



Heritage Brodiaea Preserve
2023 Summary Monitoring Report (Year 7)
San Diego, California

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A handwritten signature in black ink that reads "Gerry Scheid". The signature is written in a cursive, flowing style.

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1.0 Introduction

This monitoring report presents the results of activities conducted within the Heritage Brodiaea Preserve (HBP) during the period of January 1 to December 31, 2023. Activities discussed in this report include site maintenance activities, thread-leaved brodiaea (*Brodiaea filifolia*) 2023 population (vegetative) counts and flowering data, native grassland mitigation progress, and other native plantings.

The HBP is an approximately 14-acre biological open space area that was dedicated as part of the Heritage Bluffs II development project. The HBP is located in the northern part of San Diego (Figure 1) and it occurs to the south of Carmel Valley Road and to the east of the Black Mountain Open Space Preserve (Figure 2). The City of San Diego has now included the HBP area into its Multiple Species Conservation Program Subarea Plan's Multi-Habitat Planning Area.

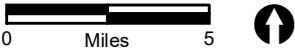
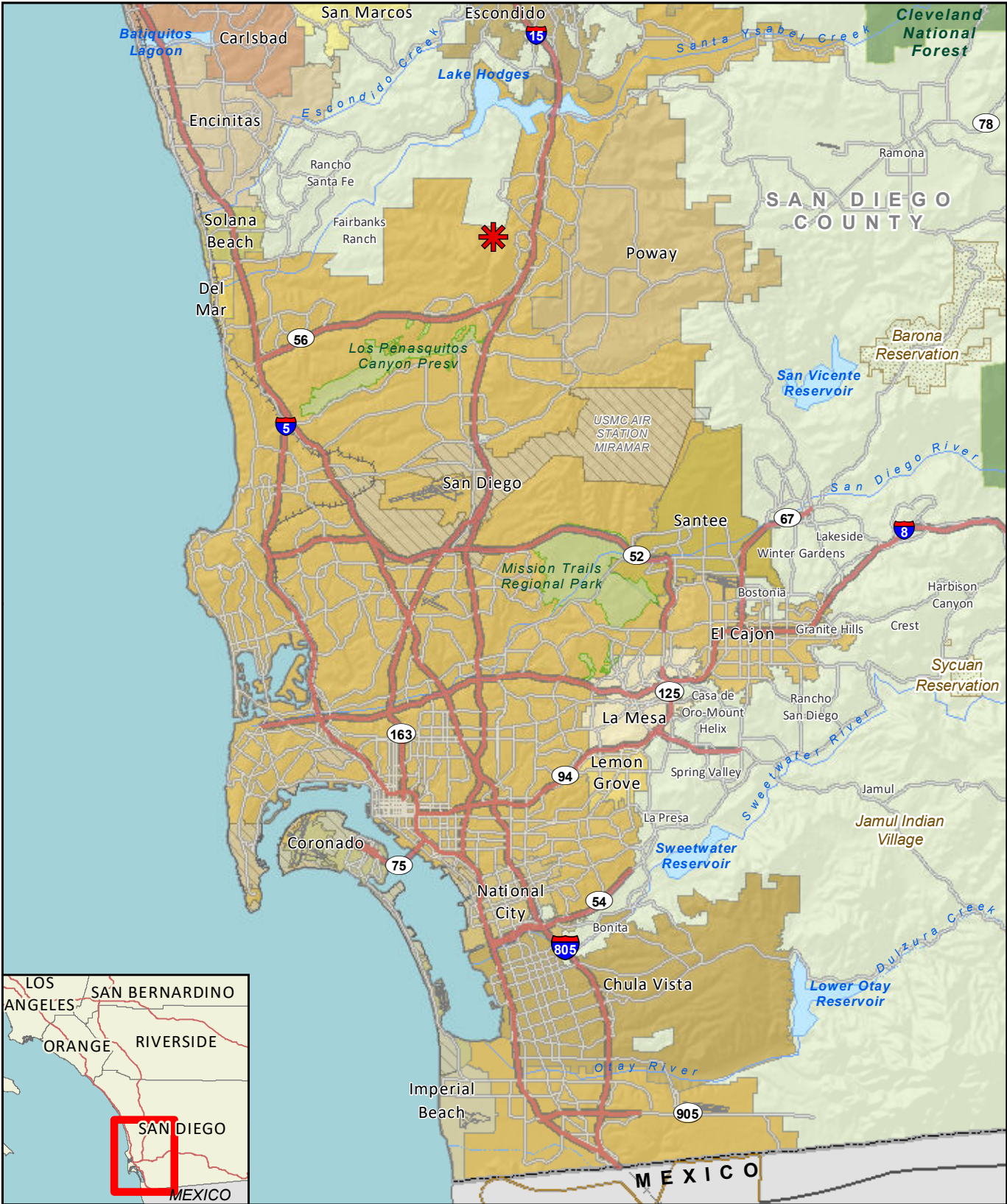
The goal of the HBP is to facilitate the conservation, preservation, and enhancement of biological resources as part of mitigation for impacts associated with development of the Heritage Bluffs II and East Clusters development project sites. The HBP has preserved a regionally significant population of thread-leaved brodiaea in a Conservation Easement dedicated for that purpose.

