

# Exhibit H

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Matt Hubbard  
480 Gate 5 Road, Suite 100  
Sausalito, CA 94965  
Re: Cypress Villa

September 27, 2024

Dear Matt,

As requested, I have completed an on-site assessment of Biological Resources on the 3270 17-mile Drive property. APN 008-462-005

#### Summary

The Owners of Villa Cypress have asked for a biological assessment of their 2.685-acre property at 3270 17-Mile Drive in Pebble Beach Ca. The property has an existing 6,594 square-foot (3,705 square-foot first floor; 2,889 square-foot second floor plus 1,578 square-foot terrace), 98-year-old single family residence, and detached 1170 square-foot garage/carriage house, of unknown age (but at least 50 years). The owners are contemplating site improvements and redesigning the driveway and patios and outside living spaces on the property.

There are no proposed Monterey Cypress tree removals in this site improvement plan. There are no anticipated impacts to special status plant or animal species because of implementing this plan. There is a reduction of hardscape from the current development coverage of the site in this improvement plan.

#### Setting

3270 Seventeen-mile Drive is at the western edge of the Monterey Peninsula about a quarter mile north of Pescadero Point, within the Del Monte Forest Local coastal program segment of the of the California Coastal Act, in the Monterey Quadrangle of the USGS. The lot extends from 17-mile Drive (about 68-foot elevation) to a fence line above the ocean bluff at about 40 feet. This part of the Peninsula is within one of only two known natural populations of the Monterey Cypress (*Hesperocyparis macrocarpa*) in the world and these trees are the dominant life forms on the property. The Monterey Cypress Forest is considered an Environmentally Sensitive Habitat Area (ESHA) and is afforded protection under both the Coastal Act and the California Endangered Species Act (CESA). This entire lot is within the Monterey Cypress Forest (though no parts of the property are still in undisturbed high quality Cypress habitat) and any remodel, revision or new development will be narrowly restricted based on local policy.

#### Research and pertinent policies

The Del Monte Forest Land Use Plan identifies much of the area within the LUP boundaries as Environmentally sensitive habitat areas (or ESHAs). *ESHA's in the Del Monte Forest are defined as those areas in which plant or animal life or their habitats are either rare or especially valuable due to their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. The Coastal Act provides strong protection for environmentally sensitive habitat areas and within such areas permits only resource-dependent uses (e.g., nature education and research) that do not result in any significant disruption of habitat values. The Act also requires that any development adjacent to environmentally sensitive habitat areas be properly sited and designed to avoid impacts that would significantly degrade such habitat areas.*

*20. Indigenous Monterey cypress habitat is an environmentally sensitive habitat area within the Del Monte Forest. Within their indigenous range, Monterey cypress trees and habitat shall be protected to the maximum extent possible. All development that could impact Monterey cypress trees and/or Monterey cypress habitat mapped in this area shall be carefully sited and designed to avoid adverse impacts and potential damage or degradation to both individual cypress trees and cypress habitat*

*and shall be required to include measures that will enhance Monterey cypress habitat values. All development shall be consistent with the limitations and standards provided in Del Monte Forest Implementation Plan Section 20.147.040(D) to ensure no Monterey cypress trees are harmed, and that Monterey cypress habitat is increased, restored as high-value and self-functioning Monterey cypress habitat,*

*(a) and placed under a Conservation Easement. All proposed development in this area shall be accompanied by a coordinated biologist and arborist report; pursuant to Section 20.147.040.A, a purpose of which is to determine: the "critical root zone" for the site (i.e., the portion of the site that must be avoided in all cases); the relative habitat sensitivity of all parts of the site, ranked from the highest sensitivity to the lowest sensitivity in terms of potential adverse impacts from development: the ways in which the critical root zone and the relative habitat sensitivity rankings relate to adjacent and surrounding habitat areas; and the measures to best protect Monterey cypress habitat on the site and overall (including in terms of on-site (and potentially offsite) restoration and enhancement measures). The critical root zone shall be defined as the dripline of each Monterey cypress tree on the site, as well as any other area where proposed development may damage or degrade Monterey cypress trees (this may include the need to preserve associated coarse root and feeder root zones, as well as soil type and condition). The arborist report shall calculate the critical root zone for each Monterey cypress tree on the site based on the best available arborist and biological professionally recognized standards, including an analysis of the habitat and coarse root zone for the cypress trees at maturity. The critical root zone may not always represent a simple radius around the tree.*

*(b) Developed Parcels. All improvements (such as structures and driveways, etc.) shall be carefully sited and designed to avoid potential damage or degradation of Monterey cypress habitat, including the micro habitat of individual trees, and must be located within existing hardscaped areas and outside of the dripline of individual cypress trees. On developed parcels (i.e., those with a legally established residence), new and/or modified development shall be located within the development envelope, which shall consist of all existing legally established structural and/or hardscaped coverage (i.e., all areas of the site covered with a structure, or other pervious or impervious hardscape areas (such as decks, patios, driveways, and paths, but not including landscaped areas, fence areas, or underground or over ground utility areas), and outside the critical root zone of individual cypress trees unless each of the following findings can be made:*

*(1) Construction, use, and maintenance of the new and/or modified development will accommodate the health and vitality, and will not harm, any existing individual Monterey cypress tree regardless of size (this determination will be made based on the type of development the particulars of its siting and design, and its location in relation to individual trees, the critical root zone, higher sensitivity portions of the site, and adjacent and surrounding habitat areas); as the existing development envelope), and that is sited in such a way as to be located within the least environmentally sensitive location (as determined by the coordinated biologist and arborist reports), and maximizes Monterey cypress habitat values, including in relation to adjacent and surrounding areas (e.g., clustering new and/or modified development on the site near to existing and/or adjacent residential*

