CALIFORNIA COASTAL COMMISSION
455 MARKET ST., SUITE 300
SAN FRANCISCO, CA 94105-2219
FAX (415) 904-5400
TDD (415) 597-5885

F11a

9-20-0457 (Southern California Gas Co.)

MAY 11, 2021

EXHIBITS

Exhibit 1 – Project Location

Exhibit 2 - Revegetation and Restoration Plan

Exhibit 3 – Habitat and Wetland Map

Figure 1 Regional Location

Imagery provided by Esri and its licensors © 2018.

Project Location

N

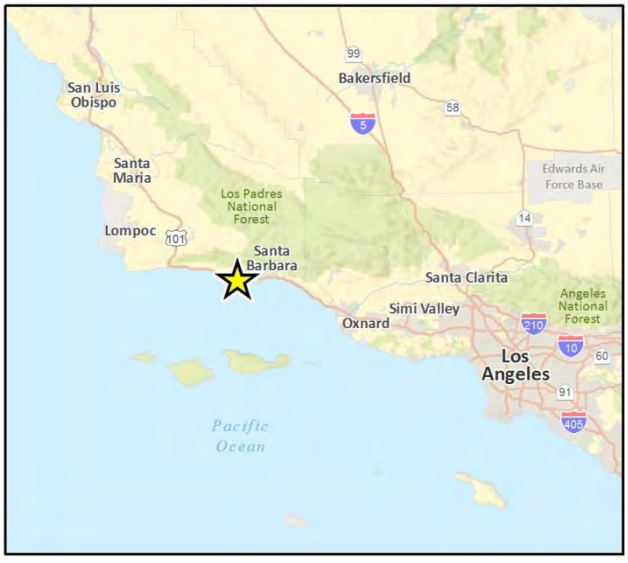


Figure 2 Project Site and Vicinity

Imagery provided by Microsoft Bing and its licensors © 2020.

Fig PD-2 Project Site

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

September 8, 2020
Project No: 18-06214

James Chuang
Senior Environmental Specialist / Land Planner
Southern California Gas Company
555 West 5TH Street
Los Angeles, California 90013

Subject: **SoCalGas Line 80 Abandonment Project, Revegetation and Restoration Plan, Santa Barbara, Santa Barbara County, California**

Dear Mr. Chuang:

Rincon Consultants, Inc. (Rincon) has prepared this Revegetation and Restoration Plan (Plan) for the Southern California Gas Company (SoCalGas) Line 80 Abandonment Project (herein referred to as the Project). Because the Project impacts are nearly all temporary with limited topsoil removal, this Plan is abbreviated and focuses on the restoration of these temporary areas of impact within the greater project area. Elements of the Project occur in several land use jurisdictions, including the City of Santa Barbara (within the Santa Barbara Airport annexation parcel), the University of California at Santa Barbara (UCSB), the California Department of Transportation (Caltrans), and unincorporated Santa Barbara County (near Atascadero and Tecolotito Creeks). The project includes the abandonment and removal of sections of Line 80, an exposed natural gas pipeline that has been decommissioned by removal of block valves at each end. In addition, pipeline span supports would be removed – approximately 23 for Line 80 and one support for Line 159, which would be replaced.

This Plan was prepared in response to the County of Santa Barbara's (County) Determination of Application Incompleteness letter dated December 14, 2018. This Plan has been prepared pursuant to the policies and development standards included in the Eastern Goleta Valley Community Plan and includes restoration of temporarily disturbed coastal wetland habitat and creation of 0.002 acre of coastal wetland habitat for the portion of the Project within Segment 1 as described in the project description below. In addition, Segment 3 of the Project as described below, is proposed to have up to 0.66 acre of temporarily impacts to landscaped/developed lands. Temporary impacts include removing Line 80, backfilling, and working over vegetation present within the work area. All recommendations of restoration and revegetation of vegetation communities for Segment 3 in this plan are subject to approval from the Santa Barbara County Parks District (County Parks) and do not replace other restoration requirements that may be requested from County Parks.

Project Location

The project site is primarily located southeast of California State Route 217 (SR 217), east of UCSB, and west of More Ranch Road in unincorporated Santa Barbara County. The project site consists of the staging, workspaces, and access routes surrounding an existing natural gas high pressure pipeline; Line 80 with approximately 23 supports, and a portion of Line 159 and one associated support span. The

project site includes Assessor Parcel Numbers (APNs): 071-200-011, -008, -017, 071-210-001, 073-450-001, and 073-130-001, and is within the United States Geological Survey (USGS) Goleta, California 7.5-minute topographic quadrangle (USGS, 2015). The Public Land Survey System depicts the project site within Township 4N, Range 28W, Section 20 (San Bernardino baseline and meridian (Earth Point, 2018).

