

ALTEC LAND PLANNING

19531 U.S. Highway 18
Apple Valley, CA 92307

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #43090, Certified Arborist #WE-8024A, CDFW: SCP #11586

Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595

(760) 242-9917

ALTEC1Eng@gmail.com

RandyAICP@gmail.com

CERTIFIED ARBORIST'S JOSHUA TREE CLEARANCE LETTER**APN 0410-011-18****SWC: LEMON STREET & "E" AVENUE****E 1/2 OF THE E 1/2, LOT "D", BLOCK 176 OF TOWN OF HESPERIA****12/21/2022****COMMERCIAL PROJECT – SITE PLAN REVIEW SPR22-00009****NORTH OF MAIN STREET, WEST OF "I" AVENUE & EAST OF RAILROAD TRACKS****PREPARED AT THE REQUEST OF:****ELITE SURPLUS DISTRIBUTORS, LLC****17229 LEMON STREET, BUILDING #16, HESPERIA, CA 92345****760.981.8176.973.1403****elitesurplusdistributors@yahoo.com****PROPERTY OWNER: CRYSTAL VELAZQUEZ-ORDAZ & ROGELIO ORDAZ****c/o RAY GARCIA****14700 SULTANA STREET, HESPERIA, CA 92345****Cell: 760.680.1652****Email: GResidentialproject@outlook.com****W.O. NO. ALP22-1221**

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City of Hesperia - Building & Safety Division

12/21/2022

c/o Michael Hearn, Deputy Community Development Director/Chief Building Official/CASp

RE: CERTIFIED ARBORIST'S CLEARANCE LETTER for JOSHUA TREES PER INFORMATION BULLETIN -0016 [10/27/2020]
APN 0410-011-18 & E 1/2 OF THE E 1/2, LOT "D", BLOCK 176 OF TOWN OF HESPERIA
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On 12/21/2022, RJ Coleman, Certified Arborist, has reviewed the Emergency Regulatory Language, Section 749.10 Title 14, CCR, is added to read: 749.10 Special Order Relating to Take of the "Western Joshua Tree" (*Yucca brevifolia*) During Candidacy Period, Information Bulletin - 0016 and conducted a pedestrian protocol survey to verify the absence or presence of Joshua Trees and Locally Protected Native Desert Plants that are within the existing property lines. See pictures for clarity of the Joshua Trees on the Site and the specific location of the proposed Residence and specifically within forty -(40) feet of any improvements. The purpose of this Clearance Letter is to provide a current Site Review to be on file with the Building and Safety Division and made a part herewith. This Assessment was performed by the following established protocols.

- The Site personally walked, and pictures taken by Randolph J. Coleman.
 - **Certified Arborist and Tree Risk Assessment Qualified, WE #8024A.**
 - **Certified Wildlife Biologist, #43090.**
 - **Scientific Collecting Permit from California Department of Fish & Wildlife, #11586.**
 - **Qualified Storm Water Developer/Planner – QSD/P #21595 (by CASQA).**
- The Site has not previously been personally walked by Randolph J. Coleman.
- A pedestrian field survey of the project Site, Zones of Influence, buffer, and adjacent properties was conducted following established protocols or until fencing encountered, as applicable or as described.
- If there are significant delays with processing entitlement applications or clarifications, an update would be appropriate prior to the completing (i.e., CEQA Initial Study and sending it to the State Clearing House for CEQA processing and Dept. of Fish & Wildlife comments) review for biological issues. The Project's Consulting Certified Arborist & Certified Wildlife Biologist would like to have the opportunity, at a minimum, to provide an Addenda Letter to the Local Agency within 30-days prior to any Clearance Letter or Biological Report expiration dates. This has been discussed specifically and previously with planning staff to avoid future issues relative to the preparation of the CEQA Initial Study being sent to the State Clearinghouse and/or CDFW review process after expiration, near expiration or prior to final approval.
- This Site is within the semi-alpine transitional zones that has been impacted by numerous wildland fires estimated from the 1860's to more recent fires during the last 0-40 years. However, rock fires at the nearby rocky hills and "Mojave River Riparian Corridor" have occurred numerous times in the last 25 years. Usually, the Project's Certified Arborist and Certified Wildlife Biologist would like the opportunity to review final design plans to verify exact locations and site improvement elevations to determine which Joshua Trees are impacted by development and endangered species, if applicable. Any size Joshua Tree can be at the end of its life cycle, affected by drought, growth patterns and impacted by fungus and insect [*Yucca weevils (Scyphophorus yuccae)*] damage. Verification of insect and fungus damage can potentially further damage the trees life cycle and is always desired to be performed just prior to grading activities.
- There has not been significant recent rainfall prior to the field survey. If recent rains occur, regardless of the time of year, is a prime timeframe for various native spring (75%) annuals and autumnal (25%) [rare and very-rare endemics - once a generation type] annuals, and all desert species to be using precious water resources.
- A review of recent communication from the California Department of Fish & Wildlife (CDFW).
- A review of California Endangered Species Act (CESA) and California Environmental Quality Act (CEQA) information.
- A Review of the California Natural Diversity Data Base (CNDDDB-RareFind3) for sensitive species, excluding riparian species since this Site is not within the Mojave River riparian habitat or manmade riparian habitat alternative (i.e., city parks, school sites, golf courses, large AG, and Equestrian sites).

