DOCKETED	
Docket Number:	21-AFC-02
Project Title:	Willow Rock Energy Storage Center
TN #:	258311
Document Title:	Willows Rock Joshua Tree Census 2024 Addendum
Description:	N/A
Filer:	Kathryn Stevens
Organization:	WSP USA Inc.
Submitter Role:	Applicant Consultant
Submission Date:	8/5/2024 4:21:44 PM
Docketed Date:	8/5/2024

WILLOW ROCK ENERGY STORAGE CENTER
JOSHUA TREE CENSUS REPORT
2024 Addendum

ANSEL, KERN COUNTY, CALIFORNIA

Prepared for:

GEM A-CAES LLC
1125 17th St #700
Denver, CO 80202

Prepared by:

WSP USA Environment & Infrastructure Inc.
18700 Pierce Street, Suite 160
Riverside, CA 92505

August 2024

TABLE OF CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

WSP USA Environment & Infrastructure Inc. (WSP) was contracted by GEM A-CAES LLC, a subsidiary of Hydrostor Inc. (Hydrostor), to conduct biological resources surveys at the site of the proposed Willow Rock Energy Storage Center (WRESC) in the unincorporated community of Ansel, Kern County, California. These studies were conducted in support of the preparation of the California Energy Commission's (CEC) Application for Certification. As part of the 2023 biological surveys, WSP was tasked with conducting focused surveys for the sensitive plant species within the WRESC project site (WSP 2024), which includes an energy storage facility, a gen-tie transmission line, and additional workspace. Accessible portions were identified are areas within public road rights-of-way, parcels owned by the applicant, or parcels with right-of-entry agreements.

Hydrostor updated the WRESC project design to include additional project features in the fall of 2023 following the field survey season. This addendum report presents the methods, results, and discussion of the Joshua tree (*Yucca brevifolia*) (WJT) census surveys conducted in 2024 within additional project areas that were not included in the 2023 surveys. All figures referenced in this report are provided in Appendix A; photographs may be provided upon request.

1.1 Project Description

As part of the on-going data collection, additional focused surveys are required to document the presence of WJT and their associated habitat in additional workspace areas and alternative gen-tie transmission line right-of-way alignments (gen-tie alignments). These areas are described as P2 North (47 acres) and P2 South (10 acres), as well as approximately 3.69 miles of additional gen-tie alignments (Figure 1, Regional Location). In the context of this report, "project site" specifically refers to the energy storage facility, all linear transmission lines and alternatives, and other supporting workspace areas. The "survey area" refers to just the additional project areas that were added for the additional 2024 addendum. However, it should be noted, that many of the western Joshua trees included in the 2024 survey area, were included in the 2023 western Joshua tree census report.

1.2 Project Location and Topography

The survey area is located on private property in and around the rural community of Ansel within the 7.5-minute Soledad Mountain and Rosamond, California, U.S. Geological Survey topographic quadrangle (topo quad). P2 North and P2 South are located east of State Route 14 and the additional gen-tie alignments are located west of State Route 14 (Figure 1, Regional Location). The project site is located within portions of Sections 31, 32, and 33 of Township 10 North and Range 12 West; portions of Section 4 of Township 9 North and Range 12 West; and portions of Sections 14, 15, of Township 9 North and Range 13 West (Figure 2, Historic USGS Topographic Map).

Topography in the survey area slopes from northwest to southeast, with flat areas in the southern portions and gently rolling hills in the central portion of the project site. Elevations range from approximately 2,400 feet (732 meters) to 2,720 feet (830 meters) along Dawn Road (Figure 3, Local Vicinity).

2.0 BACKGROUND ON WESTERN JOSHUA TREE

WJT is characterized by its tall, spiky leaves that cluster at the ends of long, branching limbs. WJTs belong to the Agavaceae family and are adapted to the arid conditions of their native arid desert habitat. The species exhibits a slow growth rate, with some WJTs taking several decades to reach maturity. Typically, they can grow to 15 to 40 feet (4.5 to 12 meters), and their lifespan extends for centuries, making them one of the longest-living yucca species. Its distinctive leaves have a waxy coating that helps reduce water loss through transpiration, and the tree is equipped with an extensive root system that enables it to access water from deep within the soil. Additionally, the WJT relies on a specialized pollination relationship with the yucca moth. The moth lays its eggs in the tree's flowers, and as the larvae develop, they consume some of the developing seeds, ensuring the WJT's reproductive success.

WJT is native to the southwestern United States (Arizona, California, Nevada, and Utah) and northwestern Mexico This range mostly coincides with the geographical reach of the Mojave Desert, where it is considered one of the major indicator species for the desert. It occurs at elevations between 1,300 and 5,900 feet (400 and 1,800 meters).

Climate plays a crucial role in the distribution of WJTs, as these trees are well-suited to the extreme temperatures and low precipitation of the Mojave Desert. They are particularly vulnerable to environmental changes, including climate fluctuations and habitat disturbances. Conservation efforts are underway to protect these trees and their unique ecosystem, as they serve as vital components of the desert landscape and provide habitat for various wildlife species.

Wildfires, invasive grasses, and poor migration patterns for the WJT's seeds are all additional factors in the species' imperilment. In July 2023, the Western Joshua Tree Conservation Act (WJTCA) was enacted which prohibits the importation, export, take, possession, purchase, or sale of any WJT in California unless authorized by the California Department of Fish and Wildlife (CDFW).

The act authorizes CDFW to issue permits for the incidental take of one or more WJT if the permittee meets certain conditions. Permittees may pay specified fees in lieu of conducting mitigation activities. The act also authorizes CDFW to issue permits for the removal of dead WJTs and the trimming of live trees under certain circumstances (CDFW 2023). By adopting this efficient approach and collecting mitigation fees, the WJTCA aims to offset the negative impacts of authorized projects in WJT habitat, contributing to the broader conservation of the species at a landscape scale. All fees collected as alternatives to mitigation activities are directed to the Western Joshua Tree Conservation Fund, exclusively used by CDFW for acquiring, conserving, and managing WJT conservation lands.

Further, the act mandates collaboration between CDFW, governmental agencies, California Native American Tribes, and the public in developing and implementing a comprehensive WJT Conservation Plan. The plan's finalized draft must be presented to the Fish and Game Commission for review and approval by December 31, 2024. CDFW is further obligated to produce annual reports on the WJT's

conservation status, submitted to the commission and the state legislature annually starting from 2025 (CDFW 2024a).

Section 1927.3, subdivision (a)(4)(A) of the California Fish and Game Code gives CDFW authority to require WJTCA incidental take permit (ITP) permittees to relocate one or more WJTs. The CDFW issued the Western Joshua Relocation Guidelines and Protocols in July 2024, which provides guidance on how and when to relocate WJT to minimize impacts to populations, prevent habitat fragmentation, and preserve connectivity corridors for gene flow and pollinator migration. Furthermore, pursuant to that subdivision, where relocation is required, permittees must implement reasonable measures required by CDFW to facilitate the successful relocation and survival of salvage trees (CDFW 2024b).

CDFW will determine whether relocation will be required under a WJTCA ITP during the permit application review process. Factors that CDFW may consider in making this determination for each project site include the following:

- Number of trees to be lethally taken (greater than 20 trees removed)
- Area of impacted western WJT habitat within a project site (greater than 20 acres impacted)
- Avoidance and minimization measures proposed by the applicant to reduce project impacts to WJT
- Quality of habitat on, and adjacent to, the project site (e.g., ecologically core or intact)
- Overall population health on the project site (e.g., declining versus stable or increasing)
- Whether the project is within predicted climate refugia for WJT
- Extent of permanent project impacts
- Density of clonal growth
- Anticipated temporal impacts of a project including operation or maintenance activities, where applicable

3.0 METHODS

Information on WJT presence and suitable habitat was obtained from a background literature review and field surveys.

3.1 Literature Review and Records Search

A literature review and record search were conducted to identify WJT presence in the project vicinity. The review included the following:

- Aerial photographs
- Pertinent documents from the WSP library and WRESC project files (e.g., other biological surveys from the general vicinity)

- Agency conservation resources for the species (CDFW 2023, 2024a, 2024b, CDFG 2024c)
- Online sources, such as the iNaturalist website (2024)

3.2 Western Joshua Tree Census Surveys

WJT census surveys were completed by WSP biologists on April 10, 12, and 22, 2024, based on the census instructions outlined on the CDFW website (CDFW 2024c). The entire project footprint was systematically searched using parallel survey transects spaced approximately 5 meters apart to achieve thorough coverage of the project site, including a 1,000-foot survey buffer, herein described as the "study area."

Each WJT stem or trunk growing independently from the ground was recorded with a global positioning system device and assigned a unique identifier. Data were also collected electronically to gather information about each tree, including tree health, size, and flowering/fruiting status. Photographs were taken of each WJT recorded and are provided in Appendix B.

A tree was considered dead if it met one of the following conditions:

- It had not undergone burning and exhibited no green leaves, no recent growth on the main stem, and no sprouts at the base.
- It had experienced partial or complete burning at least 18 months prior, lacking green leaves, showing no new growth on the main stem, and displaying no sprouts at the base.
- It had fallen and was entirely detached from its roots, or it had fallen, and its roots were no longer in contact with the soil.

