the City of Salinas collection system and ultimately entering into the Monterey One Water system in order to avoid groundwater and environmental contamination that may result from aging septic systems.
3.2 Spreckels

The Spreckels community is located along the Salinas River east of Highway 68, approximately three miles south of the City of Salinas. The 1998 Study references 200 homes, and the 2015 Study reports a population of 800. The County’s current GIS data show 258 homes. Land use is comprised of approximately 39 acres of residential high density, 8.7 acres of commercially zoned property, and 5.9 acres of public/quasi public property. Spreckels land use is shown in Figure 3.

![Figure 3. Spreckels Land Use](image)

The Spreckels wastewater treatment plant is owned and operated by California American Water. The plant’s permitted capacity is 0.180 MGD. In 2015, average dry weather flow was 0.0729 MGD, or 91.1 gcpd. However, recently, produce grower Tanimura & Antle built an 800-person housing facility on their property for seasonal farmworkers. According to the Mitigated Negative Declaration for the project, the housing facility is expected to generate wastewater flows of an additional 48,000 GPD for the Spreckels Wastewater Treatment Plant, for a total average dry weather flow of 0.121 MGD. The 1998 Study reported no known issues with existing wastewater collection and treatment service. The community is approximately one mile from the Las Palmas treatment facility, 2.8 miles from the City of Salinas collection system, and 4.1 miles from the Monterey One Water Salinas pump station.

In a 2016 Municipal Services Review, LAFCO encouraged the Spreckels Community Services District to connect to Monterey One Water system, citing groundwater protection and access to recycled water as the main benefits for this change.

3.3 Indian Springs Ranch

Indian Springs Ranch is a gated community of residences and horse stables located to the south of Las Palmas Ranch on the west side of River Road. The community is comprised of approximately 71 acres of residential low density, 2.5 acres of public/quasi-public land, and 32.1 acres of resource conservation land, after adjustment for flow calculations. Indian Springs Ranch land use is shown in Figure 4.
The 2015 Study reports that the subdivision includes 155 homes with 236 residents. The development generates approximately 21,800 gallons of wastewater per day, which is treated at the Indian Springs Wastewater Treatment Plant. The plant was constructed in the early 1980’s, and is owned and operated by California American Water. The permitted capacity of the wastewater treatment plant is 85,000 GPD.

3.4 Las Palmas Ranch

Las Palmas Ranch is located on the hillsides on the south side of River Road, approximately 1.8 miles east of Highway 68 and three miles south of the City of Salinas. The 1998 Study referenced 743 dwellings. However, the 2015 Study reports that the development includes 1029 homes, and the community is fully built-out. The community includes approximately 282 acres of low- and medium-density residential, 2.7 acres of public/quasi-public land, 1.6 acres of commercial, and 1042 acres allocated to resource conservation. These land use figures include changes made during the flow calculation procedure.

Average dry weather flow is approximately 140,000 gallons per day. Permitted capacity is 195,000 GPD. The Las Palmas Ranch treatment plant was constructed in 1989. Las Palmas Ranch land use is shown in Figure 5 on the following page.
3.5 Oak Hills

Oak Hills is located north of Highway 156, approximately 1.5 miles east of Castroville and three miles from the Monterey One Water Castroville pump station. This residential development comprises 594 medium-sized residential lots. 146 of these lots have individual septic tanks. The remaining parcels flow to a local wastewater treatment plant that was constructed in 1968, and is owned and operated by California American Water. The plant was designed and is permitted to treat 108,000 GPD of flow. The community consists of 226.7 acres of medium density residential land, 15.5 acres zoned as special treatment area, 12 acres zoned as wetlands and coastal strand, and 0.06 acres zoned as public/quasi-public. These land use figures include adjustments made in the flow calculation process. Figure 6 on the following page shows Oak Hills designated land use.
3.6 Toro Park Area

The Toro Park Area follows Highway 68 southwest of Salinas and comprises the developments of Serra Village, Toro Park Estates, The Villas, The Meadows, Markham Estates, Corral de Tierra Country Club, Toro Park Elementary School, and a small portion of San Benancio Road. The area contains some lands zoned for future development with the Ferrini Ranch Subdivision southeast of Highway 68 and the Corral de Tierra Shopping Village. The 2015 Study reports that the community includes approximately 1,114 homes, with an approximate population of 3,899.

The Toro Park Area wastewater treatment plant was constructed in 1965, and is operated by California Utilities Service (CUS). The plant treats an average of 176,000 gallons of wastewater per day. In 2010, Monterey One Water contracted with the Wallace Group to complete a Wastewater Service Study for the Toro Park Area (2010 Toro Park Study). The 2010 Toro Park Study projected buildout average dry weather flows of 291,844 GPD. The facility is permitted to treat up to 300,000 gallons per day.

Land use in the Toro Park Area includes 382 acres of low- and medium-density residential, 16.5 acres of commercial, 1 acre of industrial, 3.7 acres of mixed use, 1 acre of professional offices, and approximately 250 acres of resource conservation, rural grazing, and public/quasi-public use. Toro Area land use is shown in Figures 7a and 7b on the following pages.

In 2013, the County of Monterey authorized Wallace Group to complete a feasibility study (2013 Toro Park Study) on behalf of the Toro Area Sewer Coalition Steering Committee (TASCSC). The purpose of the study was to update the 2010 Toro Park Study, to evaluate an option for the community to move from private operation to a public model, and to provide steps needed to move forward with this approach.

The 2013 Toro Park Study provided updated costs of service, and provided a 5-year, multi-step approach toward forming a Community Services District and assuming ownership and operation of the treatment facility.
Figure 7b. Toro Park Area Land Use (South)
3.7 Chualar

The community of Chualar is located in an unincorporated area of central Monterey County along Highway 101, approximately 11 miles south of the City of Salinas. Chualar has a population of 1,190, based on the 2010 Census. The community has been served since the mid-1960s by a publicly-owned sewer collection system and wastewater treatment plant located next to the Salinas River. The collection system consists of approximately two miles of gravity sewer, a small pump station located west of Highway 101, and approximately two miles of force main that conveys flow to the wastewater treatment plant. The flows receive primary treatment within five wastewater treatment ponds, after which the flow is discharged through evaporation and percolation. The ponds were upgraded in 1969 and 1995, and the pump station was rebuilt in 1983. Wastewater treatment plant operations must meet the requirements established in Regional Water Quality Control Board (RWQCB) Waste Discharge Requirements (WDR) Order No. 01-0381. The Chualar community was formed as part of County Service Area (CSA) 75, and the Board of Supervisors acts as the Board of the CSA.

In June 2016, CSA 75 issued a Request for Qualifications for transfer of ownership for Chualar and other wastewater districts. This document describes Chualar as having 188 parcels with 171 connections, and 306 equivalent dwelling units. The plant has a capacity of 112,000 GPD average annual flow during a 100-year storm event year, based on information from the RWQCB Order. The facility treated average annual daily flow of 66,000 gallons in 2016.

The community consists of 35 acres of high density residential land, 27 acres of commercial and industrial, 14 acres zoned as agriculture, and 28 acres zoned as public/quasi public. Figure 8 on the following page shows Chualar designated land use.

3.8 City of Gonzales

The City of Gonzales is located along Highway 101, approximately 17 miles south of the City of Salinas. The City of Gonzales has a population of 8,187, based on the 2010 Census. The City’s wastewater collection system includes gravity sewer mains, three lift stations that convey flow from east to west across Highway 101, and a trunk system that conveys the flows east to the City’s wastewater treatment plant. The treatment plant is located approximately two miles west of the intersection of Alta Road and Gonzales River Road, at the end of Short Road. The wastewater treatment plant operates under RWQCB Order No. R3-2006-0005. The original construction date of this plant was not apparent from available documents. However, the plant was upgraded between 2006 and 2011 to provide 1.3 MGD average daily flow, which matches the permitted capacity as listed in the WDR permit. This capacity is sufficient to service the existing population plus planned infill.

Gonzales consists of 297 acres of low density residential land, 41 acres of medium and high density residential land, 182 acres of commercial, industrial, and mixed use, 431 zoned as public/quasi public, and 27 acres of parks. Figure 9 shows City of Gonzales designated land use.
Figure 8. Chualar Land Use

Figure 9. City of Gonzales Land Use
4.0 POPULATION FORECASTS

The 1998 Study utilized the 1997 Association of Monterey Bay Area Governments (AMBAG) population forecast to project growth and future flows. This projection resulted in the Monterey County total population projection of 523,285 in 2020.

The 2003 Study relied upon this same population projection, and adjusted the numbers to reflect AMBAG’s 1997 final report, which projected population of 536,609 in 2020. The 2015 Study listed, but otherwise did not incorporate the updated population estimate in the study.

In 2014, AMBAG published a new regional growth forecast that projects a 2020 population of 447,516 and 2035 population of 495,086 for Monterey County. Projected population for the Monterey One Water service area is 260,563 in 2020 and 291,675 in 2035, with most of the population residing within the City of Salinas.

The updated population projections are over 16 percent lower than the projections that were used in prior studies. However, the 2014 AMBAG publication does not identify populations for the smaller, rural areas that are included in the Current Study. Further, the 2014 AMBAG publication states that the population of seasonal workers is not included in the Census data, and that this population is trending toward year-round residence. Therefore, for the purposes of the Current Study, the population projections were assumed to be the same as in the 1998 Study. Further, associated flows are expected to be in the same range as those used in the prior studies.

Population forecasts for Chualar and Gonzales were not included in the 1998, 2003, or 2015 studies. However, based on historical census data, the population of Chualar is expected to grow by approximately 0.6 percent per year. This level of growth would result in a population increase of 34 percent by buildout year 2050.

