

PUBLIC WORKS DEPARTMENT CITY OF CARMEL-BY-THE-SEA

August 31, 2016

TO: Chair Ferlito and Forest & Beach Commissioners

FROM: Mike Branson, City Forester

SUBJECT: Supplemental Materials for Item V.1. – North Dunes Restoration

Project

Attached please find the following documents pertinent to the September 1, 2016 discussion of the North Dunes Restoration Project CDP

- City Council Minutes of February 3, 2015 (pertinent except)
- Professional Services Agreement with Native Solutions

MINUTES REGULAR CITY COUNCIL MEETING CARMEL-BY-THE-SEA

Tuesday, February 3, 2015

Mayor Pro Tem Beach called the meeting to order at 4:30 p.m.

ROLL CALL:

Present:

Council Members Dallas, Talmage and Theis, and Mayor

Pro Tem Beach

Absent:

Mayor Burnett

Staff Present:

Douglas J. Schmitz, City Administrator

Don Freeman, City Attorney Lee Price, Interim City Clerk

Janet, Bombard, Library and Community Activities Director

Robert Mullane, Community Planning and Building Sharon Friedrichsen, Public Services Director

Mike Calhoun, Public Safety Director

Paul Wood, Finance Manager Mike Branson, City Forester

PLEDGE OF ALLEGIANCE: Interim City Clerk Lee Price led the pledge.

EXTRAORDINARY BUSINESS: Mayor Pro Tem Beach recognized the following members of the Community:

- a. Carmel Pine Cone Publisher Paul Miller was recognized to honor the 100th Anniversary of the Pine Cone
- b. Carmel-by-the-Sea 2016 Committee Members were recognized for their work. (Present: Ann Hougham, Steve Brooks, Greg Celletti, Neal Kruse)

MOMENT OF SILENCE: Mayor Pro Tem asked for a moment of silence in memory of former City employees Rose Franzen and Steve McInchak.

ANNOUNCEMENTS:

Mayor ProTem Beach announced opportunities for the public to comment on the Ft. Ord urban design guidelines process.

City Administrator Schmitz provided the following updates:

- a) Community Workshop on Parking Program February 19th at 6:00 p.m. at Sunset Plaza
- b) Item 7.G to be deferred to the March meeting due to lack of quorum required to consider the matter
- c) Stump removal update
- d) This Month in Carmel History
- e) Status of Unisex Restrooms on Scenic Drive

PUBLIC APPEARANCES:

Sue McCloud, Centennial Committee Chair, demonstrated the Centennial Website and announced that the next committee meeting is February 18th at 4:00 p.m.

Gary Richard Arnold spoke regarding the surrender of local authority to political machines.

Richard Kreitman expressed concerns regarding noise/pollution from idling, parked delivery vehicles downtown.

CONSENT CALENDAR:

Upon a motion made by Council Member Talmage, seconded by Council Member Theis, the Council unanimously approved the Consent Calendar, but for Items 7.G (to be deferred until March) and 7.I (at the request of a member of the public).

Item 7.A: Consideration of Approval of City Council Minutes:

- a. Minutes of the Special Meeting of January 5, 2015
- b. Minutes of the Regular Meeting of January 6, 2015

Action: Approved. 4:0

Item 7.B: Approval of Warrant Register for the Month of December, 2014.

Action: Approved. 4:0

Mayor Pro Tem invited Karen Ferlito to the podium to comment on the following item pulled from the Consent Calendar, at her request:

Item 7.I Consideration of Resolution Authorizing the City Administrator to Execute a Professional Services Agreement with Native Solutions for Biological Services for the Dunes Habitat Restoration Project.

<u>Public Comments</u>: Karen Ferlito, Neils Reimers and Richard Kreitman asked clarifying questions about details regarding Year 3 programming (specifically Cypress Tree removal), the project budget and anticipated timeline. City Forester Mike Branson and City Administrator Doug Schmitz responded to the questions.