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The priority of the Joshua Tree "Mitigating Impacts to a Less-than-Significant Level are the following:

- Avoidance of Impact: 40-feet distance from any Joshua Tree for any improvements
- Minimize Impact – Certified Arborist review Site, Grading and Erosion Control Plans
 - Make recommendations for proposed pad, cut/fill slopes, and flow lines if any.
 - Make recommendations on Driveway location alterations if any.
 - Make recommendations for Stormwater Retention Basins if any.
 - Make recommendations of parameters for On-Site Wastewater system.
 - Make recommendations of parameters for the Water Line, and/or Well and Tank system.
 - Make recommendations of parameters for existing Grading and Erosion Control Plans.
- Mitigate for Impacts Onsite if any.
- Mitigate for Impacts Offsite if any.
- Mitigate for impacts through other alternatives (i.e., Incidental Take Permit) if any.

Other issues that are observed by the Certified Arborist/Wildlife Biologist for the priority of the Joshua Tree "Mitigating Impacts to a Less-than-Significant Level are the following:

- Wildland Fire areas in the semi-alpine transitional zone and mosaic of historical fire patterns
- Soil and rock Characteristics.
- Slope Aspect, up-gradient, down-gradient and Natural Drainage Courses.
- Exposure (full sun, partial sun, full shade, seasonal, deciduous trees, etc.)
- Soil nutrients and potential trace minerals and mycorrhizal fungus with obligate desert species
- Moisture requirements (rainfall, snow, dew, natural drainage courses, flooding)
- Associated Plant and Animal species
- Growth rates and development pattern of the Joshua's
- Reproduction requirements and rates that are observable (i.e., Seedling to Mature Trees in area)

SPECIAL CONDITIONS: All Avoidance of Impact within 40-feet from any Joshua Tree requires a review and Clearance Letter by a Certified Arborist with experience with Joshua Trees, Native Desert Trees, and Plants to make "Mitigation Recommendations", if applicable.

OTHER INFORMATION: If American Badger, Desert Kit Fox, Desert Tortoise, Burrowing Owl and all other owls, hawks and eagles are observed on the Site in the future, all activities shall be stopped immediately. ALTEC Land Planning shall be contacted immediately (ALTEC will contact USFWS and/or CDFW to discuss potential mitigation measures, if applicable).