*developments so as to provide as much of a contiguous, undisturbed, and unfragmented habitat area as possible. All areas outside of the approved development envelope will be: restored to and/or enhanced as high value and self-functioning Monterey cypress habitat by taking into consideration removal of exotics species, consolidation of fragmented Monterey cypress habitat (improving growing conditions to provide a bare, mineral soil necessary for seed germination, increasing sunlight to prevent soil borne fungi from inhabiting seedlings), and strategic planting of native Monterey cypress to promote future germination with all initial restoration/enhancement implemented prior to occupancy of any approved development; and placed within an open space conservation and scenic easement secured consistent with Policy.*

- (2) *All areas of new coverage (i.e., areas that would be covered with structures and/or hardscape that are not so covered in the existing legally established baseline condition) shall be offset through restoration and/or enhancement (as high value and self-functioning Monterey cypress habitat) of an off-site area (including within any right-of-way) located within the Monterey cypress habitat area mapped in Figure 2a at a ratio of 2:1 (and/or payment of a mitigation fee, commensurate with the cost to restore/enhance such an area, to an acceptable public agency or private group effectively able to both manage such a fee (including through established interest bearing and earmarked accounts, etc.) and to implement such measures). Such off-site restoration/enhancement areas shall be selected for their potential to result in the greatest amount of overall benefit to the native Monterey cypress habitat in the Del Monte Forest. All initial restoration/enhancement of the offsite area shall be implemented prior to occupancy of any approved development or, in the case of a fee, the fee paid prior to issuance of the construction permit and*
- (3) *The new and/or modified development has been sited and designed in such a way as to avoid the critical root zone and the most sensitive habitat parts of the site as much as possible, to result in greater cypress habitat value on the site (and in relation to adjacent and surrounding habitat areas) than the existing baseline habitat value, and to enhance overall Monterey cypress habitat values. If development is proposed within a Monterey cypress critical root zone, the arborist must provide alternative construction methods or preconstruction treatments to avoid impacts. The alternative methods can include supplemental irrigation, hand digging or grading, root pruning or modification to traditional construction methods, such as spanning roots, pier and above grade beams or cantilevering structures. However, in no case shall Monterey cypress trees be removed.*

This report will evaluate the extent of Monterey Cypress habitat on site, the sensitivity level of that habitat based on existing baseline conditions and the potential, if any, for new development on site that would not negatively impact Monterey Cypress trees or habitat.

## Database and Literature search

Prior to my site visit I conducted Database searches through the California Native Plant Society Rare Plant Inventory and the California a Natural diversity Database for Special Status (Rare, Threatened or Endangered) Plants and wildlife and Plant communities in the Monterey Quadrangle. The results of those searches are included as appendices to this report. Based on the location and plant community known on the project site I was able to eliminate those plant species found only at higher elevations or further inland or in freshwater aquatic habitats. ESHA can be defined by the Individual species that it hosts, or the rareness of the plant community itself. In this case, while the naturally occurring Monterey Cypress Forest is extremely rare, the plant community, unlike the nearby Dune and Coastal Bluff scrub plant communities, does not typically host many other rare, threatened, or endangered species. The ESHA classification is entirely focused on its individual trees and the Cypress Forest habitat with its unique group of understory species.

Monterey cypress occurs in two natural stands in Monterey County, California. One stand, known as the Crocker Grove, is between Point Cypress and Pescadero Point on the north side of Carmel Bay, Monterey Peninsula. A smaller one is near Point Lobos on the south side of Carmel Bay. Monterey cypress is the dominant component of the Monterey cypress forest community. This community is a moderately dense, fire-maintained forest up to 82 feet tall in sheltered areas.

Monterey cypress typically grows in pure stands with an understory of scattered dwarf shrubs and perennial herbs. It intergrades with northern coastal bluff scrub on exposed seaward edges and with Monterey pine (*Pinus radiata*) forest away from the ocean. Monterey cypress is associated with closed-cone pine-cypress forests. Species commonly associated with Monterey cypress include California sagebrush (*Artemisia californica*), coyote brush (*B. pilularis* var. *consanguinea*), blue blossom (*Ceanothus thyrsiflorus* var. *thyrsiflorus*), liveforever (*Dudleya farinosa*), seaside daisy (*Erigeron glaucus*), lizard tail (*Eriophyllum staechadifolium*), Douglas iris (*Iris douglasiana*), bush monkeyflower (*Diplacus aurantiacus*), Pacific bayberry (*Myrica californica*), skunkweed (*Navarretia squarrosa*), poison-oak (*Toxicodendron diversilobum*), and California huckleberry (*Vaccinium ovatum*).

The plant community that occupies the narrow band between the Monterey Cypress Forest and the High tide line on the Monterey peninsula is Coastal bluff scrub. It typically shares species with the outer edges of the Monterey Cypress Forest. The Coastal bluff scrub components are like the Dune scrub members found on the southern and northern sides of the peninsula with much overlap, but most of the rare, threatened, and endangered species are found in the more dynamic conditions of shifting sand in the Dune scrub. On this site, few annual species are present and most of the Bluff scrub vegetation is perennial or subshrub (small woody shrubs) species. Of the 45 plant species considered rare, threatened, or endangered in the Monterey Quadrangle, 22 of them are annuals and all of those are most typically found in sandy dune scrub or maritime chaparral plant communities. The appendices with the database lists include notes regarding whether species would be likely to occur on site *and* whether they were observed. But due to the site being 95% Monterey Cypress forest the primary focus of my site impact analysis is within the Cypress distribution on site

## Observations

On September 18, 2023, and April 16, 2024, I visited the Villa Cypress property to see the layout of the existing development and survey the entire property for sensitive plant and animal species and plant communities. The first survey was useful for observing the overall plant community but not for determining presence or absence of the complete list of plant species potentially found in the two plant communities on site. These survey dates combined allowed for locating flowering plants of most of the potentially occurring special status (Rare, Threatened or Endangered) species. Most of the annual and perennial special status species bloom in Spring and Summer and identification of some is not possible unless found in bloom. During these survey visits I walked the entire property, starting near the existing structures on the south end and progressing west and north to the property line and out to 17-mile Drive. The Villa Cypress Property is dominated by Monterey Cypress (*Hesperocyparis macrocarpa*) Forest in a nearly pure stand with almost entirely closed canopy over the property except for the Single-Family residence in the middle of the site. Several small pine trees are planted in the landscape and seedlings were noted in the area close to the road. The understory is a dense mosaic of turf grass, nonnative landscape shrubs and perennials, nonnative invasive weeds like “Ice plant” (*Carpobrotus edulis*) and scattered persistent native perennials like Seaside daisy (*Erigeron glaucus*).