The portion of Line 80 and Line 159 where the line removal and span support replacement are to occur begins adjacent to an existing bike path, east of Sandspit Road. The pipeline extends south, under Tecolotito Creek and continues west under Sandspit Road, traversing through the Goleta Beach County Park, westward, under SR 217, and terminating at an existing paved facility east of Mesa Road. The proposed portion of Line 80 to be removed or abandoned lies within the unincorporated County, with the exception of a portion of pipeline under SR 217 within the City of Santa Barbara and the terminus on UCSB. Please see Biological Resources Assessment (Rincon, 2018a) for additional location information.

Summary of Project Description

SoCalGas proposes to abandon and remove Line 80, which has already been decommissioned by removal of block valves at each end. The isolated piping is currently filled with low-pressure nitrogen. Line 80 is tied into Line 159, as shown in Photograph 2 in Appendix B. The abandonment and removal process is proposed to be segmented into four sections. In addition to the pipeline removal, one Line 159 pipeline span anchor support in Section 1, which is above ground and located approximately 10 feet landward from the Ordinary High Water Mark (OHWM) of Atascadero creek within a tidally influenced area, is proposed to be replaced (see Photograph 8, Appendix B). Work activities associated with the proposed span support removal will occur only during low tide in dry conditions. The proposed replacement support will consist of two 24-inch diameter pier foundation supports, drilled down to a depth of 40 feet. The interior of the pier supports will consist of steel rebar encased in concrete in a cylindrical fashion. The top of the pipe support will connect both the pier supports together with steel rebar and concrete. The top of the pipe support will extend approximately 1 foot 9 inches above the ground and L159 will be placed on top, connecting to the rest of the line to the east. The support removal will not impact the structural support of Line 159, as the other supports will sustain suspension. The replaced support shall be installed prior to demolition and removal. The depth of the pipeline span supports is approximately 40 feet, however excavation is limited to the first one (1) foot six (6) inches below grade and removed at the first one (1) foot and restored at the original grade.

Above-ground removal of Line 80 and associated supports (approximately 23 supports) is proposed east of the bike path parallel to Sandspit Road, east of SR 217 to the underground portion under Tecolotito Creek (Segment 1;505 linear feet, support structure depth is approximately 7.0 feet). The portion of pipeline under Tecolotito Creek and SR 217 is proposed to be abandoned in place with placement of plates over the open ends after removing residual hydrocarbons and filling the pipe with 37 cubic feet of grout (Segment 2; 130 linear feet, depth is approximately two - five feet). Excavation and removal of underground pipeline is proposed south of Tecolotito Creek/Goleta Slough, through Goleta Beach County Park, up to the eastern boundary of the bike path parallel to SR 217 (Segment 3; 1,565 linear feet, depth is approximately two - five feet). Lastly, the portion of pipeline that runs underneath SR 217 to the terminus at the eastern wall of an existing paved SoCalGas facility is proposed to be abandoned in place and filled with 322 cubic feet of grout (Segment 4; 1,141 linear feet, depth is approximately between 2.0 and 5.0 feet). In total, approximately 2,000 linear feet of pipeline is to be removed and approximately 1,300 linear feet of pipeline is proposed to be abandoned in place.

The objective of the proposed project is to remove as much of Line 80 and its associated appurtenances (i.e., pipe supports) as possible, then abandon the remaining pipe in place.

Environmental Setting

Vegetation Communities

Habitat classification is based on the classification systems provided in *A Manual of California Vegetation, Second Edition* (Sawyer et al., 2009). Five terrestrial vegetation communities or land cover types occur within the project area: pickleweed mats, quailbush scrub, annual grassland, coyote brush scrub, and developed/landscaped.

***Sarcocornia pacifica (Salicornia depressa*) [Pickleweed mats] Herbaceous Alliance**

This vegetation community is part of the pickleweed series and is located east of the Goleta Slough within the study area. The herbaceous alliance consists of pickleweed (*Sarcocornia pacifica*) or Virginia glasswort (*Salicornia depressa*) as the dominant or co-dominant species. Pickleweed was observed to be the dominant species throughout the majority of the project area. The presence of Virginia glasswort was not detected. Pickleweed is a polycarpic perennial stem succulent at low elevations (between 0–2 meters) that inhabits Coastal salt marshes and alkaline flats.