A tape measure or measuring pole was used to measure each tree, measuring from the middle of the trunk's base to the top of the furthest leaf from the base. In cases where the main trunk followed an unusual path, two measurements were taken to accurately capture the tree's true growth, with a limit of no more than two measurements per tree. Mature trees, defined as those having produced flowers/fruits in the past, or that had at least one set of branches, were identified as mature WJT. All WJTs were classified into one of three height categories:

- Class A: Less than 3.3 feet (1 meter) in height
- Class B: 3.3 feet (1 meter) or greater but less than 16.4 feet (5 meters) in height
- Class C: 16.4 feet (5 meters) or greater in height

4.0 RESULTS

A total of 253 western Joshua trees were documented in the survey area during the 2024 census. Of the 253 documented Western Joshua trees, 24 were identified as dead and 229 as live. The most prevalent height class was Class B, with 122 individuals recorded in this class; followed by Class A, with 114 individuals recorded; and Class C, with 17 individuals recorded. This species is considered present within the project area. All WJT locations (i.e., latitude/longitude), size class, vitality status, and maturity

status were documented electronically and recorded in the Field Maps Application. Photographs of all WJTs documented are included in Appendix B.

5.0 DISCUSSION AND CONCLUSIONS

Since the WJT is a candidate for state listing under the California Endangered Species Act, compliance with CESA is required if impacts to WJTs are proposed. Since the project will be permitted through the CEC, the CEC will be issuing a final decision on all state-law matters and will include avoidance and mitigation measures developed in the siting process. During the agency consultation, CDFW staff will assess the application information and work collaboratively with the CEC.

Regardless of the final footprint, the Applicant is avoiding impacts to WJTs located in the entire eastern section of the WRESC facility parcel (i.e., the portion on the east side of the railroad and Sierra Highway). This would avoid approximately 100 trees. Once the final project footprint has been determined in the regular post-Certification detailed design, the total number of avoided and impacted trees will be documented. The remaining avoidance, minimization, and mitigation measures associated with WJT impacts will be established in the CEC Certification, consistent with the WJTCA, CDFW guidelines, and applicable laws, ordinances, regulations, and standards (LORS). Avoidance, minimization, and mitigation measures may include, but are not limited to selection of temporary laydown areas, WJT relocation, and payment of the WJTCA fees (based on tree size).

CDFW will recommend to the CEC whether relocation will be required for each project permitted under the WJTCA. Factors that are considered during the determination process include:

- Number of trees to be removed (greater than 20 trees removed)
- Area of impacted WJT Habitat (greater than 20 acres impacted)
- Proposed avoidance and minimization measures
- Quality of habitat adjacent to the project site
- Overall population health
- Is the project site within predicted climate refugia?
- Extent of permanent project impacts
- Density of clonal growth
- Anticipated temporal impacts

If trees are to be relocated, the *Western Joshua Tree Relocation Guidelines and Protocols* will be implemented, and a Relocation Plan will be included as part of the Biological Resources Management Plan (CDFW 2024b).

6.0 REFERENCES

California Department of Fish and Wildlife (CDFW). 2023. Western Joshua Tree Conservation Act. July. Accessed online at: https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/WJTCA

CDFW. 2024a. Wester Joshua Tree Conservation Plan. Accessed online at: https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Conservation-Plan

CDFW. 2024b. Western Joshua Tree Relocation Guidelines and Protocols. Accessed online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=224036&inline

CDFW. 2024c. Census Instructions. Accessed January 2024. Accessed online at: https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Permitting/Census-Instructions

iNaturalist. 2024. Observations of Western Joshua Tree. Accessed online at: https://www.inaturalist.org/observations?place_id=any&taxon_id=271451

WSP USA Environment & Infrastructure Inc. (WSP). 2024. Willow Rock Energy Storage Center Project Results of Swainson's Hawk Focused Surveys. February.

7.0 LIMITATIONS

This document has been prepared for the exclusive use of Hydrostor and its Construction Contract(s) in support of the preparation of the CEC's Application for Certification for the Willow Rock Energy Storage Center Project. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. WSP accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

This report was prepared, based in part, on information obtained from historic information sources. In evaluating the subject site, WSP has relied in good faith on information provided. We accept no responsibility for any deficiency or inaccuracy contained in this report as a result of our reliance on the aforementioned information.

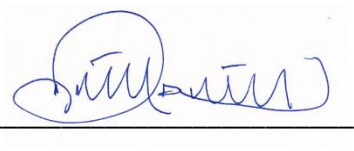
The findings and conclusions documented in this report have been prepared for the specific application to this project and have been developed in a manner consistent with that level of care normally exercised by environmental professionals currently practicing under similar conditions in the jurisdiction.

With respect to regulatory compliance issues, regulatory statutes are subject to interpretation. These interpretations may change over time, and should be reviewed.

If new information is discovered during future work, the conclusions of this report should be re-evaluated and the report amended as required prior to any reliance upon the information presented herein.

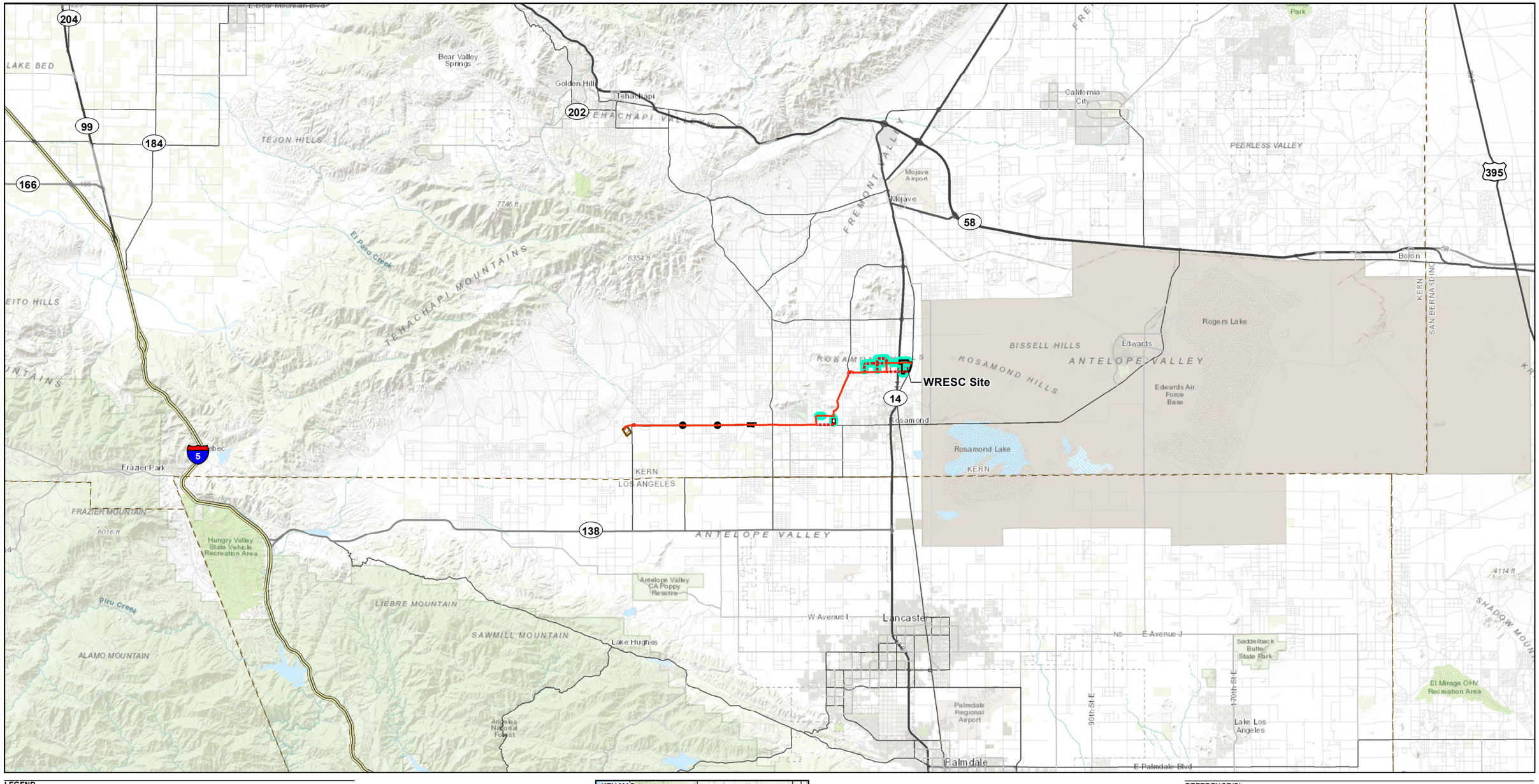
8.0 CERTIFICATION

We certify that the information in the survey report and attached exhibits fully and accurately represents our work.

