SAN JOAQUIN COUNTY MULTI-SPECIES HABITAT CONSERVATION AND OPEN SPACE PLAN
HABITAT TECHNICAL ADVISORY COMMITTEE MEETING

San Joaquin Council of Governments
Regional Center Building
555 E. Weber Avenue
Stockton, CA 95202

Participation in the meeting may be available for Committee Members attending the HTAC meeting by Conference Call and members of the public, pursuant to California Government Code Section 54953(b), at one or more of the following locations. Please contact Steve Mayo at (209) 235-0600 or mayo@sjcog.org prior to the meeting to determine which locations are utilized.

City of Tracy City of Ripon City of Lathrop City of Manteca
333 Civic Center 259 Wilma Avenue 390 Towne Center Drive 1001 W. Center Drive
Tracy, CA 95376 Ripon, CA 95366 Lathrop, CA 95330 Manteca, CA 95337

City of Lodi SJ Ag Commissioner SJ County City of Escalon
221 W. Pine Street 2101 Earhart Avenue 1810 Hazelton Avenue 2060 McHenry Avenue
Lodi, CA 95240 Stockton, CA 95206 Stockton, CA 95202 Escalon, CA 95320

Wednesday, January 8, 2020
9:30 A.M.
Board Conference Room

AGENDA

1. Call to Order / Introductions
2. Minutes: Approve Minutes of November 2019 meetings  Action
3. Public Comments

All technical items are available for action by the committee. The right column is recommendations by staff.

4. Consent Calendar: NONE

5. Wisconsin Pump Station Replacement Project, Plan Participation and Buffer Reduction  Action

6. Habitat Restoration Projects Contract for Hwy 12 Remitz, Hwy 12 Reynolds and Wetmore Preserves  Action

7. Other Matters of Business:  Information/Discussion
   a. Quarterly Reports and 2019 Annual Report
   b. HTAC 2020 Meetings conflicts – February 11 and November 11

8. Summary and Adjournment of HTAC Meeting

For your convenience, parking is available at the COG Regional Center marked “Visitor” on the East Side of the Parking Lot. There is additional parking available at Public Parking Lot K, located on American Street, just south of Weber Avenue. Additional meter parking on Weber Avenue.

The San Joaquin Council of Governments is in compliance with the Americans with Disabilities Act and will make all reasonable accommodations for persons with disabilities to participate in employment, programs, and access facilities. Persons requiring assistance or auxiliary aid in order to participate should contact Rebecca Montes at (209) 235-0600 at least 24 hours prior to the meeting. Board Meetings, Committee Meetings and all Workshops are audio/video recorded by The San Joaquin Council of Governments.
San Joaquin Multi-Species Habitat Conservation and Open Space Plan
Habitat Technical Advisory Committee
San Joaquin Council of Governments
555 East Weber Avenue
Stockton, CA 95202
Wednesday, November 13, 2019

MINUTES

I. Call to Order/Introductions:

Ms. Aguirre call the meeting to order at 9:34 am introductions were made.

Committee Members Present or Conference Call:
Megan Aguirre San Joaquin County
Mike McDowell City of Stockton
Mark Meissner City of Lathrop
David Hanham City of Lodi
Ken Zuidervaart City of Ripon
Dominique Romo City of Escalon
John Beckman BIA
Maggie Sepulveda USFWS
Michelle Leinfelder-Miles UCCE
Jesse Fowler SJ Ag Commission
James Jones EBMUD

Others Present:
Matthew Diaz City of Stockton
Robert C. Bowen Project Proponent
Lisa M. Jennings Project Proponent
Diane Moore Moore Biological

SJCOG Staff/Consultants Present:
Steve Mayo Program Manager
Laurel Boyd Associate Habitat Planner
Monica Streeter Neumiller & Beardslee
Doug Leslie ICF
II. Approval of October 9, 2019 Minutes:
It was moved/seconded (Beckman/Sepulveda) to approve the October 9, 2019 Minutes. Motion passed 11/0. David Hanham, City of Lodi and James Jones, EBMUD abstained.

III. Public Comment:
None.

IV. Consent Calendar:
a. Austin Road Truck Parking Project, Plan Participation
b. North Cherokee Lane Subdivision Project, Plan Participation and Habitat Classification Change

It was moved/seconded (Beckman/Jones) to approve the Consent Calendar. Motion passed 11/0.