***Atriplex lentiformis* (Quailbush scrub) Shrubland Alliance**

This shrubland alliance is part of the mixed saltbush series where quailbush scrub (*Atriplex lentiformis*) is dominant in the shrub canopy. Quailbush scrub is a drought deciduous shrub that occurs on gentle to steep southeast and southwest facing slopes at low elevations of 0-170 meters. Soils associated with this habitat include clays. This vegetation community is located east of Atascadero Creek within the study area.

***Bromus (diandrus, hordeaceus) – Brachypodium distachyon* Herbaceous Semi-Natural Alliance**

This herbaceous semi-natural alliance is part of the California annual grassland series where purple false brome (*Brachypodium distachyon*), ripgut brome (*Bromus diandrus*) and/or soft chess (*Bromus hordeaceus*) is dominant or co-dominant with nonnatives in the herbaceous layer. This alliance has the potential to occur in all topographic settings in foothills, waste places, rangelands, and openings in woodlands. Elevation ranges between 0-2200 meters.

***Baccharis pilularis* (Coyote brush scrub) Shrubland Alliance**

Coyote brush scrub Shrubland Alliance within the study area is dominated by coyote brush along with intermittent shrubs such as California sagebrush (*Artemisia californica*), California brittlebush (*Encelia californica*), and California buckwheat (*Eriogonum fasciculatum*). These portions of the survey area are dominated by woody shrubs with an intermittent to open herbaceous layer consisting of various invasive ice plant species as well as poison oak (*Toxicodendron diversilobum*). The Manual of California Vegetation (Sawyer et al. 2009) describes this community as occurring in river mouths, stream sides, terraces, stabilized dunes of coastal bars, spits along the coastline, coastal bluffs, open slopes, and ridges, although the species is upland. Elevations range from sea level to approximately 4,900 feet above mean sea level.

Additional information on plants observed during the survey could be found in the project's Biological Resource Assessment Report (Rincon 2018a).

Jurisdictional Areas

Segment 1 contains two wetland areas (referred to as "Wetland 1" and "Wetland 3"), totaling 0.31 acre of wetland waters (herein referred to as "Wetland 1") and 0.003 acre of non-wetland waters of the U.S. potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the Central Coast Regional Water Quality Control Board (RWQCB), streambed/banks and associated riparian vegetation potentially subject to the jurisdiction of California Department of Fish and Wildlife (CDFW), and coastal wetlands qualifying for protection under the California Coastal Act (CCA) and California Coastal Commission (CCC) regulations (Rincon 2018b). Segment 1, 2, and 4 are located within the CCC. Segment 3 is under Local Coastal Jurisdiction of Santa Barbara County.

Impacts to Vegetation and Jurisdictional Areas

Within Segment 1, the removal of Line 80, pipeline supports, and removal of pipeline supports of Line 159, with one pipeline support replacement would result in a total of 0.31 acre of temporary impacts and 0.001 acre of permanent impacts to coastal wetland habitat. Vegetation within this habitat consists of pickleweed mats, quailbush scrub, and annual grassland vegetation communities.

Within Segment 3, the removal of Line 80 would result in approximately 0.66 acre of impacts to developed/landscaped areas.

Land Use, Ownership, and Responsible Parties

The restoration areas are located within unincorporated Santa Barbara County. Management direction comes from the County. SoCalGas (applicant) would be responsible for implementation of restoration activities in the restoration area identified and required by the County and CCC.

Plan Purpose and Goals

Purpose of Plan

The primary purpose of the Plan is to identify necessary actions to stabilize disturbed soil surfaces and revegetate temporarily disturbed area with native species to restore the area to pre-Project conditions. Additionally, this Plan provides guidance for the creation of coastal wetland habitat in areas where Project components would be removed.

Goals of Restoration

The restoration goals for the Project are to:

- Restore temporarily disturbed pickleweed mats within Segment 1 (Wetland 1 and Wetland 3) to pre-Project condition;
- Restore temporarily disturbed developed/landscaped land cover within Segment 3 to pre-Project conditions;
- Stabilize soils to protect existing native vegetation from soil erosion; and
- Create a minimum of 0.002 acre of coastal wetland habitat by establishing pickleweed mats and/or quailbush scrub vegetation communities to mitigate for 0.001 acre of unavoidable permanent Project-related impacts to coastal wetland habitat, within Segment 1.

Wetland restoration and creation will also include contingency measures to be implemented if revegetation progress is slower than anticipated and to control any invasive weeds that colonize temporary disturbed and wetland creation areas.