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Location & Information of Site: See attached Drawings No. 1–15

California Desert Conservation Area Map	See attached Drawing No. 1
Western Joshua Tree Petition Map:	See attached Drawing No. 2
Victor Valley Location Map:	See attached Drawing No. 3
Groundwater Surface & other MWA Map:	See attached Drawing No. 4
Seismic Information Maps:	See attached Drawing No. 5
SCE- Fire Risk Map:	See attached Drawing No. 6
Water District Boundary Map:	See attached Drawing No. 7
FEMA Flood Map Zone & Information:	See attached Drawing No. 8
USGS Topographical Map:	See attached Drawing No. 9
Neighborhood Aerial Map:	See attached Drawing No. 10
Site Aerial Map:	See attached Drawing No. 11
Assessor's Parcel Map:	See attached Drawing No. 12
Assessor's & other Information:	See attached Drawing No. 13
Site/Grading Plan with Wastewater System:	See attached Drawing No. 14
Joshua Tree Location on Grading Plan - Detail	See attached Drawing No. 15
Township, Range & Section:	T4N, R4W, Section 10 (SW 1/4)
Latitude and Longitude:	34.442000° N / 117.288150° W
Legal Description:	E 1/2 OF THE E 1/2, LOT "D", BLOCK 176 OF TOWN OF HESPERIA

This Clearance Letter attempts to satisfy all potential jurisdictional issues of concern by the County of San Bernardino Planning and Building & Safety and its various requirements for jurisdictional review, processing, approvals, and inspections regarding the above referenced CERTIFIED ARBORIST'S JOSHUA TREE CLEARANCE LETTER.

JOSHUA TREES (*Yucca Brevifolia*): MITIGATION RECOMMENDATIONS:

- #1 Site & Grading Plan** indicate the location of the proposed residence and **ONE (-1-) JOSHUA TREE** (FIRE CLONES, CLONES, GROUPS, SEEDLINGS AND/OR DEAD) ON THE 2.51± ACRE SITE or immediately adjacent within 5±-feet of property line.
- All "Alive, Seedlings, Clones, Fire Clones and Dead" Joshua Trees shall be "Protected in Place," as depicted on the Site/Grading Plan, unless specified.

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- It is noted the Staff Report to the Fish & Game Commission (FGC) – "Status Review of the Western Joshua Tree" (March 2022) was released publicly in April 2022 and "did not" recommend listing. The FGC on June 15 had a "Deadlock 2-2 Vote" and (5th Commission seat was filled prior to October 12 meeting) and is scheduled next for February 8, 2023, in Sacramento, which may provide new and additional information [Federal "Status" process is still unknown].

Grading modifications not required if a Joshua Tree(s) trunk is a minimum of 10-ft:

- Commercial Building and all other accessory structure(s) and improvements.

Grading modifications not required if a Joshua Tree(s) trunk is a minimum of 6-ft from:

- Driveway(s), Flowline(s), Stormwater Retention Basin(s), top/toe-of-Cut/Fill Slopes, Water Meter, and Water Line
- On-Site Wastewater system, Well, or Tanks (propane, pressure, and storage)

NOTE: Neighborhood has generation of both "Seedling and Clone Joshua Trees."

#2A FOR PROPOSED NEW WASTEWATER SYSTEMS (SEEPAGE PITS @ 6' Diameters by 30'± Depth or LEACH LINES of lengths being 50± to 100 feet). Grading Plan of the Site indicates the location of the proposed Wastewater System (Septic Tank and Seepage Pits or Leach Lines). NOTE: Sewer Line is available in Lemon Street.

- Wastewater System shall have requirements delineated by San Bernardino County Environmental Health Services (SBCo EHS) in the Percolation Test Standards and Report Guide – Appendix D: Liquid Waste Disposal Systems:
 - 100 Foot Minimum from Water Wells to Septic Tank & Leach Line System
 - 50 Foot Minimum from Septic Tank to Retention Basin & Ephemeral Stream
 - 5 Foot Minimum from Septic Tank to Residence & Wastewater System
 - 5 Foot Minimum from Septic Tank to Water Service Line
 - 5 Foot Minimum from Leach Lines to Residence & Property Line
 - 8 Foot Minimum from Seepage Pits to Residence & Property Line
 - 8 Foot separation of Leach Lines
- **Installation of a WASTEWATER SYSTEM shall have these requirements:**
 - Shall be more than 6-feet from the trunk of the Joshua Tree(s)
 - Shall be more than 10-feet from the trunk of any Tree (designated large) and a larger distance, as much as possible, preferably distant to the tree's drip-line due to potential growing root issues into the new Wastewater System.

