Salinas River
Stream Maintenance Program
2020 Work Season

Annual Report
To
United States Army Corps of Engineers
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

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Executive Summary

This report summarizes the annual maintenance activities of the Salinas River Stream Maintenance Program (SMP) for the 2020 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, October 14, 2020 and finished, per an authorized extension, by November 30, 2020. Maintenance activities were performed in 5 of the 7 RMUs with treatment occurring in 23 Maintenance Areas and 1 Selective Treatment Area. A total of 124.4 acres of native and non-native vegetation removal occurred within the Maintenance Areas including 6.17 acres of initial treatment and 118.2 acres of retreatment. Sediment was removed from two Maintenance Areas including one secondary channel and one tributary. As mitigation for program impacts, arundo was removed via herbicide application and/or mowing on 81.4 acres outside secondary channels in RMUs 3, 4, and 6, including 4.17 acres of initial treatment and 120.2 acres of retreatment. Bar ripping was not conducted as part of this year's maintenance activities. No new tree planting projects are required for 2020 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 116 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, 2020 and July 17, 2020 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 September 15, 2020.

1.4.2 State of California Regional Water Quality Control Board

The RWQCB approved the early work plan on May 5, 2020 and the regular season work plan on July 30, 2020. 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 the 29 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.

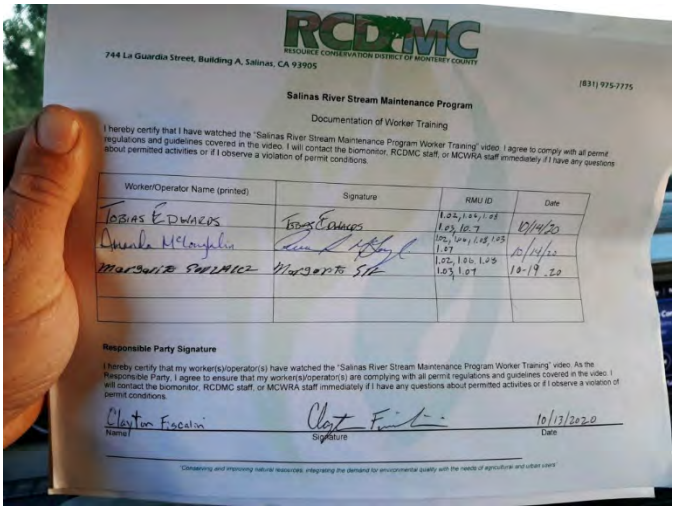
2.1 Training

Following Monterey County COVID-19 regulations there were no in-person trainings for the 2020 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
Tobias Edwards	Tobias Edwards	1.02, 1.04, 1.05 1.03, 10.7	10/14/20
Amanda McLaughlin		102, 104, 1.05, 103 1.07	10/14/20
Margarita Salmeron	Margarita Sal	1.02, 1.04, 1.05 1.03, 1.07	10-19-20

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.

Clayton Fiscalini — Name
Clayton Fiscalini — Signature
10/13/2020 — Date

"Conserving and improving natural resources, integrating the demand for environmental quality 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 will use the same site access each time and so 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 bird surveys were conducted since work did not take place before 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: 116 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. Nine potential bat roosts in dead trees were identified (bat presence not confirmed). Since project activity only occurred October 15th – November 30th, there were 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 2020 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 Woodrat Nest in Work Area	Active Woodrat Nest Outside Work Area	Potential Bat Roost
1.02	0	10	2	0
1.03	0	14	1	0
1.06	0	5	3	0
1.07	0	5	0	0
1.08	0	23	5	0
1.25	0	2	0	1
1.38	0	0	0	0
2.05	0	0	0	0
2.06	0	1	0	0
3.16b	0	1	0	3
3.16a & Mitigation	0	0	0	0
3.17	0	1	0	0
3.18	0	0	0	0
3.19	0	12	0	0
4.22 & Mitigation	0	0	4	0
4.23, 4.25, 4.26 & Mitigation	0	2	0	2
4.24 & Mitigation	0	0	0	1
6.06	1	6	1	0
6.07 & Mitigation	0	2	0	1
6.08	0	1	2	0
6.09	1	5	4	0
6.11 & Mitigation	0	3	1	1
6.12	0	0	0	0
Total Found or Indicating Activity	**2**	**93**	**23**	**9**