The Monterey Cypress Forest throughout the property is not particularly diverse in size or age class and most are mature, tall trees in generally good health. Several standing dead trees are scattered amongst the stand near the southern property line and do not appear to be at risk or danger to any structures. Their value as habitat and aesthetic appeal favors keeping them in place. A small bunch of stunted looking younger Cypress occurs between the Carriage house and the frontage along Cypress Drive (17-Mile Drive). A few younger and healthy Cypress were also found on the SW side of the main house. Only at outside edges near the property lines or close to the Ocean edge are there contiguous groups of native understory plants. Here it is dominated by seaside daisy (*Erigeron glaucus*) which appears to be the most successful



Figure 1: view looking south through cypress forest and entry drive on inland side of main house.

and common forb in the Cypress understory throughout the natural range of the trees. Mixed with the Daisy on the western end of the property are Beach aster (*Corethrogyne filaginifolia*), Dune sagewort (*Artemisia pycnocephala*) occasional stinging phacelia (*Phacelia malvifolia* var. *malvifolia*) and the afore mentioned nonnative *Carpobrotus* species. The plant community seaward of the single-family dwelling to

the high tide line of the ocean is coastal bluff scrub dominated by low growing perennial species and invaded by the ubiquitous nonnative *Carpobrotus edulis* and *chilensis* (both commonly referred to as Ice plant). It is highly disturbed on this lot with very few of the typical native species found among the nonnative groundcover (*Crassula* sp. and others) The only native species found, aside from the Seaside daisy were a few wooly lotus (*Acmispon heermannii* var. *orbicularis*), several Nutall's milkvetch a California Rare Plant Inventory list 4 species<sup>1\*</sup> (*Astragalus nuttallii* var. *nuttallii*), Beach aster (*Corethrogyne filaginifolia*) and a small patch of Giant wild rye (*Elymus condensatus*). This narrow band of Coastal Bluff scrub has an old grape stake fence within it that will be removed by hand and replaced in essentially the same location by a similar grape stake fence that will be installed without the use of machinery. The impact to plants there will be light and temporary.

Even with the extreme level of nonnative invasive plant coverage and the dense landscaping throughout the property the entire property eastward of the bluff above high tide line would be considered Monterey Cypress habitat, which is an environmentally sensitive habitat area or ESHA. However, none of the property would be classified as high sensitivity having an undisturbed understory with a diverse group of native species. And due to the dense exotic (and invasive) landscaping of neighboring properties on both sides of the property, there is no contiguous high quality cypress habitat to connect to.

Included with this combined submittal, from Bliss Landscape Architecture are sheets illustrating the Monterey Cypress habitat and sensitivity on site. 1. Plan sheet L1.4 showing the full extent of Cypress tree canopy coverage and the Critical habitat designation showing the additional 10' buffer around these trees. 2. Plan sheet L1.3 showing the variable locations of habitat sensitivity on site, based on historical development and use of the site and existing understory plants.

#### Levels of habitat sensitivity

The property can be roughly divided into three sections based on their level of development or coverage of intensively managed landscape, and coverage of tree canopy. As mentioned, none of this property is high quality cypress habitat, but this evaluation is based on the sensitivity of the habitat *on the site* and broken into 3 categories from highest to lowest sensitivity, for planning purposes.

Highest sensitivity. Area 1- the northern and most westerly portions of Cypress habitat on the lot from roughly 10 feet inside the wall along 17-mile Drive along the northern property line to the NW corner above the bluff and south along the bluff to the SW corner of the property along the ocean bluff, then east toward the existing concrete patio, weaving behind the hardscape back north along the westerly side of the residence. Significant portions of this area have a nearly closed canopy of Cypress trees, with a few large openings and various native understory species like seaside daisy, stinging phacelia and dune sagewort as well as many introduced landscape shrubs, groundcovers and invasive weeds. Restoring this area to high quality Monterey Cypress habitat would require little more than the removal of the nonnative plant material which by subtraction would create more room for the existing native species to spread.

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<sup>1</sup> Plants with a California Rare Plant Rank of 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. **Some** of the plants constituting California Rare Plant Rank 4 meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and few, if any, are eligible for state listing. List 4 species are not automatically protected under CEQA

Despite the relatively dense stand of mature cypress trees on the property this area has few young trees that could eventually sustain the life of the forest. It would be wise to include some new cypress trees in the planting plan for this area.

Medium sensitivity. Area 2 – At the Southeastern “corner” of the property from the area on both sides of the secondary driveway entrance, behind the carriage house inside the road wall and a short distance west along the boundary fence line Under the high canopy of many stately old Cypress trees, this area has a mix of native understory plants and nonnative invasive weeds and landscape plants. As in area 1, this area would require the removal of the nonnative landscape species as well as the addition of more of the typical native species like the Seaside daisy and Woodmint and sagewort to achieve a restored cypress habitat

Area 3 - The remainder of the property would be level 3, least sensitive or lowest quality Monterey Cypress habitat. It still has the stately mature cypress trees, but the “forest” is broken up by structures and driveways and parking areas and a greater level of exotic landscape cover and only occasional native understory plants. This is the area that encompasses the previous development and would be considered the “development envelope”.(though this development envelope has not yet been surveyed and legally described) This area includes all the driveways and pathways and the irrigated lawn north of the driveway entrance and the planted areas between the house and carriage house and the front wall along 17-mile Drive. While there are opportunities to replace nonnative species with native cypress habitat plants, they would be in isolated islands in a sea of hardscape and development.