City of Gonzales population projections are found in the 2011 Wastewater System Conceptual Plan (2011 Wastewater Plan), which followed the Land Use Element of the City’s 2010 General Plan. Table 1 summarizes City of Gonzales 2011 and buildout population estimates, as presented in the 2011 Wastewater Plan. At buildout, the City will have grown by over 400 percent. Most of the buildout is projected to occur within three zones located east of Highway 101. A small portion of the projected growth is associated with infill development.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Existing Population</th>
<th>Buildout Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>9,025</td>
<td>37,824</td>
</tr>
<tr>
<td>Commercial</td>
<td>0</td>
<td>930</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>9,025</td>
<td>38,754</td>
</tr>
</tbody>
</table>

Table 1. City of Gonzales Population Projections
5.0 WASTEWATER FLOW PROJECTIONS

5.1 Bolsa Knolls, Spreckels, Indian Springs Ranch, Old Palmas Ranch, Oak Hills, Toro Area

Existing flows from the six initial communities under review, as provided in the 1998 Study and confirmed through the 2003 and 2015 Studies, are summarized in Table 2, below. Existing flows for Chualar and the City of Gonzales were taken from 2015 and 2016 Regional Board Reports, and also from the City of Gonzales Wastewater Treatment Plant Capacity Study (MKN, 2016).

<table>
<thead>
<tr>
<th>Community</th>
<th>Flows from Prior Studies (MGD)</th>
<th>Flows from Regional Board Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolsa Knolls</td>
<td>N/A</td>
<td>0.100</td>
</tr>
<tr>
<td>Spreckels</td>
<td>0.125</td>
<td>0.058</td>
</tr>
<tr>
<td>Indian Springs Ranch</td>
<td>0.040</td>
<td>0.040</td>
</tr>
<tr>
<td>Las Palmas Ranch</td>
<td>0.100</td>
<td>0.150</td>
</tr>
<tr>
<td>Oak Hills</td>
<td>0.090</td>
<td>0.090</td>
</tr>
<tr>
<td>Toro Area</td>
<td>0.200</td>
<td>0.210</td>
</tr>
<tr>
<td>Chualar</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>City of Gonzales</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

* 2015 flow from MKN Wastewater Treatment Plant Capacity Study

In order to confirm flows for the first six areas listed, VWHA prepared independent flow projections for the communities. Using Monterey County (County) publicly available ArcGIS data, community service area maps from the Monterey County Local Agency Formation Committee Organization (LAFCO), and information from the 1998 and 2003 studies, the spatial boundaries of each community were defined. County parcel shapefile data was then overlaid onto these boundaries. In addition, County shapefiles with information on land use from the County’s 2010 General Plan and from the Coastal Commission’s Local Coastal Program were added to the map. These overlays enabled the analysis of land use, parcels, and potential flows for each community.

Listed acreages for parcels with assigned land uses that clearly did not contribute flows were assigned more appropriate land use categories, or otherwise removed from the flow calculation. For example, in the Toro Area, approximately 30 acres of farmland were zoned as mixed use. When multiplied by the per-acre unit flow factor used to estimate daily flows, this acreage incorrectly appeared to contribute significant system flows. Therefore, the acreage for this area was removed from the flow calculation. The acreage removed from various land use categories in each planning area is summarized in Table 3 on the following page.
### Table 3. Land Use Acreage Removed from Flow Calculations

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Spreckels</th>
<th>Bolsa Knolls</th>
<th>Indian Springs</th>
<th>Las Palmas</th>
<th>Oak Hills</th>
<th>Toro Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td>Public/Quasi-Public</td>
<td></td>
<td>8.1</td>
<td>85.0</td>
<td>12.1</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Residential Medium Density</td>
<td></td>
<td>6.0</td>
<td>41.8</td>
<td>92.2</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>Residential Low Density</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.2</td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26.5</td>
</tr>
<tr>
<td>Mixed Used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31.1</td>
</tr>
</tbody>
</table>

In the Toro Area, 3.27 acres of Public/Quasi-Public land use was reassigned to the Mixed Use category, resulting in a net decrease of 27.4 acres of Mixed Use.

In order to confirm projected flows, VWHA reviewed wastewater flow factors found in sewer master plans from nearby cities and water districts, including the City of Salinas, Marina Coast Water District, City of Gilroy, and the City of Morgan Hill, and developed draft flow factors for each land use designation. Flow factors used in the various master plans documents are summarized in Table 4.

### Table 4. Example Wastewater Unit Flow Factors

<table>
<thead>
<tr>
<th>Land Use Designation</th>
<th>Unit Flow Factor (GPD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Salinas¹</td>
</tr>
<tr>
<td>Commercial</td>
<td>1200</td>
</tr>
<tr>
<td>Industrial</td>
<td>500</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>1200</td>
</tr>
<tr>
<td>Public/Quasi-Public</td>
<td>1000</td>
</tr>
<tr>
<td>Residential - High Density</td>
<td>3500</td>
</tr>
<tr>
<td>Residential - Medium Density</td>
<td>2000</td>
</tr>
<tr>
<td>Residential - Low Density</td>
<td>1400</td>
</tr>
</tbody>
</table>

1 City of Salinas Sanitary Sewer System Master Plan (2011)
2 Marina Wastewater Collection System Master Plan (2005)
3 City of Gilroy Sewer System Master Plan (2004)
4 City of Morgan Hill Sewer System Master Plan (2003)

Using the master planning flow factors as a guideline, individual flow factors were applied to the land uses within each community, as shown in Table 5. City of Salinas flow factors were used for most of the
evaluations, with some adjustments made to individual communities. These adjustments included the following:

- Spreckels commercial flows of 500 GPD were used in lieu of 1,200 GPD
- Toro Park public/quasi public lands were primarily golf course and park lands, and were assigned no flow in lieu of 1,000 GPD

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolsa Knolls</td>
<td>0.100³</td>
<td>Not provided</td>
<td>0.275</td>
</tr>
<tr>
<td>Spreckels</td>
<td>0.071</td>
<td>0.400</td>
<td>0.121</td>
</tr>
<tr>
<td>Indian Springs Ranch</td>
<td>0.022</td>
<td>0.040</td>
<td>0.049</td>
</tr>
<tr>
<td>Las Palmas Ranch</td>
<td>0.139</td>
<td>0.235</td>
<td>0.208</td>
</tr>
<tr>
<td>Oak Hills</td>
<td>0.032⁴</td>
<td>0.100</td>
<td>0.181</td>
</tr>
<tr>
<td>Toro Area</td>
<td>0.164</td>
<td>0.210</td>
<td>0.327</td>
</tr>
</tbody>
</table>

As shown in Table 5, when the master planning flow factors were applied to the designated land use for each of the communities in the Current Study, projected buildout flows were generally consistent with the 1998 Study buildout flows.

Tables 6 through 11 provide additional detail behind the flow calculations for each of the six original planning areas. Tables 12 and 13 provide estimated flows for the additional communities of Chualar and Gonzales. Table 14 summarizes potential additional flows that may be conveyed to through Salinas Pump Station to the Monterey One Treatment Plant.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
<th>Flow Factor (GPD/AC)</th>
<th>Estimated Flow (GPD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>4.22</td>
<td>1,200</td>
<td>5,064</td>
</tr>
<tr>
<td>Farmlands</td>
<td>24.60</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Public/Quasi-Public</td>
<td>36.82</td>
<td>1,000</td>
<td>36,822</td>
</tr>
<tr>
<td>Residential High Density</td>
<td>13.30</td>
<td>3,500</td>
<td>46,566</td>
</tr>
<tr>
<td>Residential Low Density</td>
<td>27.41</td>
<td>1,200</td>
<td>32,887</td>
</tr>
<tr>
<td>Residential Medium Density</td>
<td>127.70</td>
<td>1,200</td>
<td>153,245</td>
</tr>
<tr>
<td>Resource Conservation</td>
<td>2.71</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Estimated Flow</td>
<td></td>
<td></td>
<td>0.275 MGD</td>
</tr>
</tbody>
</table>

³ Bolsa Knolls flow estimate from 2015 Study.
⁴ Oak Hills flow from 2015 Annual Report.
Table 7. Spreckels Land Use, Flow Factors, and Projected Flows

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
<th>Flow Factor (GPD/AC)</th>
<th>Estimated Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>8.7</td>
<td>500</td>
<td>4,343</td>
</tr>
<tr>
<td>Public/Quasi-Public</td>
<td>5.9</td>
<td>1,000</td>
<td>5,878</td>
</tr>
<tr>
<td>Residential High Density</td>
<td>38.6</td>
<td>1,500</td>
<td>57,888</td>
</tr>
<tr>
<td>Industrial</td>
<td>104.8</td>
<td>500</td>
<td>52,391</td>
</tr>
<tr>
<td>Total Estimated Flow</td>
<td></td>
<td></td>
<td>0.121 MGD</td>
</tr>
</tbody>
</table>

1. Commercial unit flow factor was reduced from 1,200 GPD to 500 GPD.

Table 8. Indian Springs Ranch Land Use, Flow Factors, and Projected Flows

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
<th>Flow Factor (GPD/AC)</th>
<th>Estimated Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public/Quasi-Public</td>
<td>2.5</td>
<td>1,000</td>
<td>2,456</td>
</tr>
<tr>
<td>Residential Low Density</td>
<td>71.3</td>
<td>650</td>
<td>46,323</td>
</tr>
<tr>
<td>Resource Conservation</td>
<td>32.1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Estimated Flow</td>
<td></td>
<td></td>
<td>0.049 MGD</td>
</tr>
</tbody>
</table>

Table 9. Las Palmas Ranch Land Use, Flow Factors, and Projected Flows

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
<th>Flow Factor (GPD/AC)</th>
<th>Estimated Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>1.6</td>
<td>1200</td>
<td>1,883</td>
</tr>
<tr>
<td>Public/Quasi-Public</td>
<td>2.7</td>
<td>1000</td>
<td>2,743</td>
</tr>
<tr>
<td>Residential Low Density</td>
<td>147.1</td>
<td>650</td>
<td>95,637</td>
</tr>
<tr>
<td>Residential Medium Density</td>
<td>135.2</td>
<td>800</td>
<td>108,160</td>
</tr>
<tr>
<td>Resource Conservation</td>
<td>1041.9</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Estimated Flow</td>
<td></td>
<td></td>
<td>0.208 MGD</td>
</tr>
</tbody>
</table>
Table 10. Oak Hills Ranch Land Use, Flow Factors, and Projected Flows

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
<th>Flow Factor (GPD/AC)</th>
<th>Estimated Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public/Quasi-Public</td>
<td>0.06</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Residential Medium Density</td>
<td>226.7</td>
<td>800</td>
<td>181,322</td>
</tr>
<tr>
<td>Special Treatment Area</td>
<td>15.5</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Wetlands &amp; Coastal Strand</td>
<td>12.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Estimated Flow</td>
<td></td>
<td></td>
<td>0.181 MGD</td>
</tr>
</tbody>
</table>

Table 11. Toro Area Land Use, Flow Factors, and Projected Flows

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
<th>Flow Factor (GPD/AC)</th>
<th>Estimated Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>16.5</td>
<td>1,200</td>
<td>19,827</td>
</tr>
<tr>
<td>Public/Quasi-Public¹</td>
<td>178.2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Residential Low Density</td>
<td>30.5</td>
<td>650</td>
<td>19,804</td>
</tr>
<tr>
<td>Residential Medium Density</td>
<td>351.1</td>
<td>800</td>
<td>280,852</td>
</tr>
<tr>
<td>Resource Conservation</td>
<td>70.2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Rural Grazing</td>
<td>0.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Industrial</td>
<td>0.9</td>
<td>500</td>
<td>437</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>3.7</td>
<td>1,200</td>
<td>4,404</td>
</tr>
<tr>
<td>Visitor Accommodations/Professional Offices</td>
<td>1.0</td>
<td>1,200</td>
<td>1,203</td>
</tr>
<tr>
<td>Total Estimated Flow</td>
<td></td>
<td></td>
<td>0.327 MGD</td>
</tr>
</tbody>
</table>

¹ Public/Quasi-Public lands consist primarily of golf courses and parks and were assigned no unit flows.

