Salinas River
Stream Maintenance Program
2021 Work Season

Annual Report
To
Central Coast Regional Water Quality Control Board

Regional General Permit 20, Corps File # 1996-22309S, Effective September 28, 2016

Prepared by

Monterey County Water Resources Agency
1441 Schilling Place, North Building
Salinas, CA 93901

May 2022

This page intentionally left blank

Table of Contents

List of Tables

Executive Summary

This report summarizes the annual maintenance activities of the Salinas River Stream Maintenance Program (SMP) for the 2021 maintenance season. The SMP incorporates a cooperative planning and design process among technical experts, agencies, municipalities, landowners, and growers to establish a flood risk reduction and habitat enhancement approach for the majority of the Salinas River and three tributaries. This is achieved through vegetation maintenance, sediment management, and non-native vegetation removal primarily in designated secondary or high flow channels outside of the low flow channel. This Annual Report provides regulatory agencies and interested parties with an overview of the work completed during the maintenance season and the program's compliance with the U. S. Army Corps of Engineers' permit conditions. It also allows the MCWRA to summarize and analyze the project success and impacts for future planning activities.

Stream maintenance activities were approved for both the early and regular work seasons. Work began on Wednesday, September 1, 2021 and finished by November 3, 2021. Maintenance activities were performed in 5 of the 7 RMUs with treatment occurring in 22 Maintenance Areas and 1 Selective Treatment Area. A total of 122.84 acres of native and non-native vegetation removal occurred within the Maintenance Areas including 1.24 acres of initial treatment and 121.60 acres of retreatment. Sediment was removed from San Lorenzo Creek in King City, a tributary to the Salinas River. As mitigation for program impacts, arundo was removed via herbicide application and/or mowing on 83.20 acres outside secondary channels in RMUs 3, 4, and 6. Bar ripping was not conducted as part of this year's maintenance activities. No new tree planting projects are required for 2021 impacts, however, continued tree planting survivorship monitoring under previous projects occurred.

Biological surveys for species of concern were conducted prior to work within specified time windows, and protective measures were followed during all project activities. All personnel involved in on-site work were trained in permit conditions, project protocols, and species identification by qualified staff. Confirmed special status wildlife found in or near work sites included two active American badger dens, and 127 active dusky-footed woodrat nests. No state- or federally- threatened or endangered animals or plants were observed. 'No-disturbance' buffers were placed around known and potential habitats like burrows and woodrat houses and buffers were observed during work activities.

1 Introduction

1.1 Program Background

The Salinas River has experienced flooding events in recent years that have damaged agricultural crops along the river corridor. A flood maintenance program is desired by public and private entities to prevent damage from flood events. The Salinas River Stream Maintenance Program (SMP) began in 2014 with Phase 1, a multi-benefit demonstration project involving a cooperative planning and design process among public agencies, stakeholders, landowners and growers. The objective for the SMP is to reduce flood risk to land adjacent to the Salinas River while maintaining or enhancing natural habitat and ecological and hydrological processes. This is achieved through vegetation maintenance, sediment management, and non-native vegetation removal primarily in designated secondary or high flow channels outside of the low flow channel.

Phase 1 of the program occurred in two River Management Units (RMUs) along the Salinas River at river miles 22.7 to 29.2 and river miles 32.7 to 37.7. These are referred to as RMUs 4 and 5 (Gonzales and Chualar areas respectively). Phase 2 of the SMP was developed following the same process as Phase 1 and included five additional RMUs within the SMP Program Area (river miles 2 to 94). The new RMUs are concentrated near Salinas, Soledad, Greenfield, King City and San Ardo. The 2016 work season was the first to include both Phase 1 and Phase 2, using a uniform approach over the entire Program area. The SMP will continue to be implemented under one set of permits.

1.2 Purpose of the Annual Report

The Annual Report provides regulatory agencies, interested parties, and MCWRA an overview of work completed during the previous maintenance season as well as a summary of the program's compliance with the permit conditions. It also allows the MCWRA to summarize and analyze the project results for future planning activities. The Annual Report is due to the U.S. Army Corps of Engineers (USACE) by March 31st of each year. A similar report will be prepared for the Regional Water Quality Control Board (RWQCB) by May 31st of each year.

1.3 Authorizations

The Salinas River Stream Maintenance Program was approved by the Monterey County Water Resources Agency Board of Supervisors on July 29, 2014. The authorizations listed below were received to implement both phases of the Program for a period of up to ten years.

1.3.1 U.S. Army Corps of Engineers

The Department of the Army Regional General Permit (RGP) 20 for the Salinas River Stream Maintenance Program, Corps File No. 22309S, was executed on September 28, 2016 by the USACE. The RGP is authorized under Section 404 of the Clean Water Act (33 U.S.C. Section 1344) through November 15, 2021. The National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) concurred with the USACE determination that the project was not likely to adversely affect the federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*) and the federally threatened California tiger salamander (*Ambystoma californiense*), Monterey spineflower (*Chorizanthe pungens var. pungens*) and

its critical habitat, the yellow-billed cuckoo (*Coccyzus americanus*), and the South-Central Coast (S-CCC) steelhead (*Oncorhynchus mykiss*). The USFWS issued a Biological Opinion on August 22, 2016 for the federally endangered least Bell's vireo (*Vireo bellii pusillus*) and tidewater goby (*Eucyclogobius newberryi*) and its critical habitat and the federally threatened California red-legged frog (*Rana draytonii*).

1.3.2 State of California Regional Water Quality Control Board

The Clean Water Act Section 401 Water Quality Certification for Discharge of Dredged and/or Fill Materials, Certification No. 32716WQ02, was approved on August 31, 2016 and is set to expire on November 30, 2025. The Central Coast Water Board staff will assess the implementation and effectiveness of the SMP after five years, and consider modifications to this Certification for the second five years of the permit term.

1.3.3 California Department of Fish & Wildlife

Phase 1 of the SMP was authorized by Operation of Law under Notification of Lake or Streambed Alteration No. 1600-2014-0127-R4, Salinas River Multi-Benefit Demonstration Project, Salinas River – Monterey County, dated October 2, 2014. This was held by an limited liability corporation made up of participating landowners. This authorization expired on November 15, 2018 and has been replaced by a Routine Maintenance Agreement. All impacts and necessary mitigation related to this authorization are tracked separately for the purpose of reporting to the California Department of Fish & Wildlife.

Phase 2 of the SMP was authorized under a Routine Maintenance Agreement (RMA) 1600-2016-0016-R4, approved October 14, 2016 and held by the Resource Conservation District of Monterey County (RCDMC). The RMA was amended and restated on June 16, 2017 and subsequently amended on April 10, 2018. The RMA covers all impacts under the program from the original date of approval through December 31, 2026.

1.4 Annual Work Plan Approvals

Each year, the specific maintenance activities need to be approved prior to commencement of work, by each of the authorizing agencies. Two plans detailing work proposed for the early and regular work seasons were submitted to the USACE and the RWQCB on April 20, 2021 and July 17, 2021 respectively. The National Marine Fisheries Service and U.S. Fish and Wildlife Service were sent a courtesy copy of the Work Plan although their authorization is facilitated through the USACE. In addition, California Department of Fish & Wildlife (CDFW) has a Verification Request Form process in place which is facilitated by the RCDMC.

1.4.1 U.S. Army Corps of Engineers

The early work season plan proposed to conduct herbicide treatment of non-native vegetation in RMUs 3 and 4 in areas that had already been treated in previous seasons and outside of wetland areas. USACE jurisdiction is limited in RMU's 1-6 to the activities involving grading or other fill discharge below the OHWM and in wetlands. Therefore, the early work plan was submitted to the USACE for informational purposes only and authorization for these activities was not required. The proposed regular season activities were authorized by the USACE on October 1, 2021.

1.4.2 State of California Regional Water Quality Control Board

The RWQCB approved the early work plan on May 6, 2021 and the regular season work plan on June 25, 2021. All proposed activities were authorized.

1.4.3 California Department of Fish & Wildlife

Verification Request Forms (VRFs) were approved by CDFW and maintenance activities were completed under 35 of the total 38 approved VRFs.

2 Pre-Maintenance Activities

Specific Maintenance Areas were defined using modeling and mapping tools during the Program and permit development process. Those Maintenance Areas were further refined prior to implementation of maintenance activities based on current field conditions. Successful implementation of the SMP required a diverse project team which included trained equipment operators, landowners, farm operators, biologists, ecologists, Arundo specialists, hydrologists, engineers, field staff, IT specialists, public relations staff, and legal staff. This team demonstrated a high level of coordination.

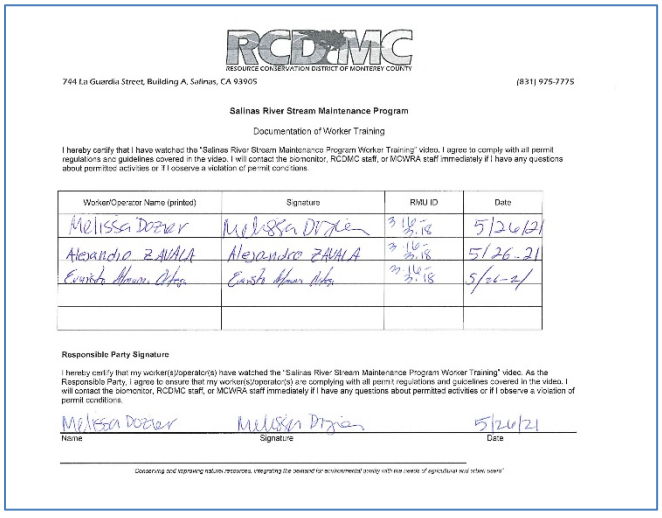
2.1 Training

Following Monterey County COVID-19 regulations there were no in-person trainings for the 2021 Work Season for project personnel (Biomonitors, Responsible Parties, equipment operators, farm managers). Fortunately, the MCWRA and Resource Conservation District of Monterey County (RCDMC) was able to utilize the program's training video which was introduced in the 2019 SMP Work Season. The purpose of this video is to train project participants in identification, range, and avoidance and minimization for state and federally protected wildlife with the potential to occur on site during project operations. Other topics included both project rules and conditions as stated in the CDFW, RWQCB, and USFWS project permits.

The training video provided a safe and effective way to train project personnel offsite since in-person training workshops were not feasible. Responsible parties, and especially project personnel, were required to watch the training video and sign a training acknowledgement sheet verifying that they had reviewed all program requirements and guidelines before project activities occurred.

See below for sample copy of the training acknowledgement sheet, the sheet contains a statement that the SMP participant understood and agreed to comply with all permit regulations and guidelines covered in the video.

Figure 1. Example documentation of training video review and acknowledgement for Fall Work Season species identification and permit conditions.



RCDMC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY

744 La Guardia Street, Building A, Salinas, CA 93905 (831) 975-7775

Salinas River Stream Maintenance Program

Documentation of Worker Training

I hereby certify that I have watched the "Salinas River Stream Maintenance Program Worker Training" video. I agree to comply with all permit regulations and guidelines covered in the video. I will contact the biomonitor, RCDMC staff, or MCWRA staff immediately if I have any questions about permitted activities or if I observe a violation of permit conditions.

Worker/Operator Name (printed)	Signature	RMU ID	Date
Melissa Dozier	Melissa Dozier	3 1/2.18	5/26/21
Alexandra ZAVALA	Alexandra ZAVALA	3 1/2.18	5/26-21
Evaristo Alonso Ortiz	Evaristo Alonso Ortiz	3 1/2.18	5/26-21

Responsible Party Signature

I hereby certify that my worker(s)/operator(s) have watched the "Salinas River Stream Maintenance Program Worker Training" video. As the Responsible Party, I agree to ensure that my worker(s)/operator(s) are complying with all permit regulations and guidelines covered in the video. I will contact the biomonitor, RCDMC staff, or MCWRA staff immediately if I have any questions about permitted activities or if I observe a violation of permit conditions.

Melissa Dozier — Melissa Dozier — 5/26/21
Name — Signature — Date

Conserving and improving natural resources, integrating the demand for environmental amenity with the needs of agricultural and urban users

2.2 Site Preparation

Participants with the assistance of the RCDMC, flagged their proposed maintenance areas after the required training and prior to receipt of work authorizations. This flagging is color-coded based on the type of activity in the area. For example, existing access ways are flagged in yellow ribbon so that heavy-equipment operators use the same site access each time and biologists and inspectors can survey and access the area. The flagging also marks the boundary for each activity and includes red flagging for avoidance areas.

2.3 Biological Surveys

The California Department of Fish & Wildlife and the U.S. Fish & Wildlife Service identifies the following species of concern for which surveys may be needed before conducting work under the Stream Maintenance Program: American badger (*Taxidea taxus*), arroyo toad (*Anaxyrus californius*), California legless lizard (*Aniella pulchra*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californienses*), coast horned lizard (*Phrynosoma blainvillii*), coast range newt (*Taricha* torosa), foothill yellow-legged frog (*Rana boylii*), Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*), San Joaquin kit fox (*Vulpes macrotis mutica*), steelhead trout (*Oncorhynchus mykiss*), tidewater goby (*Eucyclogobius newberry*), two-stripped garter snake (*Thamnophis hammondii*), western pond turtles *(Emys marorata*), western spadefoot toad (*Spea hammodii*), Salinas pocket mouse (*Perognathis inonatus psammophilus*), burrowing owl (*Athene cunicularia*), yellow-billed cuckoo (*Coccyzus americanus*), least Bell's vireo (*Vireo bellii pusillus*), Monterey spineflower (*Chorizanthe pungens* var. *pungens*), all nesting birds, and roosting bats.

Surveys were conducted for special status species in areas of suitable habitat per Work Plan approval. No nesting birds were detected before or after September 1. Surveys for yellow-billed cuckoo and least Bell's vireo were avoided by delaying the project until October in areas of concern. Focused California red-legged frog surveys were conducted in several areas of suitable habitat within 48 hours of the start of work.

At all work sites, two types of pre-activity surveys were completed within 30 days of the start of work: habitat assessment surveys and pre-maintenance surveys. Both surveys occurred within permit-specified buffer distances of work areas after the Responsible Party had flagged the work site boundaries. Habitat assessment surveys were conducted by service approved biologists from Burleson Consulting, and included conducting transect surveys for special status species and their habitats. Pre-maintenance surveys were conducted by RCD biological monitors and included classifying vegetation types in Secondary Channels, identifying and flagging wetlands and large native trees for avoidance, and also looking for sensitive wildlife and their habitats. Additionally, RCD biological monitors performed morning walk-throughs of the work areas each day work occurred, and in most cases were present during all work activities.

All surveys for San Joaquin kit fox, California red-legged frogs, and California tiger salamanders were completed by USFWS-approved biologists.

The locations of all special status individuals or habitats identified during any of the above-mentioned surveys were mapped in Collector for ArcGIS and flagged with red or pink flagging tape in the field with the appropriate buffer size.

2.3.1 Biological Survey Results

Woodrat houses were the most common evidence of special status species presence found in or near work sites: 127 active houses were found, most of which were confirmed active. All woodrat nests were avoided with at least a 10-foot buffer. Two American badger dens with sign of recent use were found. Three potential and two active bat roosts in dead trees were identified (bat presence not confirmed). There were no bird nesting or fledgling recorded for the spring work season June 1st-August 30th. Since fall project activity only occurred September 1st – November 3rd, there were also no records for bird nesting or fledging present in the work area. Table 1 shows results for special status species or habitats found for all work areas during the 2021 Work Season by VRF agreement number. The data shown in Table 2 will be submitted to the California Natural Diversity Database as a Microsoft Excel spreadsheet using the CNDDB template for submittal requirements.

