

JANUARY 2017



COUNTY OF IMPERIAL CADY POE COLONIA

SERVICE AREA PLAN (SAP)



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SECTION 1 - EXECUTIVE SUMMARY

1.1 INTRODUCTION

This Service Area Plan (SAP) outlines one of the County's four Special District Areas known as the Cady Poe Colonia. The SAP estimates the current and future demand for public services and facilities and describes how they will be developed and extended to meet the projected demand. The following is a brief summary of the existing resources, demands, financing mechanisms, and mitigation measures related to the wastewater services and facilities examined in this SAP.

1.2 PUBLIC SERVICES & FACILITIES

The wastewater system in place consists of four septic tanks that flow through a re-circulating tank into six textile filters before distribution into a large subsurface drip leach field located in the northwest corner of the development.

Wastewater Facilities

Mitigation

Routine maintenance is required to ensure adequate wastewater service to the residents of Cady Poe Colonia. The existing treatment facility has capacity for final build out of 53 homes.

However, rehabilitation of the existing system is necessary prior to adding new connections beyond the buildout.

Funding

Additional sewer usage charge revenue would come from buildout of the remaining vacant lots in the Cady Poe Colonia subdivision and sewer connections on existing homes, which would add another 17 connections. The treatment plant's average daily flow capacity is determined by the capacity of its effluent dosing and recirculating tanks with a nominal combined volume of 37,500 gallons. However, the treatment plant operates under waste discharge requirements (WDR) that limit the effluent to the subsurface disposal system to 26,500 gallons over a 24-hour period.¹ Assuming a typical household water use for effluent discharge of 300 gallons per day², the maximum effluent limit could accommodate up to 88 dwelling units (du) (26,500 gallons / 300 gallons per day = 88 du), allowing the possibility of adding up to 35 additional connections beyond the final build out of the Cady Poe Colonia subdivision (88 du capacity – 53 du buildout of Cady Poe Colonia = 35 additional connections).

1.3 FINANCING SUMMARY

Existing Revenue Sources

¹ Waste Discharge Requirements for Poe Colonia (Cady subdivision) Community Subsurface Wastewater Disposal System, Order No. R7-2005-0005 California Regional Water Quality Control Board Colorado River Basin Region.

² Estimated typical household water use for effluent discharge is based on sewer flow rate per capita data from the City of Brawley (71 gallons per day) and the City of Holtville (93 gallons per day). The average of both is 82 gallons per day per capita, which multiplied by the average household size of 3.5 persons, is 287 gallons per day (GPD) per household. As a conservative estimate, the 287 GDP is rounded up to 300 GDP.

Revenues for the maintenance and operation of the Cady Poe Colonia County Service Area (CSA) wastewater collection and treatment system derive from sewer usage rates charged to the Colonia's residents. A rate study was completed in 2005, which established an initial monthly rate of \$30 per month per connection.³ That rate has not changed since 2005.

Future Revenue Sources

County Service Areas may establish benefit assessment districts subject to property owner approval. Annual assessments appear as a levy on the property tax bill and may be collected in the same manner as property taxes.

Existing Financing Mechanisms

Cady Poe Colonia's wastewater system was constructed with a grant from the US Department of Agriculture Rural Development Program. The wastewater operations represent a net cost to Imperial County and therefore require substantial subsidies every year.

Future Financing Mechanisms

Imperial County Community and Economic Development Department offers loans from Economic Development Funds to a number of nonprofits and government entities in Imperial County for a variety of community programs, including housing project programs, water and wastewater treatment plants, road improvements, public services, and other projects. Expansion of Cady Poe Colonia's wastewater treatment and other infrastructure to serve additional homes would reduce the average cost of providing the wastewater treatment services. Loans could be repaid by the increased sewer usage revenues and/or assessments levied on new homes.

³ Wastewater Rate Study for POE Colonia County Service Area, Nolte & Associates, October 4, 2005.