Restoration and Creation Areas

The restoration area in Segment 1 consist of all temporarily disturbed quailbush scrub and pickleweed mats vegetation communities. Creation of 0.002 acre of coastal wetland habitat would occur at the location where the existing Line 159 pipeline support and Line 80 and associated wooden pipeline supports will be removed within Segment 1 (Wetland 1; Figure 1). This area is already demonstrating the ability to support healthy wetland vegetation as evidenced by the growth around the pipeline and supports; therefore, the additional open space created from the removal of Line 80, its 23 wooden supports, and one support for Line 159, are likely to support revegetation.

Segment 3 consists of all temporary impacts to landscaped/developed lands (Figure 2). It is anticipated that areas of developed lands will be restored to their pre-construction state (i.e. repaved) and areas of landscaped vegetation will be replanted; however, final restoration guidelines within Segment 3 will be determined by County Parks.

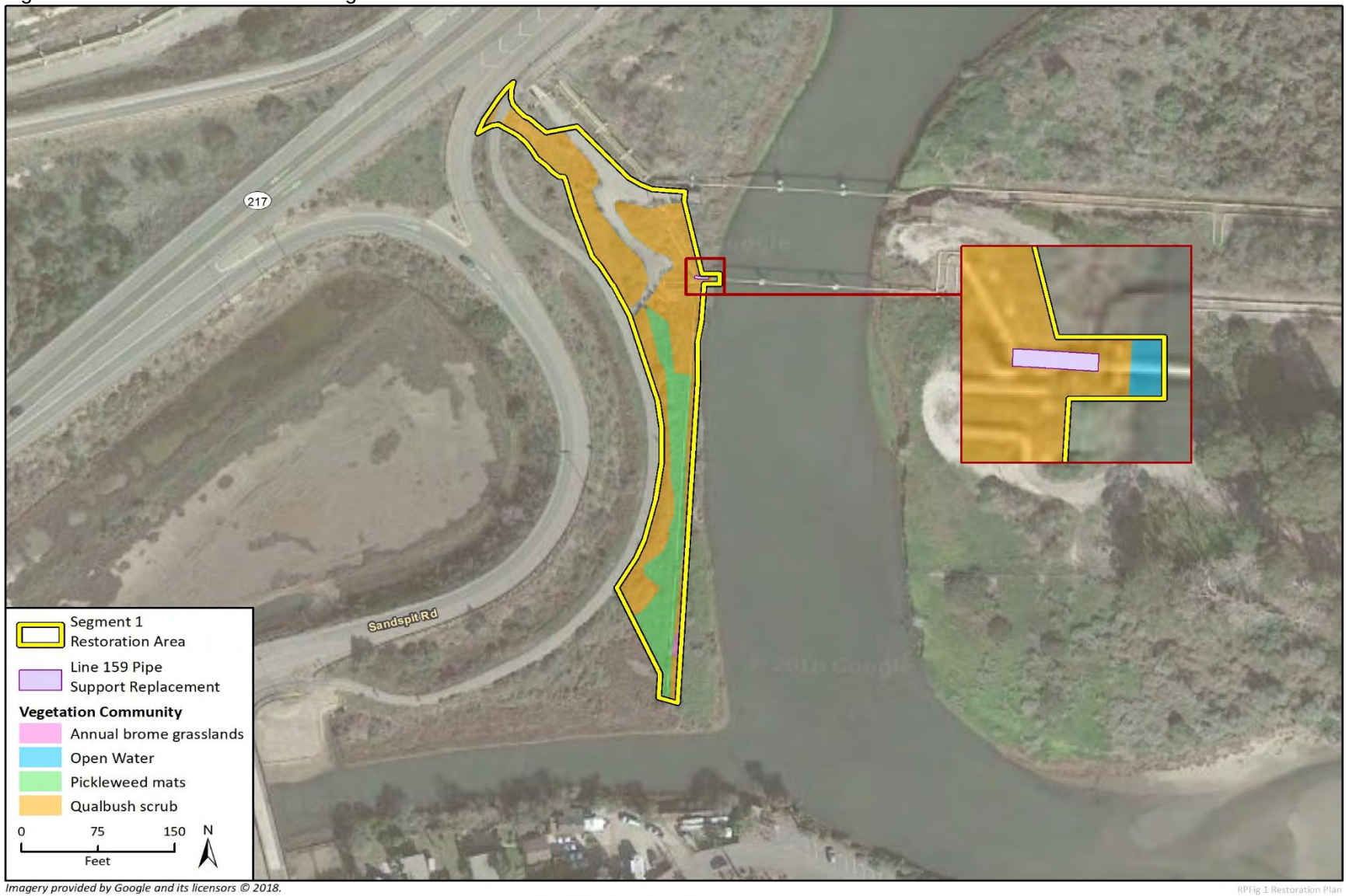
Implementation Plan

This section explains how the restoration will be implemented and monitored. Subsections are ordered in the recommended sequence of implementation. Pickleweed and quailbush, are fast growing species and would be expected to recruit quickly and easily within the restoration areas without human assistance. To enhance this natural recruitment, the coastal wetland habitat creation and restoration of the temporarily disturbed areas will be accomplished through salvation of topsoil and/or trimmings, and the seeding of native plant species, conducted in conjunction with weed monitoring and management activities.

Site Preparation

Upon completion of Project activities, the restoration area will be cleared of all equipment, trash, and debris. If soils are heavily compacted by Project activities and staging, the topsoil will be loosened with light scarification of the soil, if feasible.

Figure 1 Restoration Area for Segment 1



Several non-native invasive species have been identified within or in the vicinity of the restoration areas, including iceplant (*Carpobrotus edulis*; California Invasive Plant Council [Cal-IPC] rating High). Invasive non-native species will be removed from the restoration area prior to installation of restoration plantings.

Planting Materials

Topsoil and Trimming Salvage

As stated above pickleweed and quailbush is expected to recover within the restoration and creation areas without human assistance; however, to increase the recruitment of these species the topsoil will be salvaged and stockpiled for redistribution upon completion of the Project, as feasible. Similarly, the trimmings will be stockpiled and spread back within the restoration area upon completion of the Project, as feasible.

Seed Mixes