Table 1: Summary of species survey results

Channel ID	American Badger (active)	Active Woodrat Nest in or near Work Area	Potential Bat Roost
1.02	0	15	0
1.03	0	8	0
1.06	0	7	0
1.07	0	5	1
1.38	0	0	0
2.05	0	1	0
2.06	0	2	0
3.16b	0	3	1
3.16a & Mitigation	0	0	0
3.17	0	0	0
3.18	0	1	0
3.19	0	1	0
4.22 & Mitigation	0	7	2
4.23, 4.25, 4.26 & Mitigation	0	22	2 (active) 3 (potential)
4.24 & Mitigation	0	6	0
6.07 & Mitigation	0	8	1
6.08	0	6	0
6.09	2	7	0
6.10	0	23	0
6.11 & Mitigation	0	4	0
6.12	0	1	0
Total Found or Indicating Activity	**2**	**127**	**10**

Table 2: Special status species and habitats identified during the 2021 SMP Work Season

VRF#	RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
157	1.02	Woodrat	Active	10	27-Sep-2021	36.02032648	-120.5514896
157	1.02	Woodrat	Active	10	27-Sep-2021	36.02114514	-120.5517636
157	1.02	Woodrat	Active	10	27-Sep-2021	36.02095749	-120.5518381
157	1.02	Woodrat	Active	10	27-Sep-2021	36.02128043	-120.5518618
157	1.02	Woodrat	Active	10	27-Sep-2021	36.02125748	-120.551854
157	1.02	Woodrat	Active	10	27-Sep-2021	36.0212412	-120.5518618
157	1.02	Woodrat	Active	10	27-Sep-2021	36.01583711	-120.5515874
157	1.02	Woodrat	Active	10	27-Sep-2021	36.01581573	-120.551594
157	1.02	Woodrat	Active	10	27-Sep-2021	36.0158344	-120.5516207
157	1.02	Woodrat	Active	10	27-Sep-2021	36.0157921	-120.5516006
157	1.02	Woodrat	Active	10	27-Sep-2021	36.01560883	-120.5515762
157	1.02	Woodrat	Active	10	27-Sep-2021	36.01556964	-120.5515596
157	1.02	Woodrat	Active	10	27-Sep-2021	36.01538551	-120.5512767
157	1.02	Woodrat	Active	10	27-Sep-2021	36.01540044	-120.551292
157	1.02	Woodrat	Active	10	27-Sep-2021	36.01546208	-120.5513253
158	1.03	Woodrat	Active	10	6-Oct-2021	36.02152586	-120.5526926
158	1.03	Woodrat	Active	10	11-Oct-2021	36.02162252	-120.5526857
158	1.03	Woodrat	Active	10	11-Oct-2021	36.0214705	-120.5526007
158	1.03	Woodrat	Active	10	11-Oct-2021	36.02137815	-120.5526293
158	1.03	Woodrat	Active	10	12-Oct-2021	36.02134581	-120.5524643
158	1.03	Woodrat	Active	10	12-Oct-2021	36.0213261	-120.5524542
158	1.03	Woodrat	Active	10	12-Oct-2021	36.02126998	-120.5524834
158	1.03	Woodrat	Active	10	12-Oct-2021	36.0213408	-120.5525598
159	1.06	Woodrat	Active	10	4-Oct-2021	36.03056584	-120.5524063
159	1.06	Woodrat	Active	10	4-Oct-2021	36.03053257	-120.5523731
159	1.06	Woodrat	Active	10	4-Oct-2021	36.03053834	-120.5523872
159	1.06	Woodrat	Active	10	4-Oct-2021	36.03054152	-120.5523672
159	1.06	Woodrat	Active	10	4-Oct-2021	36.0250747	-120.552941
159	1.06	Woodrat	Active	10	4-Oct-2021	36.02505282	-120.553031
159	1.06	Woodrat	Active	10	4-Oct-2021	36.02511437	-120.5530034
160	1.07	Bat roost	Potential	25	6-Oct-2021	36.03137911	-120.5526305
160	1.07	Woodrat	Active	10	8-Oct-2021	36.03101014	-120.552596
160	1.07	Woodrat	Active	10	8-Oct-2021	36.03095524	-120.5526064

VRF#	RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
160	1.07	Woodrat	Active	10	11-Oct-2021	36.03095708	-120.5526246
160	1.07	Woodrat	Active	10	11-Oct-2021	36.03102805	-120.5525995
160	1.07	Bat roost	Potential	25	11-Oct-2021	36.03122793	-120.5526459
161	2.05	Woodrat	Active	10	13-Sep-2021	36.20015912	-121.1201834
161	2.05	American badger	Potential	50	13-Sep-2021	36.19561958	-121.1157107
162	2.06	Woodrat	Active	10	13-Sep-2021	36.2019942	-121.1211956
162	2.06	Woodrat	Active	10	13-Sep-2021	36.20141462	-121.1210996
166	3.18	Woodrat	Active	10	8-Jul-2021	36.25273011	-121.2202717
167	3.19	Woodrat	Active	10	25-Aug-2021	36.2538683	-121.2237487
168	4.22	Woodrat	Active	10	5-Aug-2021	36.29123011	-121.2827903
168	4.22	Bat roost	Potential	25	5-Aug-2021	36.29129498	-121.2824679
168	4.22	Bat roost	Potential	25	5-Aug-2021	36.29134749	-121.282503
168	4.22	Woodrat	Active	10	6-Aug-2021	36.29076792	-121.2753218
168	4.22	Woodrat	Active	10	6-Aug-2021	36.29074277	-121.2753336
168	4.22	Woodrat	Active	10	6-Aug-2021	36.29105673	-121.2801434
168	4.22	Woodrat	Active	10	6-Aug-2021	36.29106967	-121.2802378
168	4.22	Woodrat	Active	10	6-Aug-2021	36.29074572	-121.2753572
168	4.22	Woodrat	Active	10	6-Aug-2021	36.29073252	-121.2753728
168	4.22	Woodrat	Potential	10	6-Aug-2021	36.29094107	-121.2801122
169	4.23	Woodrat	Potential	10	6-Aug-2021	36.28412467	-121.2724288
169	4.23	Woodrat	Active	10	6-Aug-2021	36.28482219	-121.272908
169	4.23	Bat roost	Potential	25	6-Aug-2021	36.28372966	-121.2716575
169	4.23	Woodrat	Active	10	6-Aug-2021	36.28486261	-121.2728927
169	4.23	Woodrat	Active	10	6-Aug-2021	36.28497288	-121.2729476
169	4.23	Woodrat	Active	10	6-Aug-2021	36.28498356	-121.2729535
169	4.23	Woodrat	Active	10	9-Aug-2021	36.28400516	-121.2721246
169	4.23	Woodrat	Active	10	9-Aug-2021	36.28489632	-121.272906
169	4.23	Woodrat	Active	10	9-Aug-2021	36.28331103	-121.2717291
169	4.23	Woodrat	Active	10	9-Aug-2021	36.28491557	-121.2728791
169	4.23	Woodrat	Active	10	9-Aug-2021	36.28493236	-121.2729135
169	4.23	Woodrat	Active	10	9-Aug-2021	36.28450242	-121.2725264
169	4.23	Woodrat	Active	10	9-Aug-2021	36.28444136	-121.272541
169	4.23	Woodrat	Potential	10	9-Aug-2021	36.28406582	-121.2720246
169	4.23	Woodrat	Active	10	9-Aug-2021	36.28404488	-121.2720117

VRF#	RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
169	4.23	Bat roost	Active	25	9-Sep-2021	36.28345786	-121.27157
169	4.23	Bat roost	Active	25	9-Sep-2021	36.28318545	-121.2709853
169	4.23	Bat roost	Potential	25	9-Sep-2021	36.28310519	-121.2709056
170	4.24	Woodrat	Active	10	11-Aug-2021	36.28472147	-121.2720146
170	4.24	Woodrat	Active	10	11-Aug-2021	36.28426732	-121.2710951
170	4.24	Woodrat	Active	10	26-Oct-2021	36.28418883	-121.2711992
170	4.24	Woodrat	Active	10	26-Oct-2021	36.28396299	-121.2713251
170	4.24	Woodrat	Active	10	26-Oct-2021	36.28510742	-121.2725691
170	4.24	Woodrat	Active	10	26-Oct-2021	36.28515441	-121.2727305
169	4.25	Woodrat	Active	10	7-Sep-2021	36.28272797	-121.2704068
169	4.25	Woodrat	Active	10	8-Sep-2021	36.28188998	-121.2658452
169	4.25	Woodrat	Active	10	8-Sep-2021	36.28147812	-121.2655285
169	4.25	Woodrat	Active	10	8-Sep-2021	36.28129828	-121.2654746
169	4.25	Woodrat	Active	10	8-Sep-2021	36.28206435	-121.2658856
169	4.25	Woodrat	Active	10	8-Sep-2021	36.28118594	-121.2656494
169	4.25	Woodrat	Active	10	9-Sep-2021	36.28319051	-121.2714014
169	4.26	Woodrat	Active	10	7-Sep-2021	36.28135877	-121.2657726
169	4.26	Bat roost	Potential	25	7-Sep-2021	36.28264966	-121.270485
169	4.26	Woodrat	Active	10	7-Sep-2021	36.28288815	-121.2705018
169	4.26	Bat roost	Potential	25	9-Sep-2021	36.28242591	-121.2703809
169	4.26	Woodrat	Active	10	10-Sep-2021	36.28322429	-121.2658569
171	6.07	Woodrat	Active	10	30-Aug-2021	36.36445946	-121.3638476
171	6.07	Woodrat	Active	10	30-Aug-2021	36.36378701	-121.3646302
171	6.07	Woodrat	Active	10	30-Aug-2021	36.36386489	-121.364553
171	6.07	Woodrat	Active	10	30-Aug-2021	36.36393355	-121.3644878
171	6.07	Bat roost	Potential	50	30-Aug-2021	36.36431544	-121.3639763
171	6.07	Woodrat	Active	10	30-Aug-2021	36.36418797	-121.3640759
171	6.07	Woodrat	Active	10	30-Aug-2021	36.36436914	-121.3637749
171	6.07	Woodrat	Active	10	30-Aug-2021	36.36425611	-121.3638528
171	6.07	Woodrat	Active	10	30-Aug-2021	36.36441086	-121.36377
172	6.08	Woodrat	Active	10	31-Aug-2021	36.36291842	-121.3658964
172	6.08	Woodrat	Active	10	31-Aug-2021	36.36335442	-121.3653598
172	6.08	Woodrat	Active	10	31-Aug-2021	36.36142255	-121.3714929
172	6.08	Woodrat	Active	10	31-Aug-2021	36.36136197	-121.371663

VRF#	RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
172	6.08	Woodrat	Active	10	31-Aug-2021	36.3613187	-121.371972
172	6.08	Woodrat	Active	10	31-Aug-2021	36.36120042	-121.3723463
173	6.09	American badger	Active	50	1-Sep-2021	36.36137051	-121.3745711
173	6.09	Woodrat	Active	10	1-Sep-2021	36.3614804	-121.3755852
173	6.09	Woodrat	Active	10	1-Sep-2021	36.36126188	-121.3748438
173	6.09	Woodrat	Active	10	1-Sep-2021	36.3610898	-121.3726625
173	6.09	Woodrat	Active	10	1-Sep-2021	36.36109674	-121.3726318
173	6.09	Woodrat	Active	10	1-Sep-2021	36.36112913	-121.372606
173	6.09	Woodrat	Active	10	1-Sep-2021	36.36109121	-121.3730595
173	6.09	Woodrat	Active	10	7-Sep-2021	36.36107637	-121.3729386
173	6.09	American badger	Active	50	7-Sep-2021	36.36134849	-121.3745722
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36291051	-121.3820615
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36226453	-121.3811972
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36215	-121.3811698
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36206913	-121.3810505
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36193211	-121.3807274
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36188245	-121.3808541
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36189898	-121.3808624
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36180423	-121.3806191
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36192176	-121.3806607
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36178313	-121.3805049
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36187463	-121.3805488
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36171696	-121.3805148
174	6.10	Woodrat	Active	10	2-Sep-2021	36.361733	-121.3801649
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36176036	-121.3802712
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36171954	-121.3804887
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36174951	-121.3804417
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36174642	-121.3803292
174	6.10	Woodrat	Active	10	2-Sep-2021	36.3617818	-121.3804612
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36184618	-121.3805934
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36187262	-121.3807767
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36196798	-121.380847
174	6.10	Woodrat	Active	10	2-Sep-2021	36.36187757	-121.3808221
174	6.10	Woodrat	Active	10	2-Sep-2021	36.3624617	-121.3816585

VRF#	RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
175	6.11	Woodrat	Active	10	16-Aug-2021	36.36373532	-121.3858002
175	6.11	Woodrat	Active	10	16-Aug-2021	36.36475745	-121.3909275
175	6.11	Woodrat	Active	10	16-Aug-2021	36.36478246	-121.3909592
175	6.11	Woodrat	Active	10	16-Aug-2021	36.36413265	-121.3901466
177	6.12	Woodrat	Active	10	1-Nov-2021	36.37487052	-121.4035157
164	3.16b	Bat roost	Potential	25	23-Aug-2021	36.2502691	-121.210749
164	3.16b	Bat roost	Potential	25	23-Aug-2021	36.25013157	-121.2056365
164	3.16b	Woodrat	Active	10	23-Aug-2021	36.25026945	-121.2042518
164	3.16b	Woodrat	Active	10	23-Aug-2021	36.25022419	-121.2040431
164	3.16b	Woodrat	Active	10	23-Aug-2021	36.25017833	-121.2100778
164	3.16b	Bat roost	Potential	25	23-Aug-2021	36.25049565	-121.2114696

2.3.2 Tidewater Goby Survey Plan

No work was performed in RMU 7 during the 2021 Maintenance Season but some survey data is available that was conducted for other programs. In future years when work is proposed in RMU 7 the following condition will apply: each year before the start of work in RMU 7 and no later than August 1, information on the current status of tidewater goby (e.g., presence, estimated number of individuals) in the Salinas River Lagoon will be submitted to the Service for review.

USFWS has developed a survey protocol to facilitate the determination of presence or absence of the tidewater goby in habitats that have potential to support it. The primary use for this protocol is for project-level surveys in support of requests for consultation under section 7 of the ESA, as amended. Additionally, this protocol may also be used for section 10(a)(1)(B) permit applications, and to determine general presence–absence for other management purposes. Several assessments of the tidewater goby population in various localities have been conducted using these methods.

The RWQCB and MCWRA in cooperation with a Service-approved biologist will develop and implement a tidewater goby survey plan to document the presence, distribution, and abundance of the species within and adjacent to the Project area, including the Salinas River downstream of the Salinas River Diversion Facility (SRDF) and the Salinas River Lagoon. The survey plan will be developed in coordination with the National Marine Fisheries Service to avoid duplication of effort and excessive disturbance of habitat. The survey plan will be submitted to the Service for review and approval.

2.3.2.1 Tidewater Goby Survey Results

In October 2013, two tidewater goby were detected in the Salinas River Lagoon (Lagoon) during a survey performed by Hagar Environmental Science on behalf of the Agency. Prior to that survey, tidewater goby had not been reported in the Lagoon since 1951. Since being detected in 2013, tidewater goby have been detected during monitoring efforts in 2014, 2015, 2017, 2018, and 2020.

The most recent surveys conducted in April 2021 and prior to the emergency sandbar management action that occurred in December 2021 did not detect tidewater goby. The December 2021 surveys were primarily conducted in areas near the river mouth that were newly inundated by storm flows into the Lagoon. The purpose of this survey was to determine risk of stranding related to the emergency sandbar management action, therefore many sites with suitable habitat or previous goby detection were not surveyed because they were determined to have low potential for stranding.

The Agency is currently working on a Low-Effect Habitat Conservation Plan to address emergency sandbar management to prevent flooding at the Salinas River Lagoon. Tidewater goby will be one of the Lagoon species addressed by the plan which the Agency hopes to complete by the end of 2022.

2.3.3 Water Quality Reports

Water quality monitoring of the Salinas River Lagoon occurs between April and October. Depth profiles with instantaneous readings of temperature, dissolved oxygen, and conductivity are taken at multiple sites in the Lagoon on a monthly basis. Continuously recording sensors are also left at select sites to document conditions with hourly resolution. After being disrupted in 2020 due to the COVID-19 pandemic, monthly sampling resumed in 2020 and is scheduled to begin again in the spring of 2021.

Limited sampling is also conducted in association with facilitated sandbar management events at the Salinas Lagoon. The Lagoon most recently opened to the ocean on December 27, 2021 and remained open until mid-February 2022.