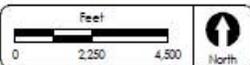
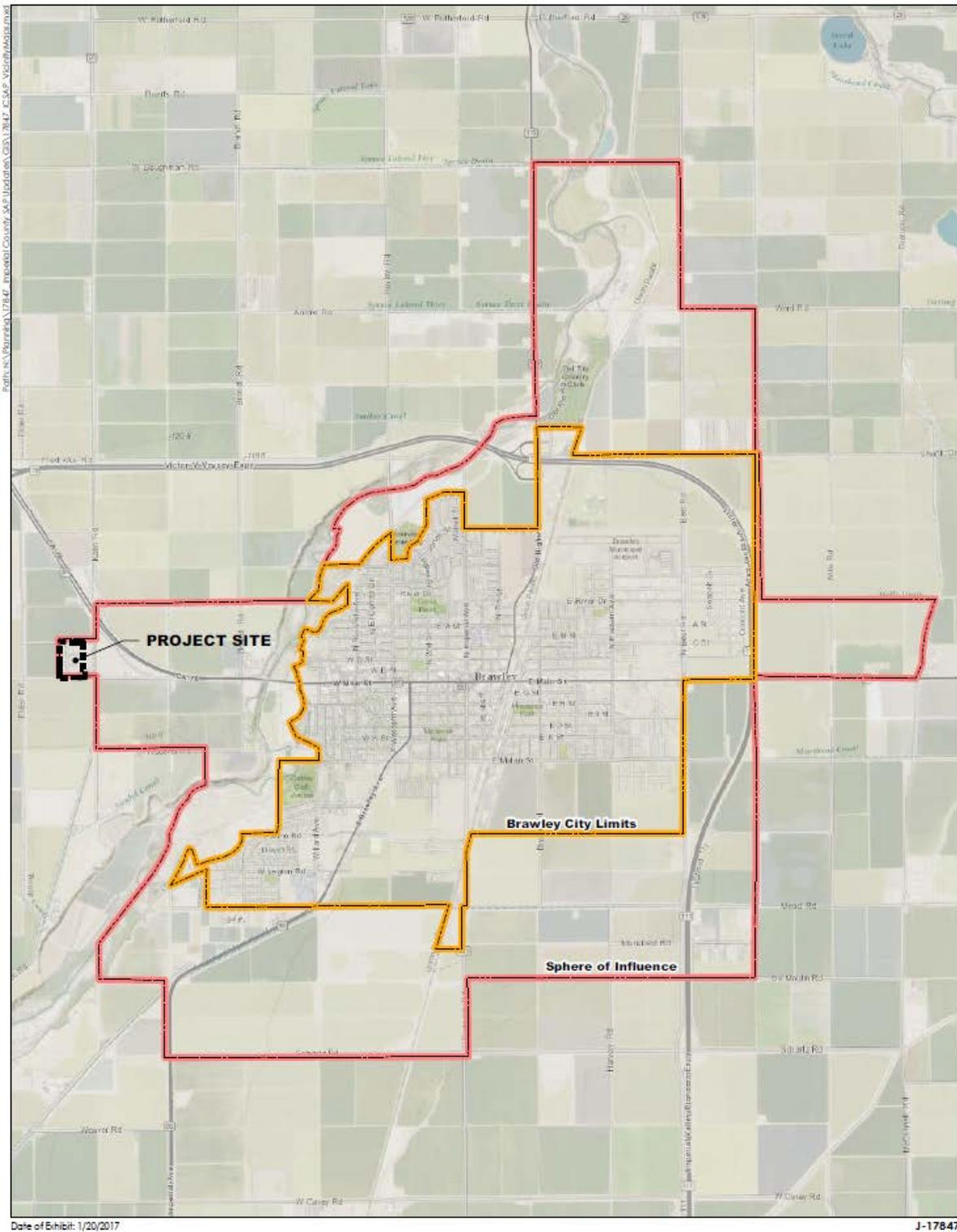
SECTION 2 – INTRODUCTION

2.1 Background

The County of Imperial is the ninth largest county in California, encompassing 4,284 square miles. It is home to nearly 180,000 residents and over 62,000 jobs. The POE Colonia County Service Area is in an unincorporated community located in Imperial County, 120 miles east of San Diego, CA, 1.5 miles east of Brawley, 60 miles west of Yuma, AZ, and approximately 20 miles north of the United States-Mexico border.

A colonia is defined by State and Federal housing guidelines as a residential area within 150 miles of the U.S./Mexico border that has a concentration of low-income households and lacks a permanent potable water supply and sewage system. The State provides block grant funds to assist local communities in providing public services to colonias. Accordingly, the City of Brawley has extended water lines to serve the Poe Colonia (but not sewer).