## Conclusions

The Amendment to the Del Monte Forest Land Use Plan known as Policy 20 clarified that projects on legally developed parcels which materially enhance Monterey cypress habitat without harming any individual Monterey cypress can proceed so long as the proposed project: increases Monterey cypress habitat area by reducing net hardscape area; and restores the remaining Monterey cypress habitat area on the subject parcel; and places the Monterey cypress habitat area on the subject parcel into a permanent Conservation Easement.

The proposed additions to the site are minimal, and designed changes decrease existing hardscape in several areas to net a total reduction of hardscape on the property of 5369 square feet. The design has reduced tree impacts (primarily for root systems) in several key areas, reduced the footprint of the existing patio/pavilion and added one new gathering place with pervious gravel cover in the least sensitive zone adjoining the SW corner of the Main House. The consistent even cover of the Cypress canopy over much of the property as can be seen in virtually every photo angle and aerial image makes it difficult to achieve a zero-sum impact to Monterey Cypress habitat with the redesign of the property landscape and hardscape. But the careful siting of the new improvements and reduction in hardscape areas throughout has achieved a level of habitat gain that is consistent with the specifics of Policy 20.

*(2) On developed lots (i.e., those with an existing legally established residence), new and/or modified development shall be located within the existing legally established structural and/or hardscape area (i.e., all areas of the site covered with a structure, or covered by pervious or impervious hardscape (such as*

*decks, patios, driveways, and paths, but not including landscaped areas, fence areas, or underground or over ground utility areas)) and outside the critical habitat area. This has been achieved by keeping the new seating area and firepit and patio off the SW corner of the house within the previously developed and impacted area where an existing network of converging pathways now exist and shrinking the footprint of the existing patio pavilion and creating a new structure on the existing concrete patio.*

Additionally, the following requirements from Policy 20 will be implemented. *All Monterey cypress habitat area outside of the approved development envelope shall be: restored to and/or enhanced as high value and self-functioning Monterey cypress habitat (including through measures identified pursuant to the biological/arborist report, such as removal of exotics species, (improving growing conditions to provide a bare, mineral soil necessary for seed germination, and increasing sunlight to prevent soil borne fungi from inhabiting seedlings<sup>2</sup>), with all initial restoration/enhancement initialized prior to occupancy of any approved development; and placed within an open space conservation and scenic easement secured consistent with LUP Policy 13;*

In coordination with the Project Landscape Architect, a restoration plan for enhancing and/or restoring Monterey Cypress habitat understory outside the baseline developed area will be prepared and implemented. This plan also includes the addition of 10 new Monterey cypress trees on the property.

I believe that this project meets the intent of the protection and enhancement of Monterey Cypress habitat and will result in a net overall gain of Monterey Cypress Forest and a significant enhancement of the quality of habitat.

All special status species documented by the CNDDDB and the California Rare Plant inventory that could potentially occur on this site were adequately searched for at appropriate times. (See attached appendices) Other than the Monterey Cypress and the plant of limited distribution *Astagalus nuttallii* var. *nuttallii*, none were found.

No Special status plant or animal species will be directly, permanently impacted by the project.

Impacts to the Monterey Cypress Forest and coastal Bluff Scrub plant communities including the removal of the old decaying grape stake fence along the bluff (see figure 9 page 13) will be minimal and temporary, resulting in long term enhancement of both plant communities.

Pat Regan

#### Appendices

Page 10 List of native and exotic species identified on site

Pages 11-14 Photos of property

Pages 15-18 California Rare Plant inventory for Monterey Quadrangle

Pages 19-23 California Natural Diversity Database output for Monterey Quadrangle

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<sup>2</sup> These recommendations for improving growing conditions for new Monterey Cypress trees are simply unnecessary and based on US Forest service literature that does not accurately refer to Monterey Cypress habitat here on the Monterey peninsula.

<b>Plant species identified on 3270 17-mile Drive property</b>	
<b>Scientific name</b>	<b>Common name</b>
<i>Acmispon heermannii</i> var. <i>orbicularis</i>	woolly lotus
<i>Artemisia pycnocephala</i>	beach sagewort
<i>Astragalus nuttallii</i> variety <i>nuttallii</i>	Nuttal's milkvetch
<i>Carpobrotus edulis</i>	"ice plant"
<i>Corethrogyne filaginifolia</i>	Beach aster
<i>Crassula</i> sp.	
<i>Dudleya caespitosa</i>	sea lettuce
<i>Elymus condensatus</i>	Giant wild rye
<i>Erigeron glaucus</i>	seaside daisy
<i>Eriophyllum staechadifolium</i>	lizard tail
<i>Eschscholzia californica</i>	California poppy
<i>Fragaria vesca</i>	Wood strawberry
<i>Frangula californica</i>	California coffee berry
<i>Grindelia stricta</i> var. <i>platyphylla</i>	Coast gum plant
<i>Hesperocyparis macrocarpa</i>	Monterey cypress
<i>Iris douglasiana</i>	Douglas's Iris
<i>Phacelia malvifolia</i> var. <i>malvifolia</i>	Stinging phacelia
<i>Pinus radiata</i>	Monterey pine
<i>Poa douglasii</i>	dune bluegrass
<i>Stachys bullata</i>	Wood mint



*Figure 2: View looking east at carriage house and driveway to southern gate. Potential habitat enhancement can occur to the right of the carriage house and around it on the east side. Hardscape will be substantially reduced here.*