Table 2: Special status species and habitats identified during the 2020 SMP Work Season

RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03166745	-120.9201569
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03166946	-120.9201985
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03161197	-120.9201446
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03161986	-120.9201942
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03695162	-120.9217998
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03680623	-120.9217973
1.02	Woodrat	Active nest	10	14-Oct-2020	36.0321601	-120.9209626
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03228557	-120.9210505
1.02	Woodrat	Active nest	10	14-Oct-2020	36.0325942	-120.9209893
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03264688	-120.9211486
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03274746	-120.9210647
1.02	Woodrat	Active nest	10	14-Oct-2020	36.03288924	-120.9210281
1.02	Woodrat	Active nest	10	14-Oct-2020	36.05159843	-120.9233744
1.02	Woodrat	Active nest	10	14-Oct-2020	36.0515942	-120.9233799
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03778487	-120.9239563
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03760272	-120.9241686
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03780513	-120.9239448
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03776289	-120.923975
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03717989	-120.9239448
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03716123	-120.9235677
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03708207	-120.9235197
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03710192	-120.9235061
1.03	Woodrat	Active nest	10	16-Oct-2020	36.0369069	-120.9235785
1.03	Woodrat	Active nest	10	16-Oct-2020	36.0368972	-120.9235628
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03690484	-120.923569
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03716628	-120.9237707
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03713508	-120.9237396
1.03	Woodrat	Active nest	10	16-Oct-2020	36.03780854	-120.9241416
1.03	Woodrat	Active nest	10	16-Oct-2020	36.0378417	-120.9241307
1.06	Woodrat	Active nest	10	14-Oct-2020	36.04761457	-120.9247879
1.06	Woodrat	Active nest	10	14-Oct-2020	36.04662257	-120.9250128

RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
1.06	Woodrat	Active nest	10	14-Oct-2020	36.04690307	-120.9250142
1.06	Woodrat	Active nest	10	14-Oct-2020	36.04680714	-120.9250166
1.06	Woodrat	Active nest	10	14-Oct-2020	36.04750212	-120.9249892
1.06	Woodrat	Active nest	10	14-Oct-2020	36.04743003	-120.9248297
1.06	Woodrat	Active nest	10	14-Oct-2020	36.0488975	-120.9240942
1.06	Woodrat	Active nest	10	14-Oct-2020	36.04969877	-120.9238091
1.07	Woodrat	Active nest	10	16-Oct-2020	36.05330961	-120.9239015
1.07	Woodrat	Active nest	10	16-Oct-2020	36.05222092	-120.9241105
1.07	Woodrat	Active nest	10	16-Oct-2020	36.0520172	-120.9240791
1.07	Woodrat	Active nest	10	16-Oct-2020	36.05368545	-120.9239989
1.07	Woodrat	Active nest	10	16-Oct-2020	36.05185312	-120.9240925
1.08	Woodrat	Active nest	10	19-Oct-2020	36.05606252	-120.924961
1.08	Woodrat	Active nest	10	19-Oct-2020	36.05615325	-120.9252124
1.08	Woodrat	Active nest	10	19-Oct-2020	36.05614093	-120.9252623
1.08	Woodrat	Active nest	10	19-Oct-2020	36.05620819	-120.9251733
1.08	Woodrat	Active nest	10	19-Oct-2020	36.05643005	-120.925369
1.08	Woodrat	Active nest	10	19-Oct-2020	36.0564192	-120.9253581
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05656691	-120.9253381
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05653655	-120.9253469
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05667737	-120.925634
1.08	Woodrat	Active nest	10	22-Oct-2020	36.0578645	-120.9263953
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05803742	-120.9266377
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05793609	-120.9268782
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05813423	-120.9266085
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05817815	-120.9266301
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05827838	-120.927109
1.08	Woodrat	Active nest	10	22-Oct-2020	36.0581841	-120.9265743
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05829625	-120.9266653
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05843322	-120.927094
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05818884	-120.926767
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05928628	-120.9278316
1.08	Woodrat	Active nest	10	22-Oct-2020	36.0591445	-120.9274191
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05927128	-120.9275361

RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05993043	-120.9278992
1.08	Woodrat	Active nest	10	22-Oct-2020	36.05999359	-120.9279688
1.08	Woodrat	Active nest	10	22-Oct-2020	36.06000658	-120.9280796
1.08	Woodrat	Active nest	10	22-Oct-2020	36.06011337	-120.9281119
1.08	Woodrat	Active nest	10	26-Oct-2020	36.0563734	-120.9253938
1.08	Woodrat	Active nest	10	26-Oct-2020	36.06026713	-120.928405
1.25	Bat roost	Potential	25	4-Nov-2020	36.47444454	-121.4521455
1.25	Woodrat	Active nest	10	3-Nov-2020	36.18776812	-121.1220322
1.25	Woodrat	Active nest	10	3-Nov-2020	36.18790596	-121.122302
1.38	Woodrat	Active nest	10	26-Oct-2020	36.20528759	-121.1204335
2.06	Woodrat	Active nest	10	23-Oct-2020	36.33921301	-121.2033671
3.16b	Bat roost	Potential	25	9-Oct-2020	36.41773522	-121.3532908
3.16b	Bat roost	Potential	25	9-Oct-2020	36.41778323	-121.3528983
3.16b	Bat roost	Potential	25	9-Oct-2020	36.41738512	-121.352118
3.16b	Woodrat	Active nest	10	9-Oct-2020	36.41761805	-121.3529416
3.17	Woodrat	Active nest	10	8-Oct-2020	36.42159058	-121.3584435
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42647839	-121.3752323
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42649901	-121.3753315
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42743682	-121.3774017
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42743195	-121.3773301
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42749971	-121.3774171
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42744603	-121.3774002
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42643866	-121.3758517
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42644042	-121.3757984
3.19	Woodrat	Active nest	10	20-Oct-2020	36.4264232	-121.3757449
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42641653	-121.3757181
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42641859	-121.3756811
3.19	Woodrat	Active nest	10	20-Oct-2020	36.42644228	-121.3757117
4.22	Woodrat	Active nest	10	7-Oct-2020	36.48637618	-121.4770137
4.22	Woodrat	Active nest	10	7-Oct-2020	36.48663078	-121.46995
4.22	Woodrat	Active nest	0	7-Oct-2020	36.48687051	-121.4741679
4.22	Woodrat	Active nest	10	7-Oct-2020	36.48671439	-121.4743938
4.25	Bat roost	Potential	25	4-Nov-2020	36.47554578	-121.4527206

RMU ID	Species	Status	Buffer (ft)	Survey Date	Lat	Long
4.25	Bat roost	Potential	25	4-Nov-2020	36.47530634	-121.4525198
4.25	Woodrat	Active nest	10	5-Oct-2020	36.47265552	-121.4514125
4.25	Woodrat	Active nest	10	5-Oct-2020	36.47265797	-121.4514134
4.24	Bat roost	Potential	25	30-Oct-2020	36.47266683	-121.4491918
6.06	American badger	Active den	50	21-Oct-2020	36.61004238	-121.5934138
6.06	Woodrat	Active nest	10	13-Oct-2020	36.61372114	-121.6023003
6.06	Woodrat	Active nest	10	13-Oct-2020	36.61157885	-121.5982346
6.06	Woodrat	Active nest	10	13-Oct-2020	36.61235732	-121.6001274
6.06	Woodrat	Active nest	10	13-Oct-2020	36.61228515	-121.5998309
6.06	Woodrat	Active nest	10	13-Oct-2020	36.6122797	-121.599787
6.06	Woodrat	Active nest	10	13-Oct-2020	36.61223922	-121.5997408
6.07	Bat roost	Potential	25	12-Oct-2020	36.61213461	-121.610824
6.07	Woodrat	Active nest	10	12-Oct-2020	36.610935	-121.6124513
6.07	Woodrat	Active nest	10	12-Oct-2020	36.61240889	-121.6106568
6.08	Woodrat	Active nest	0	12-Oct-2020	36.60793176	-121.6167443
6.08	Woodrat	Active nest	10	12-Oct-2020	36.60389638	-121.6208185
6.08	Woodrat	Active nest	10	12-Oct-2020	36.60379821	-121.6212648
6.09	American badger	Active den	50	19-Oct-2020	36.6036194	-121.6287685
6.09	Woodrat	Active nest	10	21-Oct-2020	36.61007334	-121.5938573
6.09	Woodrat	Active nest	10	21-Oct-2020	36.61038246	-121.5948083
6.09	Woodrat	Active nest	10	21-Oct-2020	36.60281017	-121.6270967
6.09	Woodrat	Active nest	10	21-Oct-2020	36.60284382	-121.6257042
6.09	Woodrat	Active nest	10	21-Oct-2020	36.60285551	-121.625597
6.09	Woodrat	Active nest	10	21-Oct-2020	36.60292257	-121.6250145
6.09	Woodrat	Active nest	10	21-Oct-2020	36.60290417	-121.6248023
6.09	Woodrat	Active nest	10	21-Oct-2020	36.60296033	-121.6247952
6.09	Woodrat	Active nest	10	21-Oct-2020	36.60310014	-121.6240579
6.11	Bat roost	Potential	25	13-Oct-2020	36.61014974	-121.6471567
6.11	Woodrat	Active	10	13-Oct-2020	36.61016478	-121.6496747
6.11	Woodrat	Active	10	13-Oct-2020	36.61058531	-121.6502173
6.11	Woodrat	Active	10	13-Oct-2020	36.61073626	-121.6502622
6.11	Woodrat	Active	10	13-Oct-2020	36.61120154	-121.6511103