Preliminary flow values were reviewed with Monterey One Water staff. In particular, the Toro Park flows presented a concern because the projected flow would be higher than the current wastewater treatment plant capacity. However, based on these discussions, it was concluded that water conservation has, and will continue to result in reduced per capita wastewater flows. The 1998 Study projections show that future flows for the Toro Park area will remain below current wastewater treatment plant capacity. Also, when utilizing 1998 Study projected flows, it is important to note that actual population throughout Monterey County has remained lower than the population projections that were used in the 1998 Study. Further, the 2014 AMBAG population projections show a lower population in 2035 than was projected in the 1998 Study. Therefore, in many ways, the 1998 Study remains conservative in its estimate of future population and associated flows.
5.2 Chualar and City of Gonzales

Of the six original areas that were reviewed for the Current Study, Spreckels was the most similar in size and demographics to Chualar. Therefore, projected flows were estimated for Chualar by applying unit flow factors from the Spreckels analysis to the Chualar land use designations. Table 12 shows projected flows for the Chualar community.

Table 12. Chualar Area Land Use, Flow Factors, and Projected Flows

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
<th>Flow Factor (GPD/AC)</th>
<th>Estimated Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>2.1</td>
<td>500</td>
<td>1,050</td>
</tr>
<tr>
<td>Public/Quasi-Public</td>
<td>28.1</td>
<td>1,000</td>
<td>28,100</td>
</tr>
<tr>
<td>Residential High Density</td>
<td>35.3</td>
<td>1,500</td>
<td>52,950</td>
</tr>
<tr>
<td>Industrial</td>
<td>25.4</td>
<td>500</td>
<td>12,700</td>
</tr>
<tr>
<td>Total Estimated Average Flow</td>
<td></td>
<td></td>
<td>0.095 MGD</td>
</tr>
</tbody>
</table>

For the purpose of sizing new conveyance facilities, a peaking of factor of 3.0 was applied to the average flow, yielding a design flow for Chualar of .285 MGD or 198 gallons per minute (GPM). This peaking factor is consistent with the wet weather peaking factor that was used to estimate City of Gonzales flows, as described in the 2011 Wastewater Plan.

The City of Gonzales expects significant development, with most of the growth occurring in three zones located north of the existing service area and Highway 101. Figure 10, taken from the 2011 Wastewater Plan, shows the planned buildout zones. The 2011 Wastewater Plan projects average daily flow of 4.75 MGD at buildout. The 2011 Wastewater Plan assigns an overall wet weather peaking factor of 3.0, as well as individual peak hour flow values, all of which exceed 4.0, for future buildout Zones 1 through 3.

Average and peak flows for the City of Gonzales, as presented in the 2011 Wastewater Plan, are shown in Table 13.

Table 13. Average Dry Weather and Peak Flows for City of Gonzales @ Buildout

<table>
<thead>
<tr>
<th>Area</th>
<th>ADF (MGD)</th>
<th>Peak Flow (MGD)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing System</td>
<td>0.730</td>
<td>2.19</td>
<td>Use 3.0 Peaking Factor</td>
</tr>
<tr>
<td>Zone 1</td>
<td>1.16</td>
<td>5.04</td>
<td>From Table 9.4 of 2011 Wastewater Plan</td>
</tr>
<tr>
<td>Zone 2</td>
<td>0.69</td>
<td>3.24</td>
<td></td>
</tr>
<tr>
<td>Zone 3</td>
<td>2.17</td>
<td>8.78</td>
<td></td>
</tr>
<tr>
<td>Total Projected Buildout Flow</td>
<td>4.75</td>
<td>14.25</td>
<td>See Note 1</td>
</tr>
</tbody>
</table>

Note 1. Peak flows may not occur simultaneously, and are not additive. To remain consistent with the 2011 Wastewater Plan approach, a systemwide Peaking Factor of 3.0 was applied to all flows that were not specific to buildout Zones 1, 2, or 3.
Figure 10. City of Gonzales Buildout Zones from 2011 Wastewater Plan
The Monterey One Water regional treatment plant has an existing capacity of 29.6 MGD, but currently treats an average of 18.5 MGD, as reported on the agency’s website. The buildout flows calculated in this report would add nearly 6 MGD of flow to the treatment plant, for a total flow of nearly 24.5 MGD. The largest contributor to this flow would be from the City of Gonzales.

A portion of the buildout flows from this report would be conveyed through the Monterey One Salinas Pump Station, and through existing infrastructure from the Salinas Pump Station to the Monterey One treatment plant. The capacity of the pump station and downstream infrastructure was not evaluated as part of this study, and should be reviewed to determine whether upgrades are required to accommodate the additional flows. Table 14 summarizes flows that are proposed to be conveyed through the Salinas Pump Station to the Monterey One regional treatment facility, as described further in Section 6.0.

### Table 14. Potential Additional Flows at Monterey One Salinas Pump Station

<table>
<thead>
<tr>
<th>Community</th>
<th>Current Flow (MGD)</th>
<th>Buildout Flow (MGD)</th>
<th>Peak Buildout Flow (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolsa Knolls</td>
<td>0.10</td>
<td>0.27</td>
<td>0.81</td>
</tr>
<tr>
<td>Spreckels</td>
<td>0.07</td>
<td>0.40</td>
<td>1.20</td>
</tr>
<tr>
<td>Indian Springs Ranch</td>
<td>0.02</td>
<td>0.04</td>
<td>0.12</td>
</tr>
<tr>
<td>Las Palmas Ranch</td>
<td>0.14</td>
<td>0.23</td>
<td>0.70</td>
</tr>
<tr>
<td>Toro Area</td>
<td>0.16</td>
<td>0.21</td>
<td>0.63</td>
</tr>
<tr>
<td>Chualar</td>
<td>0.07</td>
<td>0.09</td>
<td>0.285</td>
</tr>
<tr>
<td>City of Gonzales</td>
<td>0.90</td>
<td>4.75</td>
<td>14.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1.46</strong></td>
<td><strong>6.00</strong></td>
<td><strong>17.80</strong></td>
</tr>
</tbody>
</table>

Note 1. Peaking Factor of 3 used to develop peak flow values, to be consistent with City of Gonzales flow calculations.
6.0 WASTEWATER SERVICE ALTERNATIVES AND COSTS

6.1 Bolsa Knolls

The 1998 Study identified two wastewater approaches for Bolsa Knolls. Both options include the construction of a new local wastewater collection system, and the abandonment of the onsite septic systems.

- Option 1 conveys flows to Monterey One Water via the City of Salinas collection system. The Bolsa Knolls community would be sewered, and flow would be conveyed south on San Juan Grade Road to Van Buren Avenue and the City of Salinas Santa Rita pump station, where it would enter the City of Salinas sewer system. The project would require 24,000 lineal feet of gravity sewer pipelines, laterals to connect each home to the gravity sewer system, a new pumping station, 5,500-foot forcemain, and demolition of existing septic systems.

- Option 2 conveys flows to a future Rancho San Juan Subregional treatment plant. The Rancho San Juan development has not moved forward. Therefore, until further analysis and design are completed, the most feasible, remaining viable wastewater treatment solution is Option 1.

Figure 11, taken from the 1998 Study, shows the general configuration of Bolsa Knolls Option 1.

Figure 11. Bolsa Knolls Option 1 from 1998 Study

The 1998 Study estimates a capital cost of $6,854,600 for the new facilities, and annual Operations and Maintenance (O&M) cost of $27,000. Unit costs that were used to develop the cost estimate appear
reasonable. A cost index was not assigned in the report. Therefore, the December 1998 Engineering News Report (ENR) Construction Cost Index (CCI) for San Francisco of 6845.69 is assumed.

The 2003 Study included the two options from the 1998 Study, and added two additional options. Option 3 conveys wastewater to the Monterey One Water Castroville Pump Station via a new interceptor that will serve the Rancho San Juan development. Option 4 conveys combined Rancho San Juan and Bolsa Knolls flows direction to the Monterey One Water regional treatment plant via a new North Salinas Area Regional pump station and interceptor. Of the four options presented, Option 1 appears to be the most viable, since the Rancho San Juan development has not occurred.

The City of Salinas has confirmed that Option 1 is accounted for in the 2011 Salinas Sanitary Sewer Master Plan (SSMP). Considering Bolsa Knolls and the West Future Growth Area, the SSMP recommends upsizing City sewer lines L01, L04, and L05. However, a capacity analysis should be completed to confirm specific project needs.

The 2003 Study provided a variation on Option 1 in that flows would be conveyed by gravity to the City of Salinas Santa Rita pump station. The 2003 Study eliminated the pumping station cost, and reduced the unit costs for pipeline construction, manhole construction, and lateral construction. However, the 2003 Study did not consider added costs associated with deep installations that would likely be required to enable gravity conveyance. The 2003 Study also utilized different contingencies than the 1998 Study. In summary, the unit costs and resulting capital cost estimate of $3,999,485 appear to be low.