*Figure 3: View looking SE at Carriage house and driveway. This driveway that will be eliminated in the remodel.*





*Figure 4: View looking SE at seaward side of main house. Ice plant invading understory.*

*Figure 5: View looking east along north side of house. Note mature Cypress tree within 2 feet of house. This may be a future safety issue.*





*Figure 6: View looking Southwest at front side of single-family dwelling. Irrigated lawn will be removed.*

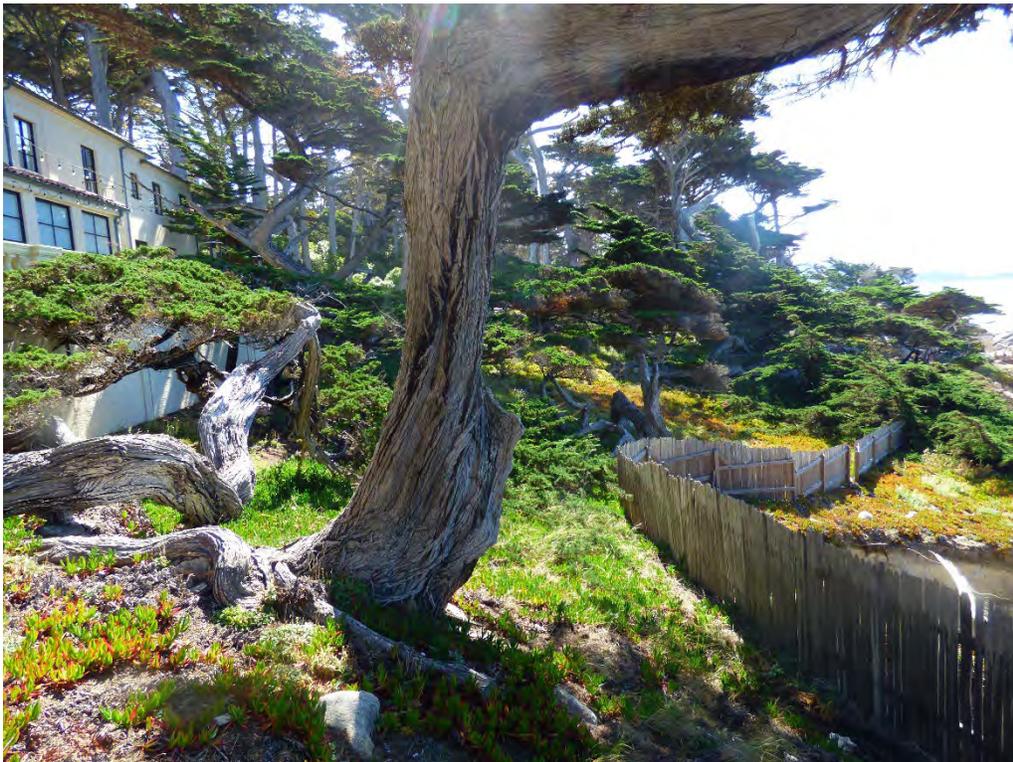
*Figure 7: View looking SE at Carriage house. Hardscape will be reduced in this area. The two Cypress trees in the middle of the photo are directly adjacent to the carriage house foundation and may be safety problems in the future.*





*Figure 8: View looking NW at Ice plant and pathway where outside firepit and seating area is proposed.*

*Figure 9: View looking SW at grape stake fence along bluff. This fence will be replaced with a new fence.*



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CNPS Rare Plant inventory for the Monterey Quadrangle and 3270 17-mile Drive, Pebble Beach CA							Elevat.	Elevat.	Present
Red text Plants are out of the 30-80 foot elevation range of the property							Low_ft	High_ft	on site?
ScientificName	CommonName	CRPR	CESA	FESA	Blooming Period	Habitat			
Allium hickmanii	Hickman's onion	1B.2	None	None	Mar-May	Chaparral, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Valley and foothill grassland	15	655	no
Arctostaphylos hookeri ssp. hookeri	Hooker's manzanita	1B.2	None	None	Jan-Jun	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal scrub	195	1760	no
Arctostaphylos montereyensis	Toro manzanita	1B.2	None	None	Feb-Mar	Chaparral, Cismontane woodland, Coastal scrub	100	2395	no
Arctostaphylos pajaroensis	Pajaro manzanita	1B.1	None	None	Dec-Mar	Chaparral	100	2495	no
Arctostaphylos pumila	sandmat manzanita	1B.2	None	None	Feb-May	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal dunes, Coastal scrub	10	675	no
Astragalus nuttallii var. nuttallii	ocean bluff milk-vetch	4.2	None	None	Jan-Nov	Coastal bluff scrub, Coastal dunes	10	395	Yes
Astragalus tener var. titi	coastal dunes milk-vetch	1B.1	CE	FE	Mar-May	Coastal bluff scrub, Coastal dunes, Coastal prairie	5	165	no
Castilleja ambigua var. insalutata	pink Johnny-nip	1B.1	None	None	May-Aug	Coastal prairie, Coastal scrub	0	330	no
Castilleja latifolia	Monterey Coast paintbrush	4.3	None	None	Feb-Sep	Cismontane woodland, Closed-cone coniferous forest, Coastal dunes, Coastal scrub	0	605	Yes
Ceanothus rigidus	Monterey ceanothus	4.2	None	None	Feb-Apr(Jun)	Chaparral, Closed-cone coniferous forest, Coastal scrub	10	1805	no
Chorizanthe douglasii	Douglas' spineflower	4.3	None	None	Apr-Jul	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	180	5250	no