2.0 HBP Translocation History

The translocation of salvaged thread-leaved brodiaea occurred as part of the East Clusters Unit 3 and Heritage Bluffs II development projects and the locations of these translocations are shown on Figure 3. These translocation efforts established the baseline numbers of thread-leaved brodiaea plants for the mitigation monitoring effort. The 2023 monitoring year represents the seventh year after translocation for the Heritage Bluffs II thread-leaved brodiaea and the eighth year after translocation for the East Clusters Unit 3 effort.

3.0 HBP 2023 Maintenance Activities

Maintenance activities conducted within the HBP area during 2023 focused on the control of perennial weeds and non-native grasses. General control of perennial weeds occurred throughout the year due to the above average annual rainfall and late summer precipitation event. During the fall months, weeding was conducted around thread-leaved brodiaea locations to remove excess grasses.



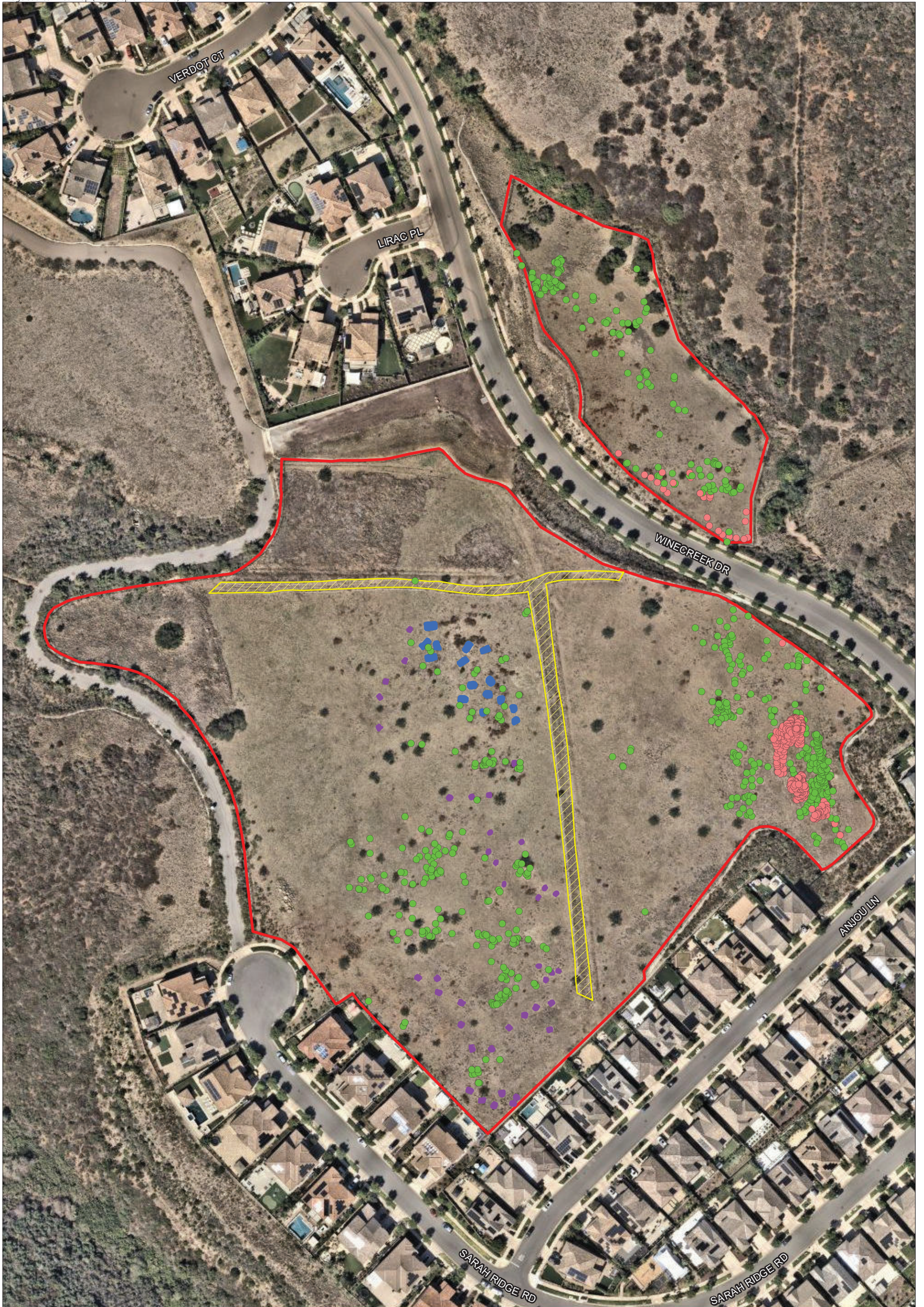
 Project Location

FIGURE 1
Regional Location



 HBP Boundary

FIGURE 2
HBP Location on Aerial Photograph



- ▭ HBP Boundary
- ▭ East Clusters Unit 3 Transplant
- ▭ Heritage Bluffs II Corm Transplant
- Natural Brodiaea
- Heritage Bluffs II Cut/Block Transplant
- ▭ Native Grassland Mitigation Area



FIGURE 3
Distribution of Natural and Translocated
Thread-leaved Brodiaea in the HBP

4.0 HBP 2023 Thread-leaved Brodiaea Vegetative Counts

A census of the number of thread-leaved brodiaea expressing vegetative growth for the translocation areas in the HBP was conducted during the months of January through March of 2023. The census involved the mapping of expressed natural thread-leaved brodiaea plants not previously located, and all translocated thread-leaved brodiaea plant locations (i.e., corm and cut/block) now within the HBP. A census of the natural thread-leaved brodiaea plants expressing vegetatively in the HBP was not conducted this year.