Signed:  _____ Date:__08/02/2024_____

Signed:  _____ Date:__08/02/2024_____

Appendix A Figures



LEGEND

- Freeway
- Major Road
- Secondary Road
- Local Connecting Road
- Important Local Road

Proposed Transmission Line

- Preferred Route, Aboveground
- Preferred Route, Underground
- Route Options 1-6, Aboveground
- Route Options 1-6, Underground

Project Components

- WRESC Site
- Other Project Parcels
- No Right of Entry Areas
- Project Boundary
- 2024 Project Area
- SCE Whirlwind Substation

0 5 10
1:350,000 MILES

REFERENCE(S)
1. COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA V FIPS 0405 FEET
2. MAP SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT
GEM A-CAES LLC

CONSULTANT
wsp

YYYY-MM-DD	2024-07-29
DESIGNED	MK
PREPARED	MK
REVIEWED	SC
APPROVED	VG/LL

PROJECT
WILLOW ROCK ENERGY STORAGE CENTER
JOSHUA TREE FOCUSED SURVEY

TITLE
REGIONAL LOCATION MAP

PROJECT NO.	PHASE	REV.	FIGURE
31406639.000	01.LBR	1	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

1in

PATH: G:\Hydrostor\Ansel\99_PROJECTS\31406639.000_Hydrostor\Ansel\BioSurvey\01.LBR - Ph1_BioSurvey\02_PRODUCTION\MXD\FIGURES\Joshua_Tree_Focus_Survey\Rev1\31406639-000_01_04_F06-01_Rev1_JT_RegionalLocationMap.mxd PRINTED ON: 2024-07-29 AT: 6:04:32 PM

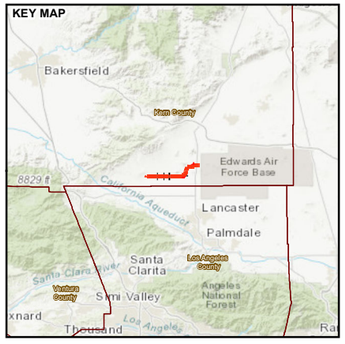
WRESC Site

LEGEND

Proposed Transmission Line
- Preferred Route, Aboveground
- Preferred Route, Underground
- Route Options 1-6, Aboveground
- Route Options 1-6, Underground

Project Components
- WRESC Sites
- Other Project Parcels
- No Right of Entry Areas
- Project Boundary
- 2024 Project Area
- SCE Whirlwind Substation

KEY MAP



0 5 10
1:350,000 MILES

REFERENCE(S)
1. COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA V FIPS 0405 FEET
2. MAP SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
COPYRIGHT:© 2013 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED

CLIENT
GEM A-CAES LLC

CONSULTANT
wsp

YYYY-MM-DD	2024-07-29
DESIGNED	MK
PREPARED	MK
REVIEWED	SC
APPROVED	VG/LL

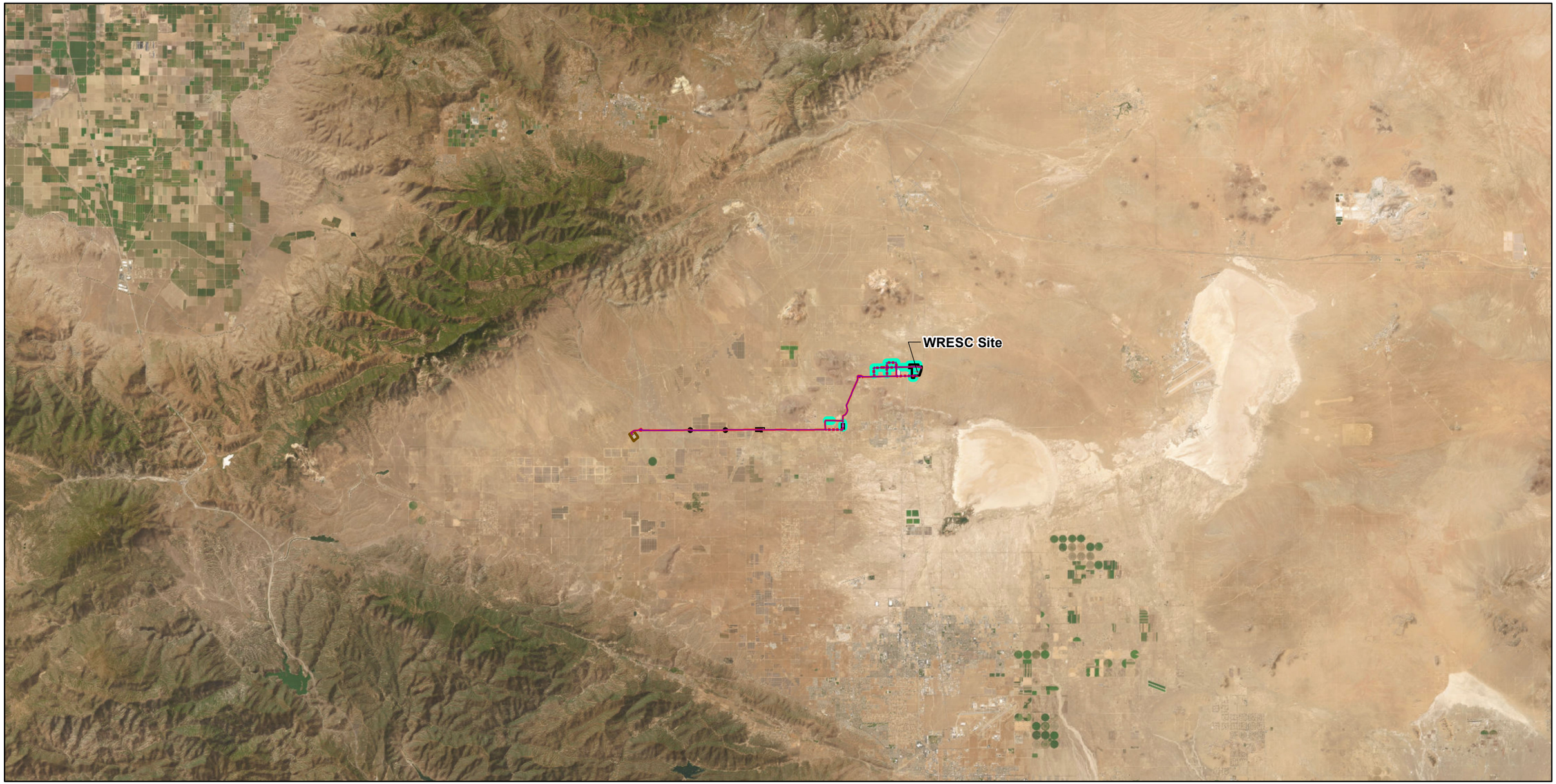
PROJECT
WILLOW ROCK ENERGY STORAGE CENTER
JOSHUA TREE FOCUSED SURVEY

TITLE
USGS TOPOGRAPHIC MAP

PROJECT NO.	PHASE	REV.	FIGURE
31406639.000	01.LBR	1	2

PATH: G:\Hydrator\Area\99_PROJECTS\31406639.000_Hydrator\Area\BioSurvey\01.LBR_Ph1_BioSurvey\02_PRODUCTION\MXD\FIGURES\Joshua_Tree_Focus_Survey\Rev1\31406639.000_01_04_F06-02_Rev1_JT_TopographicMap.mxd PRINTED ON: 2024-07-29 AT: 6:08:16 PM

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

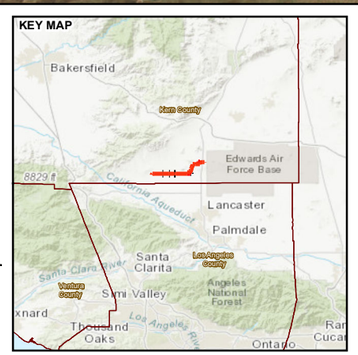


LEGEND

Proposed Transmission Line
- Preferred Route, Aboveground
- Preferred Route, Underground
- Route Options 1-6, Aboveground
- Route Options 1-6, Underground

Project Components
- WRESC Site
- Other Project Parcels
- No Right of Entry Areas
- Project Boundary
- 2024 Project Area
- SCE Whirlwind Substation
- Project ROW

KEY MAP



0 5 10
1:350,000 MILES

NOTE(S)
1. PROJECT ROW IS A 62.5 FT BUFFER ON EITHER SIDE OF THE TRANSMISSION LINE.

REFERENCE(S)
1. COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA V FIPS 0405 FEET
2. MAP SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

CLIENT
GEM A-CAES LLC

CONSULTANT
wsp

YYYY-MM-DD	2024-07-29
DESIGNED	MK
PREPARED	MK
REVIEWED	SC
APPROVED	VG/LL

PROJECT
WILLOW ROCK ENERGY STORAGE CENTER
JOSHUA TREE FOCUSED SURVEY

TITLE
LOCAL VICINITY MAP

PROJECT NO.	PHASE	REV.	FIGURE
31406639.000	01.LBR	1	3

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

0 1in

PATH: G:\Hydrostor\Ansel\99_PROJECTS\31406639.000_HydrostorAnselBioSurvey\01.LBR_Ph1_BioSurvey\02_PRODUCTION\MXD\FIGURES\Joshua_Tree_Focus_Survey\Rev1\31406639.000_01_04_F06-03_Rev1_JT_LocalVicinityMap.mxd PRINTED ON: 2024-07-29 AT: 6:15:04 PM