Preliminary seed mixes are provided for quailbush scrub and pickleweed mats vegetation communities. The seed mixes are comprised of locally native species suitable for coastal wetland (Segment 1) and upland (Segment 3) sites in southern Santa Barbara County. Within Segment 1, per the Eastern Goleta Valley Community Plan, the seed should be obtained from local genetic stock (preferably collected from the site's watershed) if feasible, or between Gaviota and Carpinteria, or as determined satisfactory by a qualified biologist. The seed or plant mix in Segment 3 may be altered by County Parks. Species composition and application rates of the seed mixes may be modified at the discretion of the Project biologist based on the composition of the native habitat adjacent to each restoration area and the availability of appropriately sourced seed.

Quailbush scrub and pickleweed mats vegetation communities occur on site in a mosaic-like distribution, with many species occurring in both communities in varying concentrations. As such, there is overlap in species within the suggested seed mixes provided below. To match the surrounding natural vegetation adjacent to the restoration and creation areas, application rates of shrubby species should be higher in the quailbush mix relative to the pickleweed mat mix.

Table 1 Preliminary Seed Mix for Quailbrush Scrub

Scientific Name	Common Name
Atriplex lentiformis	quailbush
Encelia californica	brittlebush
Baccharis salicifolia	mulefat
Hordeum brachyantherum ssp. *californicum*	meadow barley
Eriogonum fasciculatum var. *foliolosum*	coast buckwheat
Lupinus nanus	sky lupine

Table 2 Preliminary Seed Mix for Pickleweed Mats

Column Heading	Column Heading
Salicornia pacifica (= S. virginica)	pickleweed
Distichlis spicata/littoralis	saltgrass
Atriplex lentiformis	quialbush
Hordeum brachyantherum ssp. *californicum*	meadow barley
Eriogonum fasciculatum var. *foliolosum*	coast buckwheat

Seeding Technique and Timing

Broadcast Seed (Dry Seed Application)

Broadcast application can be a successful seeding technique for relatively small areas with recently disturbed soil or recently disturbed vegetation with minimal soil disturbance. Hand broadcast seed applications can also be combined with hand raking or mechanical rolling or tamping to achieve better soil contact, or with jute and/or geotextile applications.

All seed mixes will be applied to restoration and/or creation area; however, on a local scale, each seed mix will be chosen and broadcast according the natural vegetation type immediately adjacent to restoration or creation area.

The appropriate type and quantity of seed for the restoration and creation areas will be weighed out, and then applied across the area by slowly distributing from a “whirligig” seeder or by hand, walking along and across the areas from at least three angles to achieve suitable distribution.