Each thread-leaved brodiaea translocation location was visited and a direct count of the vegetative individuals expressed at the location was done. The last vegetative count data for the HBP natural population conducted in 2021 is given in Table 1. The 2023 vegetative counts for all translocated/transplanted thread-leaved brodiaea are presented in Table 2 (Heritage Bluffs II translocated) and Table 3 (East Clusters Unit 3 translocated and transplanted), along with vegetated count data from previous years and the baseline reference counts.

Table 1 HBP Thread-leaved Brodiaea Vegetative Counts for Natural Population					
	2017 Vegetative Count*	2018 Vegetative Count*	2019 Vegetative Count*	2010 Vegetative Count*	2021 Vegetative Count*
TOTAL	10,211	15,263	13,811	13,848	13,161
*Based on count of individuals that expressed vegetatively.					

Table 2 Heritage Bluffs II Thread-leaved Brodiaea Translocation Summary: 2017 through 2023								
Translocation Method	Initial Translocation Estimate	2017 Vegetative Count*	2018 Vegetative Count*	2019 Vegetative Count*	2020 Vegetative Count*	2021 Vegetative Count*	2022 Vegetative Count*	2023 Vegetative Count*
Corm Translocation	2,690	2,556	2,727	3,192	3,840	4,859	4,934	4269
Corm Translocation†	1,166	1,161	1,262	1,389	1,413	1,774	1,435	1155
Cut-Block Salvage‡	1,850	2,414	2,477	3,816	3,789	3,496	3,574	2,557
TOTAL	5,706**	6,131	6,556	8,397	9,013	10,129	9,943	7,981
*Based on count of individuals that expressed vegetatively.								
†Salvaged from East Clusters.								
‡Salvaged and planted March 2017.								
**Total planted individuals to be used as baseline for subsequent site assessments.								

Table 3 East Clusters Unit 3 Thread-leaved Brodiaea Translocation Summary: 2016 through 2023								
Translocation Method	2016 Vegetative Count*	2017 Vegetative Count*	2018 Vegetative Count*	2019 Vegetative Count*	2020 Vegetative Count*	2021 Vegetative Count*	2022 Vegetative Count*	2023 Vegetative Count*
Corm Translocation	3,175	3,281	3,569	5,311	5,306	7,358	8,471	7,750
TOTAL	3,175	3,281	3,569	5,311	5,306	7,358	8,471	7,750
*Based on count of individuals that expressed vegetatively.								