Appendix B Photographs

CS 21

CS 21 a

CS 21 b

CS 21 c

CS 21 d

CS 21 e

CS 21 f

CS 21 g

CS 21 h

CS 21 i

CS 21 j

CS 21 k

CS 21 l

CS 21 m

CS 21 n

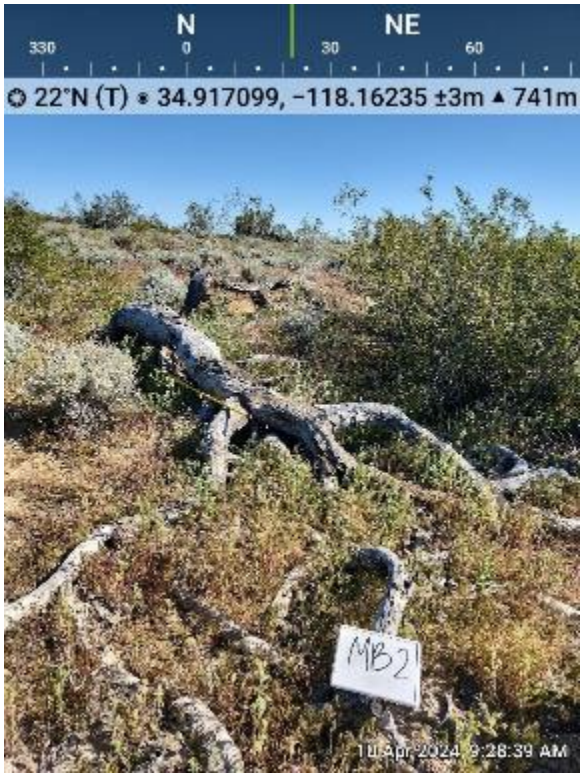
CS 21 o

CS 21 p

CS 21 q

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MB 1

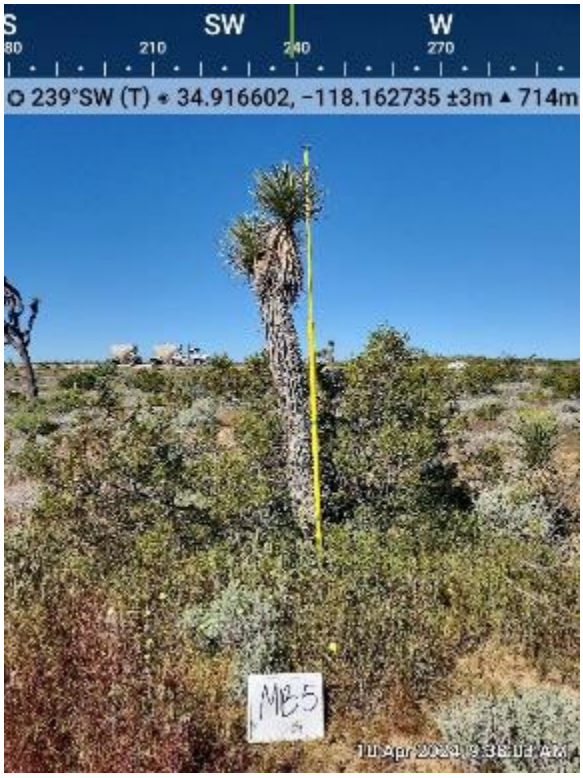


MB 2

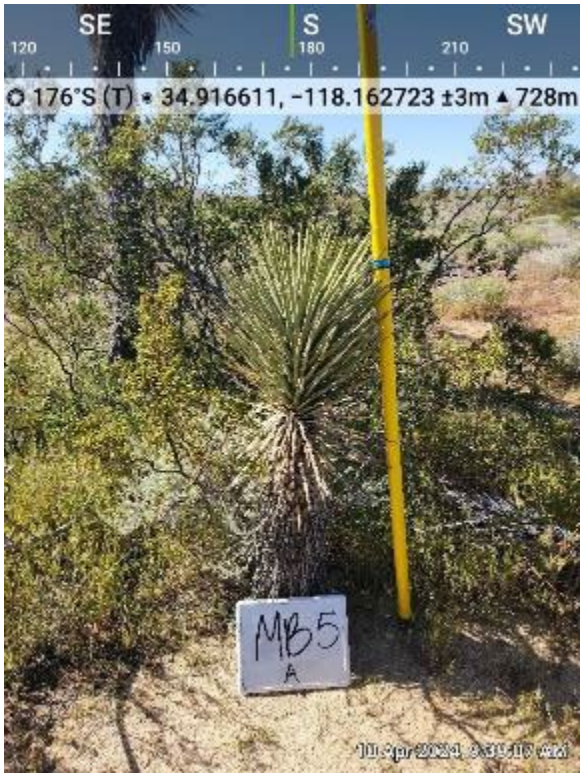
MB 3

MB 4

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024



MB 5

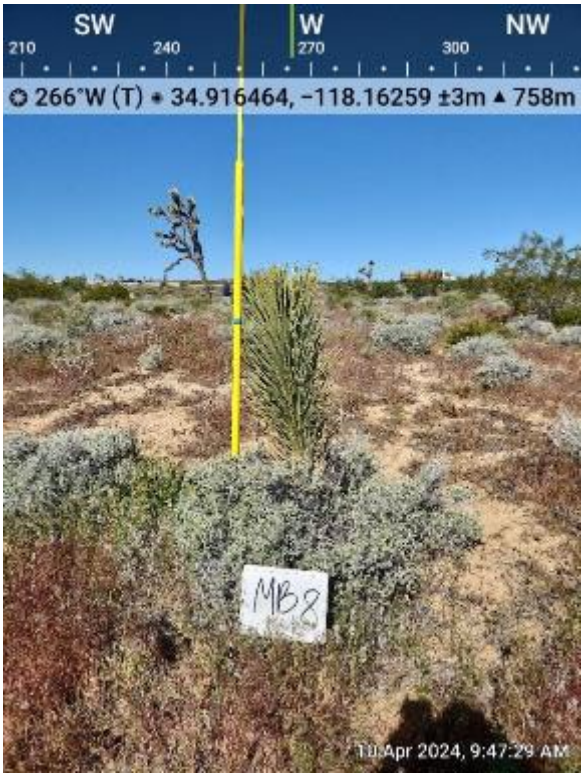


MB 5 a

MB 6

MB 7