V. Public Hearing for Jet Mulch Patterson Pass Preserve Dedication:
Ms. Aguirre opened the Public Hearing for the Jet Mulch Patterson Pass Preserve Dedication.

Mr. Mayo stated this is the first of two public hearings for the Jet Mulch Patterson Pass Preserve Dedication. The Jet Mulch Patterson Pass property under consideration is a total of 76 acres. The landowner, who is the developer of the project, is proposing an easement dedication of approximately 8.0 - 15 acres for project impacts to natural grasslands. The location of the property is west of I-580 at Patterson Pass Road to the west of the City of Tracy in the Southwest Zone. If the easement is dedicated, SJCOG, Inc. staff intends to create the Preserve Management Plan (PMP) to reflect the existing PMPs for economy of scale as a grassland preserve for species under the SJMSCP.

Ms. Aguirre closed the Public Hearing for the Jet Mulch Patterson Pass Preserve Dedication.

VI. MacArthur Industrial Park Project, Unmapped Process for Plan Participation and Buffer Reduction:
Mr. Mayo stated there are errors in the staff report for the MacArthur Industrial Park Project. The first page lists the project as part of the City of Manteca but it should read City of Tracy. The total acreage impact should also be listed as 147.47 acres of Agricultural Habitat Land.
Mr. Mayo continued to state the ‘Other Unmapped Process’ began as the Contingency Acres Process, which was quickly expended by 2006. Under the Contingency Acres Process, a total of 5,340 acres have been allocated for the purposes of General Plan amendments, such as city annexations, freeway service commercial, expansion of unincorporated, existing industrial areas, and similar anticipated projects located outside of designated, urban boundaries of the SJMSCP Planned Land Use Map.

Mr. Mayo stated once the Contingency Acres were expended, SJCOG, Inc. staff began the ‘Other Unmapped Process’ which is a minor amendment to allow projects to seek coverage under the SJMSCP. These projects follow a process similar to the unmapped project process and follow specified criteria to be allowed to participate in the plan after staff review. The review process consists of a checklist to be provided to staff that meets the biological opinion of the SJMSCP. For the MacArthur Industrial Park Project, Moore Biological completed the checklist which was reviewed by Monk & Associates.

Mr. Mayo continued to state in addition to completing the ‘Other Unmapped Process’, the project is seeking a buffer reduction. The buffer reduction will consist of a zero-foot setback at the detention or water quality treatment infrastructure to be built along the northern edge of the site. In addition, the project is requesting an approximate 35-foot buffer from the above point of the parcel along the remainder of the canal for buildout and construction of the MacArthur Industrial Park for site impacts. Ms. Moore stated the waterway at the northern portion of the property is a drainage ditch. The project and Moore Biological will be meeting with the Reclamation District to see what the setback is. A 35-foot buffer is a soft setback for now. The project and SJCOG, Inc. staff will confirm the buffer after meeting with the Reclamation District.

It was moved/seconded (Beckman/McDowell) to approve the MacArthur Industrial Park Project’s Unmapped Process. Motion passed 11/0. Michelle Leinfelder-Miles, UCCE and Jesse Fowler, SJ Ag Commission Abstained.

VII. Other Matters of Business:
   a. 2020 SJMSCP Fee Adoption by Jurisdiction
   Mr. Mayo stated the City of Manteca’s Council will adopt the 2020 SJMSCP fee on November 18th and the City of Lodi will adopt the 2020 SJMSCP fee on November 20th. All other jurisdictions have adopted the 2020 SJMSCP Fee for development.
b. **Quarterly Reports and 2019 Annual Report**
   Mr. Mayo asked that all jurisdictions still collecting the Habitat fee get the 4th quarterly reports to SJCOG, Inc. staff in a timely manner. All fees collected by the Habitat Plan go into the 2019 Annual Report. Staff intends to send a draft Annual Report to HTAC and Board in January or February of 2020 with a final draft for approval in March. Permitting will receive an adopted 2019 Annual Report in April.

c. **HTAC Meeting – No December 2019 meeting**
   Mr. Mayo stated the HTAC will not hold a December 2019 meeting.

d. **HTAC 2020 Meeting conflicts – February 11 and November 11**
   Mr. Mayo stated there are holiday conflicts in 2020 for HTAC meetings. February 12th is Lincoln’s Birthday and November 11th is Veterans Day. SJCOG, Inc. staff is looking into holding the February meeting on February 11th. Staff and HTAC can discuss the November HTAC meeting later.