2.3.2 Tidewater Goby Survey Plan

No work was performed in RMU 7 during the 2020 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 USACE 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 2013, a few individuals were found while conducting routine lagoon monitoring, with both individuals observed along the sandbar at the northwestern edge of the lagoon. In 2014, tidewater goby was the second most abundant fish species after threespine stickleback. One of the individuals was captured at the mouth of the lagoon near the usual location of breaching, four of the individuals were captured along the sandbar at the northwestern edge of the lagoon, and 53 individuals were captured near the Highway 1 Bridge. A doctoral student with the University of California, Los Angeles, conducted multiple surveys in the Salinas River Lagoon and Old Salinas River beginning in 2014, and was able to document and collect tidewater gobies during each visit. However, his collection information does not detail the number or sizes of tidewater gobies that were observed during each survey, but rather provides valuable information on population persistence.

Tidewater goby distribution surveys were conducted in October 2018. Tidewater gobies were found at each sampled location along the sandbar at/near the breach site and along the southwest shoreline of the lagoon until water depth precluded sampling (upstream from the wildlife refuge parking area). This finding contrasts with survey results from most previous years, when the distribution of tidewater goby appeared restricted to the lower lagoon (with exception of the year 2014, when the species was documented as far upstream as the Highway 1 bridge). Contrary to expectations, tidewater gobies were not found in the vicinity of the OSR slidegate. During past surveys, the species was regularly found in this area, and in the OSR in the vicinity of the Monterey Dunes Way road crossing. Although this location was not sampled in October 2018 due to permit restrictions, high tidewater goby densities were also expected in this area.

Numbers of tidewater goby captured with each seine haul during the 2018 survey ranged from 0 (near OSR slidegate, OSR and Hwy 1 Bridge) to 3. At sampling sites where the species was detected, every seine haul captured at least one goby. Due to these low capture numbers, estimation of index densities is not biologically meaningful. However, despite low captured numbers in individual seine hauls, tidewater goby appeared to be widely distributed within the lagoon, suggesting that the species was abundant during this time.

Most recently a fall 2020 survey was conducted. FISHBIO is the contractor who revisited all locations sampled in 2018 to evaluate the current distribution of tidewater goby in the lagoon. Results of these efforts are still in draft report form and should become available after FISHBIO responds to comments provided by the MCWRA. The finalized report will be forward to the U.S. Fish and Wildlife Service.

2.3.3 Water Quality Reports

Water quality monitoring of the Salinas River Lagoon typically occurs during the spring, summer, and fall months. The lagoon most recently opened to the ocean on April 7, 2020 and remained open until May 17, 2020.