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024



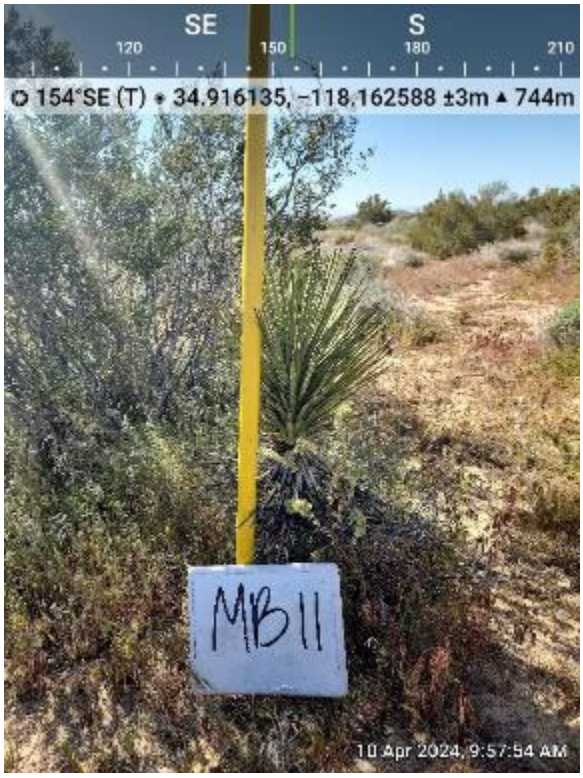
MB 8

MB 9

MB 10

MB 10 a

MB 10 b



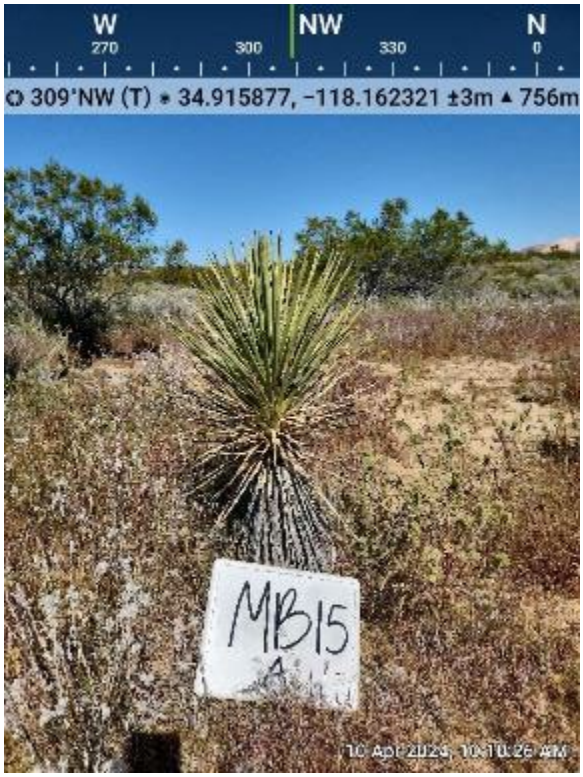
MB 11

MB 12

MB 13

MB 14

MB 15

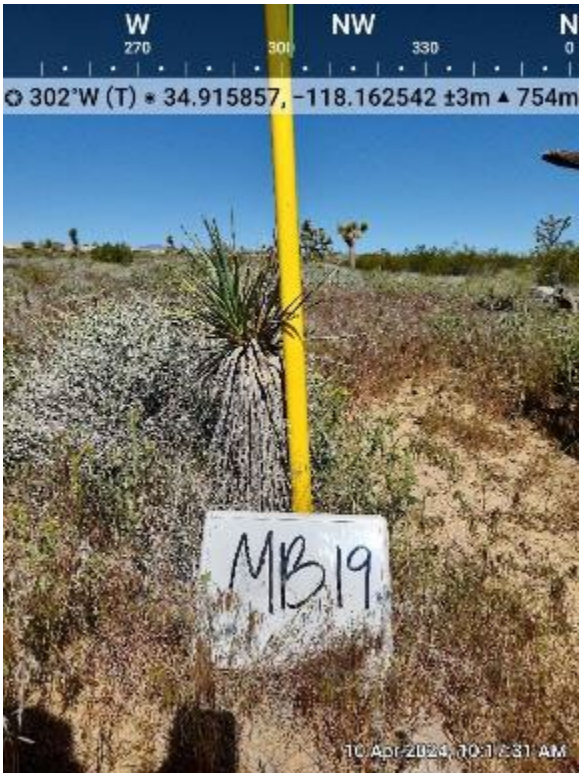


MB 15 a

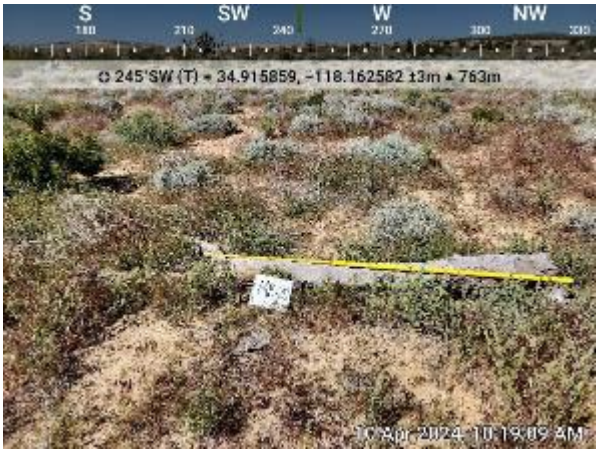
MB 16

MB 17

MB 18



MB 19



MB 20

MB 21

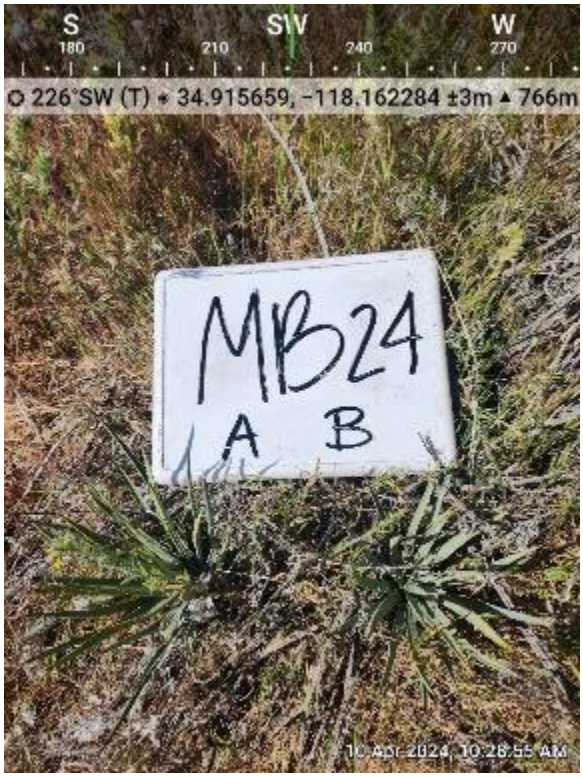
MB 21 a

MB 22

MB 23

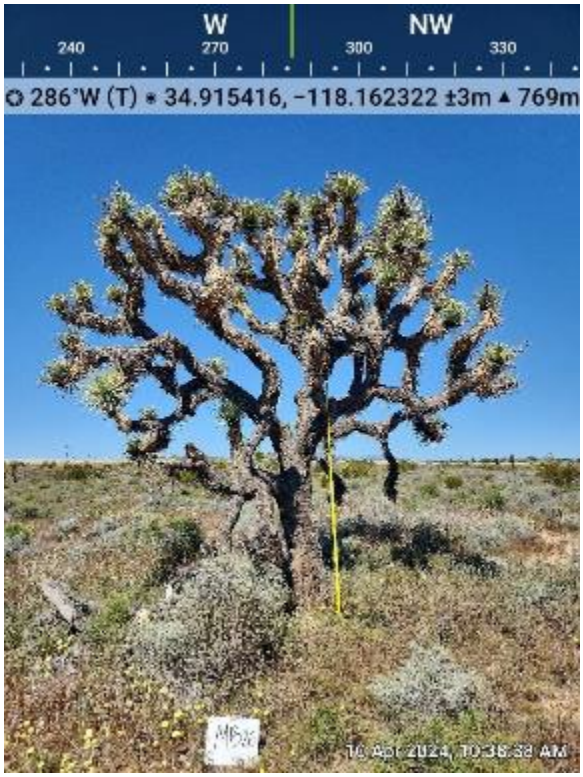
Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MB 24