<u>Action</u>: Upon a motion made by Council Member Theis, seconded by Council Member Talmage, the Council unanimously adopted Resolution No. 2015-013 Professional Services Agreement with Native Solutions for Biological Services for the Dunes Habitat Restoration Project, as recommended. 4:0

ORDERS OF COUNCIL:

Item 8.A: Presentation on Highway 68 Roundabout

Ariana Green, Monterey County Transportation Agency Planner, provided a PowerPoint presentation and responded to questions. City Administrator Doug Schmitz expressed concerns regarding emergency access to CHOMP during construction. Rich Deal, Traffic Engineer for the City of Monterey provided additional information.

Public Comments:

Sue McCloud and Carolyn Hardy expressed concerns regarding emergency access to the hospital. Jim Emery suggested that the planning take into account the value of time lost by delayed drivers and suggested that work be done at night to off-set delays to commuters.

---End of Public Comments----

Action: Report received. Council requested an update late Summer 2015 before construction begins (tentatively scheduled for September).

CONTRACT FOR PROFESSIONAL CONSULTING SERVICES

THIS CONTRACT is executed this <u>Mary day of February 2015</u>, by and between the CITY OF CARMEL-BY-THE-SEA, hereinafter referred to as "CITY" and NATIVE SOLUTIONS, hereinafter called "CONSULTANT".

IT IS HEREBY MUTUALLY AGREED AS FOLLOWS:

- 1. <u>Scope</u>. CONSULTANT hereby agrees to provide to CITY, as the scope of services under this Contract the services set forth in the proposal for services dated September 14, 2014 revised October 18, 2014 (Exhibit "A"), and the North Dunes Habitat Restoration Project Summary and Schedule (Exhibit "B"), attached hereto and incorporated herein by this reference.
- 2. <u>Timely Work.</u> CONSULTANT shall perform all duties incidental or necessary in a timely fashion; and shall be performed diligently, competently, and in accordance with professional standards of performance. Failure to so perform is hereby deemed a material breach of this Contract, and CITY may terminate this Contract with no further liability hereunder. City may agree in writing with CONSULTANT to an extension of time. It is expressly agreed and understood that CONSULTANT shall not be held responsible for delays occasioned by factors beyond their control, nor by factors that could not reasonably have been foreseen at the time of execution of this CONTRACT on February 3, 2015 and terminate June 30, 2019. The parties may agree to extend or amend this Contract prior to its expiration.
- 3. <u>Compensation</u>. CITY shall pay CONSULTANT in an amount not to exceed \$80,000, which includes \$19,800 for year one; \$25,750 for year two; \$17,450 for year three and \$8,500 for years four and five respectively, as presented in the proposal dated September 14, 2014 revised October 18, 2014 (Exhibit "A"), the North Dunes Habitat Restoration Project Summary and Schedule dated December 1, 2014 (Exhibit "B"), and in accordance with this Contract for fiscal year 2014-15.

Compensation under this Contract shall become due and payable thirty (30) days after CITY's approval of CONSULTANT'S submission of monthly written invoices. Written invoices shall clearly itemize each charge. The payment of any compensation to CONSULTANT hereunder shall be contingent upon performance of the terms and conditions of this Contract to the satisfaction of the City Administrator.

If the City Administrator determines that the work set forth in the written invoice has not been performed in accordance with the terms of this Contract, CITY shall not be responsible for payment until such time as the work has been satisfactorily performed.

- 4. <u>Additional Services</u>. In the event that CITY should request additional services not covered by the terms of this Contract, said services will be provided by CONSULTANT and paid for by CITY only after a fee for said services has been agreed upon between CONSULTANT and City Administrator and the City Administrator provides written authorization for the additional work.
- 5. <u>Meet and Confer.</u> CONSULTANT agrees to meet and confer with CITY or its agents or employees with regard to services as set forth herein as may be required by City Administrator to insure timely and adequate performance of this Contract.

6. <u>Indemnification</u>. CONSULTANT hereby agrees to the following indemnification clause:

To the fullest extent permitted by law (including, without limitation, California Civil Code Sections 2782 and 2782.6), CONSULTANT shall defend (with legal counsel reasonably acceptable to designated agents, departments, officials, representatives, and employees (collectively "Indemnitees") from and against claims, loss, cost, damage, injury expense and liability (including incidental and consequential damages, court costs, reasonable attorneys' fees, litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigation) to the extent they arise out of, pertain to, or relate to, the negligence, recklessness, or willful misconduct of CONSULTANT, any SUB-CONSULTANT, anyone directly or indirectly employed by them, or anyone that they control (collectively "Liabilities"). Such obligations to defend, hold harmless and Indemnify any Indemnitee shall not apply to the extent that such Liabilities are caused in part by the negligence, or willful misconduct of such Indemnitee.