Due to the relatively moist coastal climate and regular tidal inundation (Segment 1) of the restoration area, seed application can be performed at any time of year; however, this technique is most effective when performed on a calm day (winds less than five miles per hour) in fall, within a few weeks prior to rain.

Erosion Control Implementation

Under normal conditions, erosion is not expected to occur on site during Project activities due to the relatively flat level of the project site, however erosion control measures such as fiber rolls shall be provided as necessary to prevent damage to the restoration area and to prevent the transport of sediment offsite or into Atascadero Creek.

Maintenance

Maintenance activities will include identification and removal of invasive non-native species, removal of trash and debris, and remediation of any erosional features or erosion control measures in disrepair. Due to the relatively moist coastal climate of the project area the restoration and creation areas are not expected to require supplemental irrigation. Maintenance activities are proposed twice per year, once in the fall (October – December) and once during the spring (February – April).

Weed Monitoring and Management

Non-native invasive species can invade areas of recent disturbance and crowd out native species. The restoration and creation areas will be monitored for weeds the first fall or spring, whichever comes first,

after seeding. Following the first year, twice yearly visits will occur for three years following seed application. During the first weed monitoring visit, the biologist will check for the presence of non-native invasive plants. Weed control activities will be prescribed as needed on the basis of monitoring results. If invasive species are present at greater extent and quantity in restoration area than pre-project conditions indicate, or are hindering recovery of native vegetation, the biologist will prescribe additional hand pulling of weeds and monitoring. If needed, weed control measures would consist of removal with hand tools. Findings and recommendations, if applicable will be summarized in the monitoring reports described in the Monitoring Program section below.

Success Criteria

Impacts within Segment 1 are expected to be limited to driving and walking over vegetation, with topsoil only being removed for the Line 159 span removals and one replacement In Segment 3, impacts will consist of open trenching in order to remove Line 80. In general, success criteria are the standards against which a restoration project is assessed to document restoration and/or creation has been achieved. The goals of this Project are to restore the disturbed area with native vegetation, stabilize soils in the area that are temporarily disturbed by removal of the pipeline and Project components, and create at least 0.002 acre of additional coastal wetland habitat on site. The project will be deemed successful when monitoring inspections demonstrate that disturbance area is successfully stabilized with no major erosion issues, and vegetation is sufficiently established to ensure the restoration area would recover to pre-Project natural cover and creation areas would contain comparable natural cover and composition to adjacent coastal wetland habitat. Natural cover for this Project is defined as the total plant cover present in adjacent habitat that was undisturbed by the Project, within the same habitat type. Additionally, cover of non-native species in restoration and creation areas shall be similar to adjacent habitat of the same type undisturbed by the Project.

Success criteria will be assessed through visual assessment of similar adjacent habitat and when visual assessment indicates the restoration area is nearing success. Details of these assessment methods are provided in the section below.

Restoration Monitoring Program

Prior to restoration activities, the biological monitor will establish a minimum of two static photograph points to document pre-restoration conditions and to visually track the success of the restoration efforts. Photograph points and direction will be recorded on a figure and used for follow-up monitoring. A brief narrative summary of vegetation conditions, including dominant species and average estimated cover, will be recorded to document the pre-restoration conditions.

To ensure restoration and creation is successful and respond rapidly to any issues with vegetation recovery, the project biologist will visit the site quarterly for the first year following initial restoration. If year one restoration is determined to be making relative progress towards meeting the success criteria, monitoring will be reduced to twice annually for the last two years. During each site visit, the monitor will visually assess the restoration and creation areas for vegetation germination and growth, percent vegetative cover, presence and extent of non-native invasive species, and erosion issues. Representative photos will be taken at each photo point during the monitoring visits to document progress of restoration. A brief narrative describing vegetation in the restoration and creation areas will be recorded similar to data collected prior to the restoration implementation. If poor conditions are observed, such

as the establishment of non-native species, additional weeding and/or monitoring events will be included in the narrative.

Restoration Area (Segment 1 and 3)

To determine the percent cover within the restoration area, a visual estimate will be used. To allow for comparison between the restoration area and natural conditions, photos will be collected in the adjacent habitat of the same type outside the project footprint.

Analysis of this data will include a visual estimate of total cover and percent native cover. The restoration area photos and visual percentage estimates will be compared to the adjacent habitat data, not affected by project activities, to determine if success criteria have been met. Additionally, a list of plant species observed will be kept for the restoration area to allow comparison of non-native components between restoration areas and adjacent quailbush scrub and pickleweed mats within Segment 1, and landscaped species (to be determine by Parks) in Segment 3. This comparison will aid in assessing invasive species problems.