2.4 Adjustments to Maintenance Area Alignments

Maintenance area locations were estimated through the modeling process using LiDAR-based data. Although this data is extremely useful for modeling and other uses, and was the best available data, it did not capture all of the current field conditions that were encountered. Therefore, during the initial construction of a maintenance area, trained personnel can make made slight modifications to the location and length of maintenance areas in order to increase their ability to function and decrease impacts to sensitive species. Some maintenance areas were shortened to prohibit the crossing of the low-flow channel at the tie-in locations. Those modifications were based on the resolution of the modeling effort and the depiction of the size and shape of the maintenance area feature and do not constitute an adjustment as described in this section. All adjustments that occurred are identified each year and listed in the table below. There were no alignments performed this maintenance season.

Table 3: Adjustments to Maintenance Areas

Maintenance Area #	Adjustment	Reason for Adjustment
NONE		

2.5 Arundo Surveys

MCWRA shall prevent the establishment of new arundo growth areas within designated maintenance areas. In order to monitor those occurrences, biological monitors will perform visual inspections of maintained areas during the pre-maintenance surveys and map any new arundo growth areas.

Retreatment of those areas will then need to be scheduled during the following maintenance season. No new arundo growth areas were observed during the subject maintenance seaso

3 Maintenance Activities Conducted in 2021

The Salinas River did not have significant flows during the previous winter season and conservation releases from the upstream reservoirs ceased prior to the maintenance season. With this, there was not water present in the low-flow channel at the beginning of the maintenance season. The RMUs dried out completely before November 15th and no work was authorized within water or in wetlands.

Maintenance activities were conducted in 5 of the 7 RMUs in a total of 22 Maintenance Areas and 1 Selective Treatment Area. No work was performed in RMU 7. All of the activities were authorized through the Annual Work Plan approvals. The maintenance activities are displayed in map format in Section 6 of this report.

3.1 Work Season Dates

The early or spring work season, which only involves arundo herbicide application, began July 8th and was completed by July 14th. The fall work season began on September 1st and was completed by November 3rd. Typical work hours were daily from 7am to 5 pm during daylight hours. No work was performed at night.

3.1.1 Rainfall Restrictions

There was one rain day during the work season and no work occurred that day. But, no rain event of 0.25 inches or greater in a 24-hour period occurred during the work period.

3.2 Completed Maintenance Activities

Maintenance activities were performed in RMUs 1, 2, 3, 4, and 6 for a total 22 Maintenance Areas and 1 Selective Treatment Area, all retreatment. Maintenance activities occurred in one Selective Treatment Area that had previously been treated, but the work was limited in area and types of activities. The specific maintenance activities are further described below. Two tree planting projects were proposed for mitigating anticipated tree removal however, no sensitive tree removal occurred therefore not warranting required mitigation. The third planting project was intended to repair tree damage caused by River fire debris flows. However, the responsible party later determined that the proposed planting area was not fit for long-term tree survivorship because of the soil's low organic material content and likely future inundation events. The responsible party has agreed to continue working with the permitee on tree mitigation efforts.

3.2.1 Native Vegetation Management

Native vegetation was removed within the designated maintenance areas. Disturbance of emergent vegetation did not occur in areas with suitable habitat for California red-legged frogs or for tidewater gobies. All new impacts associated with vegetation removal are quantified in the tables below by vegetation types for each maintenance area, each RMU, and the Program Area. This includes expansion of previously treated areas. Retreatment of native vegetation is included in the total area column but not under the vegetation type columns. Those impacts were addressed in the annual report following the initial removal.

Table 4: New Vegetation Impacts by Maintenance Area

Maint. Area #	*Total Area* (acres)*	*Arundo dominant*	*Unvegetated / Sparse herbaceous*	*Early successional perennial riparian*	*Mid-successional willow*	*Early to mid-successional cottonwood forest*	*Low stature herbaceous wetland*
1.02	*10.2*	retreat	retreat	retreat	retreat	retreat	retreat
1.03	*3.0*	retreat	retreat	retreat	retreat	retreat	retreat
1.06	*4.93*	retreat	retreat	retreat	retreat	retreat	retreat
1.07	*2.64*	retreat	0.64	0.25	retreat	retreat	retreat
2.05	*1.85*	retreat	retreat	retreat	retreat	retreat	retreat
2.06	*7.8*	retreat	retreat	retreat	retreat	retreat	retreat
3.16a	*5.4*	retreat	retreat	retreat	retreat	retreat	retreat
3.16b	*12.7*	retreat	retreat	retreat	retreat	retreat	retreat
3.17	*4.7*	retreat	retreat	retreat	retreat	retreat	Retreat
3.18	*3.7*	retreat	retreat	retreat	retreat	retreat	retreat
3.19	*2.35*	retreat	retreat	retreat	retreat	retreat	retreat
4.22	*5.37*	retreat	retreat	retreat	retreat	retreat	retreat
4.23	*5.6*	retreat	retreat	retreat	retreat	retreat	retreat
4.24	*4.6*	retreat	retreat	retreat	retreat	retreat	retreat
4.25	*4.0*	retreat	retreat	retreat	retreat	retreat	retreat
4.26	*6.0*	retreat	retreat	retreat	retreat	retreat	retreat
6.07	*6.4*	retreat	retreat	retreat	retreat	retreat	retreat
6.08	*6.96*	retreat	retreat	retreat	retreat	retreat	retreat
6.09	*9.3*	retreat	retreat	retreat	retreat	retreat	retreat
6.10	*4.30*	retreat	retreat	retreat	retreat	retreat	retreat
6.11	*8.16*	retreat	retreat	retreat	retreat	retreat	retreat
6.12	*1.65*	retreat	0.17	0.18	retreat	retreat	retreat

Table 5: New Vegetation Impacts by RMU

RMU	*Total Area* (acres)*	*Arundo dominant*	*Sparse herbaceous*	*Early successional perennial riparian*	*Mid-successional willow*	*Early to mid-successional cottonwood forest*	*Low stature herbaceous wetland*
1	*20.77*	retreat	0.64	0.25	retreat	retreat	retreat
2	*9.65*	retreat	retreat	retreat	retreat	retreat	retreat
3	*28.85*	retreat	retreat	retreat	retreat	retreat	retreat
4	*25.57*	retreat	retreat	retreat	retreat	retreat	retreat
6	*36.77*	retreat	0.17	0.18	retreat	retreat	retreat
7	*0*	0	0	0	0	0	0

Table 6: New Vegetation Impacts for Program Area

RMUs	*Total Area* (acres)*	*Arundo dominant*	*Sparse herbaceous*	*Early successional perennial riparian*	*Mid-successional willow*	*Early to mid-successional cottonwood forest*	*Low stature herbaceous wetland*
1-7	*121.61*	0	0.81	0.43	0	0	0

Note: * Total Area includes re-treated areas. Total new areas are 1.24 acres. Vegetation categories do not include the retreated areas.

3.2.2 Wetlands Identification and Avoidance

No wetlands were impacted during the maintenance season. Areas where wetland plants were present were marked both by GPS coordinates and red tape during pre-maintenance surveys. Additional monitoring during maintenance activities occurred to ensure avoidance and final locations of wetland plants were confirmed after maintenance activities were completed. Areas that were located within or near where maintenance activities occurred that were previously mapped as wetlands using aerial tools were field verified. If no wetland vegetation was present then these areas were assumed not to be wetlands.

3.2.3 Permanent Fill, Including Grading, Within USACE Jurisdiction

Grading and limited sediment removal occurred during the 2021 maintenance season. The sediment removal occurred in one tributary within the SMP Area, MA 1.38 San Lorenzo Creek. The MA stockpile location was established in a location outside of jurisdictional area The grading and excavation activities performed within the maintenance areas are shown in the tables below.

Table 7: Sediment Management Activities by Maintenance Area

Maint. Area #	Total Work Area (acres)	*Un-vegetated Area Graded (acres)*	*Volume of Sediment Removal (cy)*	*Volume of Sediment Displaced by Grading (cy)*	*Grading Methods Used*
1.38	2.05	0	2,000	0	Bulldozer, grader, and water truck

Table 8: Sediment Management Activities by RMU

RMU	Total Work Area (acres)	*Un-vegetated Area Graded (acres)*	*Volume of Sediment Removal (cy)*	*Volume of Sediment Displaced by Grading (cy)*
1	2.05	0	2,000	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0

Table 9: Sediment Management Activities for Program Area

RMUs	Total Work Area (acres)	*Un-vegetated Area Graded (acres)*	*Volume of Sediment Removal (cy)*	*Volume of Sediment Displaced by Grading (cy)*
1-7	2.05	0	2,000	0

3.2.4 New Access

No new access routes were constructed, and all maintenance activities utilized existing access ways.

3.3 Compensatory Mitigation

Impacts to certain native vegetation types require compensatory mitigation. The impacts are tabulated annually and the necessary compensatory mitigation are reported cumulatively after each maintenance season. The following season's work plan must include enough mitigation to compensate for the previous season's impacts. Therefore, compensatory mitigation activities may occur before the related impacts or the season after the impact occurred. The following table outlines which impacts require compensatory mitigation as well as the ratios.

Table 10: Compensatory Mitigation Ratios

Vegetation Type	Required Mitigation
Arundo-dominated Removal	none
Sparse Herbaceous with or without Arundo	none
Early Successional Perennial Riparian	1:1 Arundo Removal within secondary channel 0.5:1 Arundo removal outside secondary channel
Mid-Successional Willow (less than 6")	3:1 Arundo Removal outside secondary channel
Early and Mid-Successional Cottonwood (2" or greater of cottonwood, sycamore and alder)	3:1 Planting of cottonwood, sycamore or alder (based on individual trees)
Large Stature Willows (6" or greater)	2:1 Planting of cottonwood, sycamore or alder (based on individual trees)
Low Stature Herbaceous Wetland	1:1 restoration

3.3.1 Summary of Impacts

The initial impacts to specific native vegetation types requires mitigation. Subsequent maintenance activities at the same location do not require additional mitigation. The impacts are documented annually and cumulatively reported. Therefore, the following tables identify the impacts from the most recent maintenance season and from the entire permit term to date, by vegetation type.

Table 11: New Impacts Requiring Compensatory Mitigation

RMU	*Early successional perennial riparian (acres)*	*Mid-successional willow (acres)*	*Early to mid-successional cottonwood forest (trees)*	*Large Stature Willows (trees)*	*Low stature herbaceous wetland (acres)*
1	0.25	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
6	0.18	0	0	0	0
7	0	0	0	0	0
Totals	0.43	0	0	0	0

Table 12: Total Impacts for Permit Term Requiring Compensatory Mitigation

RMU	*Early successional perennial riparian (acres)*	*Mid-successional willow (acres)*	*Early to mid-successional cottonwood forest (trees)*	*Large Stature Willows (trees)*	*Low stature herbaceous wetland (acres)*
1	11.24	3.48	0	0	0
2	0.26	0.27	0	0	0
3	3.39	2.2	0	0	0
4	12.98	3.25	7	1	0
5	8.9	1.9	29	18	0
6	15.91	4.6	0	6	0
7	0	0	0	0	0
Totals	52.70	15.69	36	25	0

3.3.2 Arundo Treatment as Compensatory Mitigation

The targeted invasive species for removal is arundo. Herbicide application is the preferred method of treatment for higher eradication rates. Herbicide application is most effective on green leafy plants, before they go dormant. Herbicide application was utilized during this maintenance season primarily in areas that were previously mowed. Any dense stands or browning arundo was treated through mowing and mulching, as necessary. Mitigation is performed preferentially by RMU or throughout the Program Area as needed. The following tables document the new and retreated arundo areas for the past maintenance season. Enough arundo areas have been identified and received initial treatment to account for all SMP impacts to date.

Table 13: New Arundo Treatment by RMU

	New Treatment				*Retreatment*			
	Mowing		*Herbicide*		*Mowing*		*Herbicide*	
RMU	*inside MAs (acres)*	*outside MAs (acres)*	*inside MAs (acres)*	*outside MAs (acres)*	*inside MAs (acres)*	*outside MAs (acres)*	*inside MAs (acres)*	*outside MAs (acres)*
1	0	0	0	0	0	0	0	0
2	0	0	0	0	<0.1	0	0	0
3	0	0	0	0	2.6	0	0	2.6
4	0	0	0	0	9.8	28.3*	41.2	48.8
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0.9	0	0	3.5
7	0	0	0	0	0	0	0	0
Totals	0	0	0	0	13.3	28.3	41.2	54.9

*Retreatment of 1.8 ac near the upstream tie-in of 4.26 where access had been blocked by heavy debris flows in 2017, now made accessible by maintenance equipment. Initial treatment of this area occurred in 2016.

3.3.3 Native Tree Species Plantings

No trees that would require mitigation were removed during the 2021 work season, and no additional trees are required to be planted in 2021 as mitigation for 2020 impacts. Two tree planting projects were proposed for mitigating anticipated tree removal however, no sensitive tree removal occurred therefore not warranting required mitigation. The third planting project was intended to repair tree damage caused by River fire debris flows. However, the responsible party later determined that the proposed planting area was not fit for long-term tree survivorship because of the soil's low organic material content and likely future inundation events. The responsible party has agreed to continue working with the permitee on tree mitigation efforts.

Supplemental planting for previous years' impacts occurred to address low survivorship of planted trees. The success of native tree species plantings continues to be monitored and a replanting report in 2021 recorded the survival and status of trees planted. The report recorded the number of trees surviving and the remedial action needed to address tree cuttings that did not survive from subsequent years'. A total of 40 cottonwood cuttings were planted in December 2019 to address trees that did not survive in RMU 4 per above. Approximately 30 of the 40 cottonwood cuttings showed signs of initial sprouting and rooting. These cuttings were also regularly irrigated to ensure survivorship during dry summer months. An update on the RMU 5 and 6 tree planting area was reported including a record of survival and status of trees planted. Approximately 22 of the 80 trees from the planting conducted have survived. The responsible party intends to apply to plant trees in the 2022 Work Season. All tree planting areas and activities are monitored closely and updates will be provided as necessary.

Table 14: New Tree Plantings by RMU

RMU	*Cottonwoods*	*Willows*	*Other Native Trees*
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
Totals	0	0	0

3.3.4 Status of Compensatory Mitigation

The mitigation activities began in year two of the program and will continue until all success criteria is achieved. The areas are being tracked individually but are reported cumulatively in order to determine programmatic compliance. The tables below document the total treatment areas and compares it to

the compensatory mitigation requirement ratios in Table 10. No additional initial arundo removal is required for the impacts to date.

Table 15: Status of Required Arundo as Compensatory Mitigation

RMU	*Total ESPR Impacts (acres)*	*Total Arundo treated inside MAs (acres)**	*Total MSW Impacts (acres)*	*Total Arundo Treatment Required Outside MAs (acres)*	*Total Arundo treated outside MAs (acres)*	*Additional Arundo Removal Required (acres)*
1-7	52.70	62.8	15.69	60.6	83.2	0

*Arundo treatment inside MAs is counted on an acre-for-acre basis for early successional perennial riparian impacts only.

Table 16: Status of Required Tree Planting Mitigation by RMU

RMU	*Number of non-willow trees ≥ 2" dbh removed*	*Number of willows ≥ 6" dbh removed*	*Total Number of Trees Required to Plant*	*Number of Trees Planted, species*	*Trees Required – Trees Planted*
1	0	0	0	0	-
2	0	0	0	0	-
3	0	0	0	0	-
4	7	1	23	90, cottonwoods 700, willows	-
5	29	18	123	275, cottonwoods	-
6	0	6	12	0	-
7	0	0	0	0	-
Totals	**36**	**25**	**158**	**365 cottonwoods 700 willows**	**0**

3.3.5 Success Criteria

Mitigation sites are monitored annually. The success of the invasive plant removal will be reported by area as they reach the targeted percent cover or after five years from initial removal, whichever occurs sooner. Due to extended drought conditions, there are no sites that are nearing the success criteria.

4 Program Review

4.1 Impacts to Listed Species

Maintenance activities were designed to avoid direct and indirect impacts to listed species. There were no observations of any federally-listed species during the required pre-maintenance surveys. Biological Monitors performed all necessary inspections before work began each day and were present during maintenance activities. A Service-approved biologist was on-site as necessary and on-call daily.