   This item was for information/discussion only, no action was taken.

VIII. **Summary and Adjournment:** At 9:57 am the meeting was adjourned until January 8, 2020.
STAFF REPORT

SUBJECT: Wisconsin Pump Station Project, Plan Participation and Buffer Reduction

RECOMMENDED ACTION: Motion to Approve Recommendation to SJCOG, Inc. to 1) Allow the Wisconsin Pump Station Project to Participate in the SJMSCP and; 2) Allow a Revision to the Incidental Take Minimization Measures for Giant Garter Snake (GGS) and Western Pond Turtle (WPT) Buffers

DISCUSSION:

SUMMARY:

The project applicant, Reclamation District No. 1614, is requesting coverage under the San Joaquin Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) Although the project is in a mapped area of the Plan, the project needs to be allowed to participate due to the United State Army Corps of Engineers (USACE) Section 408 permit. The project is located on the west side of Interstate 5 and north of Alpine Avenue, Stockton in the Central Zone (attachments 1 & 2).

RECOMMENDATION:

SJCOG, Inc. staff recommends the HTAC make the recommendation to the SJCOG, Inc. Board to:

1) Allow the project to participate under the SJMSCP to provide biological coverage for the project impacts to the habitat types under the federal and state permits;
2) Allow a revision to the Incidental Take Minimization measures for Giant Garter Snake (GGS) and Western Pond Turtle (WPT).

FISCAL IMPACT:

If the project is approved, SJCOG, Inc. will be provided mitigation for the project impacts as required under the SJMSCP for approximately 0.40 acres. The impacts for this project would consist of 0.40 acres of Urban (U) habitat impacts. There is no fee for Urban impacts.
BACKGROUND:

This project consists of major upgrades to an existing pump station and outfall structure near the southeast tip of the Calaveras River Slough. The existing two discharge pipes will be reconstructed as they cross the levee and two new pumps and discharge pipes will be added. The discharge pipes that will be reconstructed are 18 and 20 inches in diameter and the new pipes will be 24 inches in diameter. A new discharge structure will be constructed at the waterside slope for erosion control purposes. The existing sump and pump house will remain, although interior structural supports will be added.

The project will involve excavation of approximately 46 cubic yards of soil from the upper bank of the slough. All the excavation will be above the ordinary high-water mark (OHWM). The soil excavated will be hauled off site. Following excavation, the new pipes will be installed and a total of 344 cubic yards of clean imported fill dirt will be installed on the top and landside of the levee.

To dissipate flows, a 974 square foot Armorflex mat will be installed on the bank of the slough to dissipate flows, with 409 square feet being below the OHWM and the remaining 565 square feet above. The mat will be approximately 156 cubic yards, with 15 cubic yards being installed below the OHWM and the remaining 11 cubic yards above.

The total footprint of work in the riparian corridor will encompass a total area of 1,600 square feet of this total, 0.01 acres is below the OHWM and 0.04 acres is above the OHWM. No notable trees will be removed, although a few trees will need to be trimmed to complete construction. Construction will not require dewatering and the Armorflex mat will be installed during a period of low tide (attachment 3).

For the project proponents to reconstruct and install new pipes, excavate and install the Armorflex mat for the Wisconsin Pump Station Project, the project will impact potential Giant Garter Snake (GGS) habitat within the suggested 200-foot buffer and Western Pond Turtle (WPT) with the 300-foot buffer. As identified in Section 5.59 of the Plan, HTAC, on a case by case review, can establish a setback and buffer zone to be used by the project in place of the 200 and 300 feet suggested.

Because construction of portions of the project will be within the suggested 200-foot and 300-foot buffer areas, the project proponent has requested a reduction in the buffer to a 0’ setback for the construction of the Wisconsin Pump Station Project on the Calaveras River Slough for site impacts. The reduction of these buffers is necessary for the construction of this project. Reducing the buffer for GGS and WPT will allow the project to construct up to 0’ feet on the banks of the Smith Canal during the species’ active period.

The project is requesting an extension to the GGS active period beyond the October 1, 2020 deadline to November 1, 2020. The project should have all trenching work completed and the extension will provide time for backfilling the trenching work.
The SJMSCP GIS habitat layer classifies the project site as Urban (U) Habitat.