The 2015 Study provided the same discussion and recommendation as the 2003 Study, but shows an increased capital cost of $5.96 million. There is no discussion describing the changes that were made to develop the updated cost.

After reviewing the assumptions made in all three studies, the estimate from the 1998 Study appears to be the most reliable of the three proposed Option 1 costs. When escalated to current dollars using the April 2017 ENR CCI for San Francisco of 11696.47, the updated cost for Option 1 is $11,791,693. This cost was developed as follows:

\[
1998 \text{ Study cost of } 6,854,600 \times \frac{11696.47}{6845.69} = 11,791,693
\]

The 1998 calculated estimated monthly sewer costs assuming a debt rate of 3% and 6%. Assuming that O&M costs will increase in the same ratio as capital costs, the estimated monthly sewer cost for Option 1 is $153.40 per month assuming a 3% debt rate. By comparison, the 2015 Study lists the current O&M cost for septic tanks as $100/year.

The costs shown do not include any Monterey One Water capacity charges, or other administrative or financing charges.

### 6.2 Spreckels

The 1998 Study identified four wastewater approaches for the Spreckels area. The first three options include conveyance to Monterey One Water via the Salinas pump station (Option 1), conveyance to the City of Salinas collection system (Option 2), and conveyance to the Las Palmas wastewater treatment plant (Option 3). The fourth option conveys Spreckels flow to the Salinas pump station in combination with Las Palmas, Indian Springs, and Toro Park area flows (Regional Option 4). All options require pumping stations and forcemains. Option 3 also includes expansion of the Las Palmas treatment plant to accept the added flows.
The 1998 Study concludes that Regional Option 4 can be implemented with the lowest monthly charge to the customers. However, Option 4 also has the highest capital cost in 1998 dollars of $9,623,900, with an annual O&M cost of $119,800. Option 4 includes a new pump station and approximately 11.5 miles of new forcemain pipe.

Option 2, conveyance to the City of Salinas collection system, includes a smaller pump station and 15,000 lineal feet of new forcemain pipe. This option provides the second lowest monthly charge, and has a capital cost in 1998 dollars of $1,826,300 and annual O&M cost of $27,200.

Option 3, which includes a pump station, approximately one mile of forcemain, and expansion of the Las Palmas treatment plant, has a capital cost in 1998 dollars of $1,492,600. However, the higher annual operating cost of $139,000 results in the third highest monthly charge.

Finally, Option 1, which involves a new pump station and over four miles of forcemain, has a capital cost in 1998 dollars of $2,605,900, and is the least cost effective option.

The 2003 Study only included Option 1 from the 1998 Study. No description was provided for this project. However, a map is provided that closely matches the map from the 1998 Study. The 2003 study assigned a capital cost of $1.405 million for this alternative. The cost differential between the 1998 and 2003 Study appears to be related to the assignment of substantially lower unit costs in 2003.

The 2003 Study also lists six alternative regional projects. Maps are provided in the 2003 Study for these projects, as well as associated costs. There are no project descriptions provided in the report. However, through a visual comparison of maps provided in the 1998 Study and 2003 Study, it appears that many of the 2003 options are new. The 2003 Study provides a wide range of scopes and costs for the options presented. 2003 Study Option 3 most closely resembles, but is less extensive than the Regional Option 4 from the 1998 Study, and has an estimated cost of $5,615,832. 2003 Study Option 7 is comparable to the Toro Park option from the 1998 Study.

The 2015 Study brought forward the same options as the 2003 Study, and added a cost to compensate California American Water for purchase of the Spreckels wastewater treatment plant.

After reviewing the three studies, the most viable project would be 1998 Study Option 2, conveyance to the City of Salinas collection system, if Spreckels were to be addressed as a standalone project. Alternatively, 1998 Study Regional Option 4 is preferred if Spreckels were to be addressed in conjunction with Las Palmas, Indian Springs, and Toro Park. The cost estimates from the 1998 Study appear to be the most reliable of the three studies. However, the 1998 Study costs do not include additional costs associated with purchasing existing facilities, Monterey One Water capacity charges, or initial financing costs.

Figures 12 and 13 on the following pages show the general configuration of Option 2 and Regional Option 4, respectively, taken from the 1998 Study.

When escalated to current dollars, the updated cost for 1998 Study Option 2 is $3,120,396. Assuming that O&M costs will increase in the same ratio as capital costs, the estimated monthly sewer cost for Option 2 is $76.44, assuming a debt rate of 3%. By comparison, the 2015 Study lists the monthly sewer rate for Spreckels as $59.91.
Similarly, when escalated to current dollars, the updated cost for Option 4 is $16,443,288. The estimated adjusted monthly sewer cost for Option 4 is $52.40, assuming a debt rate of 3%. This monthly cost is lower than the current monthly cost for the Spreckels community.

Figure 12, Spreckels Option 2 from 1998 Study
In March 2017, Monterey One Water staff reviewed two new alignments for this project. The first option comprises a new pump station and approximately 2.5 miles of forcemain to the City of Salinas Harkins Road Pump Station. Implementation of this project may require the Harkins Road Pump Station and City sewer lines L20 and part of L15 to be upsized. In addition, an updated capacity analysis would be
The second option comprises a new pump station and approximately one mile of forcemain from Spreckels to Las Palmas Ranch, continuing as a shared forcemain from Spreckels, Las Palmas Ranch, and Indian Springs Ranch to the Monterey One Salinas Pump Station. Monterey One staff have prepared conceptual construction costs for the new alignments. However, these alignments require additional review to finalize construction and O&M costs, and estimate the resulting change in sewer rates. The March 2017 alignments are shown in Figure 14.

**Figure 14. Additional Spreckels Project Alignments (March 2017)**

---

### 6.3 Indian Springs Ranch

The 1998 Study identified two wastewater approaches for the Indian Springs Ranch area. In addition, Spreckels Option 4 provides a regional solution for Indian Springs Ranch. The two Indian Springs Ranch approaches include conveyance to the Las Palmas Treatment plant (Option 1) and conveyance to Monterey One Water via the Salinas pump station (Option 2). Both options require pumping stations and forcemains. The 1998 Study concludes that Regional Option 4, which is also shown as Indian Springs Ranch Option 3, can be implemented with the lowest monthly charge to the customer.
Option 1 is approximately one third of the cost of Option 2. Option 1 requires less pumping, and includes 11,616 lineal feet of forcemain pipe, for a total capital cost in 1998 dollars of $1,178,200 and an annual O&M cost of $26,700.

The 2003 Study did not include any standalone options for addressing wastewater from the Indian Springs area. Regional Option 4 (2003 Study Indian Springs Ranch Option 2) includes Indian Springs, and is discussed further in Section 6.2, above.

After reviewing the three studies, the most viable projects would be Indian Springs Ranch Option 1 (conveyance to Las Palmas treatment plant) if Indian Springs were to be addressed as a standalone project, and Regional Option 4 if Spreckels were to be addressed in conjunction with Las Palmas, Indian Springs, and Toro Park. The cost estimates from the 1998 Study appear to be the most reliable of the three studies.

Figure 15 shows the general configuration of Indian Springs Ranch Option 1, taken from the 1998 Study.

Figure 15. Indian Springs Ranch Option 1 from 1998 Study

When escalated to current dollars, the updated cost for Option 1 is $2,013,059. Assuming that O&M costs will increase in the same ratio as capital costs, the estimated monthly sewer cost for Option 1 is $91.89 assuming a debt rate of 3%. The 2015 Study lists a current sewer rate of $130.14.

If Spreckels Option 4 were implemented, the estimated monthly sewer cost is $63.68, assuming a debt rate of 3 percent. Therefore, both Indian Springs Ranch Option 1 and Spreckels Option 4 would decrease monthly cost to the Indian Springs Ranch community.
In March 2017, Monterey One Water staff reviewed two new alignments for this project. The first option comprises three new pump stations and approximately 7.2 miles of new forcemain to the Monterey One Salinas Pump Station. The forcemain between Las Palmas Ranch and the Salinas Pump Station could be sized to also include Spreckels flows. The second option comprises three new pump stations and approximately 5.3 miles of new forcemain from Las Palmas Ranch and Indian Springs Ranch to Spreckels, and then north to the City of Salinas Harkins Road Pump Station. Implementation of this project may require the Harkins Road Pump Station and City sewer lines L20 and part of L15 to be upsized. In addition, an updated capacity analysis would be required.

Staff prepared conceptual construction costs for the new alignments. However, these alignments require additional review to finalize construction and O&M costs, and estimate the resulting change in sewer rates. The March 2017 alignments are shown in Figure 16.

![Figure 16. Additional Indian Springs Ranch and Las Palmas Ranch Project Alignments (March 2017)](image)

### 6.4 Las Palmas Ranch

The 1998 Study identified two wastewater approaches for the Las Palmas Ranch area. In addition, Spreckels Option 4 provides a regional solution for Las Palmas Ranch. The two Las Palmas Ranch
approaches include conveyance to Monterey One Water via the Salinas pump station (Option 1) and conveyance to the City of Salinas collection system (Option 2). Both options require pumping stations and force mains.

Option 2 is approximately thirty percent lower in cost of Option 1, and also has lower estimated O&M costs. Option 2 includes a new pump station and 16,896 lineal feet of forcemain pipe, for a total capital cost in 1998 dollars of $2,492,200 and an annual O&M cost of $29,800.

The 2003 Study reviewed only 1998 Study Option 1. No description was provided for this project. However, a map is provided that closely matches the map from the 1998 Study. The 2003 Study assigned a capital cost in 2003 dollars of $2,731,672 for this alternative, as compared to $3,444,100 provided in the 1998 Study. The cost differential between the 1998 and 2003 Study appears to be related to the assignment of substantially lower unit costs in 2003.

After reviewing the three studies, if Las Palmas Ranch were to be addressed as a standalone project, the most viable project would be Las Palmas Ranch Option 2, which requires a connection to the Salinas collection system in lieu of the Monterey One Water Salinas pump station. The City of Salinas has indicated that portions of the collection system may require upsizing in order to implement this option. Spreckels Option 4 is also viable if Spreckels were to be addressed in conjunction with Las Palmas, Indian Springs, and Toro Park.