Figure 2-1, Project Vicinity Map



PROJECT VICINITY MAP
CADY POE

2.2 Purpose of the Service Area Plan

This SAP has been prepared for the County of Imperial in accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, which requires that a plan identifying the existing and projected demand for public facilities and services be prepared by all incorporated cities and special districts within the State. The 2000 legislation is implemented by Imperial County Local Agency Formation Commission (LAFCo), whose policy states that a city within the jurisdiction of Imperial County LAFCo must update an SAP in order to demonstrate a county's ability and intent to provide adequate services within its jurisdictional boundaries.

The Cady Poe Colonia Service Area Plan is part of a Special District known as a County Service Area (CSA). California Government Code 56036 (a) defines a Special District or CSA as "an agency of the state, formed pursuant to general law or special act, for the local performance of governmental or proprietary functions within limited boundaries. 'District' or 'special district' includes a county service area." This CSA was enacted to enable the County to localize the provision and financing of expanded services, in an area which needed a higher level of public service. By establishing CSAs, the County of Imperial can identify which areas require a higher level of specific service than those already uniformly provided within the entire county. These extended services are financed by the taxpayers of the CSA. By isolating the extra services provided within the CSA, the County can insure that the additional services are paid for by those who will receive them.

2.3 Organization and Use of the Service Area Plan

This SAP outlines the unincorporated community of the Cady Poe Colonia Subdivision existing public services and facilities, estimates the current and future anticipated demand for such facilities and services, and describes how necessary facilities and services will or may be developed and extended to meet demands. The SAP is intended to demonstrate the County's intent and ability to provide adequate services to the SOI boundaries at the time of annexation. An approximately 10-year planning horizon is used to forecast growth, and the estimated demands and provision to meet demands are based on population projections until 2025. The population projections used in this document was provided by the Southern California Association of Governments (SCAG). Projected population growth was placed into the structure and policies of the land use plan presented in the General Plan.

The document is organized into the following six chapters that satisfy the requirements set forth in the LAFCO guidelines:

Chapter 1.0 EXECUTIVE SUMMARY: Provides a brief summary of the SAP, highlighting key information regarding demand and financing.

Chapter 2.0 INTRODUCTION: Outlines the purpose and intent of the SAP and presents its layout to help the reader use the document. This chapter also provides background information on the Cady Poe Colonia and of the planning documents that enabled the preparation of the SAP.

Chapter 3.0 GROWTH PROJECTIONS: Provides general information about projected population, current and future land use trends in the Cady Poe Colonia, and the implications of these trends for the development of Cady Poe Colonia services and facilities.

Chapter 4.0 SEWER FACILITIES AND SERVICES: Details the current and planned sewer facilities and services, their current and projected adequacy, measures to ensure adequacy, and how such measures will be achieved and financed. Although LAFCO Guidelines typically require evaluation of administration, fire, law enforcement, library, parks & recreation, and circulation, since the Cady Poe Colonia is a CSA and does not propose annexation into an adjacent municipality, the SAP will analyze only wastewater facilities, the specific public services that are provided by the County. Each subchapter of Chapter 4 contains the following four sections based on the standards developed by LAFCO:

- **Performance Standard:** A description of any standards or goals that have been adopted by the County to the review of the adequacy of service within the existing and future timeframes.
- **Facility Planning and Adequacy Analysis:** An inventory of the existing facilities, the adequacy of the facilities when compared to existing demands, the anticipated demand for facilities pursuant to growth of the County, and the phasing of the demand for facilities.
- **Financing:** An explanation and identification of how sewer services and facilities are currently being funded, including a per capita cost where available and applicable, and how future services and facilities may be funded.
- **Mitigation:** A series of recommendations to ensure that adequate sewer facilities will be provided and proper levels of service will be maintained.

Chapter 5.0 FINANCING: Identifies all of the potential funding mechanisms for sewer services and facilities provision that are available to the County. This section presents potential funding sources and then identifies how each service or facility sector is currently funded and appropriate future funding opportunities, as well as cost saving opportunities.

SECTION 3 – GROWTH AND PHASING PROJECTIONS

3.1 Existing Land Use

Cady Poe Colonia is located in the Low Density Residential land use designation. This residential land use designation provides for the development of low density detached and attached single family dwelling units including either detached or attached (zero lot line) single family units and mobile homes. Up to two dwelling units per lot or parcel are permitted. This designation will permit the construction of as many as nine detached or attached single family dwelling units per net acre of land. Other uses such as churches, schools, and childcare facilities, which are determined to be compatible with and oriented toward serving the needs of low density detached and attached single family dwelling units, are also permitted.