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#2A FOR PROPOSED STORMWATER RETENTION SYSTEM(S).

Grading Plan of the Site would indicate the location of the proposed Stormwater Retention System(s), inclusive of Sub-Surface and/or Surface Systems.

Grading modifications not required if a Joshua Tree(s) trunk is a minimum of 10-ft:

#3 SEEDLINGS - NO ADDITIONAL SEEDLING JOSHUA'S OBSERVED ON-SITE.

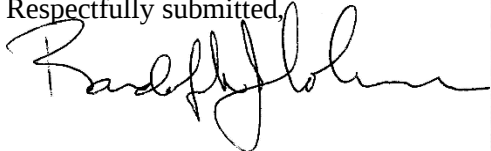
#4 DEAD JOSHUA TREES – NO ADDITIONAL DEAD JOSHUA'S OBSERVED ON-SITE

Grading modifications not required if "Dead on Ground" Joshua Tree a minimum of 6-ft:

- from any structures or any appurtenant improvements for new residence

#5 No additional issues of concern for Mitigation of Impacts Onsite or Offsite or alternatives

Respectfully submitted,



RANDOLPH J. COLEMAN

DIGITALLY SIGNED AND STAMPED **DECEMBER 21, 2022**

PE-Civil #36293, Expires 06/30/2024,

Certified Wildlife Biologist #43090,

CDFW: Scientific Collecting Permit #11586,

Certified Arborist/Tree Risk Assessment Qualified #WE-8024A



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Consultant has completed the following environmental education, workshops, licenses, and designations:

- 2021** - **Certificate Foundations of Utility Vegetation Management (UVM)** - Univ. Wisconsin-Stevens Point/UVM Association
 - Introduction to Utility Vegetation Management [UVM - 101] & Leadership and Organization [UVM - 2.1]
 - Programs and Project Management [UVM - 2.2] & Integrated Vegetation Management [UVM - 2.3]
- 2020** - **Botanical - Mitigation Measures & Monitoring** (David Magney; Rare Plant Program Manager at CNPS)
 - **Tree Care for Birds & Other Wildlife** (Arizona/California/Nevada/Hawaii)-International Society of Arboriculture
 - **Online Tools for Vegetation Data** - California Native Plant Society (CNPS)
 - **Wildland-Urban Interface** - American Planning Association
- 2019** - **Joshua Tree Master Naturalist**: Joshua Tree National Park Desert Institute & UC Riverside (8 courses)
 - **Desert Plant Phenology of Joshua Tree National Park**: UC Riverside and JTNP Desert Institute
 - **Desert Tortoise Biology & Conservation**: CDFW/BLM/UC Riverside and JTNP Desert Institute
- 2018** - **Fugitive Dust Control** (CV1903-007751-7796): South Coast Air Quality Management District
 - Large Branchiopods of California Workshop: TWS-SoCal and USFWS @ San Diego Botanic Garden
 - Sea Turtle Workshop: NMFS Protected Res. Div., West Coast Region/NOAA @ Long Beach Aquarium
- 2010/15** - San Bernardino County Planning & Airport Commissioner - Review & Approval of CEQA Studies & Projects
- 2014** - **Arroyo Toad (*Anaxyrus californicus*) Workshop** (The Wildlife Society San Diego Chapter)
 - Sustainable Communities @ APA-PTS Conference: Feb. 7-8, 2014, in San Diego
 - California Annual Conference/APA (4 Days - Anaheim and Visalia in 2013 & 2014)
- 2013** - **Tree Risk Assessment Qualified** International Society of Arboriculture (WE#-8024A - Renewed in 2018 & 2023)
 - **Yellow Billed Cuckoo (*Coccyzus americanus*) Workshop** (Kern River Valley - KRV Audubon Facility)
 - **Southwestern Willow Flycatcher (*Empidonax traillii eximius*) Workshop** (KRV Audubon Facility)
 - National Innovative Communities Conference: 2013 (Ontario CA - San Diego mention as a leader many times)
 - **Environmental Leadership Certificate**: CSU San Marcos (Matt Rahm, PhD., Esq.)
- 1998/12** - **UC Riverside Field & Other Certificates: - Desert Ecology - Field Ecology - Botany - Ornithology - Geology -**
 - Geographic Information Systems - Geographical Positioning Systems - Educational Facility Planning
 - American Planning Association Annual Conference (4 Days - Los Angeles)
 - California County Planning Commissioners Association (2 Days - Suisun City)
- 2011** - **Scientific Collecting Permit #11586** by California Department of Fish and Wildlife
 - **Legends of the Fall: Exploring the Clandestine Flora of Early Fall in the Eastern Mojave Desert**
Rare [Endangered] Autumn Annuals - Dr. James Andre & Dr. Tasha La Doux - CNPS @ UC- DRC
 - **Certified Environmental Planner - Advanced Specialty Certification for AICP (2011 [1 of 33 in U.S.]**)
 - **Qualified Storm Water Developer & Planner (QSD/P #21595) by CASQA**
- 2010** - **Certified Wildlife Biologist #43090** - by The Wildlife Society - Life Member (2006)-Western Section
- 2009** - **Western Pond Turtle, California Tiger Salamander & Red-legged Frog Workshop** (CSU Sonoma)
 - **Wildlife Management & Ecosystem Management** (Dr. Cameron Barrow, UC Riverside Research Center/3-units)
 - **Bird Biology** - Cornell University/3-unit course
- 2008** - **Palms Culture in the Southwest** (2 days - International Society of Arboriculture (ISA) in Las Vegas)
- 2007** - **Certified Arborist WE #8024A** - Int. Society of Arboriculture (+60hours CE)
 - **Riparian Ecology & Plant Identification Workshop** (David Magney; Rare Plant Program Manager at CNPS)
 - **Jurisdictional Delineation of Wetlands** (38-hours of Army Corps of Engineering training in San Diego)
 - **Protocols for Botanical Reports** (2 day - U.C. Davis - Bodega Bay Marine Research Lab)
- 2006** - **Vegetation Mapping** in Redlands (4 day - Dr. Todd Keeler-Wolf, Senior Vegetation Ecologist, CDFW & Dir. CNPS)
- 2005** - **Mojave Ground Squirrel Workshop** - Wildlife Society, CDFG & USFW
- 2003** - **California Burrowing Owl Symposium** - The Wildlife Society/Western Section in Sacramento
- 2002** - **Tortoise Workshop by Desert Tortoise Council** (Life Member), CDFG & USF&W
- 1994** - Registered Environmental Assessor #05791; Calif. Environmental Protection Agency (DTSC/ended in 2012)
- 1993** - American Institute Certified Planners #9892 & Certified Environmental Professional (2011 [1 of 33 in U.S.]
- 1982/4** - CA Licenses: Land Surveyor #5413 (1984); Civil Engineer #36293 (1983); Real Estate Broker #836955 (1982)
- 1980** - **B.S. in Civil & Environmental Engineering** from University of California,
- 1976** - Personally familiar with the general area; have completed various Surveys, Engineering, Planning & Appraisals