Figure 17 on the following page shows the general configuration of Las Palmas Ranch Option 2, taken from the 1998 Study.

When escalated to current dollars, the updated cost for Option 2 is $4,258,145. Assuming that O&M costs will increase in the same ratio as capital costs, the estimated monthly sewer cost for Option 2 is $40.12, assuming a debt rate of 3%. These estimates do not include any purchase costs for the Las Palmas Ranch treatment plant, Monterey One Water capacity fees, or other administrative or financing costs.

The 2015 Study lists a monthly sewer rate of $130.14 for Las Palmas Ranch. If Spreckels Option 4 (the regional option) were implemented, a monthly sewer rate of $52.40 would be required. Both of these rates are substantially lower than the current Las Palmas Ranch sewer rate.

In March 2017, Monterey One Water staff evaluated new alignments for conveyance of combined flows from Las Palmas Ranch, Indian Springs Ranch, and Spreckels to either the City of Salinas Harkins Road Pump Station or the Monterey One Water Salinas Pump Station. These additional alignments are discussed further in Sections 6.2 and 6.3, above.
6.5 Oak Hills

The 1998 Study identified one wastewater approach for Oak Hills, which involves abandoning the existing treatment facility and conveying this flow to the Castroville collection system. Homes that are currently served by septic would remain on the current septic systems. This option requires a new pump station and forcemain, and has a total capital cost of $371,600 and an annual O&M cost of $25,400.

The 2003 Study reviewed 1998 Study Option 1, and added two project options: Option 2 expands Option 1 to include a new sewer system to serve the homes currently on septic; Option 3 provides a new sewer system but continues to treat all flows at an upgraded Oak Hills treatment plant.

The 2003 Study reports that Options 1 and 2 require a project to increase capacity of the existing Castroville Community Services Agency No. 14 pump station. The 2003 Study included a $50,000 allowance for this work, which could not be defined due to the absence of facility information. The 2003 Study also included a $500,000 estimate to purchase the Oak Hills treatment plant from the current owner.

The 2003 Study states that Option 3 may require upsizing of the existing Oak Hills collection system. However, no budget was included in Option 3 to address this potential issue. There was also no budget added to account for associated upgrades to the existing Oak Hills treatment plant.
After reviewing the three studies, it is reasonable to assume that the existing Oak Hills community septic systems require replacement, and should be replaced by a sewered collection system. It is also reasonable to include a cost for upsizing the existing Castroville pump station. There may also be added costs to purchase the existing treatment facility, Monterey One Water capacity charges, and initial financial costs.

Figure 18 shows the general configuration for Oak Hills Option 2, taken from the 2003 Study.

The updated cost estimate for 2003 Study Option 2 is shown in Table 15. This estimate uses the 1998 cost estimate as a basis for unit costs, adds 2 lift stations and forcemains and gravity sewer pipeline to the 1998 Study cost estimate, and includes a placeholder for Castroville pump station improvements. Costs are then escalated from 1998 dollars to current dollars.
Table 15. Updated Costs for Oak Hills 2003 Study Option 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6-inch diameter forcemain¹</td>
<td>8,286</td>
<td>$88</td>
<td>$729,168</td>
</tr>
<tr>
<td>8-inch diameter gravity main²</td>
<td>9,100</td>
<td>$144</td>
<td>$1,310,400</td>
</tr>
<tr>
<td>Manholes²</td>
<td>30</td>
<td>$10,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Laterals and connections²</td>
<td>146</td>
<td>$2,000</td>
<td>$292,000</td>
</tr>
<tr>
<td>Pump Station to Castroville PS¹</td>
<td>1</td>
<td>$130,000</td>
<td>$130,000</td>
</tr>
<tr>
<td>Collection System lift stations³</td>
<td>2</td>
<td>$95,000</td>
<td>$190,000</td>
</tr>
<tr>
<td>Castroville PS Upgrade⁴</td>
<td>1</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Total Cost in 1998 dollars</strong></td>
<td></td>
<td></td>
<td><strong>$3,001,568</strong></td>
</tr>
<tr>
<td><strong>Total Cost in 2017 dollars</strong></td>
<td></td>
<td></td>
<td><strong>$5,128,446</strong></td>
</tr>
</tbody>
</table>

1. Lengths from 1998 and 2015 Studies; unit cost from 1998 Study
2. Length from 2003 Study, unit cost from 1998 Study
3. Number and unit cost from 2015 Study
4. From 2003 Study

The conceptual cost estimate provided in Table 15 is intended to be a general representation of relative costs, and was prepared without the benefit of facility drawings, maintenance records, operating data, or any other supporting information.

The updated cost estimate for Oak Hills Option 2 is $5,128,446. Assuming that O&M costs will increase in the same ratio as capital costs, the estimated monthly sewer cost for Option 2 is over $250 per month per connection, assuming a debt rate of 3%. The 2015 Study reports a monthly sewer charge of $59.91.

Oak Hills has known issues with the existing septic systems, and requires an affordable wastewater management solution. Proposed Option 2 costs, and the resulting monthly charge, show that 2003 Study Option 2 would be difficult to implement as described. Additional review of sewerage and conveyance options that can be achieved at a lower cost should be reviewed in further detail for the Oak Hills planning area, in order to develop a more feasible project alternative.

6.6 Toro Park

The 1998 Study identified one wastewater approach for Toro Park, which involves conveying flows to the Monterey One Water Salinas pump station. This option requires a new pump station and a 21,120 lineal foot forcemain. In addition, Regional Option 4 provides a regional solution for Toro Park. The 1998 Study provides a capital cost estimate of $3,592,600, and annual O&M cost of $32,400.

The 2003 Study included the 1998 Study Toro Park approach as Highway 68 Corridor Option 7. The proposed capital cost for this approach is $2,436,238. The difference between the 1998 and 2003 Study costs is primarily in the applied unit costs. In addition, the 2003 Study assigns $5.1 million in compensation to California Utilities Services for purchase of the existing wastewater system.
The 2015 Study references work that was completed by Wallace Group for the 2010 Toro Park Study, and indicates that this option is presented as Option 7A in the 2015 Study. The 2015 Study does not include a project description or maps for Option 7A, and lists the costs as not applicable. However, a proposed monthly fee associated with Option 7A is provided.

The 2010 Toro Park Study presented four different routes to convey wastewater from the Toro Park wastewater treatment plant to the Monterey One Water Salinas pump station. The route shown in the 1998 and 2003 studies is called Alternative 2 in the 2010 Toro Park Study. The Toro Park Study is included in Appendix B for reference.

2010 Toro Park Study Alternative 2 is not recommended for a number of reasons that will increase project complexity and cost: 1) a longitudinal easement from Caltrans is required to construct the new pipe within or parallel to Highway 68 - longitudinal easements are very difficult to obtain; 2) extensive private property easements are required; 3) the route includes a crossing of the Salinas River; 3) Alternative 2 presents the longest pipeline route.

The 2010 Toro Park Study recommends Alternative 4, which begins with a new 10-inch forcemain from an existing forcemain located on the north side of the Salinas River. The pipe will continue northwest along an existing dirt road parallel to the Salinas River, and then will head northeast on Davis Road to Hitchcock Road. On Hitchcock Road, the pipeline will head east then north to the Salinas Pump Station. The total pipeline length is approximately 3.2 miles (16,820 lineal feet). Pipeline installation will be primarily in roadways. Although some easements are required, the need for easements is not as extensive as Alternative 2. Figure 19 on the following page shows Toro Park Alternative 4, taken from the 2010 Toro Park Study. This figure has been annotated (orange line added) to show an optional alignment along Reservation Road that staff is considering as part of the next phase of design.

The proposed cost for the 2010 Toro Park Study Alternative 4 in 2010 dollars is $4,148,532. The 2010 Toro Park Study costs were indexed to an ENR CCI of 886. Therefore, in current dollars, the estimated capital cost is $5,473,568. After adding potential costs to purchase the Toro treatment plant, potential Monterey One Water capacity charges, and other financing and administrative costs, the 2010 Toro Park Study estimates the monthly cost to range from $79 to $134 per customer. When escalated to current dollars, this charge will be from $104 to $177 per month. The 2015 Study reports a monthly sewer charge of $127.01. Therefore, it is possible that implementation of Alternative 2 could result in a monthly charge that is less than or equal to the current monthly charge. However, the high end of the cost estimate reflects a 39 percent increase over 2015 monthly sewer rates.

In addition to the 2010 Toro Park Study Alternatives, another option is to implement Spreckels Option 4. As discussed above and in the 1998 Study, the Spreckels Option 4 has a capital cost in 1998 dollars of $9,623,900, and a projected monthly rate of $30.67 assuming a 3 percent debt rate. When escalated to current dollars, the regional solution results in a monthly charge of $52.40, which is substantially lower than the current Toro Park area sewer rate.

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5 This cost is based on Option B-4 of the 2010 Toro Park analysis. Option B-4 includes a duplex pumping station, 16,820 lineal feet of 8-inch forcemain, and three days of sewage bypassing.
6 The 2015 Toro Area Wastewater Feasibility Study (Wallace Group, May 2015) provides updated monthly costs ranging from $86 to $131. Since the costs are not substantively different than presented in the 2010 Toro Park Study, the values from the 2010 Study are referenced in this document.
The 2013-14 Monterey County Civil Grand Jury report cited several issues that should be corrected by CSA 75. The Civil Grand Jury identified that the treatment ponds are susceptible to flooding from the Salinas River, that an alternative treatment strategy should be explored, and that the Chualar sewage system infrastructure is deteriorating and requires upgrades. The Grand Jury report included a preliminary estimate of $4M to construct a new treatment facility. The source for this estimate was not referenced. However, the cost estimate appears reasonable for construction of a 100,000 gallon tertiary treatment plant. Additional costs would be required for collection system pipeline improvements, pumping and distribution facilities, permitting, engineering, administration, project/management, and a project contingency.