3.2 Planned Land Use

Land use designations are expected to remain low density residential.

3.3 Projected Population Increase

The current population of Cady Poe Colonia is estimated to be 165 based on satellite imagery of the 47 existing dwelling units and SCAG's 2014 average household size of 3.5. The population has remained stable over the last 10 years as no new dwelling units have been built. No development applications or subdivisions are pending.

3.4 Theoretical Buildout Projections

Cady Poe Colonia has a build-out capacity of 53 homes. Based on SCAG's 2014 average household size of 3.5 persons per household, Cade Poe Colonia has a projected build-out population of 186 residents.

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SECTION 4 – WASTEWATER FACILITIES AND SERVICES

The facility analysis consists of a review of the wastewater facilities specifically identified in the Resolution of Intention to form the CSA and as revised by the Imperial County Public Works Department. The facility analysis will address the adequacy of the sewer facilities as development occurs within the CSA.

I. Performance Standard

The goal in the operation and maintenance of the County’s wastewater facilities is to provide adequate service to every customer. The waste discharge requirements issued by the California Regional Water Quality Control Board (Order No. R7-2005-005) shall continue to be adhered to. Calculations show that the sewer flow is not meeting the 2 feet per second minimum flow requirement and as a result will require more than average maintenance of the sewer mains in order to prevent any blockage. In determining sewer flow volume, 3.5 persons per household was assumed, based on the average household size from SCAG.

II. Facility Planning and Adequacy Analysis

Inventory of Existing and Approved Facilities

The existing sewer line and waste water treatment facility constructed in 2004 has the capacity to handle wastewater generation under the ultimate build out of 53 homes. Wastewater from four septic tanks flow through a re-circulating tank that empties into six textile filters before being distributed into a large subsurface drip leach field located in the northwest corner of the development (see Figures 4-1 and 4-2). The discharger has indicated that the subsurface disposal leach field infiltration system is designed with the capability to change distribution lines when an area below a distribution line is saturated. This procedure will ensure even distribution of wastewater throughout the leach field and avoid over-saturation of particular soil area.

The treatment facility requires regular inspections in order to ensure all aspects of the facility are in good working order and will continue to properly function for the next 10 years.

Adequacy of Existing Facilities

In July 2014, the Imperial County Public Works Department entered into an agreement with Perc Water Corporation to manage and operate the wastewater system. According to Perc Water staff, the wastewater facility is in need of operational improvements to maintain efficient wastewater service to Cady Poe Colonia. Specifically, the wastewater treatment plant’s leach field is in need of operational improvements. Currently, the effluent is pumped (after passing through the septic tanks) to a surface holding pond, where it evaporates or percolates. Although operational improvements are needed, the existing treatment facility has the capacity to treat the current demand and ultimate build out of 53 homes.

Figure 4-1, Wastewater Facilities Photo 1



Existing wastewater facilities located along Poe Colonia Road

Figure 4-2, Wastewater Facilities Photo 2



Existing wastewater facility with leach field, looking south on Poe Colonia Road

Future Demand for Facilities

The current wastewater treatment plant has an estimated capacity to treat 88 dwelling units, which is adequate to serve the planned future buildout of Cady Poe Colonia at 53 dwelling units, assuming necessary maintenance is provided. However, as mentioned earlier, the plant's leach field is in need of operational improvements in order to maintain efficient wastewater service to the existing and future residents.

Opportunities for Shared Facilities

Due to the financial structure and the isolated location of the County Service Area, there are no opportunities for shared wastewater facilities.

Phasing

The existing wastewater treatment facility has been designed to handle treatment of up to 53 homes (full build-out), and no additional wastewater facilities are needed. However, immediate operational improvements are needed to the wastewater leach field, and the Public Works Department has contacted the Regional Water Quality Control Board to begin the process to planning and implementing these improvements. Funding has already been allocated through the CDBG program to help rehabilitate the leachfield.

III. Mitigation

Routine maintenance is required to ensure adequate wastewater service to the residents of Cady Poe Colonia. Specifically, the wastewater treatment plant's leach field is need of improvements in order to meet Regional Water Quality Control Board standards for the current residents. Further mitigation will not be required since the existing treatment facility has capacity for final build out of 53 homes.