If allowed to participate in the SJMSCP, the total disturbed area will consist of 0.40 acres of Urban (U) impacts. The project applicant will be responsible for mitigating for the habitat impacts that is consumed by this project by either paying the appropriate fees at the time of ground disturbance or dedicating land in lieu of a fee at the appropriate SJMSCP ratio. There is no fee for Urban (U) impacts.

### Adjacent Vegetation and Land Use

<table>
<thead>
<tr>
<th>Location</th>
<th>SJMSCP Vegetation Map Classification</th>
<th>Habitat Type Category</th>
<th>Actual Use Of Property</th>
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<tr>
<td>Site</td>
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<td>Urban (U), Natural (W)</td>
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</tr>
<tr>
<td>West</td>
<td>Urban (U)</td>
<td>Urban (U)</td>
<td>Urban (U)</td>
</tr>
</tbody>
</table>

**COMMITTEE ACTIONS:**

- Habitat Technical Advisory Committee: Action Required
- SJCOG, Inc. Board: January 23rd if Recommended

**ATTACHMENTS:**

1. General Location Map
2. Project Location Map
3. Project Site Map

*Prepared by: Laurel Boyd, Associate Habitat Planner*
STAFF REPORT

SUBJECT: Habitat Restoration Projects Contract for Hwy 12 Remitz, Hwy 12 Reynolds and Wetmore Forest Lake Road Preserves

RECOMMENDED ACTION: Motion to Recommend to the SJCOG, Inc. Board 1) Approve the Restoration Work with ICF; and 2) Authorize the Treasurer of SJCOG, Inc. to Execute the Agreements for Work

DISCUSSION:

SUMMARY:

As part of the SJMSCP permits, the plan has a goal of conducting enhancements and restoration on approximately 10% of the preserve lands under the plan. The enhancements can range from pesticide/herbicide restrictions, invasive noxious weed removal to full scale riparian restoration. To get more benefit for the dollars spent across the preserve system, these larger, costlier activities are strategically planned for selected properties rather than small individual restoration projects on each preserve.

For the Hwy 12 Remitz and Reynolds preserves (Attachment 1 – map), which are cattle grazing preserves for protection of vernal pool species and California tiger salamanders, the removal of invasive noxious star thistle is required. This will maximize the feed for the cattle before the invasive weed overtakes the fields this coming spring. Per US Department of Agriculture guidelines, the most effective time to spray star thistle is late autumn to early spring before the seedling to rosette stage and be effective in late spring.

The Wetmore Forest Lake Road preserve (Attachment 2 – map) is a large-scale riparian expansion focusing on 10-acres of a larger 60-acre site to eventually allow mother nature to complete the process. The timing was worked out with the land owner to start this winter/spring at the restoration site.

RECOMMENDATION:

SJCOG, Inc. staff recommends the HTAC make the recommendation to the SJCOG, Inc. Board to 1) approve the restoration work with ICF and 2) authorize the Treasurer of SJCOG, Inc. to execute the agreements for work.

FISCAL IMPACT:
The restoration work orders to be executed with ICF, are not to exceed $181,940 (Remitz/Reynolds = $67,250 and Wetmore Forest Lake = $114,690, for the work over the next 3 years. The funds to be obligated to the restoration contract will come from the land management funds associated with the Remitz, Reynolds and Wetmore Preserve endowment accounts.

BACKGROUND:

As part of the original management plan for the three preserves, the HTAC and SJCOG, Inc. Board approved restoration work on the property. SJCOG, Inc.’s land management firm, ICF International, put together a scope of work (attachment 3 and 4) for the efforts (e.g. invasive star thistle spraying, vegetation removal, site preparation, planting and weed control maintenance) on the preserves to achieve the benefits for the SJMSCP species.

Hwy 12 Remitz and Reynolds Preserves – (270 acres +/- site)
- Water Delivery and Supply
- Star Thistle Treatments
  - February/March 2020
  - April/May 2020
- Vegetation Mapping

Wetmore Forest Lake Road Preserve – 10 acres +/- site
- Site Preparation
- Temporary Irrigation Installation
- Container Plant Installation
- Native Grass/Forb Seeding
- Maintenance and Weed control (Year 1 and 2)

The scope was sent by ICF’s primary sub-contractor which ICF believed would fit the need as sub-contractors which is allowed in the land management contract for the habitat plan. ICF provided the initial bid of costs to SJCOG, Inc. staff using the prevailing wages for review and comment on the project proposed by ICF and the sub-contractor.