Sampling in the Salinas River is associated with the Salinas Valley Water Project fish monitoring requirements. Seining has not been performed since February 13, 2019 due to a letter dated February 20, 2019 when the National Marine Fisheries Service formally withdrew their 2007 Biological Opinion for the Salinas Valley Water Project and associated incidental take statement. No additional fish monitoring was performed during 2020, and water quality monitoring in the Salinas Lagoon was disrupted and not performed in 2020 due to the COVID-19 pandemic. Any future monitoring reports will be forwarded to the U.S. Fish and Wildlife Service.

3 Maintenance Activities Conducted in 2020

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. Therefore, 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 23 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 work season began on October 14th and was completed, per an authorized extension of work, by November 30th at which time all equipment and related items were removed from the sites. 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 of 2 new Maintenance Area and retreatment of 21 Maintenance Areas. 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.

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 3: 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	*5.1*	retreat	retreat	retreat	retreat	retreat	retreat
1.07	*1.75*	0	1.30	0.45	0	0	0
1.08	*4.7*	retreat	retreat	retreat	retreat	retreat	retreat
1.25	*0.02*	0	0.02	0	0	0	0
2.05	*1.8*	retreat	retreat	retreat	retreat	retreat	retreat
2.06	*6.8*	retreat	0.20	retreat	retreat	retreat	retreat
3.16a	*5.4*	retreat	retreat	retreat	retreat	retreat	retreat
3.16b	*12.7*	2.0	2.0	0.2	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	*5.3*	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
6.06	*4.5*	retreat	retreat	retreat	retreat	retreat	retreat
6.07	*6.4*	retreat	retreat	retreat	retreat	retreat	retreat
6.08	*7.0*	retreat	retreat	retreat	retreat	retreat	retreat
6.09	*9.3*	retreat	retreat	retreat	retreat	retreat	retreat
6.11	*8.2*	retreat	retreat	retreat	retreat	retreat	retreat
6.12	*1.3*	retreat	retreat	retreat	retreat	retreat	retreat

Table 4: 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	*24.8*	retreat	1.32	0.45	retreat	retreat	retreat
2	*8.7*	retreat	0.20	retreat	retreat	retreat	retreat
3	*28.7*	2.0	2.0	0.2	retreat	retreat	retreat
4	*25.5*	retreat	retreat	retreat	retreat	retreat	retreat
6	*36.7*	retreat	retreat	retreat	retreat	retreat	retreat
7	*0*	0	0	0	0	0	0

Table 5: 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	*124.4*	2.0	3.52	0.65	0	0	0

Note: * Total Area includes re-treated areas. Total new areas are 6.17 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 2020 maintenance season. The sediment removal occurred in one secondary channel and one tributary within the SMP Area including MA 1.06 and MA 1.38 San Lorenzo Creek. Two stockpiles location were established in locations outside of jurisdictional area. Sediment grading was limited to an upstream gravel shelf on MA 1.25 and all grading practices were followed making sure river channel setbacks were in place. The grading and excavation activities performed within the maintenance areas are shown in the tables below.

Table 6: 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*
1.06	4.60	0	7,098	0	Bulldozer, grader, and water truck
1.25	0.02	0.02	0	200	Bulldozer
1.38	2.24	0	1,800	0	Bulldozer, grader, and water truck

Table 7: 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	6.86	0	8,898	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 8: 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	6.86	0	8,898	0

3.2.4 New Access

No new ramps were constructed but some vegetation was removed to make 1 new access way to provide an access route to MAs 2.06. The 2020 Work Plan intended for 3 new access routes to be constructed, however, the newly planned access route for 1.07 did not require any vegetation removal after all and the access route for 1.25 was able to align with an existing road. All other 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 9: 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 10: 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	0.45	0	0	0	0
2	0.20	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
Totals	0.65	0	0	0	0

Table 11: 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	10.99	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	15.73	4.6	0	6	0
7	0	0	0	0	0
Totals	52.27	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 12: 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	2.0	0	0	0	2.6	0	0	2.6
4	0	0	0	0	9.8	26.5	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	2.0	0	0	0	13.3	26.5	41.2	54.9

3.3.3 Native Tree Species Plantings

No trees that would require mitigation were removed during the 2020 work season, and no additional trees are required to be planted in 2020 as mitigation for 2019 impacts.

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 2020 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. 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 2021 Work Season. All tree planting areas and activities are monitored closely and updates will be provided as necessary.