IV. Financing

Current Funding

The Cady Poe Colonia County Service Area (CSA 05-01) was organized for the purpose of providing funding for the subdivision's sewer lift station and community septic system (wastewater treatment plant).⁴ The sewer use charge, a flat fee of \$30 per month per connection, constitutes the only formal revenue source. There are currently 36 connections to the system. The maximum annual service charge revenue is therefore \$12,960, whereas the service charge revenues over the six-year period from 2011 to 2016 have averaged about \$10,000. Furthermore, the average expense of the wastewater operations over the same period was approximately \$81,000. This average includes expenses for professional services (the contracted treatment plant operator) in fiscal years 2014–2015 and 2015–2016 of \$148,000 and \$153,000, respectively. These expenses are atypical of the other four fiscal years when the expenses averaged \$43,600.

⁴ Resolution of Intention of the County Board of Supervisors 2005-056 to Establish a CSA for the Cady Poe Colonia, July 19, 2005.

The clear trend is that the sewer service charges cover only about 23% of the typical annual operating expenses.

The shortfall is made up by other County funds as indicated in the Public Works Department budget. Under “Public assistance-Other assistance,” the Cady Poe Colonia CSA shows a net cost of \$165,793 (actual expenses minus revenues) for 2016.⁵

The 2005 sewer rate study for the Cady Poe Colonia CSA recommended a stepped rate increase beginning at \$30 per month and rising to \$50 per month in 2010. Even with this increase, the rate study indicated the recommended schedule of charges was severely inadequate to cover the total cost of providing wastewater service. With the estimated cost rising in 2010 to \$78,300, the rate in that year would have needed to be at least \$130 per month to generate the projected required revenue. Furthermore, this rate was based on the assumption that the number of connections would increase to the buildout capacity of 53 homes/connections, which has not occurred.

Cost Avoidance Opportunities

The main cost challenge with Cady Poe Colonia’s wastewater operations is the high fixed costs of operating the treatment plant being spread over too few connections. Most of the operating costs are fixed in the short term. In July 2014, the County entered into an agreement with Perc Water Corporation to manage and operate the wastewater system. The agreement is for an annual amount not to exceed \$147,588 with terms renewable annually over a five-year agreement period. The County can issue a Request for Proposals when the current agreement expires.