Herbivory was relatively low to the natural thread-leaved brodiaea locations during 2023. The above-average amount of precipitation coupled with the frequency of events were good for vegetation growth in the HBP. The primary cause of herbivory was from animals grazing on the vegetative shoots.

Precipitation amounts for this portion of San Diego County were above normal during the 2022-2023 rainfall season. The above-average amount of precipitation coupled with good frequency of events were both good for vegetation growth in the HBP. Despite the ample rainfall, the number of the thread-leaved brodiaea that expressed vegetatively within the translocation areas were slightly lower when compared to the previous year vegetative counts. Representative photographs of vegetative growth observed during the 2023 counts are provided (Photographs 1 through 4).

5.0 HBP 2023 Thread-leaved Brodiaea Flowering Individuals Count

A count of the number of thread-leaved brodiaea individuals that produced a flower stalk during the spring of 2023 was conducted within the HBP. The flower stalk count included all the translocated locations. The data on flowering individuals are given in Table 4. Representative photographs of thread-leaved brodiaea individuals in flower are shown in Photographs 5 through 8.

Table 4 HBP Thread-leaved Brodiaea Flowering Individuals (2023)		
Brodiaea Type	Flowering Individuals	Percent Vegetative Individuals Flowering
Heritage Bluffs II Corm Translocation	1132	22.5
Heritage Bluffs II Corm Translocation	186	16.5
Heritage Bluffs II Cut-Block Translocation	439	18.0
East Clusters Unit 3 Corm Translocation	1599	20.6



PHOTOGRAPH 1
Vegetative Growth of Thread-leaved Brodiaea in a Translocation Plot
(Photo Date: January 17, 2023)



PHOTOGRAPH 2
Vegetative Growth of Thread-leaved Brodiaea in a Translocation Plot
(Photo Date: January 17, 2023)



PHOTOGRAPH 3
Vegetative Growth at a Natural Thread-leaved Brodiaea Location
(Photo Date: January 17, 2023)



PHOTOGRAPH 4
Vegetative Growth at a Natural Thread-leaved Brodiaea Location
(Photo Date: January 17, 2023)



PHOTOGRAPH 5
Thread-leaved Brodiaea Flower
(Photo Date: May 18, 2023)



PHOTOGRAPH 6
Thread-leaved Brodiaea Flower
(Photo Date: May 28, 2023)



PHOTOGRAPH 7
Thread-leaved Brodiaea Flowers
(Photo Date: May 28, 2023)



PHOTOGRAPH 8
Thread-leaved Brodiaea Flowers
(Photo Date: May 28, 2023)

The percentage of those thread-leaved brodiaea that expressed vegetatively and then flowered ranged between 16 percent and 22 percent during the spring of 2023. This flowering data represents the highest percentage of flowering for individuals expressing vegetatively over the seven years of monitoring. Factors that may have contributed to the high flowering rates were the distribution of the rainfall events (i.e., well-spaced winter and spring precipitation events) and above-average rainfall amounts. Although vegetative expression was lower than the previous year, the corms that expressed vegetatively this year had ample moisture within the flowering period to produce flowers prior to drying up. In other words, the thread-leaved brodiaea plants dried later in the summer this year, which likely allowed for an increase in flower production.

6.0 Plant and Wildlife Observations

Native cover estimates were conducted visually. Native plant cover in the HBP primarily consists of native bunchgrasses along with scattered individuals of native perennial plants, for example, gumplant (*Grindelia camporum*), lemonadeberry (*Rhus integrifolia*), redberry (*Rhamnus crocea*), coastal goldenbush (*Isocoma menzessii*), long-stemmed golden yarrow (*Eriophyllum confertiflorum*), and California buckwheat (*Eriogonum fasciculatum*). The estimated native plant cover for the HBP is approximately 35 percent.

A list of plant species observed within the HBP, compiled during monitoring visits, is provided as Attachment 1. A total of 62 plants species were documented. Examples of native species observed in the preserve areas include blue-eyed grass (*Sisyrinchium bellum*) (Photograph 9), onion (*Allium praecox*) (Photograph 10), arroyo lupine (*Lupinus succulentus*) (Photograph 11), miniature lupine (*Lupinus bicolor*) (Photograph 12), deerweed (*Acmispon glaber*) (Photograph 13), and small-flowered morning glory (*Convolvulus simulans*) (Photograph 14). Areas of common goldfields (*Lasthenia gracilis*) (Photographs 15 and 16) were observed this year within the smaller eastern preserve area where seed had been applied the previous winter.