The County noted that construction of a new Chualar treatment facility may not be the most effective solution to current issues. The County may be referring to the potential complexity of implementing a recycled water strategy involving land irrigation. Additional studies and permitting would be required to confirm that such a strategy meets the RWQCB Recycled Water Standards, as well as County Code Chapter 15.23. The County Code includes specific requirements to minimize potential nitrate impact on groundwater supplies resulting from land application of recycled water. Further, land application is often used during dry weather, combined with storage or an alternative discharge strategy during wet weather.

The Current Study includes a review of one feasible alternative to Chualar on-site treatment. This alternative, shown in Figure 20, includes a new pump station and pipeline to convey wastewater flows to the City of Salinas, and ultimately, to the Monterey One Salinas Pump Station.
The Chualar Pipeline Alternative constructs a new pump station at the site of the existing facility at Main and Grant Street, and pumps Chualar flows approximately 900 feet north on Grant Street, east on Chualar Road for 1.4 miles, and then north on Old Stage Road for approximately 1.7 miles. At this location, flow converts to gravity, and continues approximately 8.2 miles on Old Stage Road to a connection with the City of Salinas sewer collection system. A field survey is required to confirm that field elevations will support a gravity interceptor up to and including a connection with the City of Salinas system. Flows are then conveyed through the City or Salinas system to the Monterey One Salinas Pump Station, and then to the Monterey One treatment facility for treatment.

In order to develop a conceptual cost for this project, pipeline unit cost values were adopted from the City of Gonzales 2011 Wastewater Conceptual Plan. The costs presented in the 2011 Wastewater Plan were adjusted using the Engineering New Report (ENR) Construction Cost Index (CCI), San Francisco, as shown in Table 16. The unit construction costs do not include costs for easements or land acquisition, if required.
### Table 16. Pipeline Unit Construction Cost Values from City of Gonzales 2011 Wastewater System Conceptual Plan

<table>
<thead>
<tr>
<th>Description</th>
<th>2011 Plan Cost ($/foot)</th>
<th>Current Estimated Cost ($/foot)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENR CCI Reference Date</td>
<td>September 2011</td>
<td>April 2017</td>
</tr>
<tr>
<td>ENR CCI Cost Index</td>
<td>10192.79</td>
<td>11696.47</td>
</tr>
<tr>
<td>10-inch gravity pipeline</td>
<td>n/a</td>
<td>197</td>
</tr>
<tr>
<td>12-inch gravity pipeline</td>
<td>182</td>
<td>209</td>
</tr>
<tr>
<td>15-inch gravity pipeline</td>
<td>210</td>
<td>241</td>
</tr>
<tr>
<td>18-inch gravity pipeline</td>
<td>248</td>
<td>285</td>
</tr>
<tr>
<td>21-inch gravity pipeline</td>
<td>288</td>
<td>330</td>
</tr>
<tr>
<td>24-inch gravity pipeline</td>
<td>320</td>
<td>367</td>
</tr>
<tr>
<td>27-inch gravity pipeline</td>
<td>366</td>
<td>420</td>
</tr>
<tr>
<td>30-inch gravity pipeline</td>
<td>414</td>
<td>475</td>
</tr>
<tr>
<td>36-inch gravity pipeline</td>
<td>512</td>
<td>588</td>
</tr>
<tr>
<td>42-inch gravity pipeline</td>
<td>588</td>
<td>675</td>
</tr>
<tr>
<td>48-inch gravity pipeline</td>
<td>672</td>
<td>771</td>
</tr>
<tr>
<td>6-inch force main</td>
<td>n/a</td>
<td>187</td>
</tr>
<tr>
<td>10-inch force main</td>
<td>185</td>
<td>212</td>
</tr>
<tr>
<td>12-inch force main</td>
<td>196</td>
<td>225</td>
</tr>
<tr>
<td>14-inch force main</td>
<td>n/a</td>
<td>236</td>
</tr>
<tr>
<td>16-inch force main</td>
<td>214</td>
<td>246</td>
</tr>
<tr>
<td>20-inch force main</td>
<td>n/a</td>
<td>337</td>
</tr>
<tr>
<td>30-inch force main</td>
<td>n/a</td>
<td>484</td>
</tr>
</tbody>
</table>

Pump station costs were estimated using the guidelines shown in Table 17. Pump Station costs represent average expected costs, using values from recently-construction pump station projects in the San Francisco Bay Area.

### Table 17. Pump Station Construction Unit Costs

<table>
<thead>
<tr>
<th>Pump Station Size</th>
<th>Conceptual Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 200,000 gallons per day (GPD)</td>
<td>$200,000 per station</td>
</tr>
<tr>
<td>200,000 to 1,000,000 GPD</td>
<td>$1 per GPD</td>
</tr>
<tr>
<td>1,000,000 GPD and larger</td>
<td>$0.70 per GPD</td>
</tr>
</tbody>
</table>
Table 18 provides estimated construction costs for the Chualar Pipeline Alternative. The estimated costs do not include any upgrades to the existing Chualar wastewater collection system. Recommendations for improvements to the Chualar wastewater collection system should be developed following closed circuit television inspection of the existing system.

This evaluation also did not include an assessment of City of Salinas or Monterey One facilities. If any upgrades are required to the downstream facilities to convey the added flows, associated costs must be added to the estimate. To remain consistent with the cost estimating approach that is presented in the 2011 Wastewater Plan, design, construction administration, and contingency may be calculated as an additional 50% of conceptual construction costs.

### Table 18. Chualar Pipeline Alternative Estimated Construction Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-inch diameter forcemain and appurtenances</td>
<td>17,268</td>
<td>$187</td>
<td>$3,229,000</td>
</tr>
<tr>
<td>10-inch diameter gravity main</td>
<td>43,296</td>
<td>$197</td>
<td>$8,529,000</td>
</tr>
<tr>
<td>New Pump Station @ Grant and Main (2.85 MGD)</td>
<td>1</td>
<td>$2,000,000</td>
<td>$1,995,000</td>
</tr>
<tr>
<td><strong>Estimated Construction Cost</strong></td>
<td></td>
<td></td>
<td><strong>$13,753,000</strong></td>
</tr>
</tbody>
</table>

The conceptual cost estimate provided in Table 18 was prepared without the benefit of facility drawings, maintenance records, operating data, elevation data, or any other supporting information.

### 6.8 City of Gonzales

The 2011 Wastewater Plan states that the existing treatment plant has sufficient capacity to treat flows from the existing service area, including planned infill. However, the existing plant and wastewater collection system require significant upgrades to handle buildout flows from future buildout Zones 1 through 3. In order to accommodate projected buildout flows, the 2011 Wastewater Plan provides a conceptual construction cost ranging from $25M to $30.6M in treatment plant improvements. This cost excludes approximately $2.4M to constructed additional percolation facilities. In addition, the estimate excludes the cost to purchase 80 to 140 acres of land that may be needed for expanded percolation facilities. It should be noted that the City current owns approximately 30 acres of land adjacent to the treatment plant. When adjusted to include percolation bed construction and escalated to current dollars, the estimated cost for treatment plant upgrades is $37.9M.

The 2011 Wastewater Plan also estimates the need for $17.1M in pipeline and pump station improvements, in 2011 dollars. The 2011 Wastewater Plan included an estimated cost of $1.5M for construction of a new 8.78 MGD lift station at Gloria Road, to convey Zone 3 flows. Using the unit costs in Table 17, this estimate appears low. For consistency, the pump station cost was increased to $6.15M in current dollars, resulting in an updated cost of $24.4M to upgrade the wastewater collection system in current dollars.

The City’s General Plan anticipates significant growth. Wastewater conveyance needs and associated costs could be substantially different under a slow growth versus rapid growth scenario. Therefore, this study evaluates two scenarios. Growth Scenario 1 assumes a phased growth strategy. In Scenario 1, infill...
occurs first, followed by the development of Zones 1, 2, and 3. Conveyance facilities for the existing service area and all planned infill remain separate from conveyance facilities for Zones 1, 2, and 3. In Scenario 1, the City would be able to defer the construction cost for Zone 1 through 3 infrastructure until development occurs. The initial capital cost would be lower, but overall costs higher due to the need for two separate conveyance systems.

Scenario 2 assumes that the City constructs one conveyance system that is equipped to handle flows from the existing service area as well as Zones 1 through 3. Scenario 2 requires a significantly higher initial capital investment than Scenario 1, but results in a lower overall cost.

**Scenario 1. Dual Conveyance Systems.** This scenario accommodates flows in a phased approach, with separate conveyance systems from the existing system and from buildout Zones 1 through 3. As shown in Figure 21A, the existing system conveyance system intercepts wastewater flow on Fermin Lane, west of the City, and conveys the flow through a new forcemain west on Fermin Lane, north on Alta Street, across Highway 101 to Old Stage Road, and then approximately one half mile past the intersection of Old Stage Road and Chualar Road to a high point, where the forcemain breaks to gravity. After this point, flows are conveyed through an 8.2-mile long gravity interceptor to the City of Salinas. Similar to the Chualar Pipeline Alternative, a field survey is required to confirm that field elevations will support the proposed gravity pipeline alignment. It is likely that Gonzales flows will be higher than can be accommodated by the Salinas sewer collection system. Therefore, the new interceptor continues over five miles through the City of Salinas to the Monterey One Salinas Pump Station.

Figure 21A Gonzales Pipeline Scenario 1 (Dual Systems)

A second conveyance system conveys Zones 1 through 3 flows from the City of Gonzales to the City of Salinas. The Zones 1 through 3 system includes a pump station at Gloria Road and Highway 101 to convey Zone 3 flows toward Zone 2. Zone 2 and 3 flows are then conveyed by gravity to Zone 1, where a pump station near Burgundy Drive conveys combined Zones 1 through 3 flows to the City of Salinas.
If Zones 1 through 3 are not developed at one time, it will be important to size the pump stations and forcemains to accommodate lower flows until full buildout occurs. Dual forcemains and/or gravity interceptors may be required to accommodate a wide range of flows.