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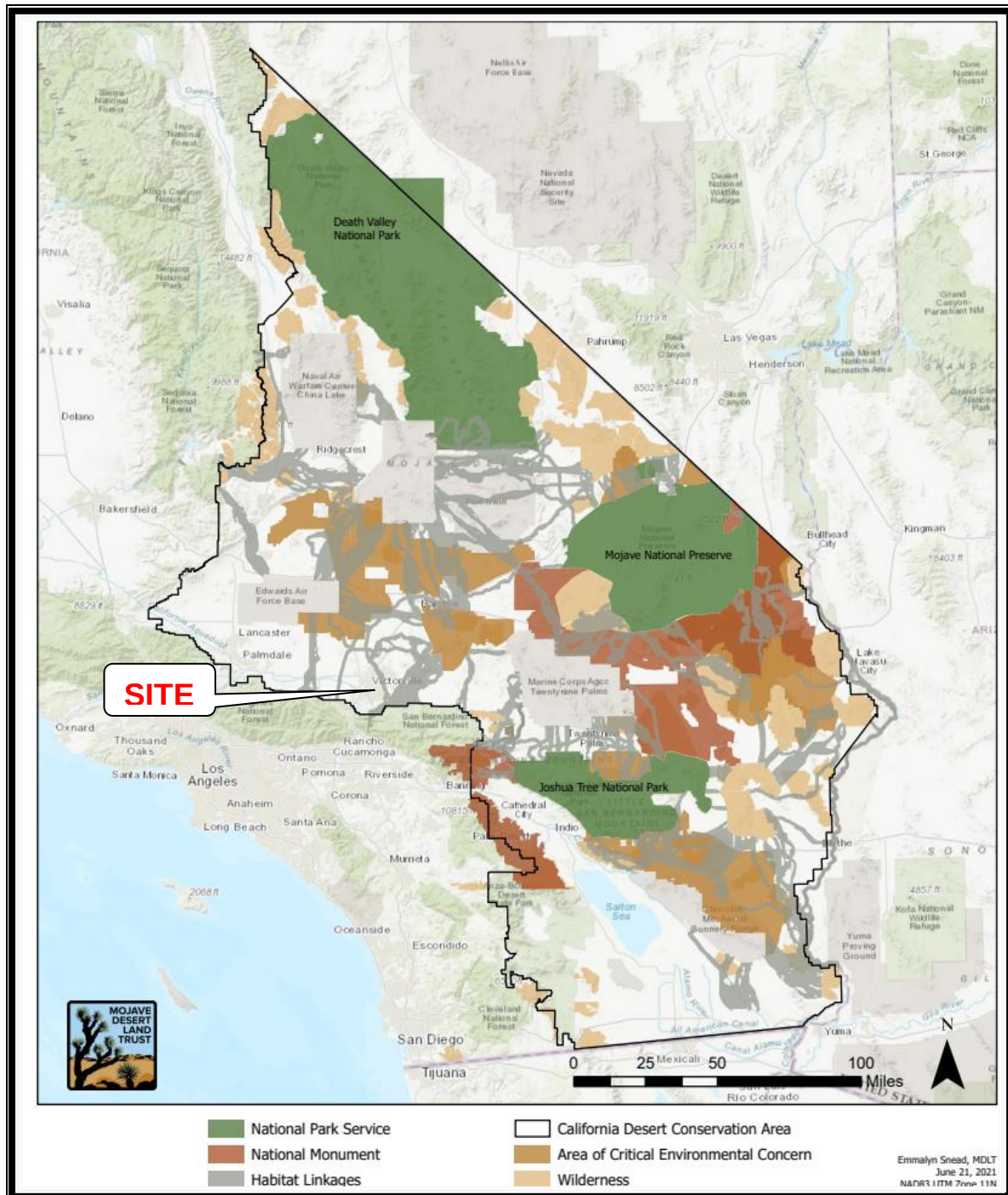
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CALIFORNIA DESERT CONSERVATION AREA MAP