A list of general wildlife species observed within the HBP was compiled during monitoring visits and is provided as Attachment 2. Observed wildlife included 7 species of insect, 1 snail species, 4 reptile species, 25 bird species, and 4 mammal species. Notable wildlife species observed on the site this past year were greater roadrunner (*Geococcyx californianus*), coyote (*Canis latrans*), California quail (*Callipepla californica*), southern Pacific rattlesnake (*Crotalus oreganus helleri*) (Photograph 17), and San Diego gophersnake (*Pituophis catenifer annectens*) (Photograph 18). An owl box was installed in the larger western preserve area in the fall of 2021 to attract barn owls; however, no owls have occupied the box to date.



PHOTOGRAPH 9

Blue-eyed Grass Flower Observed in the Heritage Preserve
(Photo Date: March 28, 2023)



PHOTOGRAPH 10
Early Onion Flowers Observed in the Heritage Preserve
(Photo Date: April 19, 2023)



PHOTOGRAPH 11
Arroyo Lupine Flowers Observed in the Heritage Preserve
(Photo Date: April 21, 2023)



PHOTOGRAPH 12
Miniature Lupine Observed in the Heritage Preserve
(Photo Date: January 27, 2023)



PHOTOGRAPH 13
Deerweed Observed in the Heritage Preserve
(Photo Date: May 18, 2023)



PHOTOGRAPH 14
Small-flowered Morning Glory Observed in the Heritage Preserve
(Photo Date: May 18, 2023)



PHOTOGRAPH 15
Common Goldfield Flowers Observed in the Heritage Preserve
(Photo Date: Marh 8, 2023)



PHOTOGRAPH 16
Common Goldfields and Arroyo Lupine Observed in the Heritage Preserve
(Photo Date: April 17, 2023)



PHOTOGRAPH 17

A Coiled Southern Pacific Rattlesnake Observed in the Heritage Preserve
(Photo Date: May 28, 2023)



PHOTOGRAPH 18

A Coiled San Diego Gophersnake Observed in the Heritage Preserve
(Photo Date: May 18, 2023)

7.0 Native Grassland Mitigation (Year 3)

The Heritage Bluffs II development project conditions of approval required the implementation of a native grassland mitigation element. A mitigation plan was approved that outlined the mitigation requirement that included the establishment of a minimum 0.15 acre of native grassland and the enhancement of a 0.30-acre buffer within a 0.45-acre restoration area. The restoration area rehabilitated two old dirt roads that previously existed in the HBP (see Figure 3).

Implementation of the native grassland mitigation within the HBP began with the planting of the native bunch grasses during the first week of December 2020. Weed control was the primary maintenance activity conducted in the native grassland mitigation area during the current year.

The success criteria for the native grassland mitigation include the assessment of species richness/recruitment, native vegetation cover, non-native vegetation cover, and target invasive species. The assessment of these criteria for Year 3 of the five-year monitoring period is as follows:

- **Species Richness and Recruitment:** Evaluation of the number of native species observed in the native grassland mitigation area found five native plant species: purple needlegrass (*Stipa pulchra*), foothill needlegrass (*Stipa lepida*), California encelia (*Encelia californica*), willow herb (*Epilobium brachycarpum*), and long-stemmed golden-yarrow (*Eriophyllum confertiflorum*) (Photograph 19). The presence of five native species exceeds the Year 3 success criteria milestone which required four native species to be present. Recruitment of needlegrasses (Photograph 20), long-stemmed golden yarrow, and willow herb were observed this year.
- **Native Vegetation Cover:** Native vegetation cover was estimated to be 30 percent and consisted primarily of the two native grass species planted. The Year 3 success criteria milestone is 35 percent. The vegetative cover of the native grasses this year decreased slightly due to the heavy rains that waterlogged the soils, causing some plants to die.
- **Non-native Vegetation Cover:** Cover of non-native vegetation was less than 1 percent due to the regular control of non-native species. The Year 3 success goal for this criterion was a maximum of 20 percent cover of non-native species.
- **Target Invasive Species:** There were no significant numbers of target invasive species (e.g., artichoke thistle [*Cynara cardunculus*], fennel [*Foeniculum vulgare*], Australian saltbush [*Atriplex semibaccata*], black mustard [*Brassica nigra*], bristly ox-tongue [*Helminthotheca echioides*], Russian thistle [*Salsola tragus*]) within the native grassland mitigation area due to regular control of these species during maintenance visits. The success goal for this criterion for Year 3 was no target invasive species present.