4.2 Impacts to Water of the State

Maintenance activities were designed to avoid impacts to waters of the state by working in dry areas away from the low-flow channel. The Salinas River had significant flows during the previous winter season and conservation releases from the upstream reservoirs continued through the majority of the maintenance season. Therefore, there was water present in the low-flow channel at the beginning of the maintenance season. Inspections of each maintenance site and the adjacent area occurred during the pre-maintenance surveys when flows were reduced enough to show tie-in locations and the adjacent low-flow channel. There was no indication or erosion or other water quality issues at the sites after the maintenance season. Additional inspections will occur during the next maintenance season.

4.3 Project Design Changes

All work was in compliance with the permit applications, permit terms and conditions, and annual authorizations. Less work was performed than proposed in the approved Work Plan.

4.4 Effectiveness Monitoring

Topographic surveys were conducted down the centerline of select maintenance areas both pre- and post-maintenance activities. This data is representative of each RMU and will be used over time to determine how the maintenance areas are functioning and to assess the sediment transport characteristics of the maintenance areas. The resultant longitudinal profiles are available in Section 7 of this report.

4.5 Adaptive Management

Adaptive management may be necessary if significant flows (25,450 cfs or greater at the Spreckels stream gage) occur during the previous rainy season. Modifications may need to be made to the location of maintenance areas if flood events cause the designated locations to shift or re-align, or if shifts in the location or alignment of the Salinas River low-flow channel indicate a need to modify a designated maintenance area. These needs should be evaluated near the end of the rainy season in order to be prepared for the following year's maintenance. At this time, there are no adaptive management sites identified.

During the winter of 2021, none of the Maintenance Areas were activated and the flows were significantly less than the 5-year flow. The peak flows that have occurred at each gaging station by the time of this report are as follows:

- Bradley (USGS 11150500) 780 cfs on 12/20/2021

- Soledad (USGS 11151700) Not recorded
- Chualar (USGS 11152300) 1,090 cfs on 12/26/2021
- Spreckels (USGS 11152500) 569 cfs on 12/29/2021
  (all data is still provisional at this time)

(all data is still provisional at this time)

4.6 River Morphology Monitoring

Monitoring of the Salinas River's morphology is required after all flood events equal to or exceeding 42,800 cfs (10-year event) at the Spreckels stream gage. Specifically, visual inspections must occur of the low-flow channel and all designated maintenance areas to determine if any channel movement due to fluvial processes has occurred. These inspections would occur after flood waters have receded and the low-flow channel and maintenance areas are visible. The past winter did not produce the targeted flow at the Spreckels gage and therefore the inspections were not necessary.

4.7 Program Reassessment Reporting

Reassessment Reporting, necessary to evaluate the performance of the Program, was performed last year May 31, 2021. For this purpose, the MCWRA has performed ongoing data collection and monitoring for years 2016, 2017, 2018, 2019, and 2020. * The information was used to assess the implementation and effectiveness of the project conducted in the first five-years. The information provided with the submittal included:

a) A summary of the maintenance activities, impacts, and mitigation activities conducted in the first five-years of the Project implementation; and
b) A summary of all monitoring information collected, as well as a detailed description and results of all analysis required, in accordance with Special Condition H (Inspections and Monitoring).

The maintenance activities, impacts, and mitigation activities completed in the first five:

In Years 1 – 5, maintenance activities have included vegetation removal and sediment management in RMU's 1-6. On average each year the participation in the SMP was approximately 21 MAs and 1 selective treatment area. A total of 31 out of 123 secondary channel areas, or MAs, have participated in the Program for one or more years during these first five years. A total of 1 out of 3 tributaries have participated in the Program for one or more years during the first five years.

Vegetation maintenance activities have occurred in a total of 31 secondary channels and 1 tributary during the first five years. These MAs include: 1.02, 1.03, 1.06, 1.07, 1.08, 1.25, 2.05, 2.06, 3.16 (a and b), 3.17, 3.18, 3.19, 3.20, 4.17, 4.18, 4.22, 4.23, 4.24, 4.25, 4.26, 5.03, 5.08, 5.09 (and 5.09b), 6.06, 6.07, 6.08, 6.09, 6.10, 6.11, and 6.12. The five-year total of initial vegetation removed from these MAs is 124.4 acres, which includes vegetation initially cleared under the Phase 1 demonstration project (see table 16).

** MCWRA and program partners have continued that same data collection into years 2021 and 2022*

Table 17: Acres if initial vegetation removed over the first five years

RMUs	*Acres removed 2016 (initial)*	*Acres removed 2017 (initial)*	*Acres removed 2018 (initial)*	*Acres removed 2019 (initial)*	*Acres removed 2020 (initial)*	*Acres removed in 2020 (retreat)**	*Cumulative acres of initial removal* (includes retreatment)*
1-7	*70.6*	*22.1*	*2.1*	*21.4*	*6.17*	*118.2*	*124.4*

**Includes vegetation initially cleared under the demo project.*

Sediment disturbance activities occurred in a total of 13 secondary channels and 1 tributary during the first five years. These MAs include: 1.02, 1.03, 1.06, 1.22, 1.38 (San Lorenzo Creek), 3.19, 3.2, 5.08, 5.09 (and 5.09b), 6.06, 6.10, 6.11. The five-year total of sediment removed from the SMP area is 42,863 cubic yards. The five-year total of sediment displaced by grading in the SMP area 36,331 cubic yards.

Table 18. Sediment removal and displacement in SMP area over first five years.

Year	Total Work Area (acres)	*Un-vegetated Area Graded (acres)*	*Volume of Sediment Removal (cy)*	*Volume of Sediment Displaced by Grading (cy)*
2016	35.3	10.5	0	28,435
2017	9.8	5	2,000	7,696
2018	9.6	5.6	25,000	0
2019	5.9	5.6	0	0
2020	6.7	0	8,898	200
Total	**67.5**	**21.1**	**42,863**	**36,331**

In Years 1 – 5, impacts have included the removal of native and non-native vegetation including the removal of 52.27 acres of Early Successional Perennial Riparian (ESPR); 15.69 acres of Mid-Successional Willow (MSW), 36 Early to Mid-Successional Cottonwood forest (trees); and, 25 Large Stature Willow (trees) (Table 17). No acres of low stature herbaceous wetland have been removed.

Table 19. Years 1 - 5 New Impacts Requiring Compensatory Mitigation.

Vegetation Type	Acres removed Demo (initial)	*Acres removed 2016 (initial)*	*Acres removed 2017 (initial*	*Acres removed 2018 (initial)*	*Acres removed 2019 (initial)*	*Acres removed 2020 (initial)*	**Cumulative initial vegetation removal requiring mitigation**
Early successional perennial riparian	22.83	22.1	4.62	0.05	2.02	0.65	**52.27**
Mid-successional willow	5.16	3.5	5.77	0	1.26	0	**15.69**
Early to mid-successional cottonwood forest (trees)	35	1	0	0	0	0	**36**
Large Stature Willows (trees)	25	0	0	0	0	0	**25**
Low stature herbaceous wetland	0	0	0	0	0	0	**0**

Based on work completed during the first five work seasons and the impacts monitored to ESPR, MSW, and various trees, compensatory mitigation is required. A summary of compensatory mitigation has been detailed and discussed in each year's annual report, including the 2021 Annual Report in section 3.3. A summary of mitigation activities is provided below for Program Reassessment purposes.

In Years 1 – 5 the MCWRA, the RCDMC, and Program participants, have implemented compensatory mitigation installation, maintenance, and effectiveness monitoring, as required by law. The MCWRA and the others listed are responsible for the performance of compensatory mitigation for all actual Project impacts. The below is a summary for those compensatory mitigation actions which require inspection and monitoring, and are subject to analysis:

- The Program is implementing all required compensatory mitigation per the *Salinas River Stream Maintenance Program Revised Final EIR,* dated June 2014; the Final Supplemental Attachment; and the Program's 401 Certification.

- The Program is mitigating for EPSR and MSW through the removal of Arundo, and through trees planted, at required ratios.
- The Program is targeting final performed criteria including
    - 5% or less Arundo cover in all Arundo removal areas five years after removal (including Arundo removed within designated MAs and not intended as mitigation for impacts), and,
    - 85% survival of mitigation tree plantings five years after planting

The MCWRA is responsible to monitor compensatory mitigation sites each year for five years following completion of initial removal (Arundo) and initial planting (trees). The monitoring is ongoing and the following information is being collected:

a) Assessment of growth, survival, percent cover, general health and stature, and progress toward achieving final performance criteria, and,
b) A determination of whether remedial actions are needed to achieve final performance criteria.

The goal of monitoring is to provide a detailed description and the results of all analysis. This can be provided five years after initial removal and initial planting.

Monitoring of all Arundo removal areas started in Year 2018. The start to begin monitoring was delayed two years because of unfavorable drought conditions which didn't allow for the use of chemical control on the Arundo removal areas. If Arundo is stressed and browning due to drought, then emergence is impacted, and spray application is ineffective. The observed Arundo removal areas and the associated stands were in this condition during the years of 2016, and 2017. During this time required chemical control through herbicide treatment could not be performed. Chemical control of Arundo is the only proven method for eradication and two to three years of treatment are generally necessary. Herbicide treatment began in 2018 during mid-summer and fall applications after flowering and before dormancy. This is the best time to kill Arundo stands and protect injury to many native plants. Herbicide treatment is then used after repeated mowing and growth to reduce stands. In the years of 2016 and 2017, non-chemical control through mowing (cutting) and other manual methods (cutting and disking) were used. The mechanical methods employed did begin the process of Arundo removal; however, the reduction of the stands and cover for progress the following year minimal. The MCWRA reported this in the annual reports for 2016 and 2017 and the monitoring began in 2018. It is recommended, an adjustment be made to the final performance criteria timeline (of within five years) to determine achievement of 5% cover by Program year 2023 instead of 2021. The preliminary results of the Arundo removal data collection and monitoring for performance will be previewed and presented in the first report review of the Long-Term Effectiveness Assessment Report. In analysis underway, the Arundo transect study areas do show the Arundo performance on target to meeting the criteria of 5% or less. The data collection, monitoring, and analysis will be presented in further detail in the first report review. The first report review was provided by the MCWRA to accompany the 2020 Annual Report provided on May 31, 2021.

Monitoring of all tree planting sites. The replanting data and status of the sites is provided for an overview of the required planting of trees on sites in RMU 4 (near MA 4.22) and RMU 5 (MA 5.10) (Table 19).

Table 20. Status of required tree plantings in RMUs 4 and 5.

RMU	*Number of non-willow trees ≥ 2" dbh removed*	*Number of willows ≥ 6" dbh removed*	*Total Number of Trees Required to Plant*	*Number of Trees Planted, species*	*Trees Required – Trees Planted*	*Status of site to-date*
4 (near 4.22)	7	1	23	90, cottonwoods 700, willows	-	Damaged by 2021 debris flows and heavy runoff
5 (near 5.10)	29	18	123	275, cottonwoods	-	Intact and performing well
6 (near 5.10)	0	6	12	0	-	Intact and performing well
Totals	**36**	**25**	**158**	**365 cottonwoods 700 willows**	**0**	

There are two tree planting sites with ongoing monitoring. The achievement of the required performance criteria is through targeted through ongoing data collection and monitoring, and the sites are visited multiple times per year. The planting sites of 4.22 and 5.10 were established in 2017 and 2016, respectively and in accordance with the data shown in Table 20. The trees that were planted near 4.22 in 2017 did not survive initially. Then trees were replanted to replace those; however, all those trees were damaged in the winter of 2021 because of River Fire debris flows and heaving runoff in late January 2021. The MCWRA, the RCDMC and the Program participant will be evaluating for a new site and begin replanting at a new site in Work Season 2022. The trees planted near 5.10 has trees planted and they are performing well. The trees planted have survived and the Responsible Party continues to manage weeds around the trees. No remedial actions are needed at this time to achieve final performance criteria. The determination of meeting final performance criteria is not available at this time and therefore the MCWRA will continue monitoring and ensuring maintenance. Updated photographs for 5.10 demonstrate the overall health, vigor, statue, and density achieved for the site re-plantings.

Figure 1. Tree plantings near 5.10 performing well.

Figure 2. Tree plantings near 5.10 performing well.

Table 21: Status of Required Arundo as Compensatory Mitigation for years 1-5

RMU	*Total ESPR Impacts (acres)*	*Total Arundo treated inside MAs (acres)**	*Total MSW Impacts (acres)*	*Total Arundo Treatment Required Outside MAs (acres)*	*Total Arundo treated outside MAs (acres)*	*Additional Arundo Removal Required (acres)*
1-7	52.27	62.8	15.69	60.6	81.4	0

*Arundo treatment inside MAs is counted on an acre-for-acre basis for early successional perennial riparian impacts only. For status of required arundo as compensation mitigation updated to account for 2020 and 2021 work season impacts see table 15.

4.8 Long-Term Effectiveness Assessment Reporting

The MCWRA completed the first Effectiveness Report for the Project and provided it to the Central Coast Water Board on June 30, 2021. The Effectiveness Report includes the analyses, assessments, and other information identified in Special Condition 1.7 and is consistent with the approved Long-Term Effectiveness Assessment Plan dated May 2019. On July 6, 2021, Mr. Cassady, Environmental Scientist, thanked the MCWRA for sending the comprehensive Effectiveness Report and it was noted that despite the limitations of not having data from 5- or 10-year storm events, the report contains useful information and indicates the MCWRA was prepared to collect and analyze data once such events inevitably occur. Additional comments were provided by the Central Coast Water Board mainly focused on the amount of work being performed in the first five years. MCWRA provided responses to those comments and can be seen in the letter from April 26, 2022 *'Long-Term Effectiveness Reporting and continued program activities, Water Quality Certification Number 32716WQ02 for 2016-2025 Salinas River Stream Maintenance Program, Monterey County.'* As of May 26, 2022, the Central Coast Water Board confirmed receipt of those responses and will be contracting the MCWRA on next steps for the Long-Term Effectiveness Assessment Plan's approval.