COMMITTEE ACTIONS:

- Habitat Technical Advisory Committee: Recommend Approval by SJCOG, Inc. Board
- SJCOG, Inc. Board: January 23, 2020

ATTACHMENTS:

1. Hwy 12 Remitz and Reynolds Preserve Map
2. Wetmore Forest Lake Road Preserve Map
3. Scope of Work – Remitz/Reynolds Star-Thistle Control
4. Scope of Work – Wetmore Forest Lake Road Enhancements

Prepared by: Steven Mayo, Program Manager
ATTACHMENT 1 – Hwy 12 Remitz and Reynolds Preserves Map

Legend

SJMSCP Hwy 12 Fee Title Properties

- Clements St Rt Hwy 12 Fee Title_023-210-11
- Hwy 12 Terry Remitz_023-140-31 32 33-37 150-44
ATTACHMENT 2 – Wetmore Forest Lake Road Map

Legend

- JP Wetmore Properties_Cent
- County Parcels_2018

JP Wetmore Properties
SJ County APNs:
003-120-11
003-130-33
003-130-34

Approximately 50-70 Acres
November 26, 2019

Mr. Steven Mayo
Senior Regional Planner
San Joaquin Council of Governments
555 East Weber Avenue
Stockton CA 95202

Subject: Scope of Work and Cost Estimate to Control Yellow Star Thistle on the Remitz and Reynolds Clements Road Preserves

Dear Mr. Mayo:

ICF Jones & Stokes, Inc. (ICF) appreciates the opportunity to prepare this scope of work and cost estimate to control yellow star thistle and other non-native thistles on the Remitz Clements Road and Reynolds Clements Road preserves.

Scope of Work

This scope of work and cost estimate is for work to be performed on the Remitz Clements Road and Reynolds Clements Road preserves and includes two treatments on each property and preparation of a map of treated areas.

Assumptions

- This scope focuses on the management of yellow star-thistle but also includes other thistles (including milk thistle, Italian thistle, etc.).
- It is estimated that approximately 150 acres of thistles need treating at Remitz Clements Road preserve and 120 acres at the Reynolds Clements Road preserve.
- Selective herbicides (i.e., Transline, Milestone, etc.) shall be used to control thistles and minimize impacts to non-target species (i.e., grasses).
- A PCA recommendation shall be provided prior to initiating treatment.
- This scope does not provide measures to eradicate or minimize noxious grass populations (i.e., medusahead and barbed goatgrass).
One temporary 3,000-gal water storage tank will be allowed to be set up at each site (provided by Triangle Properties) between February and May 2020. The water tank shall be stored on-site for Triangle’s weed management purposes only and will not be allowed for other purposes (i.e., ranch operations, water for grazing, etc.).

This scope includes a minimum of two herbicide applications at each site. An ATV and boom spray shall be used for heavily infested areas (i.e., where thistle cover is > 15%). Spot treatments by hand (backpack sprayer or wand) shall be used for patchy or sporadic areas.

This scope does not assume complete eradication of the species mentioned above, but management to below 2% total cover.

All weed management activities will be performed outside of wetlands.

This scope does not include preparation of any permit applications.

**Task 1a: Water Deliver & Supply to Remitz Clements Road Preserve**
(1) Deliver and set-up temporary 3,000-gal water storage tank to site in February, (2) Fill water tank via water truck up to 4 times; and (3) Remove water tank in May.

**Task 1b: Yellow Star-Thistle Treatments at Remitz Clements Road Preserve (~150 acres)**
(1) Treat yellow star-thistles (and other thistles) in February/March with ATV and boom spray in heavily infested areas; (2) Use backpack sprayer or wand attached to ATV for spot treatments or adjacent to wetlands; and (3) Follow-up spot applications in April/May to treat later germinating or missed thistles.

**Task 2a: Water Deliver & Supply to Reynolds Clements Road Preserve**
(1) Deliver and set-up temporary 3,000-gal water storage tank to site in February, (2) Fill water tank via water truck up to 4 times; and (3) Remove water tank in May.