The native grassland mitigation area is progressing well. Regular control of non-native plant species and continued recruitment of native grasses and other native plants improves the habitat quality.



PHOTOGRAPH 19

Long-stemmed Golden Yarrow Occurring in the Native Grassland Mitigation Area at the Heritage Preserve (Photo Date: May 19, 2023)



PHOTOGRAPH 20

Native Needlegrass Recruits in the Native Grassland Mitigation Area at the Heritage Preserve (Photo Date: May 20, 2023)

8.0 Supplemental Planting

Supplemental planting within the HBP occurred during the fall of 2023. One-gallon container stock of purple needlegrass and foothill needlegrass were planted in portions of the larger western preserve area. A total of 780 one-gallon native grass plants were planted.

9.0 Management Activities for 2024

Management activities to be conducted during 2024 will focus on the continued control of perennial non-native plant species (e.g., artichoke thistle re-sprouts, fennel re-sprouts, Russian thistle, prickly lettuce [*Lactuca serriola*], flaxed-leaved horseweed [*Erigeron bonariensis*] and other weed species). Although significant progress was made in the control of perennial non-native plant species in 2023, control efforts will continue as re-sprouts and new seedlings of these noxious weeds begin to appear.

The maintenance of the native grassland mitigation area will concentrate on the control of invasive plant species. If weed control progresses well, other native plants may be added to the native grassland mitigation area this year to increase species richness. In addition, planting of native bunch grasses and the addition of some native shrub species will occur in other areas of the HBP in the fall of 2024 to augment areas planted this year and to begin to fill in other bare areas.

ATTACHMENTS

ATTACHMENT 1

Plant Species Observed

Attachment 1
Plant Species Observed

Major Plant Group	Family	Scientific Name / Common Name	Origin	
Angiosperms: Monocots	Alliaceae / Onion Family	<i>Allium praecox</i> / early onion	N	
	Iridaceae / Iris Family	<i>Sisyrinchium bellum</i> / western blue-eyed grass	N	
	Melanthiaceae / False-hellebore Family	<i>Toxicoscordion fremontii</i> [= <i>Zigadenus fremontii</i>] / Fremont's camas	N	
	Poaceae (Gramineae) / Grass Family	<i>Avena barbata</i> / slender wild oat	I	
		<i>Brachypodium distachyon</i> / purple falsebrome	I	
		<i>Bromus diandrus</i> / rippgut grass	I	
		<i>Bromus hordeaceus</i> / soft chess	I	
		<i>Bromus rubens</i> [= <i>Bromus madritensis</i> ssp. <i>rubens</i>] / red brome	I	
		<i>Festuca perennis</i> [= <i>Lolium multiflorum</i> and <i>Lolium perenne</i>] / rye grass	I	
		<i>Stipa lepida</i> [= <i>Nassella lepida</i>] / foothill needle grass	N	
		<i>Stipa pulchra</i> [= <i>Nassella pulchra</i>] / purple needle grass	N	
	Themidaceae / Brodiaea Family	<i>Bloomeria crocea</i> / common goldenstar	N	
		<i>Brodiaea filifolia</i> / thread-leaved brodiaea	N	
		<i>Dipterostemon capitatus</i> [= <i>Dichelostemma capitatum</i>] / blue dicks	N	
Angiosperms: Eudicots	Amaranthaceae / Amaranth Family	<i>Amaranthus albus</i> / tumbleweed	I	
	Anacardiaceae / Sumac or Cashew Family	<i>Rhus integrifolia</i> / lemonade berry	N	
	Apiaceae (Umbelliferae) / Carrot Family	<i>Foeniculum vulgare</i> / fennel	I	
	Asteraceae / Sunflower Family	<i>Ambrosia psilostachya</i> / western ragweed	N	
		<i>Baccharis pilularis</i> / chaparral broom, coyote brush	N	
		<i>Corethrogyne filaginifolia</i> var. <i>filaginifolia</i> / California sand-aster	N	
		<i>Deinandra fasciculata</i> [= <i>Hemizonia fasciculata</i>] / fascicled tarweed	N	
		<i>Encelia californica</i> / California encelia	N	
		<i>Erigeron bonariensis</i> [= <i>Conyza bonariensis</i>] / flax-leaved horseweed	I	
		<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i> / long-stem golden-yarrow	N	
		<i>Grindelia camporum</i> [= <i>Grindelia camporum</i> var. <i>bracteosa</i>] / gumplant	N	
		<i>Hedypnois cretica</i> / Crete weed	I	
		<i>Helminthotheca echioides</i> [= <i>Picris echioides</i>] / bristly ox-tongue	I	
		<i>Isocoma menziesii</i> var. <i>menziesii</i> / spreading goldenbush	N	
		<i>Lactuca serriola</i> / prickly lettuce	I	
		<i>Lasthenia gracilis</i> [<i>L. californica</i> Lindley, misapplied in San Diego County] / common goldfields	N	
		Asteraceae / Sunflower Family	<i>Pseudognaphalium beneolens</i> [= <i>Gnaphalium canescens</i> ssp. <i>beneolens</i>] / fragrant everlasting	N
			<i>Pseudognaphalium californicum</i> [= <i>Gnaphalium californicum</i>] / California everlasting, green everlasting	N