Notwithstanding the provisions of the above paragraph, CONSULTANT agrees to indemnify and hold harmless CITY from and against any and all claims, demands, defense costs, liability, expense, or damages arising out of or in connection with damage to or loss of any property belonging to CONSULTANT or CONSULTANT'S employees, contractors, representatives, patrons, guests or invitees.

CONSULTANT further agrees to indemnify CITY for damage to or loss of CITY OF CARMEL-BY-THE-SEA property to the proportionate extent they arise out of CONSULTANT'S negligent performance of the work associated with this Contract or to the proportionate extent they arise out of any negligent act or omission of CONSULTANT or any of CONSULTANT'S employees, agents, contractors, representatives, patrons, guests or invitees; excepting such damage or loss arising out of the negligence of CITY.

7. <u>Insurance</u>. CONSULTANT shall submit and maintain in full force insurance as described herein. Without altering or limiting CONSULTANT'S duty to indemnify, CONSULTANT shall maintain in effect throughout the term of this Contract, a policy or policies of insurance with the following minimum limits of liability:

<u>Commercial general liability insurance</u> including but not limited to premises, personal injuries, bodily injuries, products, and completed operations, with a combined single limit of not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate.

<u>Workers' Compensation Insurance</u> If CONSULTANT employs others in the performance of this Contract, CONSULTANT shall maintain workers' compensation insurance in accordance with California Labor Code section 3700 and with a minimum of \$100,000 per occurrence for employers' liability.

Other Insurance Requirements

- A. All insurance required under this Contract must be written by an insurance company either:
 - 1) admitted to do business in California with a current A.M. Best rating of no less that A:VI;

2) an insurance company with a current A.M. Best rating of no less that A:VII

Exception may be made for the State Compensation Insurance Fund when not specifically rated.

- B. Each insurance policy required by this Contract shall be endorsed to state that CITY shall be given notice in writing at least thirty (30) days in advance of any cancellation thereof, except CITY shall be given TEN (10) days notice for nonpayment of the premium.
- C. The general liability and auto policies shall:
 - 1) Provide an endorsement naming CITY, its officers, officials, and employees as additional insureds under an ISO CG 20 10 07 04 or ISO 20 37 07 04 or their equivalent.
 - 2) Provide that such insurance is primary and non-contributing insurance to any insurance or self-insurance maintained by CITY.
 - 3) Contain a "Separation of Insureds" provision substantially equivalent to that used in the ISO form CG 00 01 10 01 or their equivalent.
 - 4) Provide for a waiver of any subrogation rights against CITY via an ISO CG 24 01 10 93 or its equivalent.
- D. Prior to the start of work under this Contract CONSULTANT shall file certificates of insurance and endorsements evidencing the coverage required by this Contract with the City Administrator. CONSULTANT shall file a new or amended certificate of insurance promptly after any change is made in any insurance policy which would alter the information on the certificate then on file.
- E. Neither the insurance requirements hereunder, nor acceptance or approval of CONSULTANT'S insurance, nor whether any claims are covered under any insurance, shall in any way modify or change CONSULTANT'S obligations under the indemnification clause in this Contract, which shall continue in full force and effect. Notwithstanding the insurance requirements contained herein, CONSULTANT is financially liable for its indemnity obligations under this Contract.
- F. Any deductible or self-insured retentions must be declared to and approved by CITY. At the option of CITY either: the insured shall reduce or eliminate such deductibles or self-insured retentions as respects CITY, its officers, officials, employees, and volunteers; or CONSULTANT shall provide a financial guarantee satisfactory to CITY guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