Table 19A summarizes project components and associated costs for Scenario 1.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Service Area (2.2 MGD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-inch diameter forcemain</td>
<td>41,500</td>
<td>$212</td>
<td>$8,798,000</td>
</tr>
<tr>
<td>18-inch diameter gravity main to City of Salinas</td>
<td>43,300</td>
<td>$285</td>
<td>$12,341,000</td>
</tr>
<tr>
<td>18-inch diameter gravity main through City of Salinas to Salinas Pump Station</td>
<td>27,000</td>
<td>$285</td>
<td>$7,695,000</td>
</tr>
<tr>
<td>New 2.2 MGD Pump Station @ Fermin Lane</td>
<td>1</td>
<td>$1,540,000</td>
<td>$1,540,000</td>
</tr>
<tr>
<td><strong>Conceptual Construction Cost Existing Service Area</strong></td>
<td></td>
<td></td>
<td>$30,374,000</td>
</tr>
<tr>
<td><strong>Zone 3 to Zone 2 (8.78 MGD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-inch diameter forcemain</td>
<td>5,280</td>
<td>$337</td>
<td>$1,779,000</td>
</tr>
<tr>
<td>30-inch diameter gravity main</td>
<td>2,300</td>
<td>$475</td>
<td>$1,093,000</td>
</tr>
<tr>
<td>New 8.78 MGD Pump Station near Gloria Road and Hwy 101</td>
<td>1</td>
<td>$6,146,000</td>
<td>$6,146,000</td>
</tr>
<tr>
<td><strong>Zone 2 to Zone 1 (12.02 MGD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-inch diameter gravity</td>
<td>3,600</td>
<td>$588</td>
<td>$2,117,000</td>
</tr>
<tr>
<td><strong>Zone 1 to Summit of Old Stage Road (17 MGD peak hourly flow)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-inch diameter forcemain</td>
<td>36,000</td>
<td>$484</td>
<td>$17,424,000</td>
</tr>
<tr>
<td>New 17 MGD Pump Station near Burgundy Way/Hwy 101</td>
<td>1</td>
<td>$11,942,000</td>
<td>$11,900,000</td>
</tr>
<tr>
<td><strong>Gravity Interceptor from Summit of Old Stage Road to and Through City of Salinas (17 MGD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-inch diameter gravity main to City of Salinas</td>
<td>43,300</td>
<td>$588</td>
<td>$25,460,000</td>
</tr>
<tr>
<td>36-inch diameter gravity main through City of Salinas to Salinas Pump Station</td>
<td>27,000</td>
<td>$588</td>
<td>$15,876,000</td>
</tr>
<tr>
<td><strong>Conceptual Construction Cost Zones 1 through 3</strong></td>
<td></td>
<td></td>
<td>$81,795,000</td>
</tr>
<tr>
<td><strong>Total Construction Cost – Scenario 1</strong></td>
<td></td>
<td></td>
<td>$112,169,000</td>
</tr>
</tbody>
</table>

The 2011 Wastewater Study states that the existing wastewater plant has sufficient capacity to treat flows from the existing service area, including flows from planned infill. Therefore, the City could use the
existing plant to serve the current service area, and implement the Zone 1 through 3 component of Scenario 1 in lieu of upgrading existing gravity trunk sewers and expanding the wastewater treatment plant. The 2011 Wastewater Concept Plan provides an estimated construction cost of $62.3 million for plant and existing system upgrades. This cost excludes the cost to purchase 80 to 140 acres of land that may be needed for expanded percolation facilities. It should be noted that the City currently owns approximately 30 acres of land adjacent to the treatment plant. By comparison, the estimated construction cost for the Zone 1 through 3 component of Scenario 1 is $81.8M.

Scenario 2. Combined Conveyance System. This scenario utilizes the infrastructure that is described under the Zone 1 through 3 component of Scenario 1. However, in lieu of building separate systems, existing flows are captured and pumped to the east, to the location of the future Zone 1 pump station near Burgundy Drive. The Zone 1 pump station, forcemain, and gravity interceptor are upsized to accommodate flows from the existing system, in addition to flows from Zones 1 through 3. A single forcemain and gravity interceptor convey flows along Old Stage Road to the City of Salinas, and through the City to the Monterey One Salinas Pump Station.

Scenario 2 is shown in Figure 21B.

Figure 21B Gonzales Pipeline Scenario 2 (Combined System)

Gonzales pump stations and proposed forcemains from existing system (yellow) and Zones 1 through 3 (orange).

As with Scenario 1, if Zones 1 through 3 are not developed at the same time, then it will be important to size the pump stations and forcemains to accommodate lower flows until full buildout occurs.

Table 19B shows the Scenario 2 components and the estimated cost of construction. The estimated construction cost for Scenario 2 is approximately $20M lower than for Scenario 1, due to the consolidation of forcemains and gravity interceptors into a single conveyance system.
# Table 19B. Conceptual Costs for Gonzales Scenario 2

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zone 3 to Zone 2 (8.78 MGD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-inch diameter forcemain and appurtenances</td>
<td>5,280</td>
<td>$337</td>
<td>$1,779,000</td>
</tr>
<tr>
<td>30-inch diameter gravity pipeline and appurtenances</td>
<td>2,300</td>
<td>$475</td>
<td>$1,093,000</td>
</tr>
<tr>
<td>New 8.78 MGD Pump Station near Gloria Road and Hwy 101</td>
<td>1</td>
<td>$6,146,000</td>
<td>$6,146,000</td>
</tr>
<tr>
<td><strong>Zone 2 to Zone 1 (12.02 MGD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-inch diameter gravity pipeline and appurtenances</td>
<td>3,600</td>
<td>$588</td>
<td>$2,117,000</td>
</tr>
<tr>
<td><strong>Existing Service Area to Zone 1 (2.2 MGD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-inch diameter forcemain and appurtenances</td>
<td>5,600</td>
<td>$212</td>
<td>$1,187,000</td>
</tr>
<tr>
<td>New 2.2 MGD Pump Station @ Chualar River Road</td>
<td>1</td>
<td>$1,540,000</td>
<td>$1,540,000</td>
</tr>
<tr>
<td><strong>Zone 1 to Summit of Old Stage Road (19.2 MGD peak hourly flow)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-inch diameter forcemain and appurtenances</td>
<td>36,000</td>
<td>$484</td>
<td>$17,424,000</td>
</tr>
<tr>
<td>New 19.2 MGD Pump Station near Burgundy Way and Hwy 101</td>
<td>1</td>
<td>$11,942,000</td>
<td>$13,440,000</td>
</tr>
<tr>
<td><strong>Gravity Interceptor from Summit of Old Stage Road to and Through City of Salinas (19.2 MGD)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42-inch diameter gravity interceptor to Salinas</td>
<td>43,300</td>
<td>$675</td>
<td>$29,228,000</td>
</tr>
<tr>
<td>42-inch diameter gravity main on E. Alviso St., Blanco Rd., and S. Davis Road to Salinas Pump Station</td>
<td>27,000</td>
<td>$675</td>
<td>$18,225,000</td>
</tr>
<tr>
<td><strong>Conceptual Construction Cost Existing Service Area</strong></td>
<td></td>
<td></td>
<td>$92,179,000</td>
</tr>
</tbody>
</table>

The conceptual cost estimates provided in Tables 19A and 19B were prepared without the benefit of facility drawings, maintenance records, operating data, elevation data, or any other supporting information.

If the Chualar improvements are implemented in conjunction with the Gonzales improvements described in Tables 19A or 19B, the Chualar “buy-in” would reduce the Gonzales portion of construction costs by approximately $8.5M.
Table 20 summarizes the Options and Costs that are presented in the Current Study. Figure 22 compares current and projected monthly sewer rates for the six original planning areas. A financial analysis was not completed for the additional areas of Chualar and City of Gonzales, and is recommended as one of the next steps for these communities.
### Table 20. Summary of Focused Options and Costs

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>Preferred Alternative</th>
<th>Capital Cost (current dollars)</th>
<th>Estimated Monthly Charge</th>
<th>Current Monthly Charge</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolsa Knolls</td>
<td>Option 1. Convey flow to Monterey One Water via City of Salinas collection system.</td>
<td>$11,791,693</td>
<td>$153.40</td>
<td>n/a</td>
<td>Upgrades to the City of Salinas sewer pipelines may be required. Option 1 costs do not include these improvements, which may include upsizing City sewer lines L03, L04, and L05. 2015 Study estimates maintenance cost for septic system as $100/month. Approximate cost for replacement of each septic system is $10,000, excluding any required remediation.</td>
</tr>
<tr>
<td>Spreckels</td>
<td>Option 2 if addressed as a standalone project. Convey flow to City of Salinas collection system. Regional Option 4 if addressed with Indian Springs Ranch, Las Palmas Ranch, and Toro Park.</td>
<td>$3,120,396</td>
<td>$76.44</td>
<td>$59.91</td>
<td>Option 2 costs reflect recommendations from the prior studies, and do not include costs for new alignments that were evaluated by staff in March 2017. In addition, these costs do not include any necessary improvements to the City of Salinas Harkins Pump Station or City sewer lines L20 and part of L15, which may require upsizing. 2015 Study estimates $109,781 to acquire existing wastewater system.</td>
</tr>
<tr>
<td>Indian Springs Ranch</td>
<td>Option 1 if addressed as a standalone project. Convey to Las Palmas treatment plant. Regional Option 4 if addressed with Spreckels, Las Palmas Ranch, and Toro Park.</td>
<td>$1,178,200</td>
<td>$91.89</td>
<td>$130.14</td>
<td>Assumes any Las Palmas plant upgrades needed to provide long-term service are paid by Las Palmas. Additional review may be needed to compare historical options to March 2017 project alignments. 2015 Study estimates $204,637 to acquire existing wastewater system.</td>
</tr>
<tr>
<td>Las Palmas Ranch</td>
<td>Option 2 if addressed as a standalone project. Convey to City of Salinas collection system. Regional Option 4 if addressed with Spreckels, Indian Springs Ranch, and Toro Park.</td>
<td>$4,258,145</td>
<td>$40.12</td>
<td>$117.26</td>
<td>Option 2 costs do not include any necessary costs to upsize the City of Salinas collection system upstream of the Monterey One Salinas pump station. Additional review may be needed to compare historical options to March 2017 project alignments. 2015 Study estimates $421,324 to acquire existing wastewater system.</td>
</tr>
<tr>
<td>Oak Hills</td>
<td>2003 Study Option 2. Converted homes on septic to sewered system and convey flow to Castroville collection system.</td>
<td>$5,128,446</td>
<td>Over $250.00</td>
<td>$59.91</td>
<td>2015 Study estimates $636,223 to acquire the existing wastewater system. Additional engineering for this planning area is recommended in order to refine project scope and reduce costs.</td>
</tr>
<tr>
<td>Toro Park</td>
<td>2010 Toro Park Study Option 4. Convey flow to the Monterey One Water Salinas pump station via Davis Road. Regional Option 4 if addressed with Spreckels, Indian Springs Ranch, and Las Palmas Ranch.</td>
<td>$5,473,568</td>
<td>$104 to $177 (See Note 5)</td>
<td>$127.01</td>
<td>Upgrades to the Monterey One Salinas Pump Station may be required. The costs shown do not include these improvements.</td>
</tr>
<tr>
<td>Chualar</td>
<td>Only one alternative was evaluated for Chualar.</td>
<td>$13,753,000</td>
<td>Not calculated</td>
<td>$23.70</td>
<td>Upgrades to the City of Salinas sewer pipelines may be required. The costs shown do not include these improvements.</td>
</tr>
<tr>
<td>City of Gonzales</td>
<td>The preferred option would depend on the anticipated timeline for growth.</td>
<td>$92M to $112M</td>
<td>Not calculated</td>
<td>Variable up to $35.00</td>
<td>Upgrades to the Monterey One Salinas Pump Station may be required. The costs shown do not include these improvements.</td>
</tr>
</tbody>
</table>