Chorizanthe pungens var. pungens	Monterey spineflower	1B.2	None	FT	Apr-Jun(Jul-Aug)	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland	10	1475	no
Clarkia jolonensis	Jolon clarkia	1B.2	None	None	Apr-Jun	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	65	2165	no
Clarkia lewisii	Lewis' clarkia	4.3	None	None	May-Jul	Broadleaved upland forest, Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal scrub	100	3920	no
Collinsia multicolor	San Francisco collinsia	1B.2	None	None	(Feb)Mar-May	Closed-cone coniferous forest, Coastal scrub	100	900	no
Cordylanthus rigidus ssp. littoralis	seaside bird's-beak	1B.1	CE	None	Apr-Oct	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal dunes, Coastal scrub	0	1690	no
Cryptantha rattanii	Rattan's cryptantha	4.3	None	None	Apr-Jul	Cismontane woodland, Riparian woodland, Valley and foothill grassland	805	3000	no
Delphinium hutchinsoniae	Hutchinson's larkspur	1B.2	None	None	Mar-Jun	Broadleaved upland forest, Chaparral, Coastal prairie, Coastal scrub	0	1400	no
Eriastrum virgatum	virgate eriastrum	4.3	None	None	May-Jul	Chaparral, Coastal bluff scrub, Coastal dunes, Coastal scrub	150	2295	no
Ericameria fasciculata	Eastwood's goldenbush	1B.1	None	None	Jul-Oct	Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub	100	900	no
Erysimum menziesii	Menzies' wallflower	1B.1	CE	FE	Mar-Sep	Coastal dunes	0	115	no
Fritillaria agrestis	stinkbells	4.2	None	None	Mar-Jun	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland	35	5100	no
Fritillaria liliacea	fragrant fritillary	1B.2	None	None	Feb-Apr	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland	10	1345	no
Gilia tenuiflora ssp. amplifaucalis	trumpet-throated gilia	4.3	None	None	Mar-Apr	Cismontane woodland, Valley and foothill grassland	1280	2955	no
Gilia tenuiflora ssp. arenaria	Monterey gilia	1B.2	CT	FE	Apr-Jun	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub	0	150	no

Horkelia cuneata var. sericea	Kellogg's horkelia	1B.1	None	None	Apr-Sep	Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub	35	655	no
Hosackia gracilis	harlequin lotus	4.2	None	None	Mar-Jul	Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Valley and foothill grassland	0	2295	no
Iris longipetala	coast iris	4.2	None	None	Mar-May(Jun)	Coastal prairie, Lower montane coniferous forest, Meadows and seeps	0	1970	no
Layia carnosa	beach layia	1B.1	CE	FE	Mar-Jul	Coastal dunes, Coastal scrub	0	195	no
Leptosiphon grandiflorus	large-flowered leptosiphon	4.2	None	None	Apr-Aug	Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Valley and foothill grassland	15	4005	no
Leptosiphon latisectus	broad-lobed leptosiphon	4.3	None	None	Apr-Jun	Broadleaved upland forest, Cismontane woodland	560	4920	no
Lessingia tenuis	spring lessingia	4.3	None	None	May-Jul	Chaparral, Cismontane woodland, Lower montane coniferous forest	985	7055	no
Lomatium parvifolium	small-leaved lomatium	4.2	None	None	Jan-Jun	Chaparral, Closed-cone coniferous forest, Coastal scrub, Riparian woodland	65	2295	no
Lupinus tidestromii	Tidestrom's lupine	1B.1	CE	FE	Apr-Jun	Coastal dunes	0	330	no
Malacothamnus palmeri var. involucratus	Carmel Valley bush-mallow	1B.2	None	None	Apr-Oct	Chaparral, Cismontane woodland, Coastal scrub	100	3610	no
Microseris paludosa	marsh microseris	1B.2	None	None	Apr-Jun(Jul)	Cismontane woodland, Closed-cone coniferous forest, Coastal scrub, Valley and foothill grassland	15	1165	no
Monardella sinuata ssp. nigrescens	northern curly-leaved monardella	1B.2	None	None	(Apr)May-Jul(Aug-Sep)	Chaparral, Coastal dunes, Coastal scrub, Lower montane coniferous forest	0	985	no

Monolopia gracilens	woodland woollythreads	1B.2	None	None	(Feb)Mar-Jul	Broadleaved upland forest, Chaparral, Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland	330	3935	no
Piperia michaelii	Michael's rein orchid	4.2	None	None	Apr-Aug	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal scrub, Lower montane coniferous forest	10	3000	no
Piperia yadonii	Yadon's rein orchid	1B.1	None	FE	(Feb)May-Aug	Chaparral, Closed-cone coniferous forest, Coastal bluff scrub	35	1675	no
Potentilla hickmanii	Hickman's cinquefoil	1B.1	CE	FE	Apr-Aug	Closed-cone coniferous forest, Coastal bluff scrub, Marshes and swamps, Meadows and seeps	35	490	no
Rosa pinetorum	pine rose	1B.2	None	None	May-Jul	Cismontane woodland, Closed-cone coniferous forest	5	3100	no
Sidalcea malachroides	maple-leaved checkerbloom	4.2	None	None	(Mar)Apr-Aug	Broadleaved upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland	0	2395	no
Trifolium hydrophilum	saline clover	1B.2	None	None	Apr-Jun	Marshes and swamps, Valley and foothill grassland, Vernal pools	0	985	no
Trifolium polyodon	Pacific Grove clover	1B.1	CR	None	Apr-Jun(Jul)	Closed-cone coniferous forest, Coastal prairie, Meadows and seeps, Valley and foothill grassland	15	1395	no
Trifolium trichocalyx	Monterey clover	1B.1	CE	FE	Apr-Jun	Closed-cone coniferous forest	100	1000	no
<b>CA Rare Plant Rank</b>	<b>Description</b>								
1B.1	Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California								
1B.2	Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California								
1B.3	Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California								
4.1	Plants of limited distribution; seriously threatened in California								
4.2	Plants of limited distribution; fairly threatened in California								
4.3	Plants of limited distribution; not very threatened in California								