Creation Area (Segment 1)

Due to the much smaller size of the creation area, percent cover within the entire creation area will be visually estimated and compared with the adjacent habitat conditions noted as part of the restoration area monitoring methodology.

Schedule and Reporting

Monitoring will be conducted quarterly for the first year following restoration. If year one restoration is determined to be successful, monitoring will be reduced to twice annually for the following two years, with monitoring visits to be conducted in the fall and late spring. Annual reports will be prepared following each year's monitoring visit to document the progress of the restoration program. Reports will be prepared and submitted to the County and other agencies if required by permit conditions within one month of conducting the monitoring visit, or as permit conditions require.

Adaptive Management

After seeding and erosion control measures have been installed as necessary, an adaptive management approach will be implemented. The purpose of adaptive management is to provide a strategy to address unforeseen changes in site conditions and challenges due to unpredictable conditions such as drought. This strategy will guide decisions for maintenance activities, supplemental restoration work, and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect restoration and creation success.

The first monitoring visit described above will begin the adaptive management cycle. The information gathered during the monitoring visits will be used to evaluate the progress and identify specific problems, if applicable. A spring monitoring visit in the first year following restoration will assess recovery of vegetation from applied seed, soil seed bank, and existing native vegetation, as well as surveying for presence non-native invasive species. Based on outcome of these initial monitoring site visits, the project biologist will determine if adaptive management measures are necessary. If problems are identified, the qualified biologist, in consultation with the County and CCC, can design measures to address the issue. Measures may include additional erosion control efforts or weeding. The measures

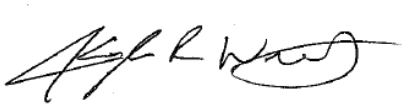
must be designed to ensure the restoration requirements and objectives are still being achieved. If vegetation growth and recovery is progressing more slowly than anticipated, measures for supplemental seeding will be prescribed. Seed will be locally sourced.

Completion of Restoration/Creation

Once restoration and creation are complete, the applicant will submit a final report to the County, the CCC, and applicable agencies, summarizing restoration work completed and documenting post-Project site conditions. Once the County, CCC, and applicable agencies have agreed that success criteria defined in this Plan have been met, no additional work will be required.

Thank you for the opportunity to support your environmental analysis needs for this important Project. Please contact us if you have any questions.

Sincerely,
Rincon Consultants, Inc.



Kyle Weichert, M.S.
Senior Biologist/Project Manager

Christopher Julian
Principal/Senior Regulatory Specialist

References

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (Eds.). 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley, California.

California Department of Fish and Wildlife (CDFW). 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. California Department of Fish and Wildlife. Sacramento, California.

California Department of Fish and Wildlife and California Native Plant Society. 2014. Protocol for Combined Vegetation Rapid Assessment and Releve Sampling Field Form. California Department of Fish and Wildlife. Sacramento, California.

California Department of Transportation (Caltrans). 2013. Updated 2010 Standard Specifications: Erosion Control. Sacramento, California. Available online at http://www.dot.ca.gov/hq/esc/oe/construction_standards.html

County of Santa Barbara. 2018. Determination of Application Incompleteness- Line 80 Abandonment Project. December 14.

Herrick, J. E., J. W. Van Zee, K. M. Havstad, L. M. Burkett, W. G. Whitford. 2005. Monitoring Manual for Grassland, Shrubland and Savanna Ecosystems: Volume I: Quick Start. USDA – ARS Jornada Experimental Range, Las Cruces, New Mexico.

Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Nongame Heritage Program. 156 pgs.

Mayer, K.E. and W.F. Laudenslayer, Jr., (Editors). 1988. A guide to wildlife habitats of California. State of California, Resources Agency, Department of Fish and Game. Sacramento, CA. Updated online: http://www.dfg.ca.gov/biogeodata/cwhr/wildlife_habitats.asp