**Attachment 1
Plant Species Observed**

Major Plant Group	Family	Scientific Name / Common Name	Origin
Angiosperms: Eudicots	Asteraceae / Sunflower Family	<i>Sonchus oleraceus</i> / common sow thistle	I
	Boraginaceae / Borage Family	<i>Cryptantha intermedia</i> / nievitas cryptantha	N
	Brassicaceae (Cruciferae) / Mustard Family	<i>Brassica nigra</i> / black mustard	I
	Caryophyllaceae / Pink Family	<i>Silene gallica</i> / small-flower catchfly, windmill pink	I
	Chenopodiaceae / Goosefoot Family	<i>Atriplex semibaccata</i> / Australian saltbush	I
		<i>Salsola tragus</i> / Russian thistle, tumbleweed	I
	Convolvulaceae / Morning-Glory Family	<i>Calystegia macrostegia</i> / morning-glory	N
		<i>Convolvulus arvensis</i> / bindweed, orchard morning-glory	I
		<i>Convolvulus simulans</i> / small-flowered morning-glory	N
	Cucurbitaceae / Gourd Family	<i>Marah macrocarpa</i> / wild cucumber	N
	Fabaceae (Leguminosae) / Legume Family	<i>Acmispon glaber</i> [= <i>Lotus scoparius</i>] / deerweed, California broom	N
		<i>Lathyrus splendens</i> / pride-of-California, Campo pea	N
		<i>Lupinus bicolor</i> / miniature lupine	N
		<i>Lupinus succulentus</i> / arroyo lupine	N
		<i>Medicago polymorpha</i> / California burclover	I
		<i>Melilotus officinalis</i> / yellow sweetclover	I
	<i>Vicia americana</i> ssp. <i>americana</i> / American vetch	N	
	Geraniaceae / Geranium Family	<i>Erodium cicutarium</i> / redstem filaree	I
	Hydrophyllaceae / Waterleaf Family	<i>Pholistoma auritum</i> var. <i>auritum</i> / fiesta flower	N
	Lamiaceae / Mint Family	<i>Stachys rigida</i> var. <i>rigida</i> [= <i>Stachys ajugoides</i> var. <i>rigida</i>] / hedge nettle	N
	Malvaceae / Mallow Family	<i>Sidalcea sparsifolia</i> [= <i>Sidalcea malviflora</i> ssp. <i>sparsifolia</i>] / southern checkerbloom	N
	Myrsinaceae / Myrsine Family	<i>Lysimachia arvensis</i> [= <i>Anagallis arvensis</i>] / scarlet pimpernel	I
	Onagraceae / Evening-Primrose Family	<i>Epilobium brachycarpum</i> / willow herb, fireweed	N
	Papaveraceae / Poppy Family	<i>Eschscholzia californica</i> / California poppy	N
	Polygonaceae / Buckwheat Family	<i>Eriogonum fasciculatum</i> / California buckwheat	N
		<i>Rumex crispus</i> / curly dock	I
	Rhamnaceae / Buckthorn Family	<i>Rhamnus crocea</i> / spiny redberry	N
	Rubiaceae / Madder Family	<i>Galium</i> sp. / bedstraw, cleavers	N
Solanaceae / Nightshade Family	<i>Datura wrightii</i> / western Jimson weed	N	
Violaceae / Violet Family	<i>Viola pedunculata</i> / johnny-jump-up	N	

ORIGIN

N = Native to locality.

I = Introduced species from outside locality.