5 Photos of Typical Work Areas

Pre-maintenance Areas

Vegetation Removal

Arundo Treatment

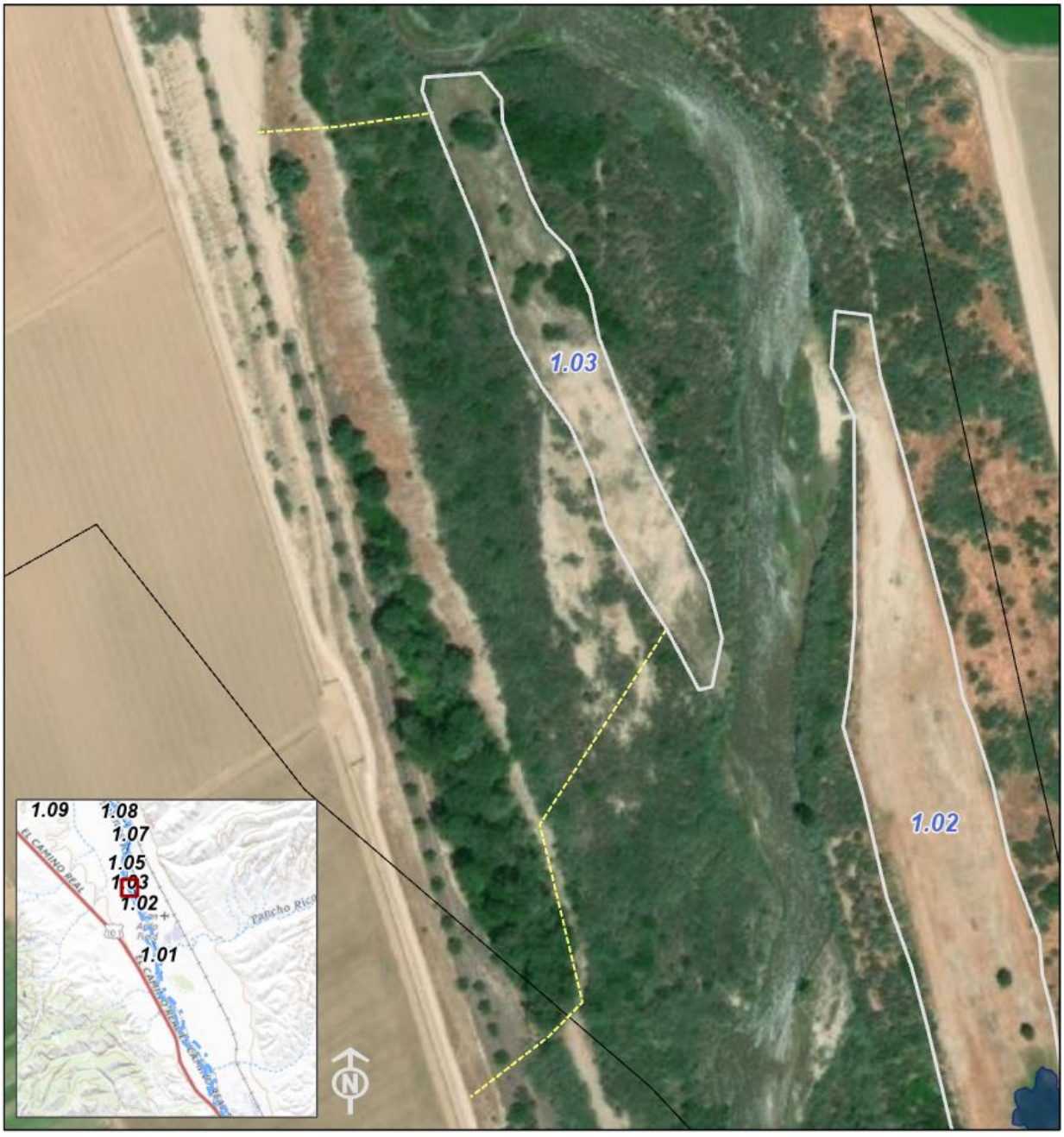
Grading & Sediment Removal

6 Maps of Maintenance Activities

Project Activities
Secondary Channel 1.02, VRF# 0157
Salinas River Stream Maintenance Program

300 150 0 300 600 900 US Feet

Map created February 17, 2022



Wetlands- restricted
Arundo Mitigation 2021
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Secondary Channel 1.03, VRF# 0158
Salinas River Stream Maintenance Program

230 115 0 230 460 690
US Feet

Map created February 17, 2022

RCD MC

Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Secondary Channel 1.06, VRF# 0159
Salinas River Stream Maintenance Program

260 130 0 260 520 780
US Feet

Map created February 17, 2022

Project Activities
Secondary Channel 1.07, VRF# 0160
Salinas River Stream Maintenance Program

140 70 0 140 280 420 US Feet

Map created February 17, 2022

RCDMC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY

Wetlands- restricted
Arundo Mitigation 2021
Sediment Removal
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Secondary Channel 1.38, VRF# 0176
Salinas River Stream Maintenance Program

310 155 0 310 620 930
US Feet

Map created February 17, 2022

Project Activities
Secondary Channel 2.05, VRF# 0161
Salinas River Stream Maintenance Program

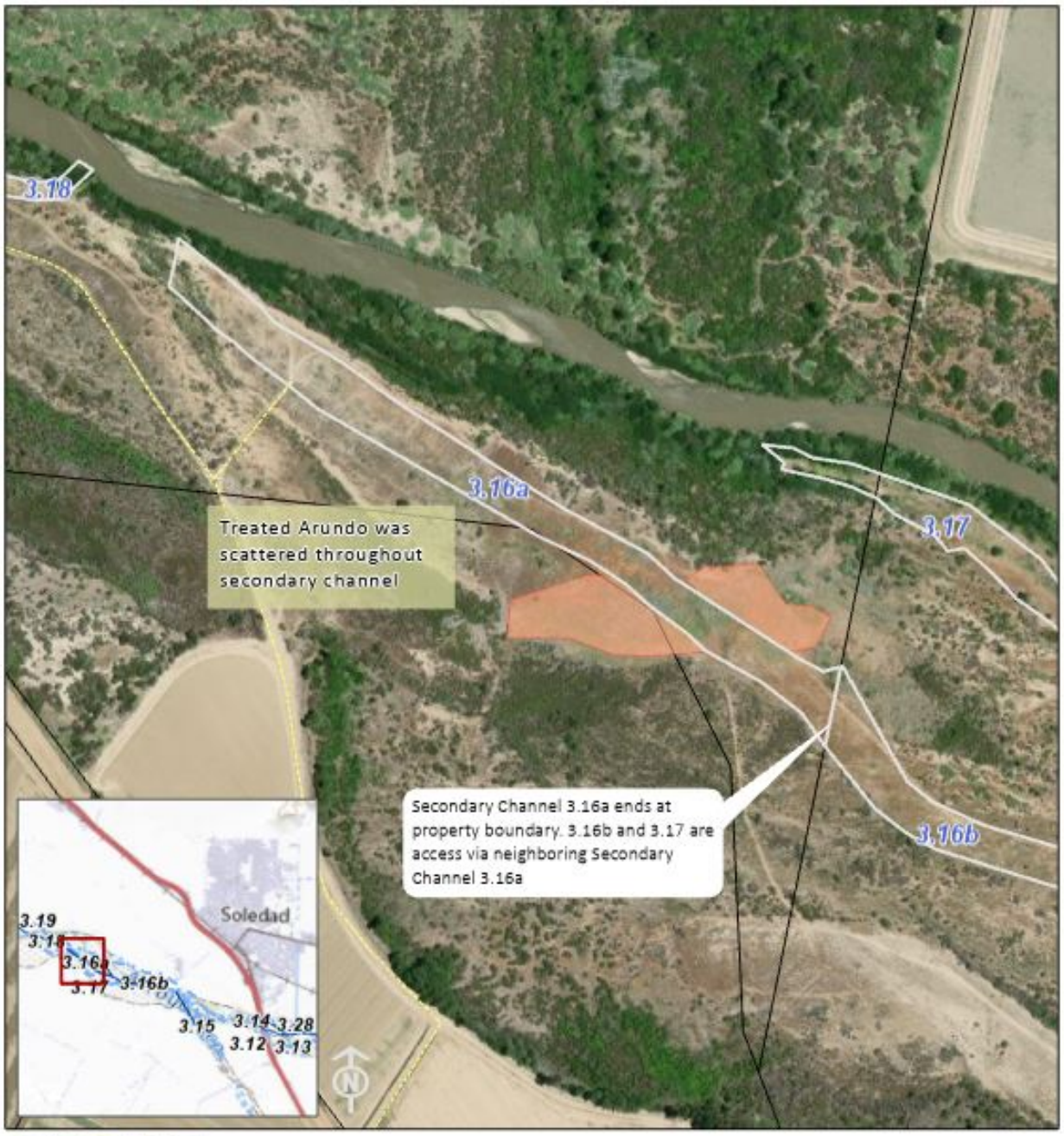
175 87.5 0 175 350 525 US Feet

Map created February 17, 2022

Project Activities
Secondary Channel 2.06, VRF# 0162
Salinas River Stream Maintenance Program

275 137.5 0 275 550 825 US Feet

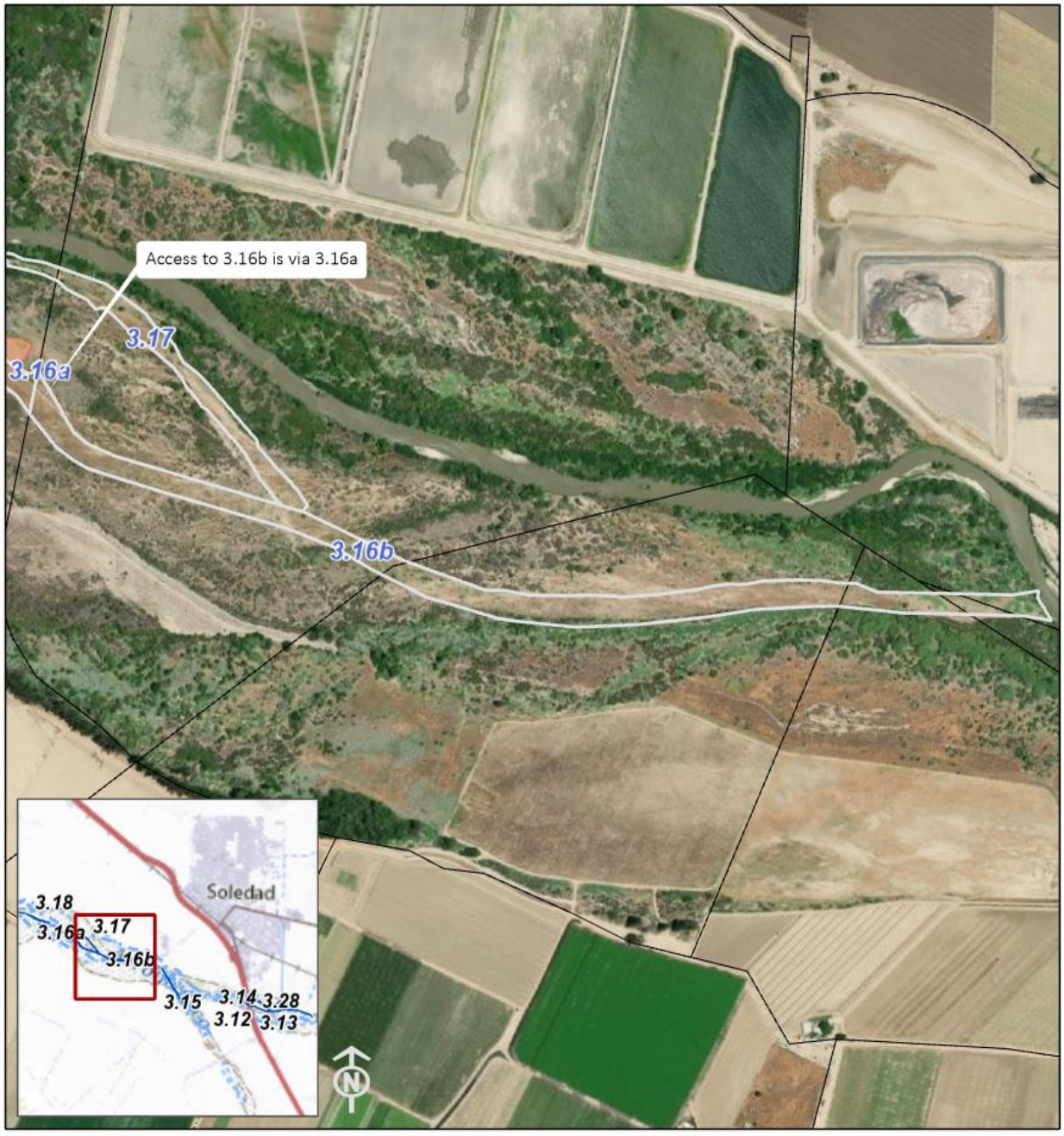
Map created February 17, 2022


3.18
3.16a
3.17
3.16b
Treated Arundo was scattered throughout secondary channel
Secondary Channel 3.16a ends at property boundary. 3.16b and 3.17 are access via neighboring Secondary Channel 3.16a
Soledad
3.19
3.18
3.16a
3.17
3.16b
3.15
3.14
3.28
3.12
3.13
N
RCD MC
Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area
Project Activities
Secondary Channel 3.16a, VRF# 0148 and 0163
Salinas River Stream Maintenance Program
350 175 0 350 700 1,050
US Feet
Map created February 17, 2022

Project Activities
Mitigation Area 3.16a, VRF# 0147 and 0178
Salinas River Stream Maintenance Program

130 65 0 130 260 390 US Feet

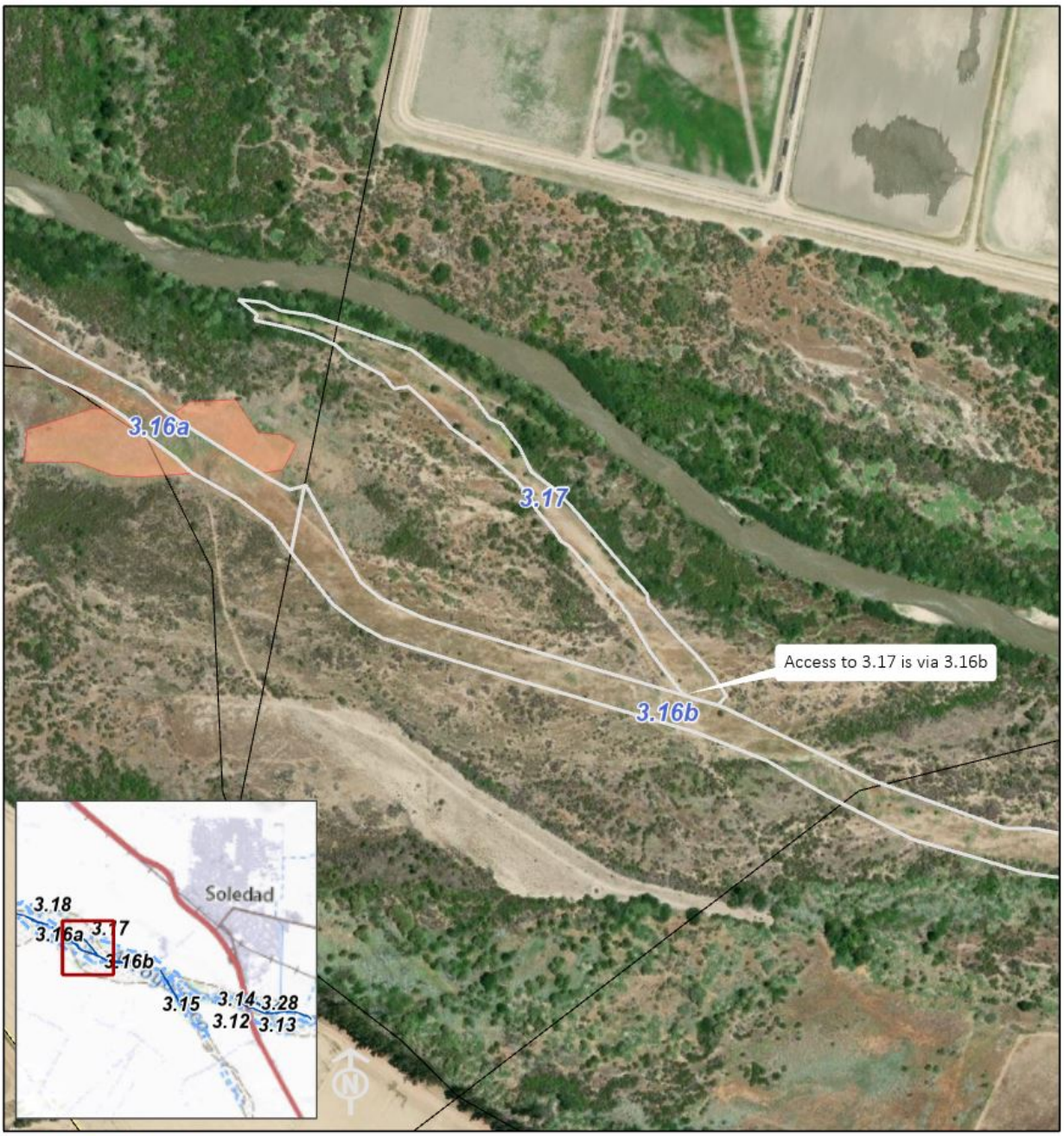
Map created February 17, 2022



Project Activities
Secondary Channel 3.16b, VRF# 0164
Salinas River Stream Maintenance Program