CNDDDB inventory for the Monterey Quadrangle, 3270 17-mile Drive, Pebble Beach CA							
		Federal	State	CDFW	CA Rare	potential	observed
Scientific_Name	Common_Name	_Status	_Status	Status	Plnt Rank	habitat?	on site?
<b>Animals - Amphibians</b>							
Ambystoma californiense pop. 1	California tiger salamander - central California DPS	Threatened	Threatened	WL	-	no	no
Batrachoseps luciae	Santa Lucia slender salamander	None	None	-	-	marginal	no
Rana boylei	foothill yellow-legged frog	None	Endangered	SSC	-	no	no
Rana draytonii	California red-legged frog	Threatened	None	SSC	-	no	no
Taricha torosa	Coast Range newt	None	None	SSC	-	no	no
<b>Animals - Birds</b>							
Ardea herodias	great blue heron	None	None	-	-	no	no
Athene cunicularia	burrowing owl	None	None	SSC	-	no	no
Charadrius nivosus nivosus	western snowy plover	Threatened	None	SSC	-	no	no
Coturnicops noveboracensis	yellow rail	None	None	SSC	-	no	no
Cypseloides niger	black swift	None	None	SSC	-	no	no
Laterallus jamaicensis coturniculus	California black rail	None	Threatened	FP	-	no	no
Passerculus sandwichensis alaudinus	Bryant's savannah sparrow	None	None	SSC	-	no	no
Pelecanus occidentalis californicus	California brown pelican	Delisted	Delisted	FP	-	no	no
Ptychoramphus aleuticus	Cassin's auklet	None	None	SSC	-	no	no
Rallus obsoletus obsoletus	California Ridgway's rail	Endangered	Endangered	FP	-	no	no
Setophaga petechia	yellow warbler	None	None	SSC	-	no	no
<b>Animals - Fish</b>							
Oncorhynchus mykiss irideus pop. 9	steelhead - south-central California coast DPS	Threatened	None	-	-	no	no
<b>Animals - Insects</b>							
Bombus caliginosus	obscure bumble bee	None	None	-	-	no	no
Bombus occidentalis	western bumble bee	None	None	-	-	no	no
Coelus globosus	globose dune beetle	None	None	-	-	no	no
Danaus plexippus pop. 1	monarch - California overwintering population	Candidate	None	-	-	marginal	no

		<b>Federal</b>	<b>State</b>	<b>CDFW</b>	<b>CA Rare</b>	<b>potential</b>	<b>observed</b>
<b>Scientific_Name</b>	<b>Common_Name</b>	<b>_Status</b>	<b>_Status</b>	<b>Status</b>	<b>Plnt Rank</b>	<b>habitat ?</b>	<b>on site?</b>
Euphilotes enoptes smithi	Smith's blue butterfly	Endangered	None	-	-	no	no*
<b>Animals - Mammals</b>							
Enhydra lutris nereis	southern sea otter	Threatened	None	FP	-	no	no
Eumetopias jubatus	Steller sea lion	Delisted	None	-	-	no	no
Lasiurus cinereus	hoary bat	None	None	-	-	no	no
Myotis yumanensis	Yuma myotis	None	None	-	-	no	no
Neotoma macrotis luciana	Monterey dusky-footed woodrat	None	None	SSC	-	marginal	no
Sorex ornatus salarius	Monterey shrew	None	None	SSC	-	no	no
Sorex vagrans paludivagus	Monterey vagrant shrew	None	None	-	-	no	no
<b>Animals - Mollusks</b>							
Haliotis cracherodii	black abalone	Endangered	None	-	-	no	no
Haliotis kamtschatkana	pinto abalone	None	None	-	-	no	no
<b>Animals - Reptiles</b>							
Anniella pulchra	Northern California legless lizard	None	None	SSC	-	no	no
Emys marmorata	western pond turtle	None	None	SSC	-	no	no
Phrynosoma blainvillii	coast horned lizard	None	None	SSC	-	no	no
Thamnophis hammondi	two-striped gartersnake	None	None	SSC	-	no	no
<b>Community - Terrestrial</b>							
Central Dune Scrub	Central Dune Scrub	None	None	-	-	no	no
Central Maritime Chaparral	Central Maritime Chaparral	None	None	-	-	no	no
Monterey Cypress Forest	Monterey Cypress Forest	None	None	-	-	yes	yes
Monterey Pine Forest	Monterey Pine Forest	None	None	-	-	yes	no
Monterey Pygmy Cypress Forest	Monterey Pygmy Cypress Forest	None	None	-	-	no	no
Northern Bishop Pine Forest	Northern Bishop Pine Forest	None	None	-	-	no	no
<b>Plants - Lichens</b>							
Ramalina thrausta	angel's hair lichen	None	None	-	2B.1	no	no
Sulcaria spiralifera	twisted horsehair lichen	None	None	-	1B.2	no	no
<b>Plants - Vascular</b>							
Allium hickmanii	Hickman's onion	None	None	-	1B.2	no	no
Arctostaphylos hookeri ssp. hookeri	Hooker's manzanita	None	None	-	1B.2	no	no