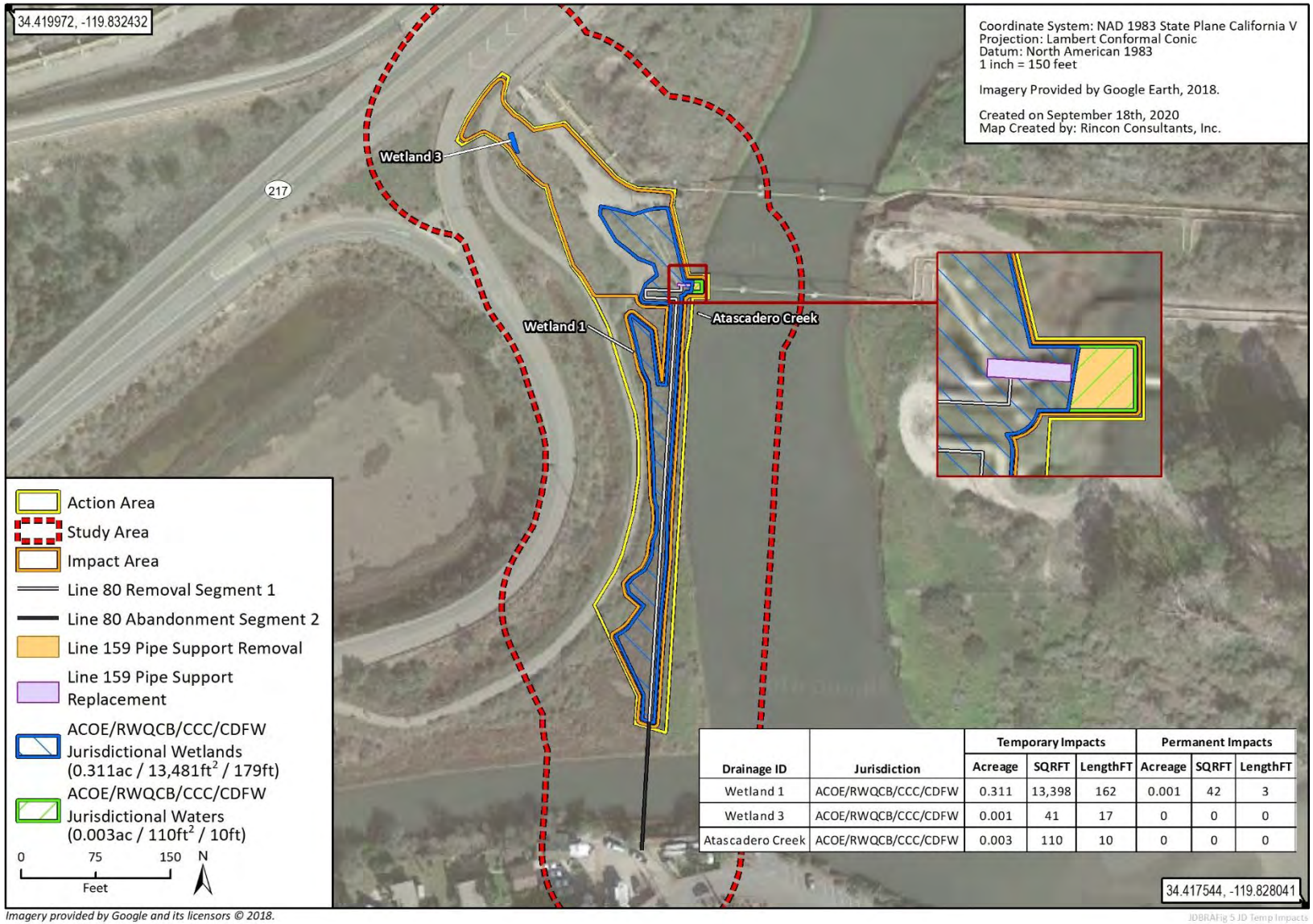
Rincon Consultants, Inc. 2018a. Line 80 Abandonment Project Biological Resources Assessment. October.

Rincon Consultants, Inc. 2018b. Line 80 Abandonment Project Jurisdictional Delineation Report. October.

Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.

Smith, Clifton F. 1998. A Flora of the Santa Barbara Region, California: An Annotated Catalog of the Native, Naturalized, and Adventive Vascular Plants of Mainland Santa Barbara County, Adjacent Related Areas, and Four Channel Islands. Second Edition. Santa Barbara Botanic Gardens & Capra Press.

Figure 5 Jurisdictional Resources



Drainage ID	Jurisdiction	Temporary Impacts			Permanent Impacts		
		Acreage	SQRFT	LengthFT	Acreage	SQRFT	LengthFT
Wetland 1	ACOE/RWQCB/CCC/CDFW	0.311	13,398	162	0.001	42	3
Wetland 3	ACOE/RWQCB/CCC/CDFW	0.001	41	17	0	0	0
Atascadero Creek	ACOE/RWQCB/CCC/CDFW	0.003	110	10	0	0	0

Imagery provided by Google and its licensors © 2018.
Additional data provided by USDA, NRCS, 2018.