ATTACHMENT 2

Wildlife Species Observed

Attachment 2
Wildlife Species Observed

Major Wildlife Group	Family	Scientific / Common Name	Origin
Invertebrates	Apidae / Honey Bees, Bumble Bees, and Allies	<i>Apis mellifera</i> / honey bee	I
	Papilionidae / Parnassians & Swallowtails	<i>Papilio rutulus</i> / western tiger swallowtail	N
	Pieridae / Whites & Sulphurs	<i>Pontia protodice</i> / checkered [=common] white	N
	Nymphalidae / Brush-footed Butterflies	<i>Agraulis vanillae incarnata</i> / gulf fritillary	N
		<i>Junonia coenia grisea</i> / common buckeye	N
		<i>Vanessa cardui</i> / painted lady	N
	Land Snails / Helminthoglyptidae	<i>Heminthoglypta traskii coelata</i> / Peninsular Range shoulderbrand snail	N
Formicidae / Ants	<i>Linepithema humile</i> / Argentine ant	I	
Reptiles	Phrynosomatidae / Spiny Lizards	<i>Sceloporus occidentalis longipes</i> / Great Basin fence lizard	N
		<i>Uta stansburiana elegans</i> / western side-blotched lizard	N
	Colubridae / Colubrid Snakes	<i>Pituophis catenifer annectens</i> / San Diego gophersnake	N
	Crotalidae / Rattlesnakes	<i>Crotalus oreganus helleri</i> / southern Pacific rattlesnake	N
Birds	Odontophoridae / New World Quail	<i>Callipepla californica</i> / California quail	N
	Cathartidae / New World Vultures	<i>Cathartes aura</i> / turkey vulture	N
	Accipitridae / Hawks, Kites, & Eagles	<i>Buteo jamaicensis</i> / red-tailed hawk	N
	Falconidae / Falcons	<i>Falco sparverius</i> / American kestrel	N
	Charadriidae / Lapwings & Plovers	<i>Charadrius vociferus</i> / killdeer	N
	Columbidae / Pigeons & Doves	<i>Zenaida macroura</i> / mourning dove	N
	Cuculidae / Cuckoos & Roadrunners	<i>Geococcyx californianus</i> / greater roadrunner	N
	Tyrannidae / Tyrant Flycatchers	<i>Sayornis nigricans</i> / black phoebe	N
		<i>Sayornis saya</i> / Say's phoebe	N
		<i>Tyrannus verticalis</i> / western kingbird	N
	Corvidae / Crows, Jays, & Magpies	<i>Corvus brachyrhynchos</i> / American crow	N
	Alaudidae / Larks	<i>Eremophila alpestris actia</i> / California horned lark	N
	Aegithalidae / Bushtit	<i>Psaltriparus minimus</i> / bushtit	N
	Troglodytidae / Wrens	<i>Thryomanes bewickii</i> / Bewick's wren	N
		<i>Troglodytes aedon</i> / house wren	N
	Turdidae / Thrushes	<i>Sialia mexicana</i> / western bluebird	N
	Sylviidae / Babblers	<i>Chamaea fasciata</i> / wrentit	N
	Mimidae / Mockingbirds & Thrashers	<i>Mimus polyglottos</i> / northern mockingbird	N
		<i>Toxostoma redivivum</i> / California thrasher	N
	Parulidae / Wood Warblers	<i>Setophaga [=Dendroica] coronata</i> / yellow-rumped warbler	N
	Passerellidae / New World Passerines	<i>Melospiza melodia</i> / song sparrow	N
		<i>Melospiza [=Pipilo] crissalis</i> / California towhee	N
		<i>Pipilo maculatus</i> / spotted towhee	N

Attachment 2
Wildlife Species Observed

Major Wildlife Group	Family	Scientific / Common Name	Origin
Birds	Passerellidae / New World Passerines	<i>Zonotrichia leucophrys</i> / white-crowned sparrow	N
	Fringillidae / Finches	<i>Haemorhous [=Carpodacus] mexicanus</i> / house finch	N
Mammals	Leporidae / Rabbits & Hares	<i>Sylvilagus bachmani</i> / brush rabbit	N
	Sciuridae / Squirrels & Chipmunks	<i>Otopermophilus [=Spermophilus] beecheyi</i> / California ground squirrel	N
	Geomyidae / Pocket Gophers	<i>Thomomys bottae</i> / Botta's pocket gopher	N
	Canidae / Canids	<i>Canis latrans</i> / coyote	N
<p>ORIGIN N =Native to locality. I = Introduced species from outside locality.</p>			