**Task 2b: Yellow Star-Thistle Treatments at Reynolds Clements Road Preserve (~120 acres)**
(1) Treat yellow star-thistles (and other thistles) in February/March with ATV and boom spray in heavily infested areas; (2) Use backpack sprayer or wand attached to ATV for spot treatments or adjacent to wetlands; and (3) Follow-up spot applications in April/May to treat later germinating or missed thistles.

**Task 3: ICF Contract Oversight**
ICF will perform the following services in support of this project.
(1) Landowner Coordination and Project Management. ICF will coordinate the project with the various landowners and conduct other project management tasks.

(2) Treatment Evaluation. ICF will map yellow star thistle cover on the preserves in Spring 2021 to evaluate the effectiveness of the treatment program and prepare a write up for inclusion in the annual report.

**Cost Estimate**

The cost estimate to provide these services is $67,250 (Table 1).

*Table 1. Cost Estimate to Control Yellow Star Thistle on the Remitz and Reynolds Clements Road Preserves.*

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<thead>
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<th>Bid Item</th>
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<td>Task 1a: Water Deliver &amp; Supply to Remitz Clements Road Preserve</td>
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<td>Task 1b: Yellow Star-Thistle Treatments at Remitz Clements Road Preserve (~150 acres)</td>
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<td>Task 2a: Water Deliver &amp; Supply to Reynolds Clements Road Preserve</td>
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<td>ICF Landowner Coordination and Project Management</td>
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<td>ICF Mapping of Yellow Star Thistle and Write up for Annual Report</td>
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<td><strong>Total Cost</strong></td>
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Sincerely,

Trina Prince
Contracts Specialist
December 2, 2019

Mr. Steven Mayo  
Senior Regional Planner  
San Joaquin Council of Governments  
555 East Weber Avenue  
Stockton CA 95202

Subject: Scope of Work and Cost Estimate to Install Preserve Enhancements on the Wetmore Forest Lake Road Preserve

Dear Mr. Mayo:

ICF Jones & Stokes, Inc. (ICF) appreciates the opportunity to prepare this scope of work and cost estimate to install preserve enhancements on the Wetmore Forest Lake Road preserve.

Scope of Work

This scope of work and cost estimate is for work to be performed on the Wetmore Forest Lake Road preserve. The scope of work includes site preparation, plant installation, irrigation installation, site maintenance, native grass seeding, and weed management on an approximately 10-acre area of the preserve. Maintenance is proposed over a 2-year post-installation period and includes irrigation and weed management. This scope encompasses planting and maintaining approximately 10 acres of the preserve. Revegetation includes the planting of 12 to 24 individual “clusters” with container plantings. Each cluster will consist of approximately 1,800 to 3,600 square feet planted with 25 to 50 container seedlings in each cluster.

Assumptions

- Triangle will be responsible for pre-staking individual planting locations.
- This scope does not include any engineering designs, flood hazard evaluations, or storm water runoff plans or permit preparation.
- All tree and shrub seedlings (and sedge/rush/grass liners) shall be provided by Triangle. A total of 600 container seedlings (Tree bands and D-pots) will be provided for this project.
- This scope assumes that a minimum 2” pressurized irrigation line will be available within 500 feet of the first planting area (cluster).
This scope does not include any additional costs for water or electricity.

Broadcast seeding of native grasses/forbs shall be performed between clusters and plantings within clusters in October 2020. The entire 10-acre revegetation area will be kept free of weeds (bare ground) throughout the first maintenance year until seeding, specifically to minimize competition with new plantings, reduce potential herbivory by voles, and reduce the existing weed seed bank for future native grass/forb establishment.

A PCA recommendation shall be provided for all herbicides used at the site. Herbicides will only be applied by a qualified licensed or certified applicator. Herbicide applications shall ensure that no incidental damage occurs to adjacent or existing agricultural fields or native trees, shrubs and perennials.

This scope does not include any measures to protect plants from herbivory.

This scope does not guarantee the success of plantings due to soil constraints, herbivory, adjacent farming practices, vandalism, fire, flood events, or other natural disasters.

This scope does not provide any guarantees to the level of success for native grass/forb cover establishment or noxious weed control beyond 2021.

Task 1. Site Preparation
(1) Spray weeds over entire 10-acre revegetation test area; and (2) Pre-stake container planting areas (clusters).