Table 13: 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 14: 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	52.27	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.

Table 15: 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 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.

4.3 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.

4.4 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. These needs should be evaluated near the end of the rainy season in order to be prepared for the following year's maintenance. There still may be high flows during this rainy season so no conclusions can be made at this time.

4.5 Certification of Compliance

MCWRA understands that this report may be reviewed by the resource agencies for compliance with the terms of the RGP. In addition, field site visits may be performed on representative sites by the employees of these resource agencies as part of their compliance evaluation. The USACE has provided a Certification of Compliance Form in their Annual Work Plan approval to verify that the applicant complied with the terms and conditions of the RGP. This certification is provided in Section 8.

5 Photos of Typical Work Areas

Pre-maintenance Areas

Vegetation Removal

Arundo Treatment

Selective Treatment Area Pre- and Post-work

Grading & Sediment Removal

6 Maps of Maintenance Activities


.03
1.02
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0113
Channel 1.02
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:3,387
0 20 40 80 Meters
Map created February 2021


1.03
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0114
Channel 1.03
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:1,824
0 20 40 80 Meters
Map created February 2021


1.07
1.06
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0115
Channel 1.06
Maintenance Area
Sediment Management
Arundo Mitigation
Wetlands - restricted
Access Routes
Salinas River Centerline
Longitudinal Profile Line
Scale: 1:2,972
0 20 40 80 Meters
Map created February 2021


1.07
1.06
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0116
Channel 1.07
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:1,720
0 20 40 80 Meters
Map created February 2021


1.08
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0117
Channel 1.08
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:3,349
0 20 40 80 Meters
Map created February 2021


Access route aligned w/ existing road
1.25
Project activity limited to sediment management area
1.24
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0118
Channel 1.25
Maintenance Area
Sediment Management
Arundo Mitigation
Wetlands - restricted
Access Routes
Salinas River Centerline
Scale: 1:2,473
0 20 40 80 Meters
Map created February 2021


1.38
1.37
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0119
Channel 1.38
Maintenance Area
Sediment Management
Arundo Mitigation
Wetlands - restricted
Access Routes
Longitudinal Profile Line
Scale: 1:3,864
0 20 40 80 Meters
Map created February 2021


Access for 2.06
2.05
2.04
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0120
Channel 2.05
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:2,291
0 20 40 80 Meters
Map created February 2021


2.07
2.06
New access route from
Secondary Channel 2.05
2.05
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0121
Channel 2.06
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:4,210
0 20 40 80 Meters
Map created February 2021


3.16a
3.17
3.16b
Treated arundo scattered throughout channel - primarily concentrated near arundo mitigation area
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0122
Channel 3.16a
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:3,746
0 20 40 80 Meters
Map created February 2021


3.17
3.16a
Arundo retreated via mowing, no herbicide application for 2020 Work Season
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0123
3.16a Mitigation Area
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:2,020
0 20 40 80 Meters
Map created February 2021


3.17
3.16a
3.16b
Access to 3.16b from Secondary Channel 3.16a
New vegetation and arundo treatment along southern edge
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0124
Channel 3.16b
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:9,685
0 20 40 80 Meters
Map created February 2021


3.17
3.16a
3.16b
Access to 3.16b from
Secondary Channel 3.16a
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0125
Channel 3.17
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:3,774
0 20 40 80 Meters
Map created February 2021


Treated arundo scattered throughout channel
3.18
RCDMC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0126
Channel 3.18
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:4,315
0 20 40 80 Meters
Map created February 2021


3.19
Treated arundo scattered throughout channel
Dry river crossing from 3.18
3.18
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0127
Channel 3.19
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:2,541
0 20 40 80 Meters
Map created February 2021


4.22
Bridge bisects Secondary Channel
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0128
Channel 4.22
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:7,707
0 20 40 80 Meters
Map created February 2021


4.24
Arundo retreated via mowing only
4.23
Arundo retreated via spraying and mowing
4.25
Arundo intermixed throughout secondary channels
4.26
4.27
4.265
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0130
4.23, 4.25, 4.26
Maintenance Area
County APN
Wetlands - restricted
Access Routes
Scale: 1:9,318
0 20 40 80 Meters
Map created February 2021