DRAWING 1

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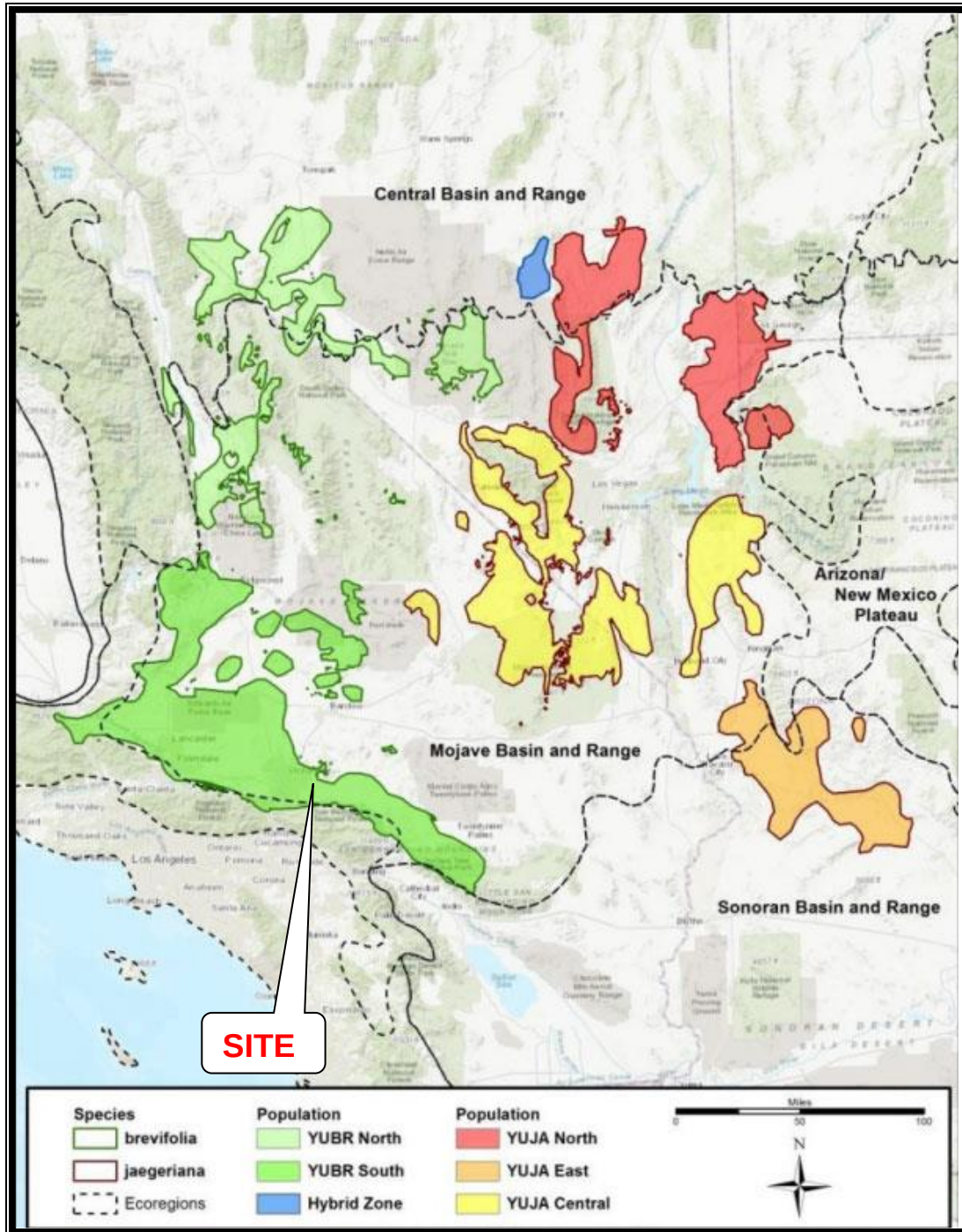
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Western Joshua Tree CESA Petition & DFW's Evaluation of Petition Map



DRAWING 2

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VICTOR VALLEY LOCATION MAP



DRAWING 3

Planning: Land, GIS & Cannabis
Engineering: Civil, Structural & Soils
Surveying: ALTA, Land, Construction & GPS

Reports: CEQA, Biological, Native Plant & Phase 1
Community Relations & Marketing Studies
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Real Estate & R/W Services
Feasibility & Fiscal Analysis
Construction Management & Inspections