- 9. Ownership of Work. Upon completion of the work under this Contract, ownership and title to all materials and deliverables produced as part of this Contract will automatically be vested in CITY and no further contract will be necessary to transfer ownership to CITY.
- 10. <u>Licensing</u>. CONSULTANT represents that it is properly licensed to perform the work specified under this Contract, including but not limited to, possession of a current city business license.
- 11. <u>Termination</u>. This Contract may be terminated by either party upon thirty (30) calendar days written notice to the other party. In the event of such termination, CITY shall pay CONSULTANT for all services performed to the satisfaction of CITY to the date of receipt of notice of termination. An itemized statement of the work performed to the date of termination shall be submitted to CITY. In ascertaining the services actually rendered hereunder up to the date of termination of this Contract, consideration shall be given to both completed work and work in process of completion, and to complete and incomplete drawings and other documents whether delivered to CITY or in the possession of the CONSULTANT.
- 12. <u>Agency</u>. In performing the services specified under this Contract, CONSULTANT is hereby deemed to be an independent CONSULTANT and not an agent or employee of CITY.
- 13. Authority of the City Administrator. CONSULTANT shall perform all necessary services provided under this Contract and outlined in the proposal and shall do, perform, and carry out said work in a satisfactory and proper manner as determined by and to the satisfaction of the City Administrator. The City Administrator reserves the right to make changes, additions or deletions, to the scope of work as deemed necessary or advisable to implement and carry out the purposes of this Contract. The City Administrator is authorized to execute change orders.
- 14. Responsibility of Consultant. By executing this CONSULTANT represents and state to CITY that he/she possesses, or will arrange to secure from others, all necessary professional capabilities, experience, resources and facilities necessary to provide to city the services contemplated under this Contract. CONSULTANT further warrants that he/she will follow the current generally accepted practices of the profession to make findings, render opinions, prepare factual presentations, and provide professional advice and recommendations regarding the project for which services are rendered under this Contract.
- 15. <u>Materials and Equipment</u>. CONSULTANT shall furnish at his/her own expense, all materials and equipment necessary to carry out the terms of this Contract.
- 16. <u>Digital Files</u>. CONSULTANT shall furnish copies of all deliverables on compact disks (for example, final report) in digital format. Files shall be compatible with the current versions used by PC computers.
- 17. Audit Authority. CONSULTANT shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management under this Contract; the accounting and control systems shall be satisfactory to CITY. CITY and CITY's auditor shall be afforded access to CONSULTANT's records, books, correspondence and other data relating to this Contract. CONSULTANT shall preserve these records, books, correspondence and other data relating to this Contract for a period of four (4) years after

final payment or for such longer period as may be required by law. In addition, CONSULTANT agrees to make said records, books, correspondence and other data relating to this Contract available to CITY at CITY's principle place of business upon seventy-two (72) hours advance written notice. The City Administrator, or his or her designee, shall at all times have the right to inspect the work, services, or materials. CONSULTANT shall furnish all reasonable aid and assistance required by CITY for the proper examination of the work or services and all parts thereof. Such inspection shall not relieve CONSULTANT form any obligation to perform said work or services strictly in accordance with the specifications of any modifications thereof and in compliance with the law.

18. <u>Notices</u>. All notices herein provided to be given, or which may be given by either party to the other, shall be considered fully received when made in writing and deposited in the United States mail, certified and postage prepaid, and addressed to the respective parties as follows:

CITY:

City Administrator

City of Carmel-By-The-Sea

P.O. Box CC

Carmel-By-The-Sea, CA 93921

CONSULTANT:

Native Solutions P.O. Box 215

San Juan Bautista, CA 95045

- 19. <u>Entire Contract</u>. This Contract constitutes the entire contract between the parties hereto and supersedes any and all prior contracts, whether oral or written, relating to the subject matter thereof. Any modification of this Contract will be effective only if it is in writing signed by both parties hereto.
- 20. <u>Validity</u>. If any provision in this Contract is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will continue in full force without being impaired or invalidated in any way.
- 21. <u>Assignment of Interest</u>. The duties under this Contract shall not be assignable, delegable, or transferable without the prior written consent of CITY. Any such purported assignment, delegation, or transfer shall constitute a material breach of this Contract upon which CITY may terminate this Contract and be entitled to damages.
- 22. <u>Conflict of Interest</u>. CONSULTANT shall at all time avoid conflicts of interest, or the appearance of conflicts of interest, in the performance of this Contract. CONSULTANT shall file statements of financial interest on forms provided by CITY to the extent and at the times required by CITY'S Conflict of Interest Code and applicable law.