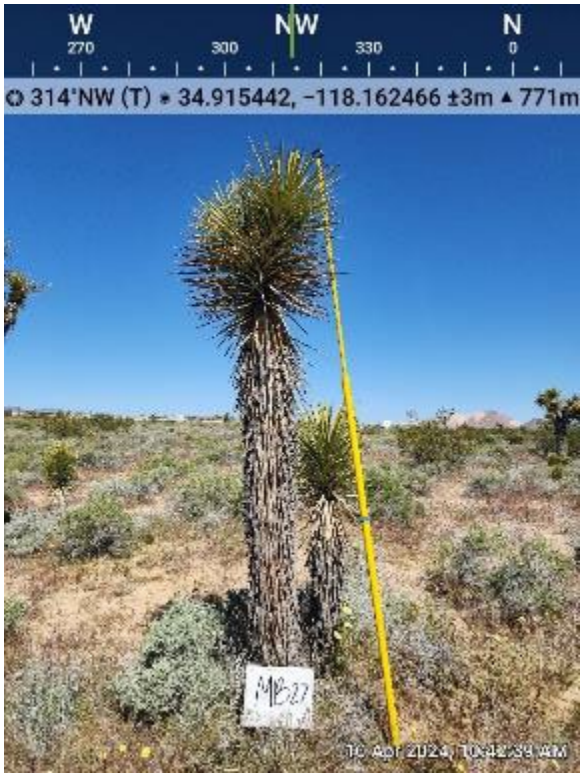
MB 24 a, b

MB 25



MB 26

MB 26 a



MB 27

MB 27 a

MB 28

MB 29

MB 30

MB 31

MB 31 a

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MB 31 b

MB 31 c

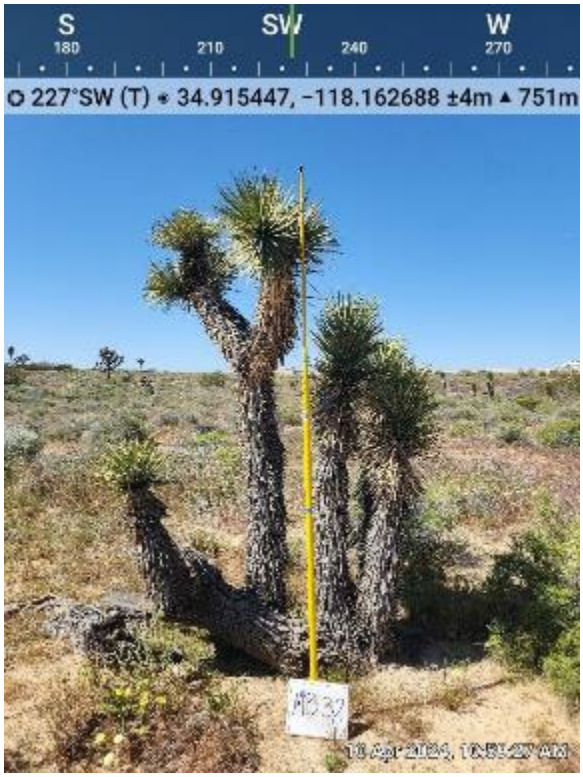
MB 31 d

MB 31 e

MB 31 f

MB 31 g

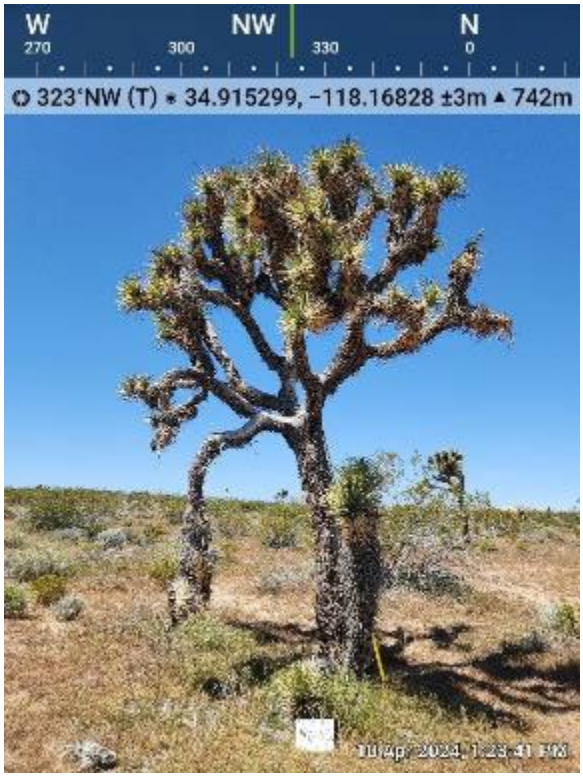
MB 31 h



MB 32

MB 33

MB 34



MB 35

MB 36

MB 36 a

MB 36 b

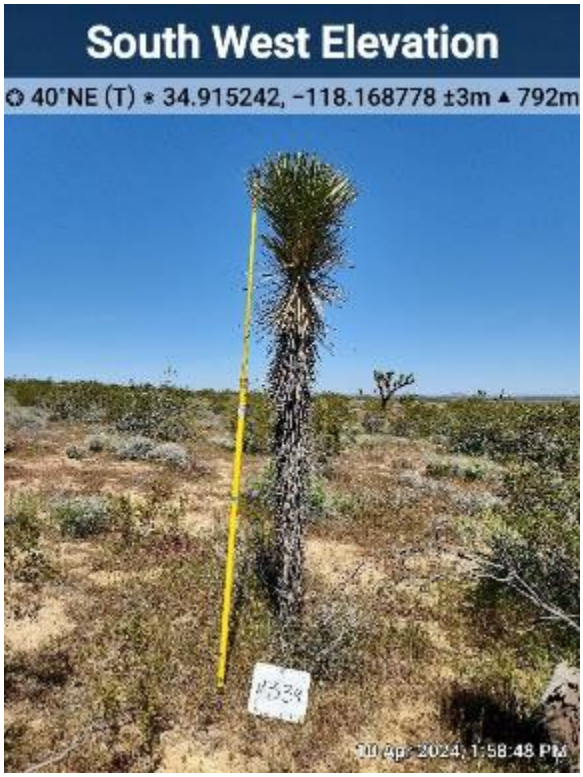
MB 37

MB 37 a, b

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MB 37 c

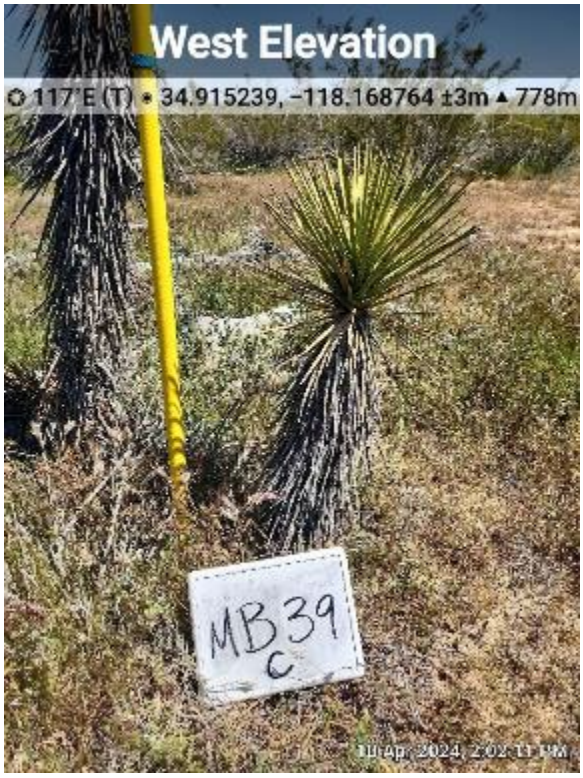
MB 37 d, e



MB 39

MB 39 a

MB 39 b

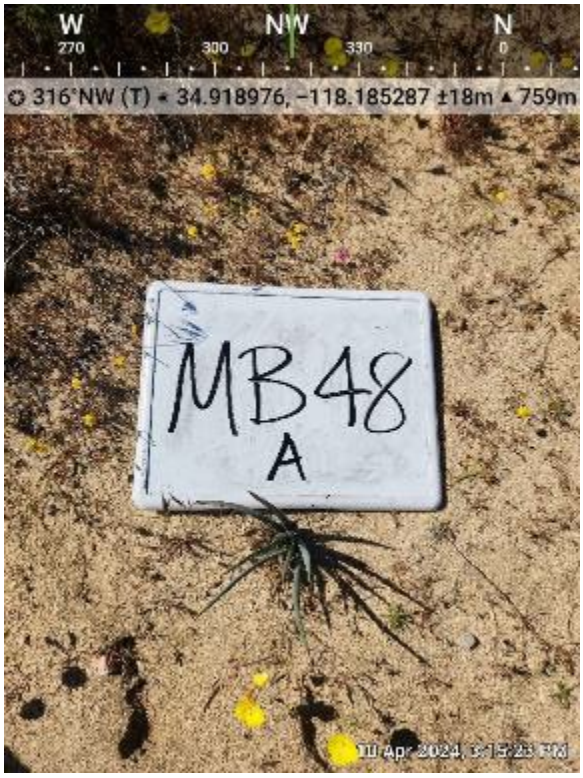


MB 39 c

MB 40

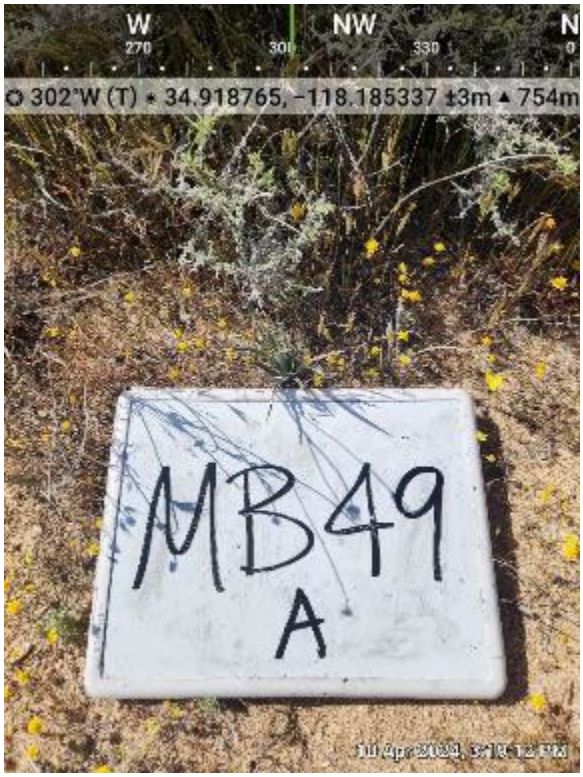
Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MB 48