Task 2. Container Plant Installation
(1) Install 600 container Treeband and DP40 seedlings in 24 clusters/clusters over 10 acres. Seedlings will be supplied by Triangle and consist of Treeband and DP40 seedlings. Planting is anticipated to occur between March and April 2020, pending seasonal rainfall patterns and site conditions; (2) Install 19" tall tree tubes around each seedling; and (3) Water all seedlings thoroughly immediately after planting.

Task 3. Temporary Irrigation Installation
(1) Design and provide irrigation layout plan to ICF for review; (2) Install on-grade irrigation system using 1/2" Sch. 40 PVC pipe and 1/2" polypropylene lines. Two 2-gph emitters will be installed for each planting. Any irrigation lines across roads will consist of detachable flex hoses and removed when not operating to provide access to farmers and irrigation maintenance personnel or may be buried at least 6" below grade; (3) Test run irrigation and apply to new plantings.

Task 4. Native Grass/Forb Seeding
(1) Acquire native seed mix; (2) Prep seeding areas between clusters by disk; (3) Broadcast seed or drill seed areas between clusters; (4) Broadcast seed by hand between plantings in
clusters; and (5) Harrow areas where broadcast seeding method was used. No harrowing where seed drill is used.

**Task 5. Site Establishment and 1st Year Irrigation and Maintenance**

1. Provide twice weekly irrigation to plantings from March through April 2020, reducing to once weekly from May through August 2020, and twice monthly September through October 2020. All emitters will be checked during each irrigation application and unlogged or replaced as necessary. The frequency and amount of irrigation shall be adjusted each week; and (2) Hand-pull weeds growing in tubes.

**Task 6. Site Establishment and 2nd Year Irrigation and Maintenance**

1. Provide twice monthly irrigation to plantings from April to July 2020, reducing to once monthly from August to September 2020. All emitters will be checked during each irrigation application and unlogged or replaced as necessary. Irrigation shall be provided such that all plantings receive at least 8-10 gallons of water each cycle. The frequency of irrigation may be adjusted as monitoring suggests; and (2) Hand-pull weeds growing in tubes.

**Task 7. Supplemental Weed Control (Years 1 and 2)**

1. Spray and/or hand remove non-native weeds between plantings and clusters during the first 2 years. All areas within 2 feet of planted seedlings shall be kept free of weeds; (2) Target invasive species (i.e., those ranked 'High' in Cal-IPC's list [e.g., perennial pepperweed, yellow star-thistle, etc.]). Herbicide applications will be performed at different times of the year, depending on species, and include selective herbicides where non-target vegetation co-exists. Some of the weed control efforts shall be performed simultaneously with items 5 and 6.

**Task 8. Site Inspections and Miscellaneous Items**

1. Attend inspections with ICF and/or SJCOG as needed (e.g., prior to commencement of work to verify existing conditions; following initial site preparation; upon delivery of plant materials and seed material to project site; key irrigation system installation stages; during and following completion of planting activities; at the completion of the implementation phase; (2) Provide portable toilet facilities during installation period; and (3) Evaluate site for any adaptive management needs.

**Task 9: ICF Contract Oversight**

ICF will coordinate with SJCOG and the landowner on all matters pertaining to the project, conduct site inspections after each phase of project installation, and ensure that all terms and conditions of the contract are adhered to.
Cost Estimate
The cost estimate to provide these services is $114,690 (Table 1).

Table 1. Cost Estimate to Install Preserve Enhancements on the Wetmore Forest Lake Road Preserve.

<table>
<thead>
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<th>Bid Item</th>
<th>Total ($)</th>
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<td>Task 1. Site Preparation</td>
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<td>Task 2. Container Plant Installation</td>
<td>$19,080.00</td>
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<td>Task 3. Temporary Irrigation Installation</td>
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<td>Task 4. Native Grass/Forb Seeding</td>
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<td>Task 5. Site Establishment and 1st Year Irrigation and Maintenance</td>
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<td>Task 6. Site Establishment and 2nd Year Irrigation and Maintenance</td>
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<td>Task 7. Supplemental Weed Control (Years 1 and 2)</td>
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<td>Task 8. Site Inspections and Miscellaneous Items</td>
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<td>Triangle Subtotal</td>
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<td>Task 9. ICF Contract Oversight, Site Inspections, and Landowner Coordination</td>
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<tr>
<td>Total Cost</td>
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Sincerely,

Trina Prince
Contracts Specialist