During the term of this Contract CONSULTANT shall not directly or indirectly, either as a partner, employer, employee, consultant, principal, and agent or in any individual or representative capacity, engage or participate in any business or voluntary activity on behalf of any other party on any property located within the City of Carmel-By-The-Sea without notification to City Administrator.

23. <u>Non-discrimination/Affirmative Action</u>. CONSULTANT will not discriminate against any employee or applicant for employment because of race, creed,

color, sex, age, national origin, marital status, physical or other motor handicap, unless based upon bonafide occupational disqualification.

CONSULTANT will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex, age, national origin, marital status, physical or other motor handicap.

- Counterparts. This Contract may be executed in multiple originals, each of which is deemed to be an original, and may be signed in counterparts.
- 25. Laws. CONSULTANT agrees that in the performance of this Contract it will reasonably comply with all applicable state, federal and local laws and regulations. This Contract shall be governed by and construed in accordance with the laws of the State of California and the City of Carmel-By-The-Sea.
- 26. Attorneys Fees and Court Venue. Should either party to this Contract bring legal action against the other, (formal judicial proceeding, mediation or arbitration), the case shall be handled in Monterey County, California, and the party prevailing in such action shall be entitled to a reasonable attorney's fee which shall be fixed by the judge, mediator or arbitrator hearing the case and such fee shall be included in the judgment, together with all costs.
- Severability. If any term of this Contract is held invalid by a court of 27. competent jurisdiction, the remainder of this Contract shall remain in effect.

IN WITNESS WHEREOF, this Contract is entered into by the parties hereto in Carmel, California, on the day and year first written above.

CITY OF CARMEL-BY-THE-SEA

Doug Schmitz, City Administrator

ATTEST:

Lee Price, MMC Interim City Clerk

CONSULTANT

Joan D. Canepa (native Solutions)
Biologist

Native Solutions

Joey and Steve Canepa P.O. Box 215 San Juan Bautista, CA. 95045 Phone/fax: 831.623.9048 Cell: 831.915.7873

Email: joeydorrellcanepa@gmail.com

NORTH DUNES Habitat Restoration City of Carmel-by-the-Sea

September 14, 2014

Landscape contractor CA. license # 836197 CA. Dept of Pesticide Regulation- Qualified applicator's license #104530 Native Solutions EIN:51-0600187

Proposed Budget by Year	7/2014-6/2015	7/2015-6/2016	7/2016-6/2017	7/2017-6/2018	7/2018-6/2019	
Task/Item	YEAR ONE	YEAR TWO	YEAR THREE	YEAR FOLIR	VEAR EIVE	Even
BIOLOGICAL CONSULTANT (CDP application)	\$4,250				I CAIN LIVE	CA 250
Meetings/ Public Hearings	\$1,700	\$1,275				\$2,000 C\$
SENSITIVE SPECIES MANAGEMENT (Permit, re-survey)	\$2,000	\$1,400				\$2,013
PROJECT MANAGEMENT	\$3,400	\$2,550	\$1.700			43,400 ¢7,550
FENCING (sensitive species, pathways)	7500	2500	001/21			10000
WEED ERADICATION						TODOG
SPRAY (Herbicide)	\$1,700	\$1,275	\$1,000			\$3 975
HAND WEED	\$2,250	\$4,500	\$2,250			\$9,000
STABILIZE DRIFTING SAND	\$0	\$2,500	\$2,000			\$4.500
SEED COLLECTION-site specific/ BROADCAST SEED	\$750	\$250	\$250			\$1.250
						44,400
PROPAGATION (phase over 3 years)- 3000 Cells	\$1,875	\$1,250	\$625			¢3 7E0
INSTALLATION (phase over 3 years) - 3000 Cells	\$1,875	\$1,250	\$625			\$3.750
MAINTENANCE (fencing, erosion, weeding-4 years)	\$0	\$5,000	\$5,000	\$5,000	\$5,000	\$20,000
						^^4 vrs only
MONITORING (includes sensitive species, 5 years)	\$0	\$4,500	\$4,000	\$3,500	\$3,500	\$15,500
INTERPRETIVE SIGNAGE (City of Carmel)						\$0
PROPOSED PROJECT COST (5 years)	\$19,800	\$25,750	\$17,450	\$8,500	\$8,500	\$80,000