Recommended Funding

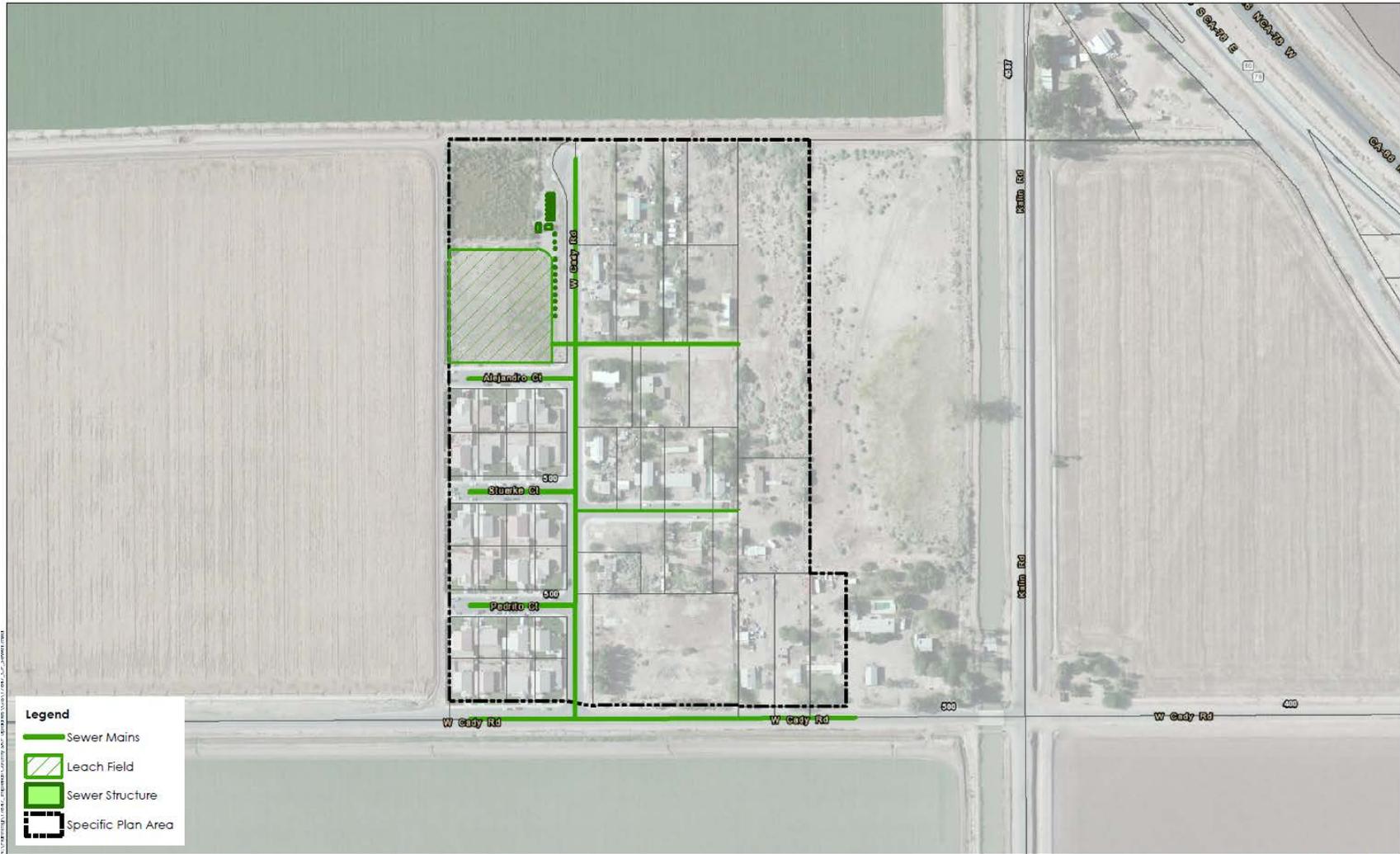
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⁵ FY 2016–2017 County of Imperial Adopted Budget, Public Works “USDA Poe Wastewater.”

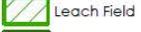
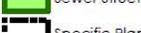
⁶ Waste Discharge Requirements for Poe Colonia (Cady subdivision) Community Subsurface Wastewater Disposal System, Order No. R7-2005-0005 California Regional Water Quality Control Board Colorado River Basin Region.

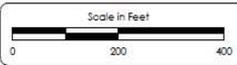
⁷ Estimated typical household water use for effluent discharge is based on sewer flow rate per capita data from the City of Brawley (71 gallons per day) and the City of Holtville (93 gallons per day). The average of both is 82 gallons per day per capita, which multiplied by the average household size of 3.5 persons, is 287 gallons per day (GPD) per household. As a conservative estimate, the 287 GDP is rounded up to 300 GDP.

Figure 4-3, Wastewater Infrastructure Map



Legend

-  Sewer Mains
-  Leach Field
-  Sewer Structure
-  Specific Plan Area



Date of Exhibit: 1/9/2017
 Imperial County Assessor Parcels: 10/2016
 ESRI World Imagery Basemap: 08/2014

Cady Poe Specific Plan
 Sewer Structure Plan

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SECTION 5 – FINANCING

5.1 Introduction

This section of the Service Area Plan discusses various financing mechanisms available to the Cady Poe Colonia CSA for maintenance and operation of the wastewater system.

5.2 Existing Revenue Sources

Special Revenue

Development Impact Fees and Connection Charges

The County collects a small impact fee for wastewater improvements. Connection charges recover the cost of making new connections to the system. Neither the impact fee nor the connection fee represents a significant source of revenue for capital improvements; by state law, these fees may not be used for operations.

Community Development Block Grants

Funds utilized for improvements to colonias are primarily obtained through the US Department of Housing and Urban Development Community Development Block Grants (CDBG) Colonia Allocation. Colonia improvements focus on addressing the lack of adequate sewage systems, water services, and decent housing.

The CDBG program is administered by the State. The primary statutory objective of the CDBG program is to develop viable communities by providing decent housing and a suitable living environment and by expanding economic opportunities, principally for persons of low and moderate income. The State must ensure that at least 70% of its CDBG grant funds are used for activities that benefit low- and moderate-income persons over a one-, two-, or three-year time period selected by the State. This general objective is achieved by granting “maximum feasible priority” to activities which benefit low- and moderate-income families or aid in the prevention or elimination of slums or blight. Under unique circumstances, states may also use their funds to meet urgent community development needs. A need is considered urgent if it poses a serious and immediate threat to the health or welfare of the community and has arisen in the past 18 months.