660 330 0 660 1,320 1,980
US Feet

Map created February 17, 2022



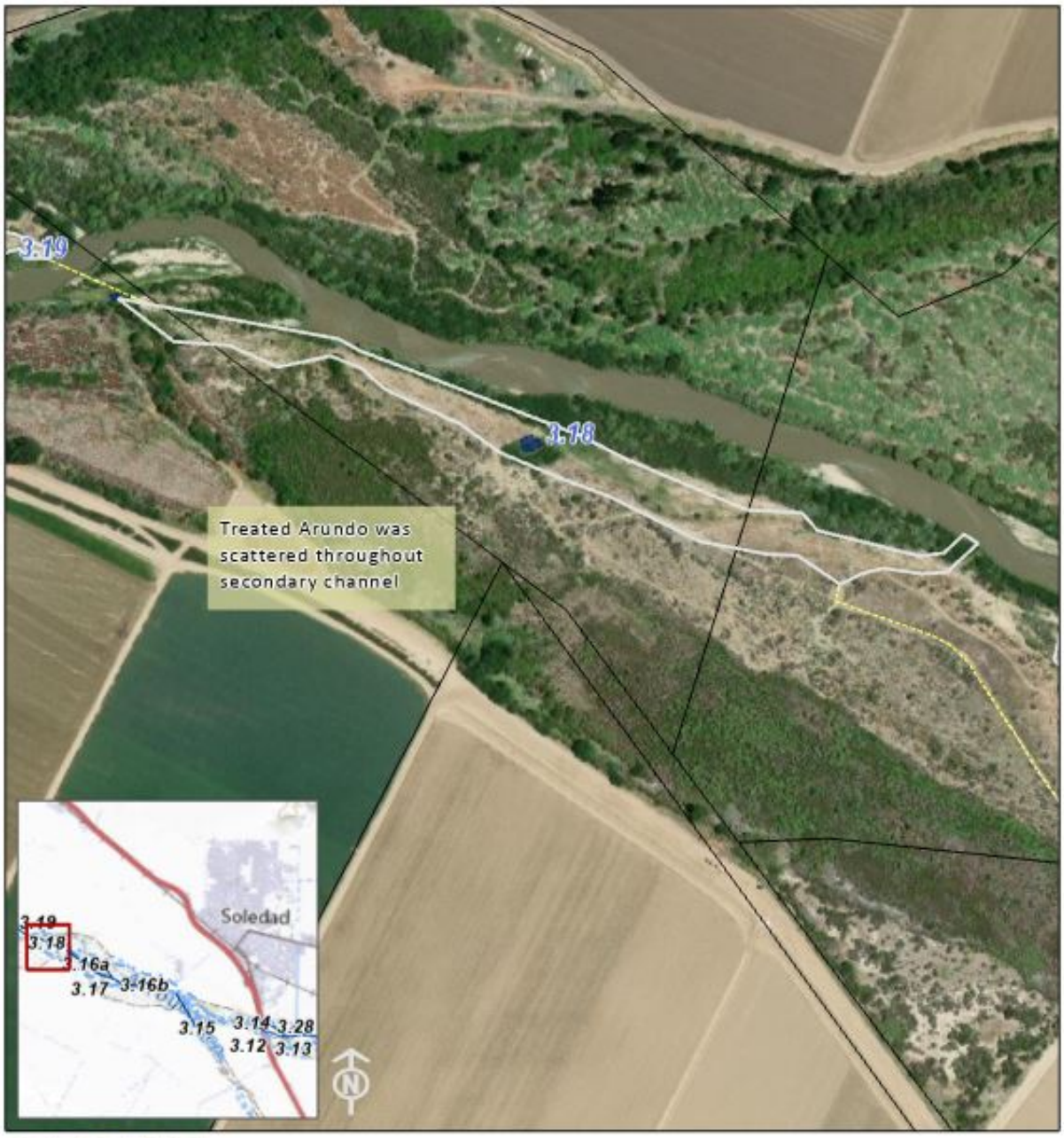
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY

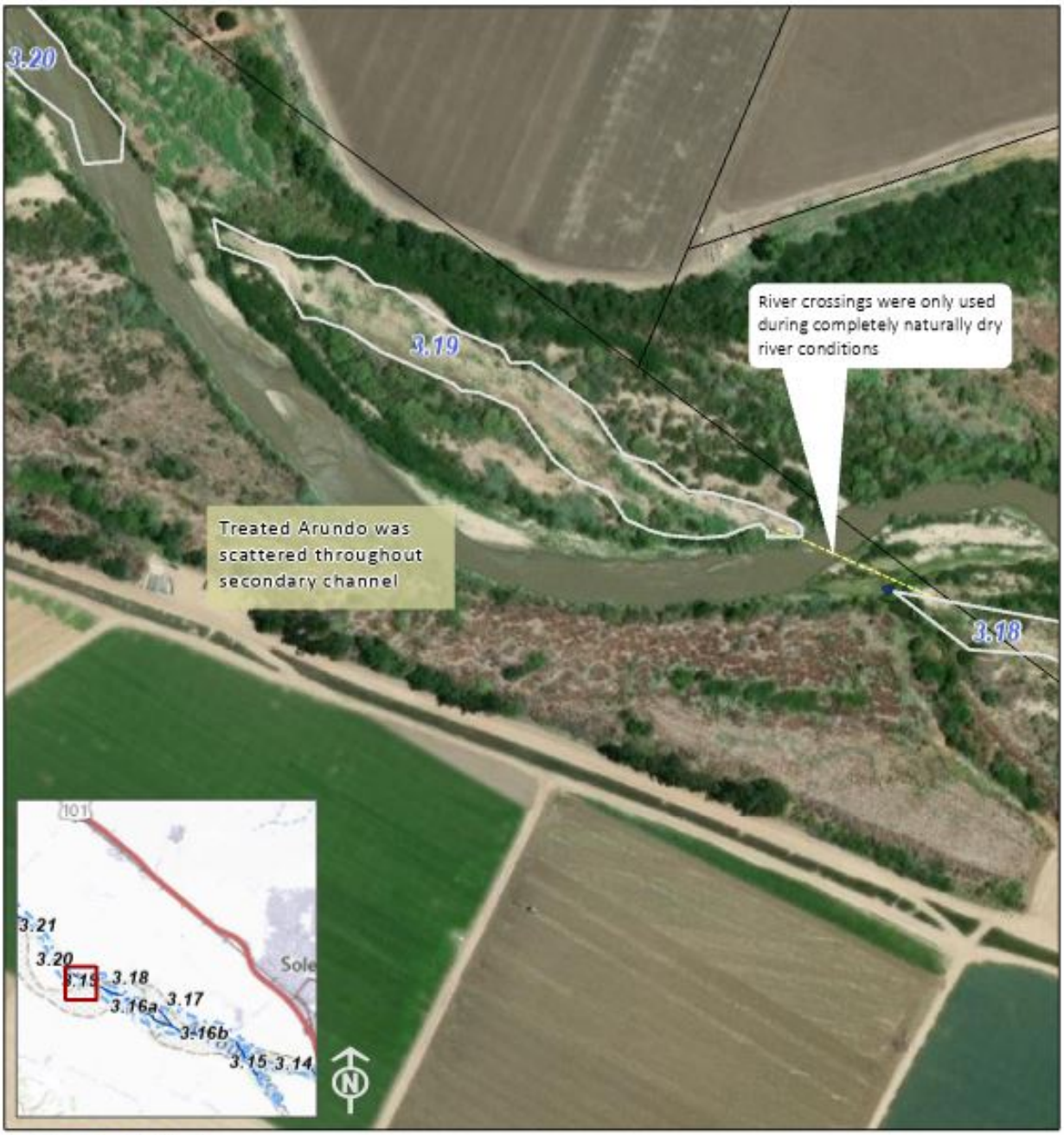
Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Secondary Channel 3.17, VRF# 0165
Salinas River Stream Maintenance Program

420 210 0 420 840 1,260
US Feet

Map created February 17, 2022


3.19
3.18
Treated Arundo was scattered throughout secondary channel
Soledad
3.19
3.18
3.16a
3.17
3.16b
3.15
3.14
3.28
3.12
3.13
N
RCD MC
Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area
Project Activities
Secondary Channel 3.18, VRF# 0149 and 0166
Salinas River Stream Maintenance Program
350 175 0 350 700 1,050
US Feet
Map created February 17, 2022



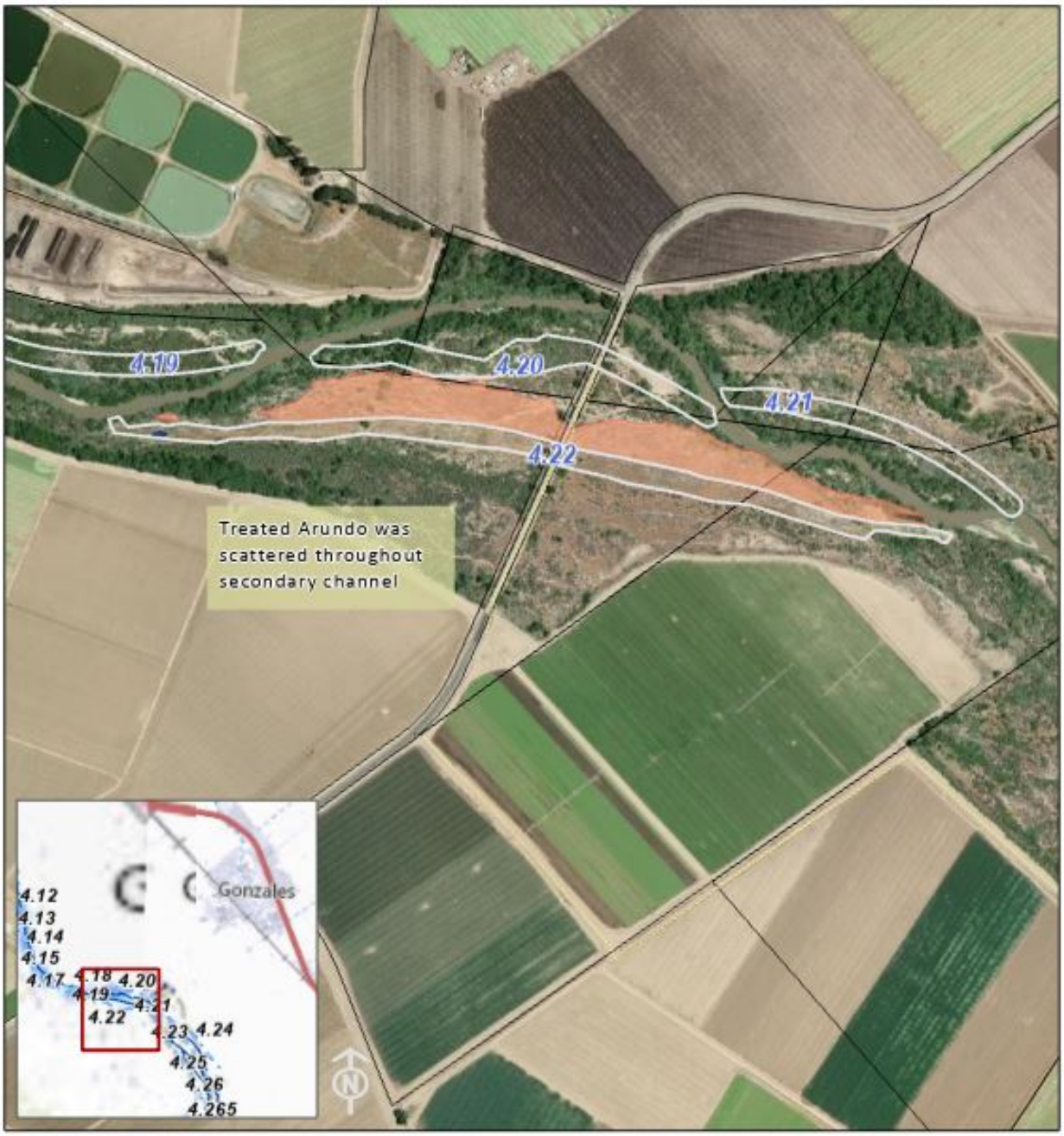
RCD MC

Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Secondary Channel 3.19, VRF# 0167
Salinas River Stream Maintenance Program

260 130 0 260 520 780 US Feet

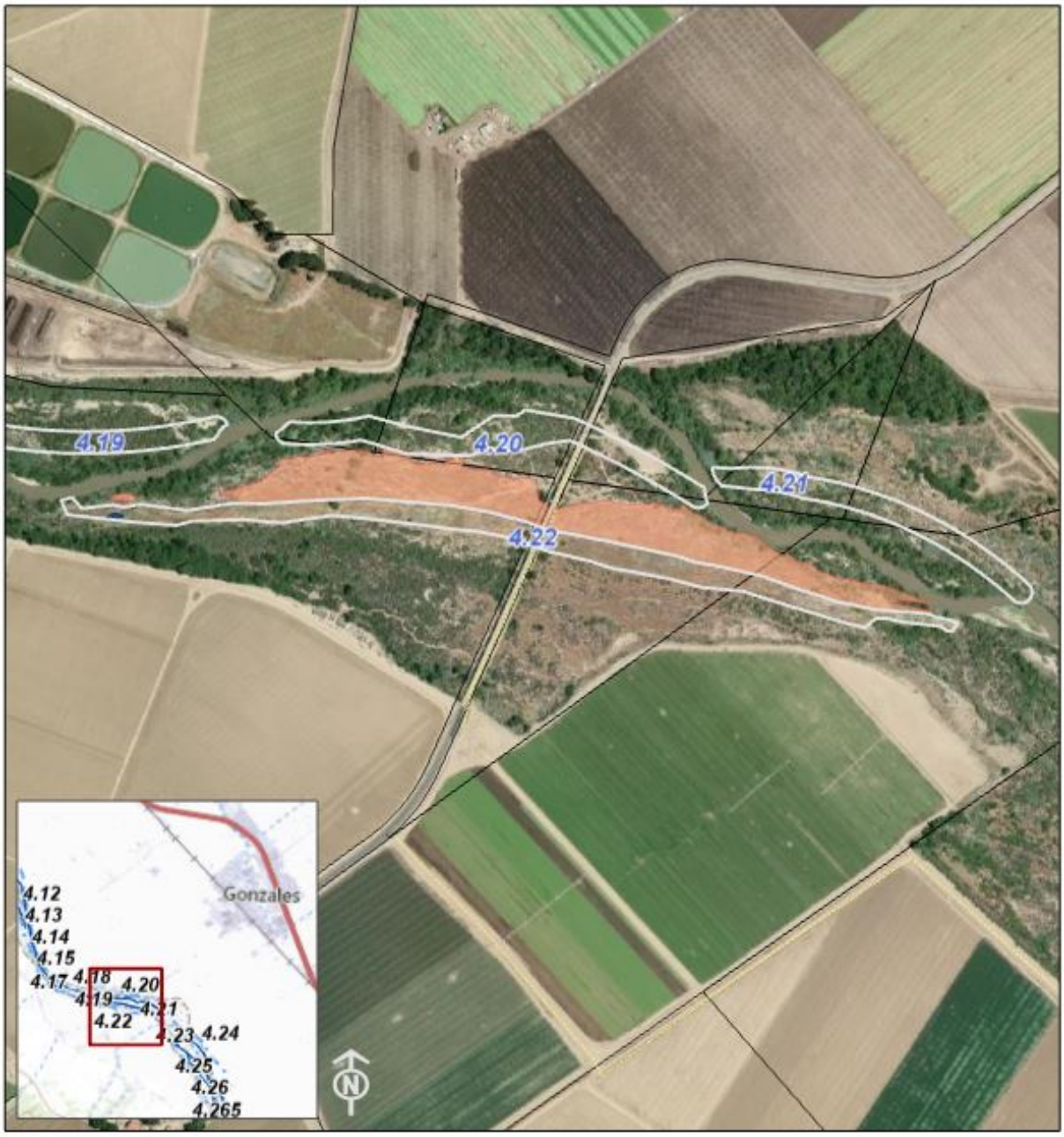
Map created February 17, 2022



Project Activities
Secondary Channel 4.22, VRF# 0151 and 0168
Salinas River Stream Maintenance Program