Native Solutions
Joey and Steve Canepa

P.O. Box 215 · San Juan Bautista, CA. 95045 Phone (831) 915-7873 joeydorrellcanepa@gmail.com Landscape contractor's license # 836197

Date: January 26, 2015

To: Mike Branson, City Forester

City of Carmel-by-the-Sea Public Services Department P.O. Box CC, California 93921

Ph. 831-620-2073

MBranson@ci.carmel.ca.us

From: Joey and Steve Canepa

Native Solutions

Re: North Dunes Habitat Restoration Project

Summary and Schedule

Year One (November 2014-June 2015) and Years Two-Three (2015-2017)

The North Dunes and Del Mar Dunes Habitat Restoration Plan was written in 2008 for the City of Carmel by Jean Ferreira, botanist. The comprehensive document provides surveys, background information, and restoration protocol for revegetation and management of the North Dunes; approximately 5 acres of sensitive habitat adjacent to Carmel Beach. Restoration of this area directly supports the following 1990 General Plan policies for the City of Carmel (P-5-42): Restore, maintain and enhance the degraded habitat in the North Dunes area to enhance environmental resources and aesthetics. Protect sensitive habitat and special-status species through development and implementation of the Del Mar and North Dunes Master Plan.

The City recently approved funding to implement the North Dunes Habitat Restoration project. Native Solutions, a local habitat restoration business, has been contracted to provide biological management, implementation, maintenance, and monitoring. The following documents provide a brief summary of restoration activities and a schedule for Years One-Three. Due to the late start of the contract, the schedule lists November 2014-June 2015 as Year One. Suggested deferred activities are detailed under Year Two (July 2015-June 2016) and Year Three (July 2016-June 2017).

If you have any questions or comments, please contact me!

Joey Dorrell-Canepa Dune Biologist, Native Solutions

Summary

North Dunes and Del Mar Dunes Habitat Restoration Plan (Ferreira, 2008)

Mission: Recreate a self-sustaining native dune habitat with thriving populations of the special status species, while providing safe visitor access and enjoyment of the dunes

Objectives:

Eliminate all aggressive non-native species

Expand the population of Tidestrom's lupine

Expand the quantity and quality of available habitat for Black Legless Lizards

Establish a trail system to provide safe visitor access without compromising the health of the dune habitat

Provide interpretation of the dune areas to enhance visitor's experience and knowledge of the Carmel Dunes

Joey Canepa (dune biologist)

NOTES regarding three year schedule:

Due to uncertain rainfall patterns and the delayed start of the first year of revegetation effort, it is my suggestion to propagate and plant seedlings over a three year period. Seedlings should be installed as early as possible during the winter rainfall period between January-February 2015 - 2017). This phased approach allows for maximum establishment using information from prior years' plant survival.

Broadcast seeding may be a very efficient method of native plant establishment in this fragile habitat with such hydrophobic sands and uncertain rainfall. Seed is easy to collect in the fall, and takes little effort to broadcast and rake in lightly. Unlike planted seedlings, if the dune seed does not get consistent moisture, it will usually survive for at least one year, and germinate when sufficient rainfall finally arrives.

Schedule

Year One (November 2014-June 2015)

Management:

Review specific goals of Dune Restoration and Management Program

Observe pedestrian use patterns, areas prone to erosion or overuse

Re-survey site: 1) sensitive species 2) invasive weed areas 3) diversified native vegetation

Consult with CA. Department of Fish and Game for necessary permit

(Lupinus tidestromii var. tidestromii - Tidestrom's lupine)

Plan phased areas for weed eradication, broadcast seeding, planting, seed collection

Supervise weed eradication, planting activities

Protection:

Install exclusionary cabling around colonies of Tidestrom's lupine
Install temporary fencing around any new plantings in exposed areas

Restoration Implementation:

Collect seed from site (2014) and Carmel River Beach (< 2 miles, 2015-2016).