4.24
Arundo retreated
via mowing only
4.23
Arundo retreated
via spraying and mowing
4.25
4.23, 4.25, 4.26 Arundo mitigation
is the area West of Salinas River
4.26
4.27
4.265
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0131
4.23, 4.25, 4.26
Mitigation Area
Maintenance Area
County APN
Arundo Mitigation
Wetlands - restricted
Access Routes
Salinas River Centerline
Scale: 1:9,318
0 20 40 80 Meters
Map created February 2021


4.24
Arundo retreated
via mowing only
4.23
Arundo intermixed throughout
secondary channel
Arundo retreated
via spraying and mowing
4.25
4.26
4.27
4.265
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0132
Channel 4.24
Maintenance Area
County APN
Wetlands - restricted
Access Routes
Scale: 1:9,318
0 20 40 80 Meters
Map created February 2021


4.24
Arundo retreated
via mowing only
4.23
4.24 mitigation area
is everything East of Salinas River
Arundo retreated
via spraying and mowing
4.25
4.26
4.27
4.265
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0133
4.24 Mitigation Area
Maintenance Area
County APN
Arundo Mitigation
Wetlands - restricted
Access Routes
Salinas River Centerline
Scale: 1:9,318
0 20 40 80 Meters
Map created February 2021


6.06
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0134
Channel 6.06
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:6,600
0 20 40 80 Meters
Map created February 2021


6.07
6.06
6.08
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0135
Channel 6.07
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:5,709
0 20 40 80 Meters
Map created February 2021


6.07
Arundo retreated via herbicide application
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0136
6.07 Mitigation Area
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:2,339
0 20 40 80 Meters
Map created February 2021


6.07
6.08
6.08
6.09
Crossing was used
in dry river conditions
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0137
Channel 6.08
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:5,709
0 20 40 80 Meters
Map created February 2021

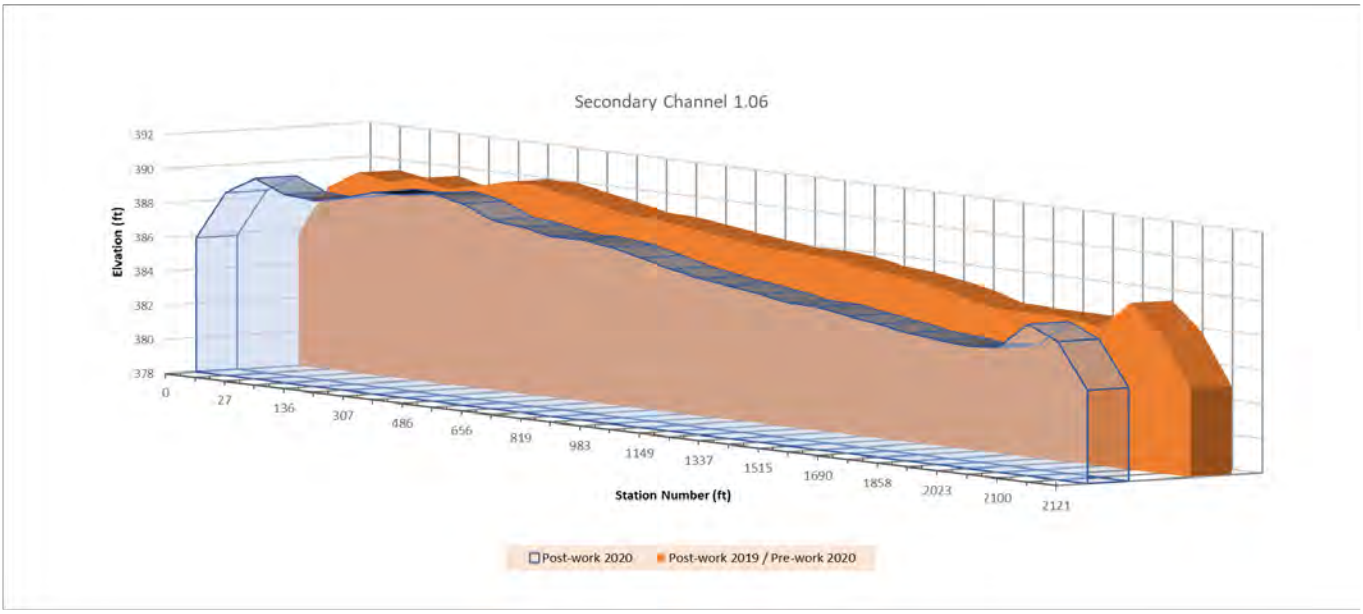

6.09
6.08
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0138
Channel 6.09
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:5,709
0 20 40 80 Meters
Map created February 2021