5.3 Future Revenue Source

Updated Sewer Usage Charge

The Imperial County Department of Public Works plans to issue a Request for Proposals (RFP) in the first quarter of 2017 to prepare an updated sewer rate study for Cady Poe Colonia.

Updated Development Impact Fees

Since impact fees may not be used for maintenance and operations, increasing the County wastewater development impact fee would not benefit the Colonia’s fiscal condition.

5.4 Existing Financing Mechanisms

Financing in the context of public facilities refers to the means of paying for facility improvements concurrent with the need. Facilities financing usually implies a stream of revenue that may be saved for future improvement projects (pay-as-you-go) or be used as debt service for loans or bonds. There is currently outstanding Cady Poe Colonia CSA debt and therefore no current financing mechanisms.

General Fund

The Imperial County General Fund could provide loans to the Cady Poe Colonia CSA for capital improvements; however, there is no identified revenue stream to repay such loans.

Capacity Fee Funds

The potential sewer capacity fee revenues from the development of the remaining 6 vacant lots and 17 additional sewer connections in the Colonia would not support debt service and only minimal capital improvements.

Sewer Usage Charge

See discussion above under the Current Funding subheading. The current sewer usage rate is nowhere close to meeting current expenses and therefore could not be used as a mechanism to finance debt.

Developer/Builder Contributions

See the discussion under the Capacity Fee Funds subheading above. Development potential within the Colonia is very limited; therefore, there is little to no opportunity for developer contributions.

Special Assessment Districts

The Board of Supervisor's Resolution of Intention to establish the Cady Poe Colonia CSA 05 01 states: "a tax assessment sufficient to pay for all such services that are furnished on an extended basis will be annually levied on all taxable property within the area." However, the resolution establishing CSA 05-01 does not indicate that a tax assessment for the Colonia was approved. Although the resolution states that the property owners who directly benefit from the formation of the CSA "will pay for all direct and indirect costs for the operation of the Cady Poe Colonia CSA" and that "the parties will reimburse the County for the operation of the CSA," the resolution does not establish a funding mechanism.

Community Facilities Districts

Community Facilities Districts (Mello-Roos districts) may levy special taxes with approval of two-thirds of the property owners or by registered voters, if over 12 registered voters reside in the district. The special tax revenues may be used for maintenance, operations, and to finance capital improvements. The voter approval requirements of Community Facilities Districts make them difficult to implement in developed areas.

5.5 Future Financing Mechanisms

State and Federal Funding

In addition to the CDBG program discussed above, two other financing sources are the Border Area Environmental Cooperation Commission (BECC) and the Imperial County Community and Economic Development (ICCED) fund. The ICCED uses intergovernmental transfers to fund expenditures for various activities and programs including USDA Small Business, Home Biz Micro-Training, and the ICCED Micro-Lending Program, as well as Cady Poe Colonia wastewater (USDA Poe Wastewater). The BECC has funded wastewater improvement projects in the Brawley area as recently as 2013.

5.6 Facility Financing

Current Funding

As discussed above, the Cady Poe Colonia sewer usage charge constitutes the only formal revenue source available to the CSA. At a flat rate of \$30 per month per connection, which has not changed since 2005, the sewer usage charge covers only about 23% of the CSA's typical annual operating expenses.

Cost Avoidance Opportunities

The County's service agreement with Perc Water Corporation, which calls for four one-year renewals up to five years total. The County and Perc entered the agreement in July 2014 therefore the agreement expires in 2019. The County should issue a Request for Proposals for management and maintenance of the wastewater system when the current agreement with Perc Water Corporation expires, or renegotiate terms to seek a possible reduction in the contract cost.

Recommended Funding

If it hasn't already done so, the County should commence a study to update the sewer usage charge. It is anticipated that the study will recommend an increase in rates to generate revenues closer to the actual requirements or at the least to be comparable to the rates charges by other providers, such as the City of Brawley, which currently charges a flat rate of \$47 per month.⁸

⁸ The City of Brawley completed a water and sewer rate study and, in September 2015, held a public hearing prior to adopting increased rates. The City Council declined to adopt the proposed rate increases.