Propagate 1500 seedlings (fall, 2014), 1000 (fall, 2015), 500 (fall, 2016)

Propagate 100 Tidestrom's lupine from onsite seed collections only (fall 2015)

Broadcast previously delineated areas with site-specific mixture of fresh seed.

Stabilize drifting sand with straw bunches if needed, depending on wind patterns.

Plant seedlings January-February 1500 seedlings (2015), 1000 (2016), 500 (2017)

Delineate weed-free areas for planting and survival monitoring

Create native plant clusters and habitat corridors, interspersed with open sand areas

Weed eradication

Monitoring:

Monitor survival of planted seedlings, assess germination and survival in broadcast seeded areas Monitor endangered Tidestrom's lupine (3x/annually)

Count number of individuals at emergence, full vegetative growth, seed dispersal)

Monitor areas of erosion, high pedestrian use

Draft plan for short (1-5 years) and long term monitoring programs (5 years +) with agency input

Year Two (July 2015-June 2016)

Management:

Identify Monterey Cypress maintenance areas and removal areas

Review plant establishment and success of YEAR ONE implementation

Plan any necessary fencing to protect highly impacted areas (if desired)

Evaluate 1) sensitive species survival to seed dispersal, any herbivory issues?

2) invasive weed areas declining? Target species?

3) areas of diversified native vegetation increasing?

Obtain permit from CA. Department of Fish and Game (Tidestrom's lupine)

Plan next areas for weed eradication, broadcast seeding, planting, seed collection

Supervise weed eradication, planting activities

Protection: Evaluate and adjust exclusionary cabling around colonies of Tidestrom's lupine

Restoration Implementation:

Collect seed from site and Carmel River Beach (< 2 miles, 2015-2016).

Propagate 1000 seedlings (fall, 2015), 500 (fall, 2016)

Propagate 100 Tidestrom's lupine from onsite seed collections only (fall 2015)- permit

Broadcast new delineated areas with site-specific mixture of fresh seed.

Stabilize drifting sand with straw bunches if needed, depending on wind patterns.

Plant seedlings in new areas January-February 1000 (2016), 500 (2017)

Delineate weed-free areas for planting and survival monitoring

Create native plant clusters and habitat corridors, interspersed with open sand areas

Weed eradication

Monitoring:

First monitoring report- surveys in spring 2016

Monitor survival of planted seedlings, assess germination and survival in broadcast seeded areas

Monitor endangered Tidestrom's lupine (3x/ annually)-with special attention to new seedlings

Count number of individuals at emergence, full vegetative growth, seed dispersal)

Finalize short (2-5 years) and long term monitoring programs (5 years +) with agency input

Year Three (July 2016-June 2017)

Management:

Supervise removal of designated Monterey Cypress, maintain existing trees

Review plant establishment and success of past implementation activities

Plan any necessary fencing to protect highly impacted areas (if desired)

Plan interpretive signage

Evaluate

- 1) sensitive species survival to seed dispersal, any herbivory issues?
- 2) invasive weed areas declining? Target species?
- 3) areas of diversified native vegetation increasing?

Plan next areas for weed eradication, broadcast seeding, planting, seed collection Supervise weed eradication, planting activities

Protection: Evaluate and adjust exclusionary cabling around colonies of Tidestrom's lupine Install any addition cable fencing needed

Restoration Implementation:

Collect seed from site and Carmel River Beach.

Propagate 500 seedlings (fall, 2016)

Propagate any additional Tidestrom's lupine (needed to total 100) from onsite collection and install (permit)

Broadcast new delineated areas with site-specific mixture of fresh seed.

Stabilize drifting sand with straw bunches if needed, depending on wind patterns.

Plant in new areas January-February- 500 seedlings (2017)

Delineate weed-free areas for planting and survival monitoring

Create native plant clusters and habitat corridors, interspersed with open sand areas Weed eradication

Monitoring: Second annual monitoring report- surveys in spring 2017

Monitor survival of planted seedlings, assess germination and survival in broadcast seeded areas Monitor endangered Tidestrom's lupine (3x/annually) - special attention to any new seedlings