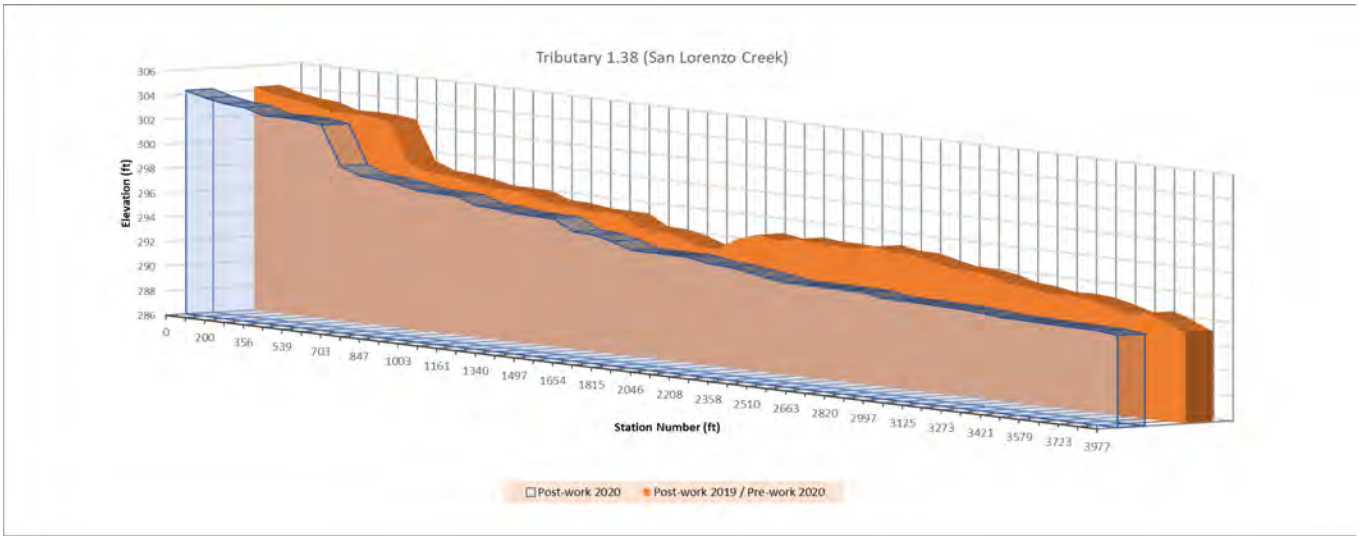

6.11
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0140
Channel 6.11
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:3,654
0 20 40 80 Meters
Map created February 2021


6.11
RCD&MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0141
6.11 Mitigation Area
Maintenance Area
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:2,132
0 20 40 80 Meters
Map created February 2021


Area cleared with
hand equipment
6.12
RCD MC
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
2020 SMP
Project Activities
VRF # 0142
6.12 Selective
Treatment Area
Maintenance Area
Sediment Management
Arundo Mitigation
Wetlands - restricted
Access Routes
Scale: 1:2,132
0 20 40 80 Meters
Map created February 2021

7 Longitudinal Profiles





8 Certification of Compliance

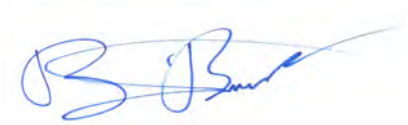
Enclosure 3

Permittee: Shaunna Murray, Monterey County Water Resources Agency

File Number: 1996-22309S (2020 SMP)

Certification of Compliance
for
Regional General Permit 20

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Regional General Permit authorization."



(Permittee)

E-signed 3/30/2021

(Date)

Return to:

Greg Brown
U.S. Army, Corps of Engineers
San Francisco District
Regulatory Division, CESPN-R-S
1455 Market Street
San Francisco, CA 94103-1398