640 320 0 640 1,280 1,920 US Feet

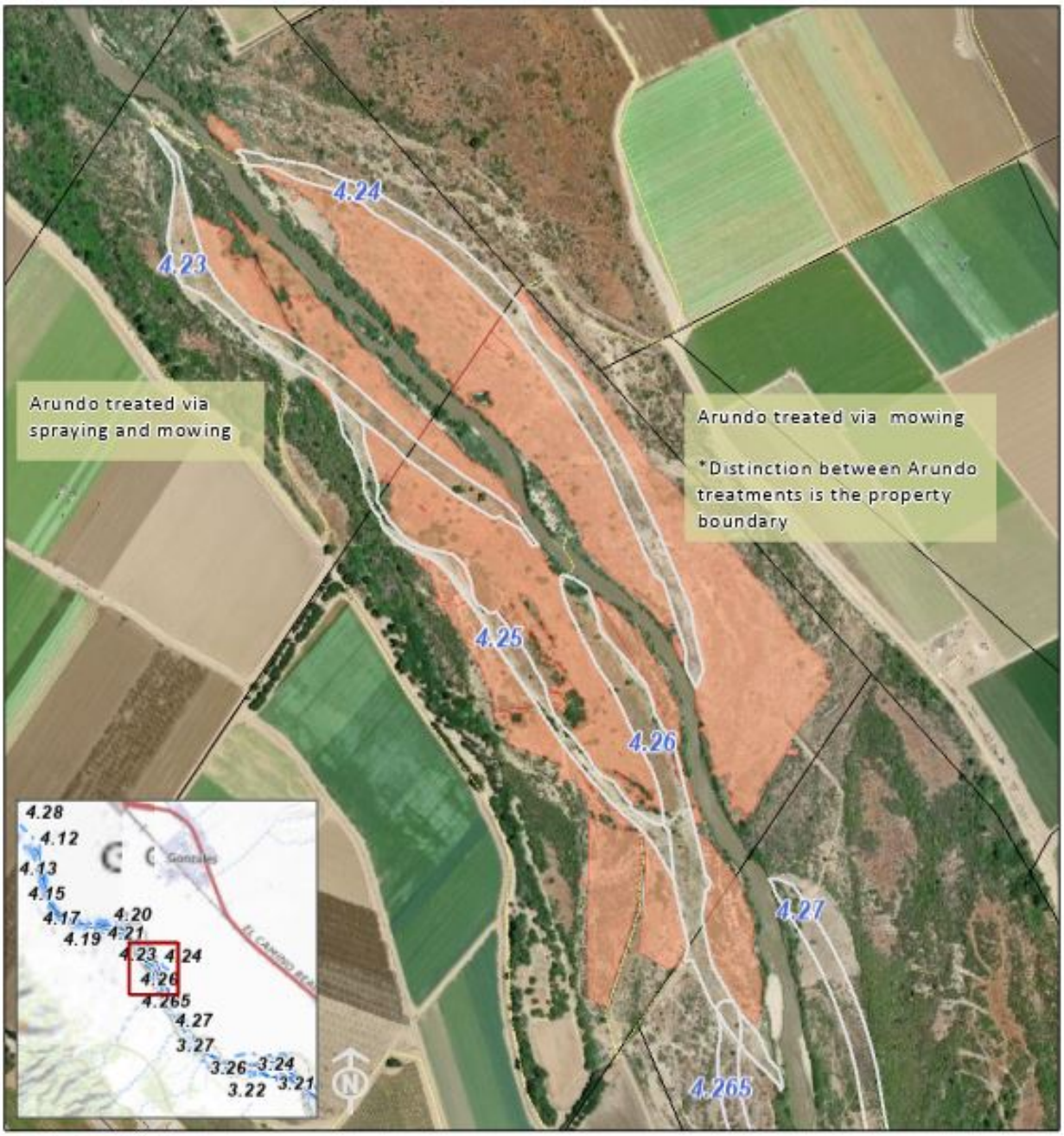
Map created February 17, 2022

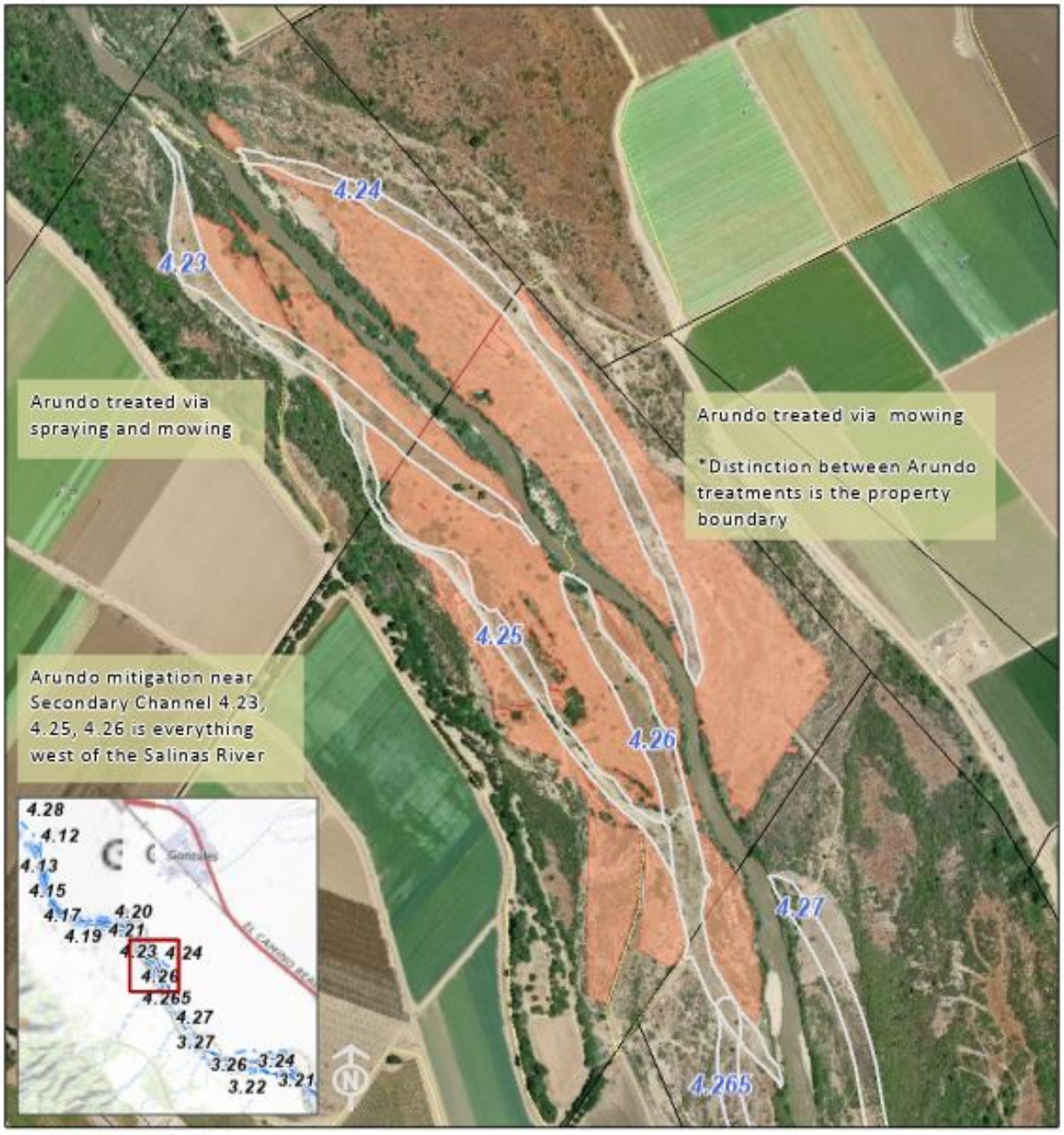


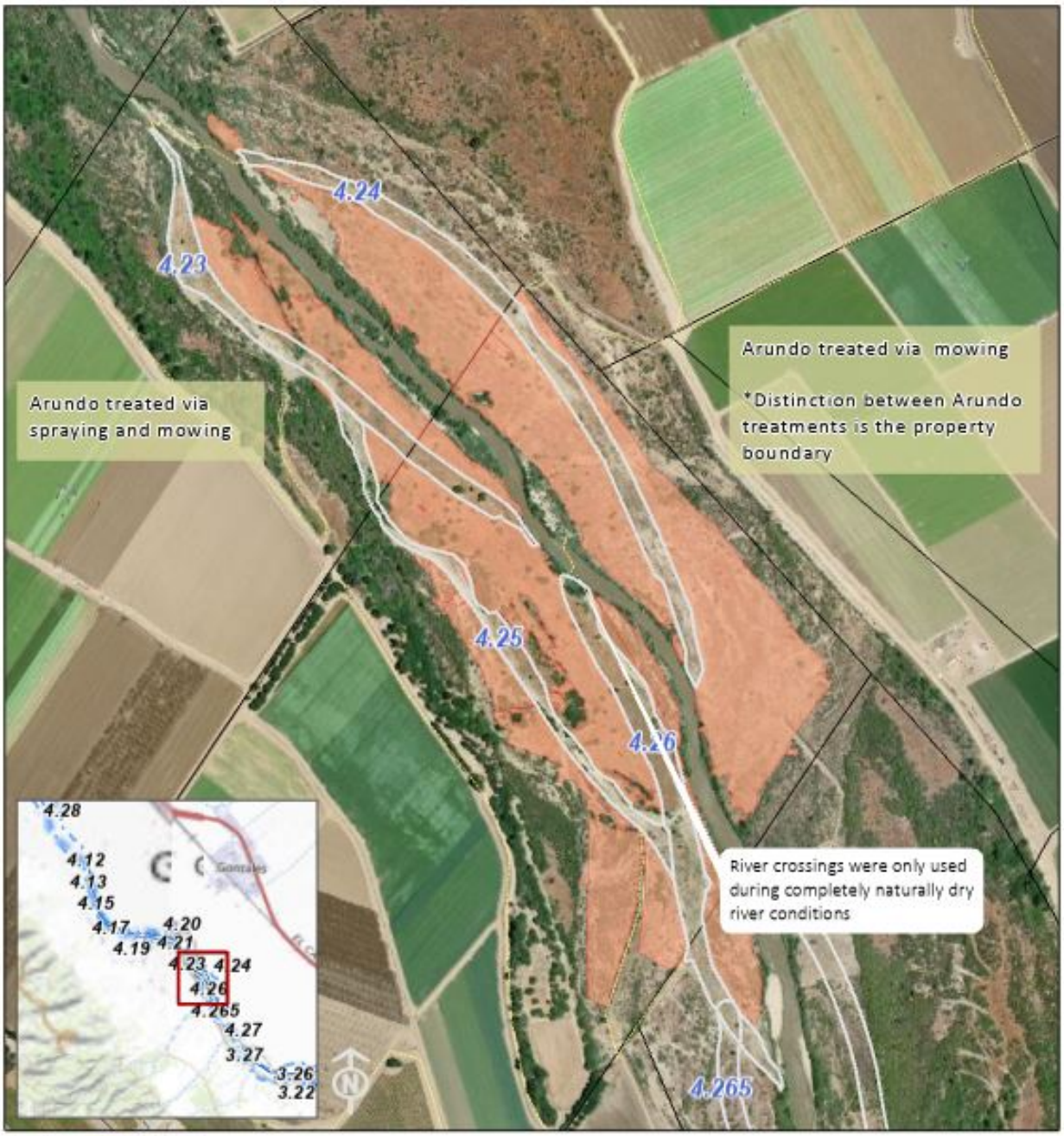
Project Activities
Mitigation Area 4.22, VRF# 0150 and 0179
Salinas River Stream Maintenance Program

600 300 0 600 1,200 1,800 US Feet

Map created February 17, 2022


4.24
4.23
Arundo treated via spraying and mowing
Arundo treated via mowing
*Distinction between Arundo treatments is the property boundary
4.25
4.26
4.27
4.265
4.28
4.12
4.13
4.15
4.17
4.20
4.19
4.21
4.23
4.24
4.26
4.265
4.27
3.27
3.26
3.24
3.22
3.21
N
RCD MC
Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area
Project Activities
Secondary Channels 4.23, 4.25 and 4.26
VRF# 0153 and 0169
Salinas River Stream Maintenance Program
640 320 0 640 1,280 1,920
US Feet
Map created February 17, 2022

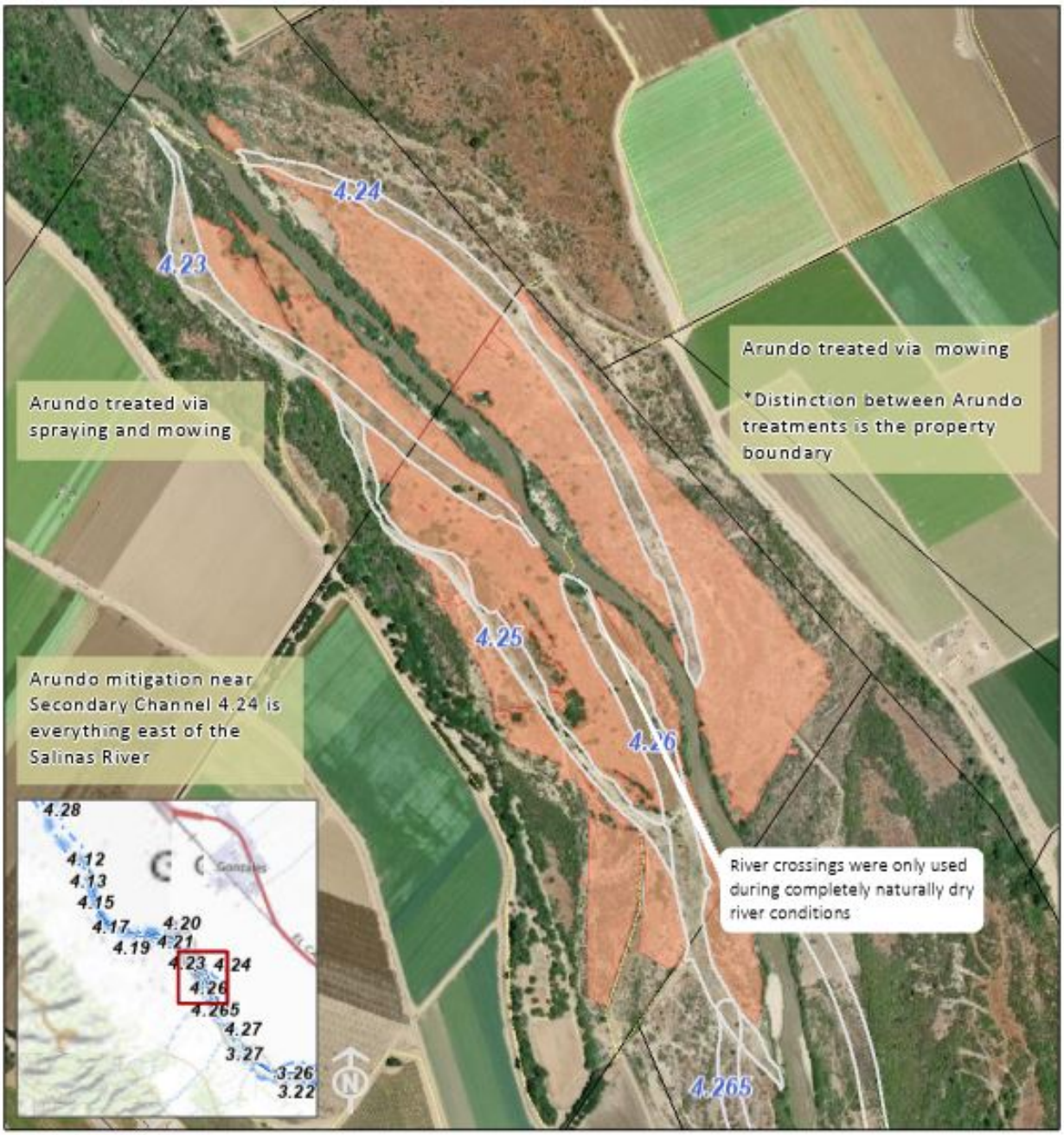

4.24
4.23
Arundo treated via spraying and mowing
Arundo treated via mowing
*Distinction between Arundo treatments is the property boundary
4.25
Arundo mitigation near Secondary Channel 4.23, 4.25, 4.26 is everything west of the Salinas River
4.26
4.27
4.265
4.28
4.12
4.13
4.15
4.17
4.20
4.21
4.19
4.23
4.24
4.26
4.265
4.27
3.27
3.26
3.24
3.22
3.21
N
RCD
RMC
Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area
Project Activities
Mitigation Area 4.23, 4.25 and 4.26
VRF# 0152 and 0180
Salinas River Stream Maintenance Program
640 320 0 640 1,280 1,920
US Feet
Map created February 17, 2022



Project Activities
Secondary Channel 4.24, VRF# 0155 and 0170
Salinas River Stream Maintenance Program

640 320 0 640 1,280 1,920 US Feet

Map created February 17, 2022



Project Activities
Mitigation Area 4.24, VRF# 0154 and 0181
Salinas River Stream Maintenance Program