		<b>Federal</b>	<b>State</b>	<b>CDFW</b>	<b>CA Rare</b>	<b>potential</b>	<b>observed</b>
<b>Scientific_Name</b>	<b>Common_Name</b>	<b>_Status</b>	<b>_Status</b>	<b>Status</b>	<b>Plnt Rank</b>	<b>habitat ?</b>	<b>on site?</b>
Arctostaphylos montereyensis	Toro manzanita	None	None	-	1B.2	no	no
Arctostaphylos pajaroensis	Pajaro manzanita	None	None	-	1B.1	no	no
Arctostaphylos pumila	sandmat manzanita	None	None	-	1B.2	no	no
Astragalus nuttallii var. nuttallii	ocean bluff milk-vetch	None	None	-	4.2	yes	yes
Astragalus tener var. titi	coastal dunes milk-vetch	Endangered	Endangered	-	1B.1	no	no
Castilleja ambigua var. insalutata	pink Johnny-nip	None	None	-	1B.1	no	no
Castilleja latifolia	Monterey Coast paintbrush	None	None	-	4.3	yes	no
Ceanothus rigidus	Monterey ceanothus	None	None	-	4.2	no	no
Chorizanthe douglasii	Douglas' spineflower	None	None	-	4.3	no	no
Chorizanthe pungens var. pungens	Monterey spineflower	Threatened	None	-	1B.2	no	no
Clarkia jolonensis	Jolon clarkia	None	None	-	1B.2	no	no
Clarkia lewisii	Lewis' clarkia	None	None	-	4.3	no	no
Collinsia multicolor	San Francisco collinsia	None	None	-	1B.2	no	no
Cordylanthus rigidus ssp. littoralis	seaside bird's-beak	None	Endangered	-	1B.1	no	no
Cryptantha rattanii	Rattan's cryptantha	None	None	-	4.3	no	no
Delphinium hutchinsoniae	Hutchinson's larkspur	None	None	-	1B.2	no	no
Eriastrum virgatum	virgate eriastrum	None	None	-	4.3	no	no
Ericameria fasciculata	Eastwood's goldenbush	None	None	-	1B.1	no	no
Erysimum menziesii	Menzies' wallflower	Endangered	Endangered	-	1B.1	no	no
Fritillaria agrestis	stinkbells	None	None	-	4.2	no	no
Fritillaria liliacea	fragrant fritillary	None	None	-	1B.2	no	no
Gilia tenuiflora ssp. amplifaucalis	trumpet-throated gilia	None	None	-	4.3	no	no
Gilia tenuiflora ssp. arenaria	Monterey gilia	Endangered	Threatened	-	1B.2	no	no
Hesperocyparis goveniana	Gowen cypress	Threatened	None	-	1B.2	no	no
Hesperocyparis macrocarpa	Monterey cypress	None	None	-	1B.2	yes	yes
Horkelia cuneata var. sericea	Kellogg's horkelia	None	None	-	1B.1	no	no
Hosackia gracilis	harlequin lotus	None	None	-	4.2	no	no
Iris longipetala	coast iris	None	None	-	4.2	no	no

		<b>Federal</b>	<b>State</b>	<b>CDFW</b>	<b>CA Rare</b>	<b>potential</b>	<b>observed</b>
<b>Scientific_Name</b>	<b>Common_Name</b>	<b>_Status</b>	<b>_Status</b>	<b>Status</b>	<b>Plnt Rank</b>	<b>habitat ?</b>	<b>on site?</b>
Layia carnosa	beach layia	Endangered	Endangered	-	1B.1	no	no
Leptosiphon grandiflorus	large-flowered leptosiphon	None	None	-	4.2	no	no
Leptosiphon latisectus	broad-lobed leptosiphon	None	None	-	4.3	no	no
Lessingia tenuis	spring lessingia	None	None	-	4.3	no	no
Lomatium parvifolium	small-leaved lomatium	None	None	-	4.2	no	no
Lupinus tidestromii	Tidestrom's lupine	Endangered	Endangered	-	1B.1	no	no
Malacothamnus palmeri var. involucratus	Carmel Valley bush-mallow	None	None	-	1B.2	no	no
Microseris paludosa	marsh microseris	None	None	-	1B.2	no	no
Monardella sinuata ssp. nigrescens	northern curly-leaved monardella	None	None	-	1B.2	no	no
Monolopia gracilens	woodland woollythreads	None	None	-	1B.2	no	no
Pinus radiata	Monterey pine	None	None	-	1B.1	no	no
Piperia michaelii	Michael's rein orchid	None	None	-	4.2	marginal	no
Piperia yadonii	Yadon's rein orchid	Endangered	None	-	1B.1	marginal	no
Potentilla hickmanii	Hickman's cinquefoil	Endangered	Endangered	-	1B.1	no	no
Rosa pinetorum	pine rose	None	None	-	1B.2	no	no
Sidalcea malachroides	maple-leaved checkerbloom	None	None	-	4.2	no	no
Trifolium hydrophilum	saline clover	None	None	-	1B.2	no	no
Trifolium polyodon	Pacific Grove clover	None	Rare	-	1B.1	no	no
Trifolium trichocalyx	Monterey clover	Endangered	Endangered	-	1B.1	no	no
CA Rare Plant Rank	Description						
1A	Plants presumed extinct in California and rare/extinct elsewhere						
1B.1	Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California						
1B.2	Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California						
1B.3	Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California						
4.1	Plants of limited distribution; seriously threatened in California						
4.2	Plants of limited distribution; fairly threatened in California						
4.3	Plants of limited distribution; not very threatened in California						
CESA Status	Description						

FP	Fully Protected: This classification was the State of California's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds and mammals. Most of the species on these lists have subsequently been listed under the state and/or federal endangered species acts.						
SSC	Species of Special Concern: It is the goal and responsibility of the Department of Fish and Wildlife to maintain viable populations of all native species. To this end, the Department has designated certain vertebrate species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as "Species of Special Concern" is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long-term viability.						
WL	Watch List: The Department of Fish and Wildlife maintains a list consisting of taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.						
ESA Listing Status	Description						
Endangered	The classification provided to an animal or plant in danger of extinction within the foreseeable future						
Threatened	The classification provided to an animal or plant which is likely to become an Endangered species within the						
Proposed Endangered	The classification provided to an animal or plant that is proposed for federal listing as Endangered in the						
Proposed Threatened	The classification provided to an animal or plant that is proposed for federal listing as Threatened in the						
Candidate	The classification provided to an animal or plant that has been studied by the United States Fish and						
None	The plant or animal has no federal status.						
Delisted	The plant or animal was previously listed as Endangered or Threatened, but is no longer listed on the						

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