MB 48 a

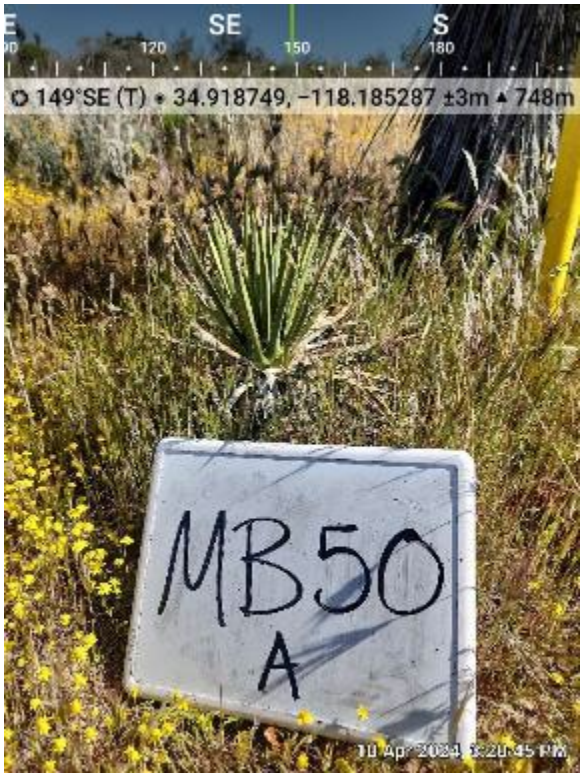
MB 49



MB 49 a

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MB 50

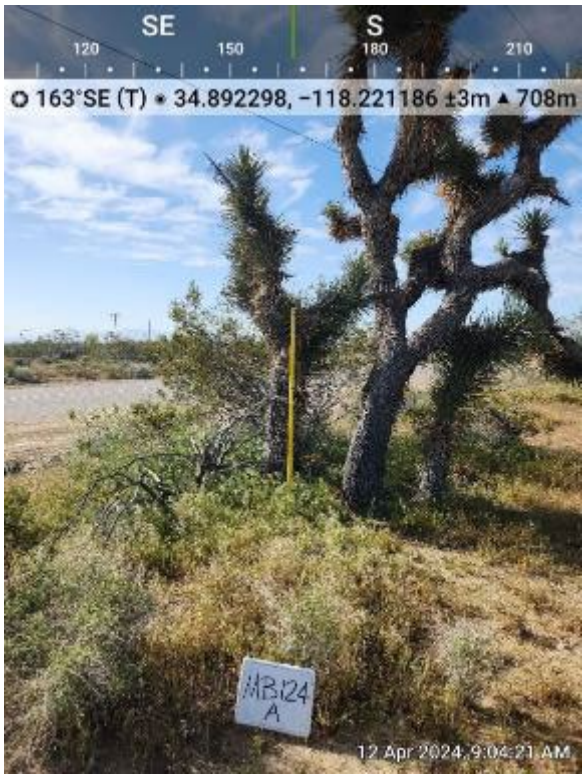


MB 50 a

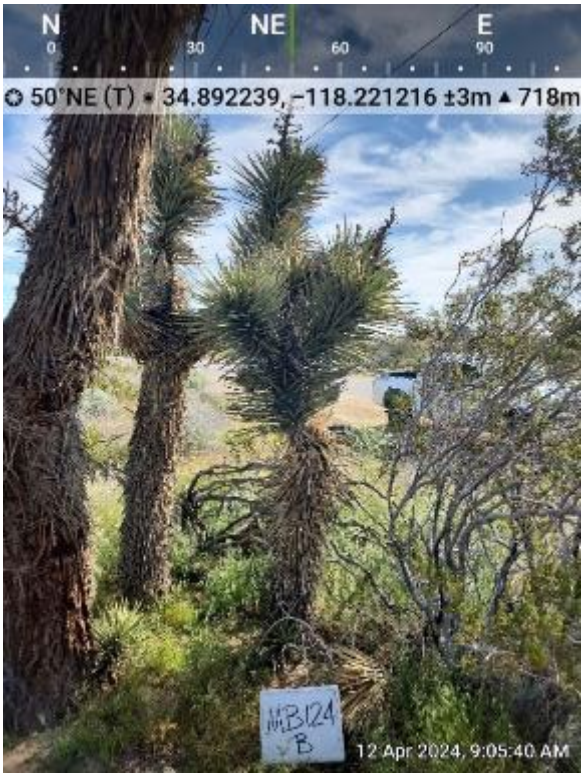
MB 50 b

MB 50 c

MB 124



MB 124 a



MB 124 b

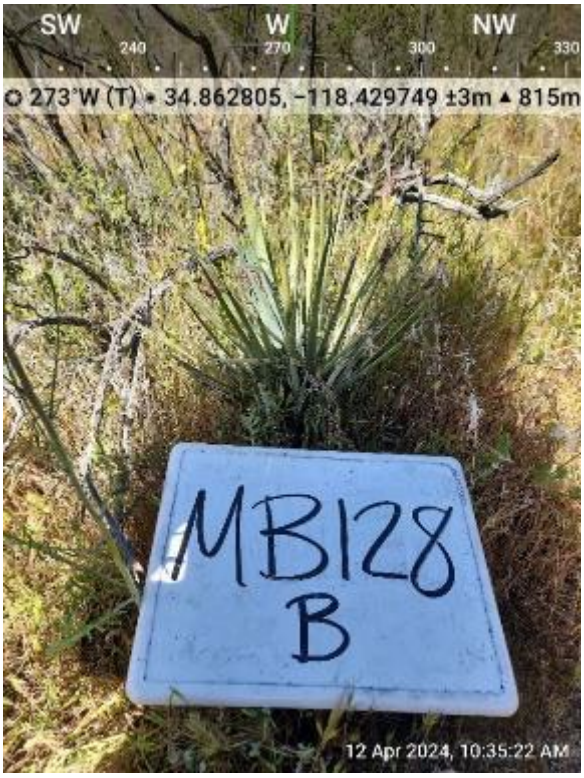
MB 124 c

MB 125

MB 126

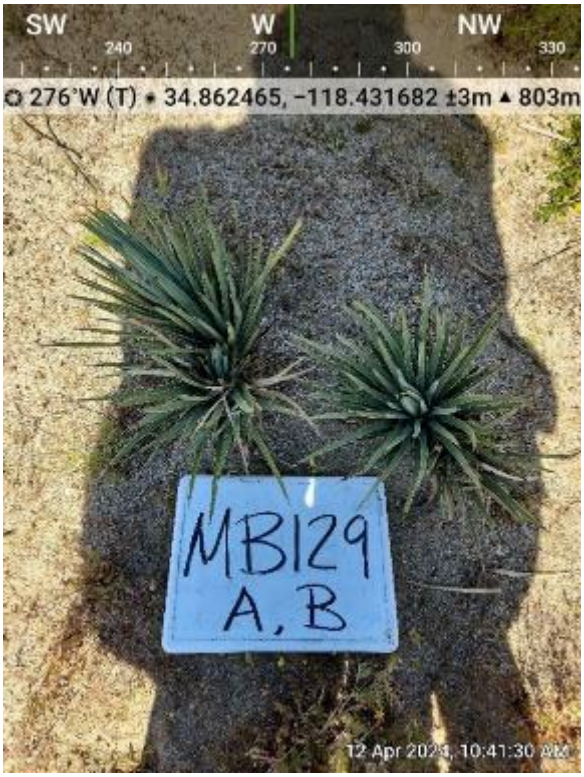
MB 128

MB 128 a



MB 128 b

MB 129



MB 129 a, b

MB 130

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MB 130 a

MB 130 b

MB 130 c

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 1

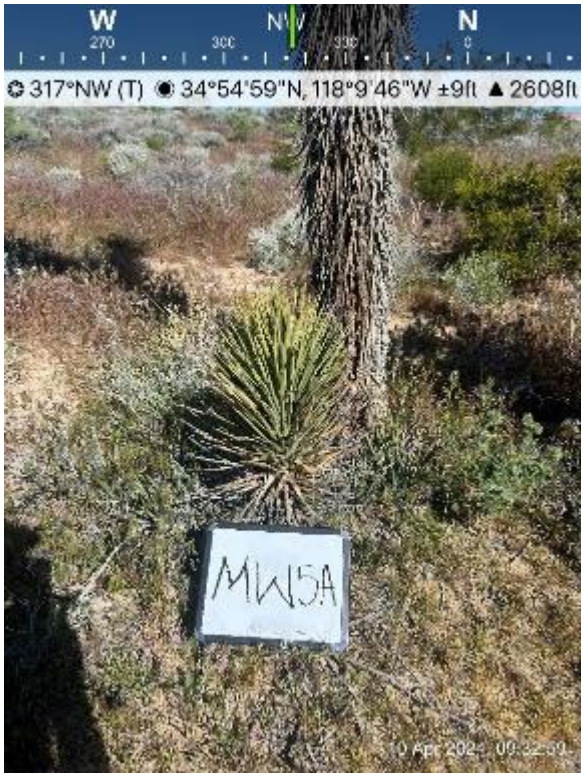
MW 2

MW 3

MW 4

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 5



MW 5 a

MW 5 b

MW 5 c

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 5 d

MW 5 e

MW 5 f

MW 5 g

MW 5 h

MW 5 i

MW 5 j

MW 5 k

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 5 l

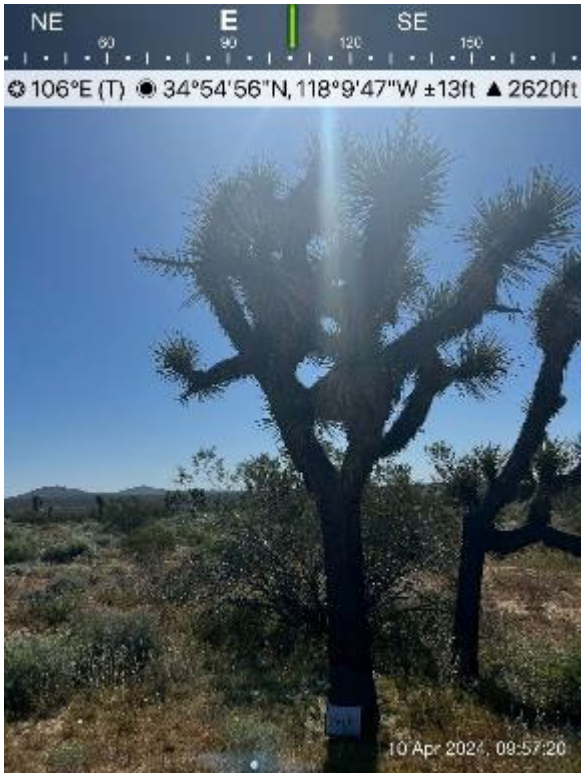
MW 5 m

MW 6

MW 7

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 8



MW 9

MW 9 a

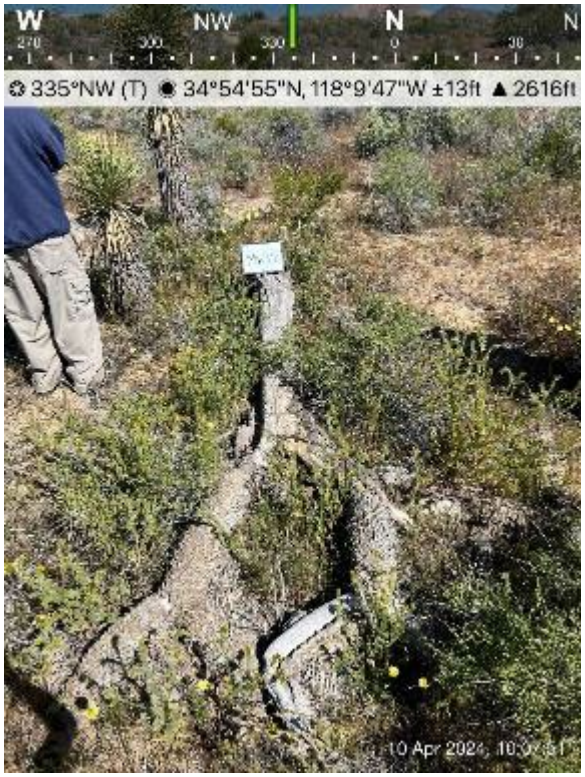
MW 9 b

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 9 c

MW 10

MW 10 a



MW 10 b

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 11

MW 11 a

MW 11 b

MW 11 c

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 11 d

MW 12

MW 12 a

MW 12 b

MW 12 c

MW 13

MW 14

MW 14 a

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 14 b

MW 14 c

MW 14 d

MW 14 e

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 14 f

MW 14 g

MW 15

MW 15 a

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 15 b

MW 15 c

MW 15 d

MW 15 e

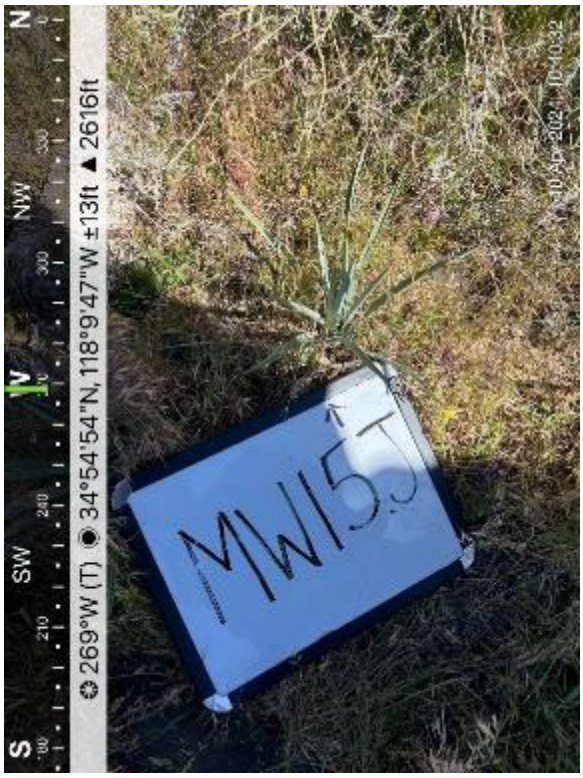
MW 15 f

MW 15 g

MW 15 h

MW 15 i

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024