640 320 0 640 1,280 1,920
US Feet

Map created February 17, 2022

Project Activities
Secondary Channel 6.07 VRF# 0171
Salinas River Stream Maintenance Program

490 245 0 490 980 1,470 US Feet

Map created February 17, 2022

RCD MC

Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Mitigation Area 6.07 VRF# 0182
Salinas River Stream Maintenance Program

125 62.5 0 125 250 375 US Feet

Map created February 17, 2022

RCD MC

Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Secondary Channel 6.08 VRF# 0172
Salinas River Stream Maintenance Program

490 245 0 490 980 1,470
US Feet

Map created February 17, 2022

RCD MC

Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Secondary Channel 6.09 VRF# 0173
Salinas River Stream Maintenance Program

490 245 0 490 980 1,470
US Feet

Map created February 17, 2022

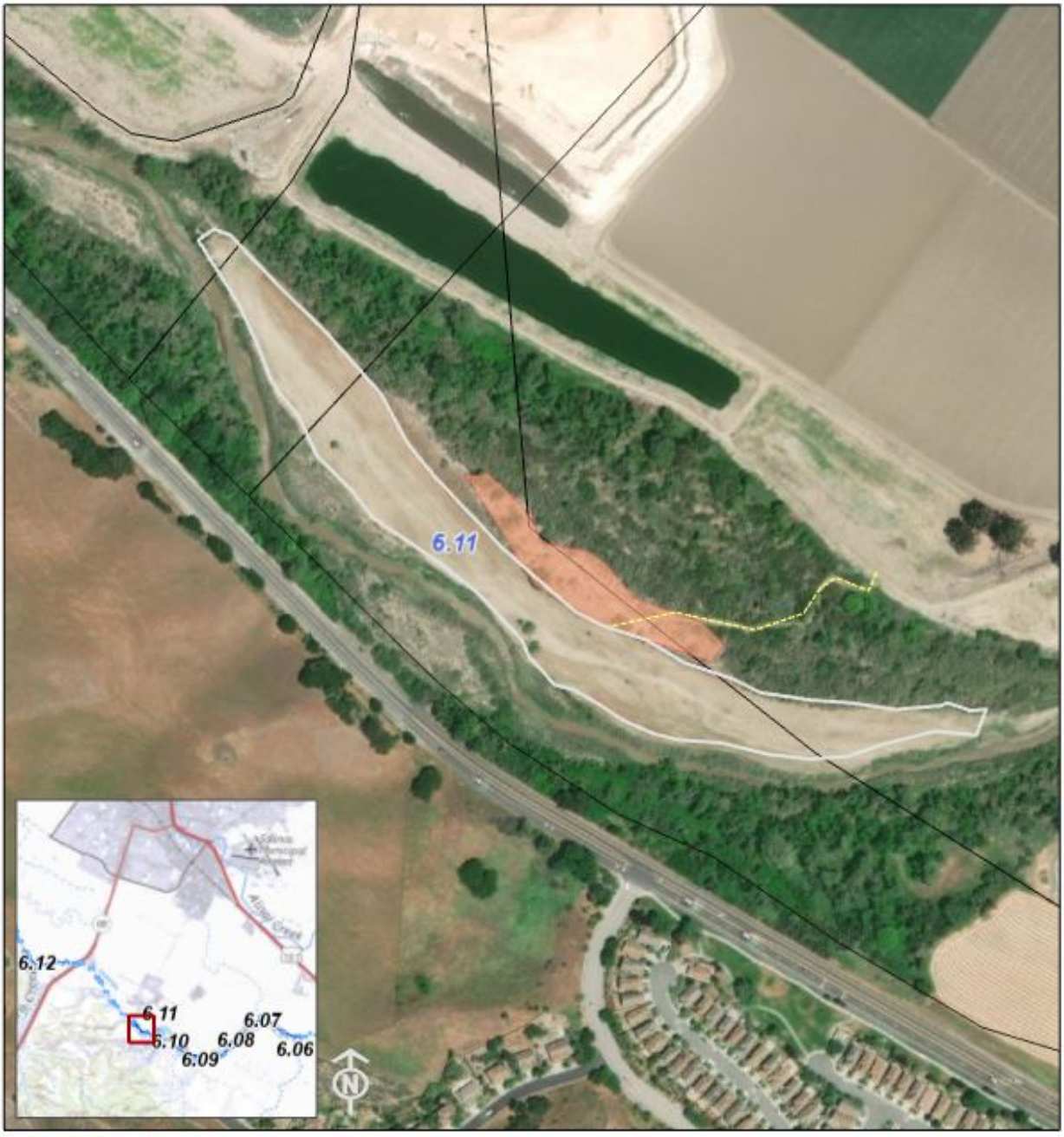
RCD MC

Wetlands- restricted
Arundo mitigation- retreament
Access Routes
Parcel boundary
Maintenance Area

Project Activities
Secondary Channel 6.10 VRF# 0174
Salinas River Stream Maintenance Program

325 162.5 0 325 650 975 US Feet

Map created February 17, 2022



Project Activities
Secondary Channel 6.11 VRF# 0175
Salinas River Stream Maintenance Program

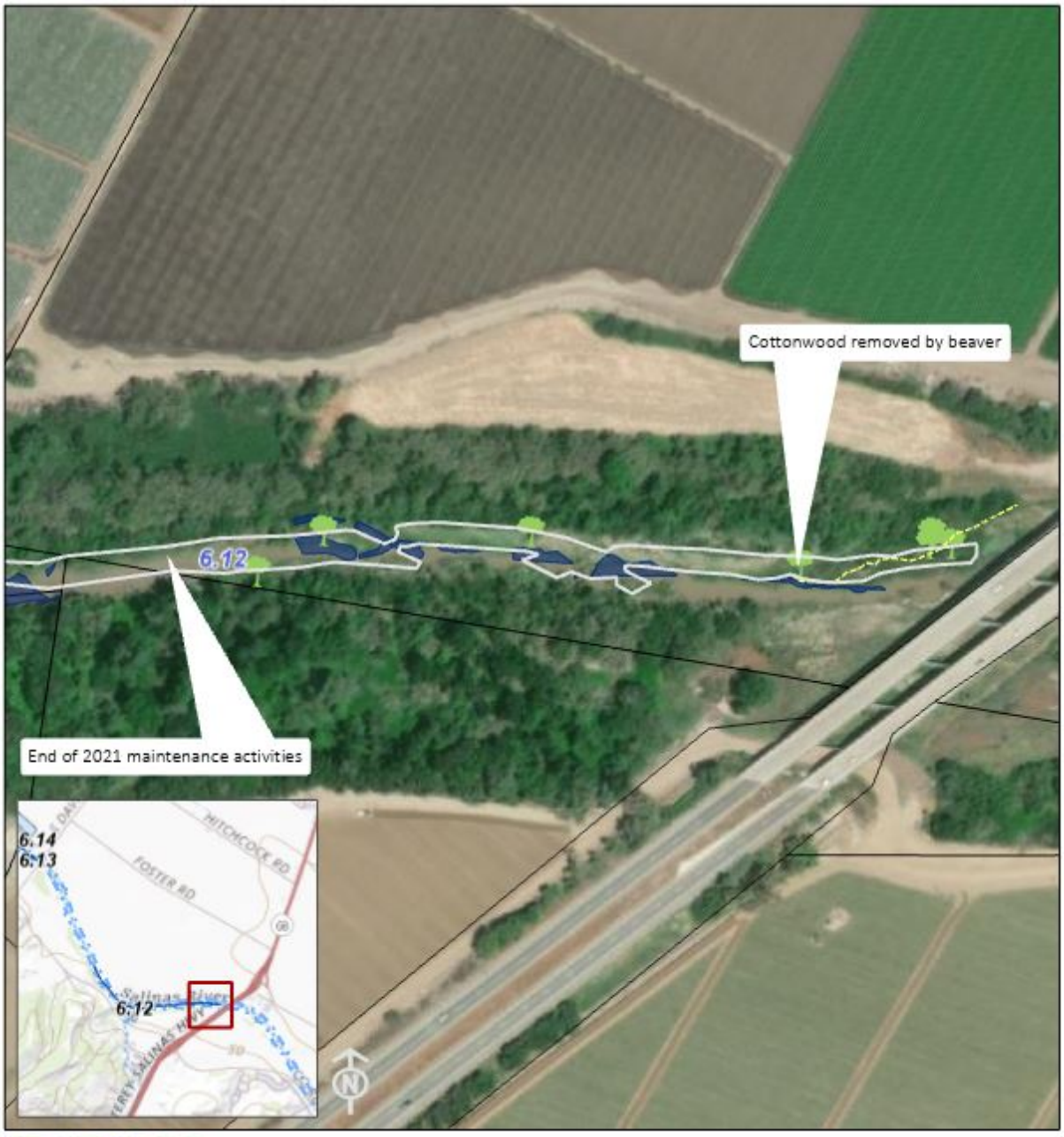
325 162.5 0 325 650 975 US Feet

Map created February 17, 2022

Project Activities
Mitigation Area 6.11 VRF# 0156
Salinas River Stream Maintenance Program

130 65 0 130 260 390 US Feet

Map created February 17, 2022

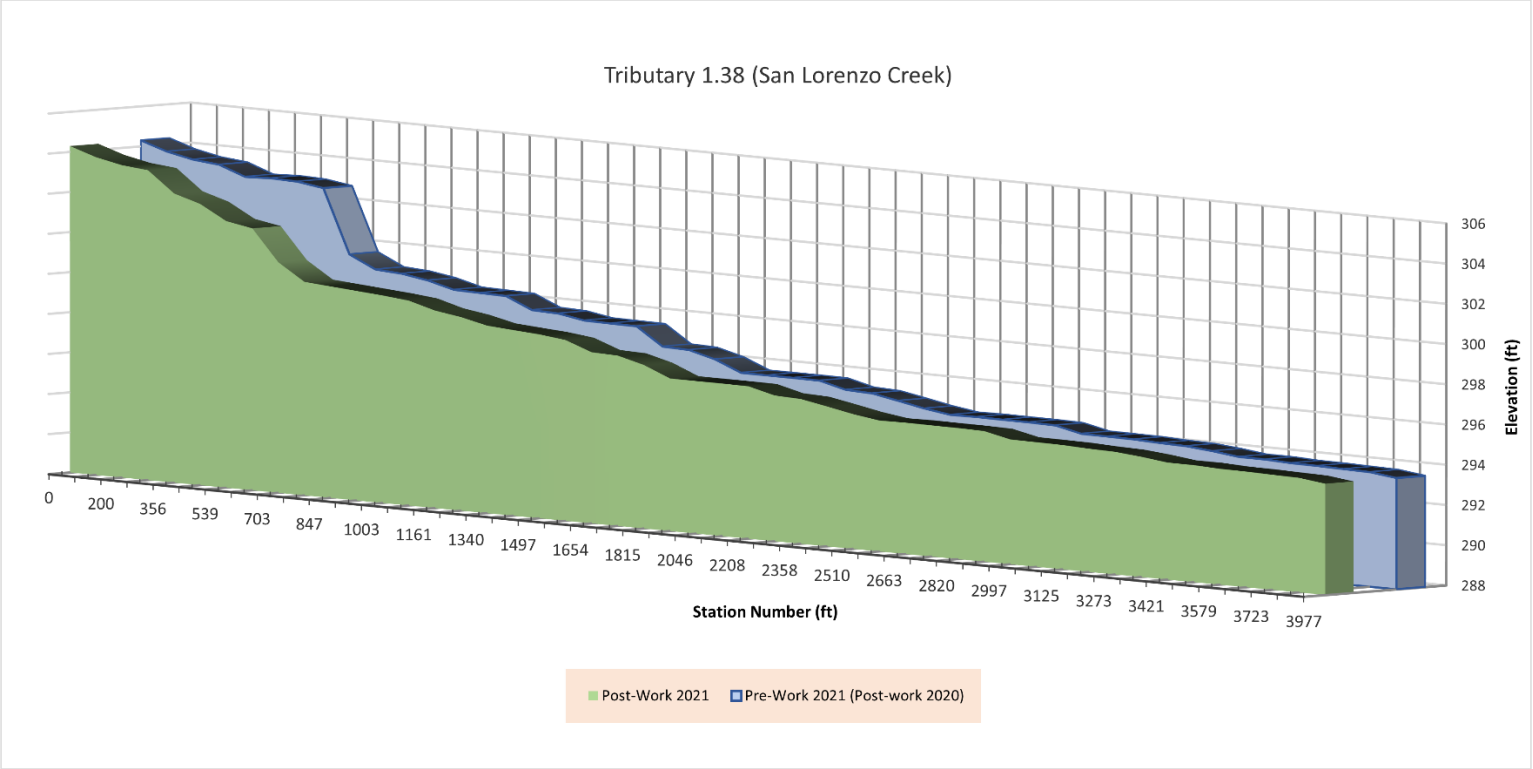


Project Activities
Selective Treatment Area 6.12 VRF# 0177
Salinas River Stream Maintenance Program

225 112.5 0 225 450 675
US Feet

Map created February 17, 2022

7 Longitudinal Profiles



Appendix A: Work Plan Approvals

May 6, 2021

VIA ELECTRONIC MAIL

Jennifer Bodensteiner
Monterey County Water Resources Agency
1441 Schilling Place, North Building
Salinas, CA 93901
Email: bodensteinerjm@co.monterey.ca.us

Dear Ms. Bodensteiner:

RE: APPROVAL OF 2021 EARLY WORK PLAN FOR THE SALINAS RIVER STREAM MAINTENANCE PROGRAM, WATER QUALITY CERTIFICATION NO. 32716WQ02

Thank you for submitting the April 26, 2021 Early Work Plan – 2021 Season (Plan) for the Salinas River Stream Maintenance Program. The Central Coast Water Board approves the proposed activities described in the Plan, provided that all activities are conducted as described in the Plan and as required in Water Quality Certification No. 32716WQ02.

Please contact Mark Cassady at 805-549-3689 or Mark.Cassady@waterboards.ca.gov, or Phil Hammer at 805-549-3882 or Phillip.Hammer@waterboards.ca.gov with any questions.

Sincerely,

Digitally signed by Phillip Hammer
Date: 2021.05.06 16:52:11 -07'00'
Water Boards

for
Matthew T. Keeling
Executive Officer

cc:

Greg Brown
U.S. Army Corps of Engineers
Email: Gregory.G.Brown@usace.army.mil

Bill Stevens
National Oceanic and Atmospheric Administration
Email: William.Stevens@noaa.gov

Linda Connolly
California Department of Fish and Wildlife
Email: Linda.Connolly@wildlife.ca.gov

July 9, 2021

VIA ELECTRONIC MAIL

Jennifer Bodensteiner
Monterey County Water Resources Agency
1441 Schilling Place, North Building
Salinas, CA 93901
Email: bodensteinerjm@co.monterey.ca.us

Dear Ms. Bodensteiner:

RE: APPROVAL OF 2021 FALL WORK PLAN FOR THE SALINAS RIVER STREAM MAINTENANCE PROGRAM, WATER QUALITY CERTIFICATION NO. 32716WQ02

Thank you for submitting the June 25, 2021 Fall Work Plan – 2021 Season (Plan) for the Salinas River Stream Maintenance Program. The Central Coast Water Board approves the proposed activities described in the Plan, provided that all activities are conducted as described in the Plan and as required in Water Quality Certification No. 32716WQ02.

Please contact Mark Cassady at 805-549-3689 or Mark.Cassady@waterboards.ca.gov, or Diane Kukol at 805-542-4637 or Diane.Kukol@waterboards.ca.gov with any questions.

Sincerely,

Diane Kukol
Digitally signed by Diane Kukol
Date: 2021.07.09 16:00:06 -07'00'
Water Boards

for
Matthew T. Keeling
Executive Officer

cc:

Diane Kukol
Central Coast RWQCB
Email: Diane.KukolQwaterboards.ca.gov

Shaunna Murray
Monterey County Water Resources Agency
Email: murraysl@co.monterey.ca.gov

Greg Brown
U.S. Army Corps of Engineers
Email: Gregory.G.Brown@usace.army.mil

Bill Stevens
National Oceanic and Atmospheric Administration
Email: William.Stevens@noaa.gov

Linda Connolly
California Department of Fish and Wildlife
Email: Linda.Connolly@wildlife.ca.gov