1. Option numbers are taken from 1998 Study, unless noted otherwise.
2. Estimated monthly charge is based on monthly charge from 1998 Study, with factoring and escalation applied.
3. 1998 Study did not include cost for purchase of existing wastewater systems, Monterey One Water capacity charges, or initial financing costs.
4. Currently monthly charge as reported in 2015 Study, with the exception of Chualar costs which were provided by the County.
5. 2010 Toro Park costs include cost for purchase of existing wastewater systems, Monterey One Water capacity charges, and initial financing costs. Therefore, these costs are more comprehensive than the other costs, and cannot be directly compared to other costs in this table.
Notes:
1. Estimated monthly sewer rate for the Toro Park non-regional solution includes additional charges, such as financing and plant purchase charges, that are not included for the other planning areas.
2. A financial analysis was not completed for Chualar or Gonzales as part of the Current Study.
7.0 SUMMARY AND RECOMMENDATIONS

7.1 Summary of Information Reviewed

The first phase of the Current Study reviewed and consolidated information from prior reports related to wastewater infrastructure needs, priorities, and costs for six planning areas: Bolsa Knolls, Spreckels, Indian Springs Ranch, Las Palmas Ranch, Oak Hills, and Toro Park. These areas were identified through prior studies by Monterey One Water as having the highest need for an alternative approach to wastewater management. These areas each have either failing or substandard wastewater infrastructure, a potential for failure with planned growth, high cost of service, or a combination of these factors. More recently, options to bring flows from Chualar and the City of Gonzales were considered and added to the Current Study.

Information from the 1998 Wastewater Service Area Study, 2003 Wastewater Service Area Study Update, and 2015 Focused Wastewater Service Area Study Updates were reviewed and compared. Each study built upon the prior work. However, the 1998 Study provided the most information regarding the technical basis behind each analysis and recommendation, and also provided the most reliable cost estimates. Therefore, the infrastructure recommendations and costs that are presented in this use the 1998 Study as a basis.

Regarding the Toro Park Area, two additional studies were completed in 2010 and 2015 to review potential project alternatives and costs. The 2010 Wastewater Service Study for Toro Park Planning Area developed four alternatives for conveyance of Toro Park flows to the Monterey One Water Salinas pump station, and recommended an option that conveys flows via Davis Road. The 2015 Toro Area Wastewater Service Feasibility Study focused on various options for transferring management of the Toro Park planning area to Monterey One Water, and recommended a multi-step implementation process that involved community outreach, financial analysis, jurisdictional and policy formation, and final implementation. The Current Study utilized recommendations from the 2010 Study in developing options for the Toro Park area.

Finally, Chualar and City of Gonzales each manage on-site treatment facilities. Planning documents for each of the communities were reviewed. One alternative to convey flows from Chualar to the City of Salinas was reviewed. Two options for the City of Gonzales appear feasible. However, the preferred solution will depend strongly on the City’s timeline for new development west of Highway 101.

7.2 Bolsa Knolls and Oak Hills

The six original planning areas are separated geographically, with Bolsa Knolls and Oak Hills located apart and to the north of the City of Salinas, and the remaining areas grouped along Highway 68 and Highway 101, south of the City of Salinas. Bolsa Knolls is currently unsewered. Oak Hills has a local treatment facility, and approximately one quarter of the parcels remain on septic. Both of the communities have experienced challenges in maintain the septic systems, and each requires an alternative wastewater approach to prevent future environmental compliance issues related to the aging septic systems. Due to the relatively small size and isolation of each community, proposed solutions will likely result in high monthly costs to the property owners. For example, the estimated monthly cost for the Bolsa Knolls community is approximately $150 per parcel, and the estimated monthly cost for the Oak Hills community may approach $200 or $250 per parcel.

Based on the analyses completed to date, the opportunity for off-site treatment for each of these communities does not appear infeasible. Therefore, it is recommended that Monterey One Water consider
completion of a Basis of Design for each of these communities. The Basis of Design would answer outstanding questions regarding the ability to maximize use of existing infrastructure, potential impacts on the receiving collection system infrastructure, and “soft” project costs including permitting, easements, and compensation for existing facilities. In anticipation of an identified solution, Monterey One Water should begin actions needed to include Bolsa Knolls in the Monterey One Water SOI.

Recommended actions are as follows:

- Initiate activities to bring Bolsa Knolls into the Monterey One Water SOI
- Engage Bolsa Knolls and/or and Oak Hills, along with Monterey County LAFCO, Monterey County Department of Environmental Health, and the Central Coast Regional Water Quality Control Board with regard to exploring options for sewer collection and conveyance for off-site treatment
- Begin governance, policy, and financing discussions related to the above concept
- With concurrence from the stakeholders, initiate a Basis of Design to further define a single, preferred project for Bolsa Knolls and/or Oak Hills

7.3 Spreckels, Indian Springs Ranch, Las Palmas Ranch, and Toro Park

For the remaining four original planning areas of Spreckels, Indian Springs Ranch, Las Palmas Ranch, and Toro Park, the most cost effective and environmentally beneficial solution is a regional approach that conveys flows from all areas to the Monterey One Water Salinas pump station, for continued conveyance to the Monterey One Water regional treatment facility. This regional option has a high potential for reducing monthly service charges substantially for these communities. In addition to reducing monthly service charges, the regional option would address the issue of aging infrastructure, with particular attention to the Toro Park treatment plant, which was constructed in 1965 and has likely exceeded its design life. The treatment facilities at Indian Springs Ranch and Las Palmas Ranch are also nearing 30 years old, which is a timeframe when the frequency of major renovations and replacements increase for many treatment facilities.

If a regional solution is not implemented, options to bring wastewater flows from each community to the Monterey One Water Regional Wastewater Treatment Plant have been identified that reduce cost for most areas to a level that is below current monthly charges. If any of these non-regional options are selected, it is recommended that Monterey One Water consider completion of a Basis of Design for each of the selected projects. The Basis of Design would answer outstanding questions regarding the ability to maximize use of existing infrastructure, potential impacts on the receiving collection system infrastructure, and “soft” project costs including permitting, easements, and compensation for existing facilities. Concurrently, Monterey One Water should begin discussions with the system owners to develop a collaborative strategy for transfer of ownership of each facility.

If a regional solution is implemented, it would be prudent to initiate early discussions with the stakeholders to explore and begin resolving key issues related to governance, policy issues, and financing. Concurrently, a Basis of Design could be developed for the regional solution. However, it would be prudent to initiate the Basis of Design only after Monterey One Water has a high level of confidence that the regional solution is supported by most or all stakeholders.

Recommended actions are as follows:

- Initiate discussions with each of the stakeholders and Monterey County LAFCO, Monterey County Department of Environmental Health, and the Central Coast Regional Water Quality
Control Board for Spreckels, Indian Springs Ranch, Las Palmas Ranch, and Toro Park regarding options for sewer collection and conveyance for off-site treatment

- Begin governance, policy, and financing discussions related to the above concept
- Develop Memorandum of Understanding or other agreement regarding the preferred path forward, which may include standalone projects, or a partial or fully regional approach
- Begin activities to secure outside funding, through grants or SRF loans, after the project is defined
- Also after the overall approach is determined, initiate one or more Bases of Design to further define the optimum project for the defined approach. This work includes obtaining additional information about the existing Toro Park collection and treatment facilities, in order to expand the conceptual design that was completed by Wallace Group.

7.4 Chualar and the City of Gonzales

Due to their distance from the City of Salinas, proposed solutions for Chualar and the City of Gonzales will likely result in significant increases in sewer rates. However, Chualar will face a significant rate increase with any solution, due to the current condition of existing infrastructure and the need for a new wastewater treatment facility that provides secondary, or possibly tertiary treatment. The Chualar Pipeline Alternative may provide the small community with a more sustainable long-term solution for wastewater management.

The City of Gonzales recently upgraded the wastewater treatment plant, and does not appear to have immediate wastewater infrastructure rehabilitation needs. However, if planned growth occurs, the City will need to construct significant and costly improvements to the existing plant and pipelines. In addition, the City may need to purchase additional land for disposal of the increased wastewater flows. In lieu of completing a major wastewater facility expansion, the City has viable options for conveying either future flows, or all flows to the Monterey One system for treatment.

Recommended actions are as follows:

- Complete a financial evaluation to determine the potential impact of proposed projects on sewer rates.
- Initiate discussions with each of the stakeholders to further explore their interest in pursuing any of the proposed alternatives, given pending infrastructure needs and proposed project costs.
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Appendix A

1998 Wastewater Cost of Service Study
2003 Wastewater Cost of Service Study Update
2015 Focused Wastewater Cost of Service Study
Appendix B

2010 MRWPCA Wastewater Service Study for Toro Park Planning Area
2013 Toro Area Wastewater Service Feasibility Study
Appendix C
Supporting Documents for Chualar and City of Gonzales Evaluations