MW 15 j

MW 15 k

MW 15 l

MW 15 m

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 15 n

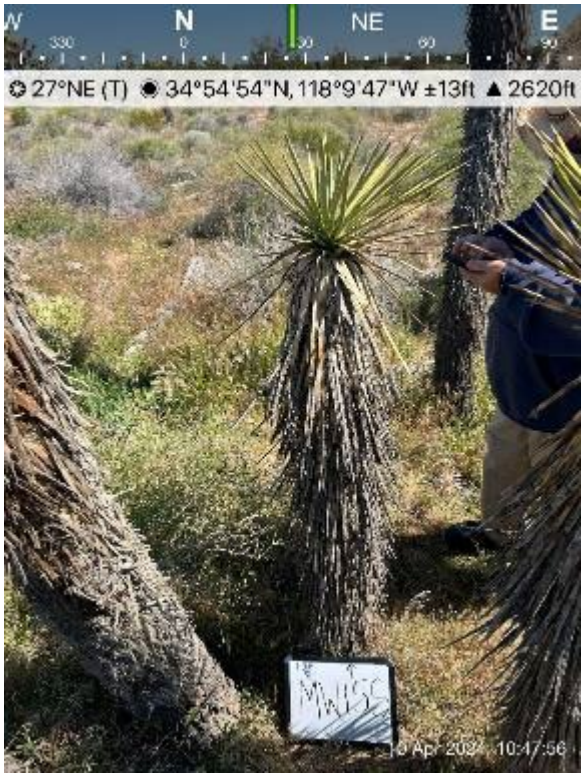
MW 15 o

MW 15 p

MW 15 q

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 15 r



MW 15 s

MW 15 t

MW 15 u

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 15 v

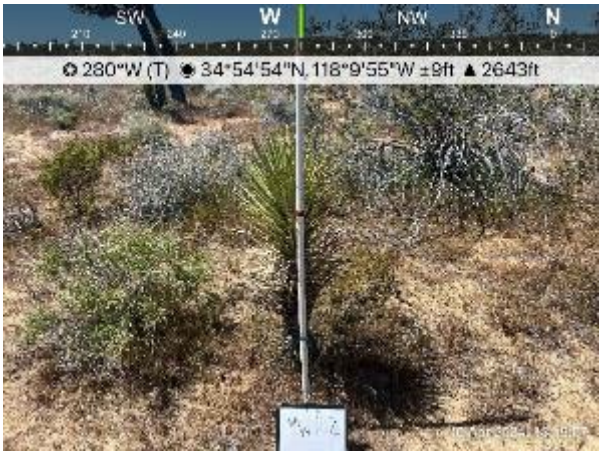
MW 16

MW 17

MW 18

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

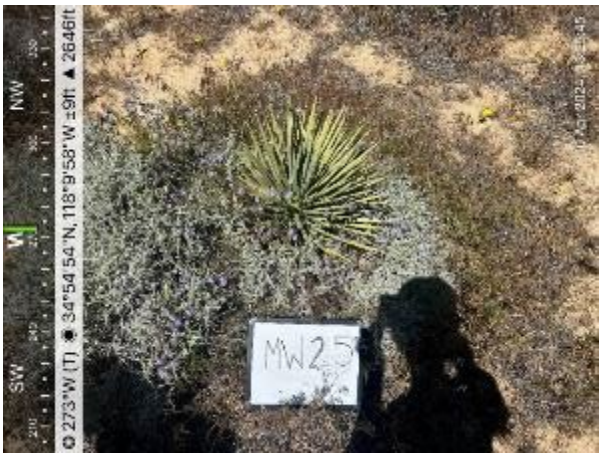
MW 18 a



MW 22

MW 23

MW 24



MW 25

MW 26

MW 26 a

MW 26 b

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 26 c

MW 27

MW 28

MW 28 a

MW 28 b

MW 28 c

MW 28 d

MW 28 e

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

MW 31

MW 118

SW 1

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

SW 2

SW 3

SW 4

SW 5

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

SW 6

SW 6 a

SW 6 b

SW 6 c

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

SW 6 d

SW 6 e

SW 7

SW 7 a, b, c, d

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

SW 7 e, f, g

SW 7 h

SW 7 i

SW 8

SW 9

SW 10

SW 11

SW 12

SW 12 a

SW 13

SW 13 a

SW 14

SW 15

SW 15 a

SW 15 b

SW 15 c

SW 15 d

SW 15 e

SW 15 f

SW 15 g, h

SW 16

SW 17

SW 18

SW 19

SW 20

SW 21

SW 22

SW 23

SW 24

SW 24 a

SW 24 b

SW 24 c

SW 24 d

SW 25

SW 26

SW 27

SW 28

SW 29

SW 30

SW 31

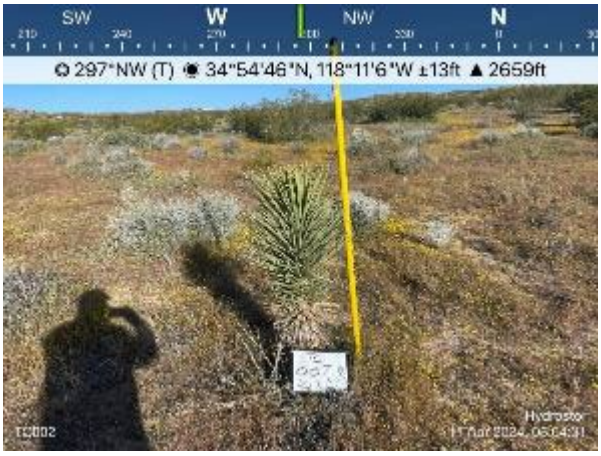
SW 31 a

SW 31 b

SW 31 c

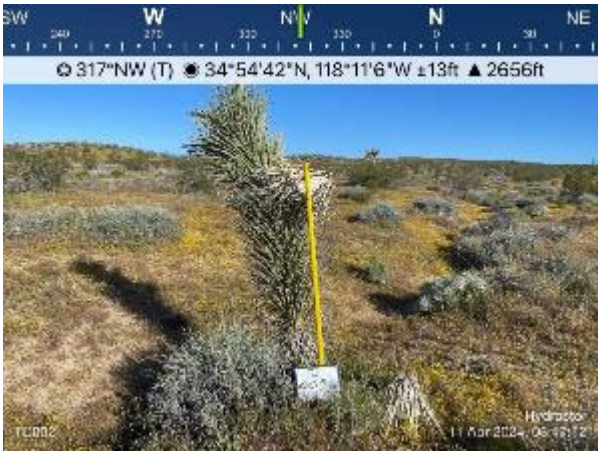
SW 31 d

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024



TC 7

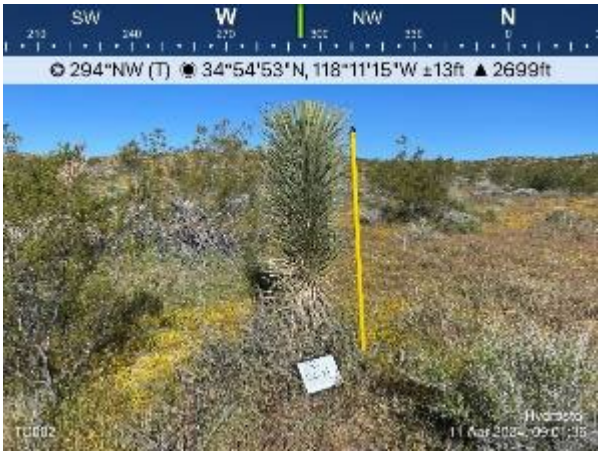
TC 8



TC 9

TC 9 a

TC 10



TC 11

TC 12

TC 12 a

Hydrostor Energy Storage Project
Western Joshua Tree Census
WSP – April 2024

TC 13