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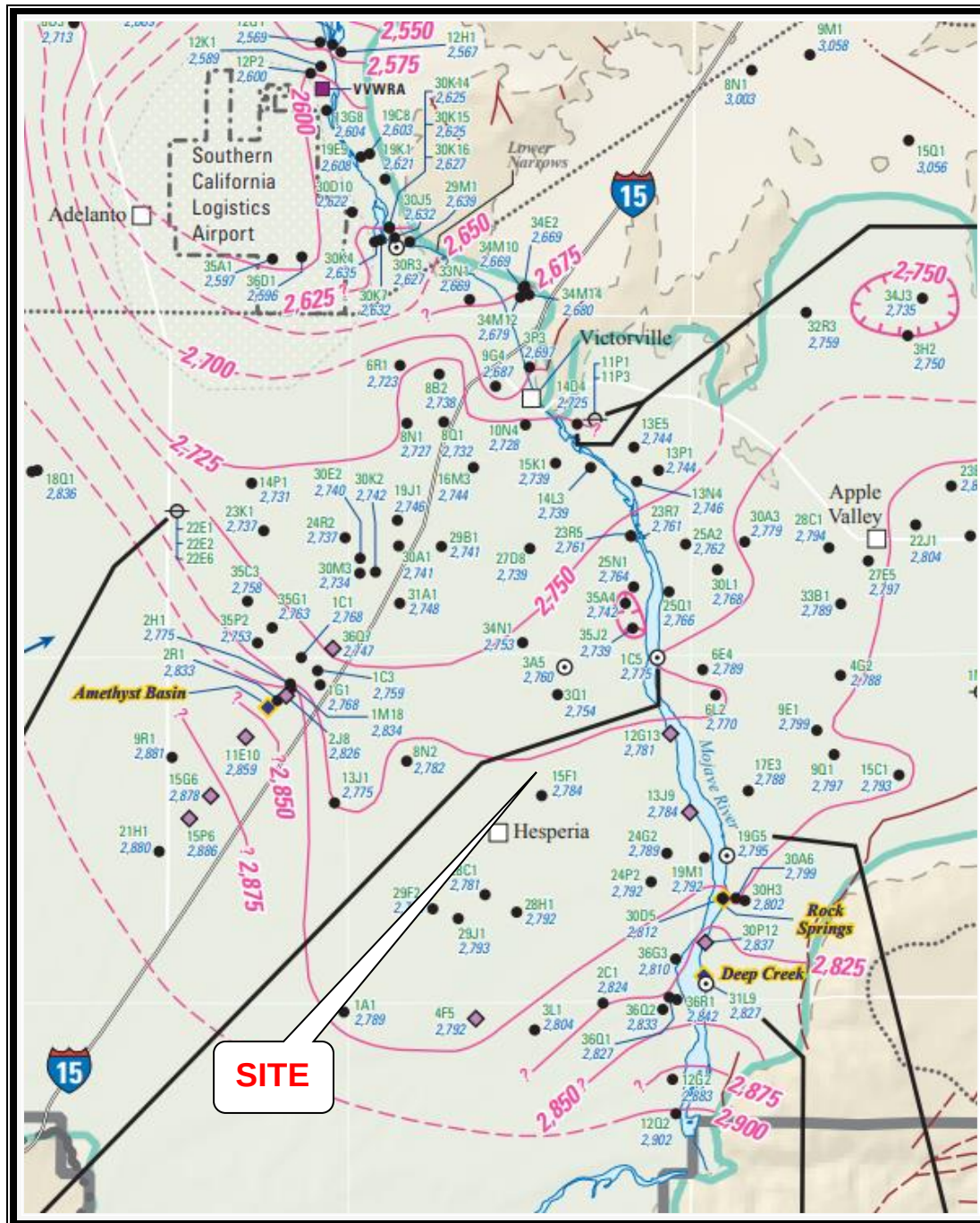
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GROUNDWATER SURFACE ELEVATION MAP – MOJAVE WATER AGENCY



DRAWING 4A/C

Planning: Land, GIS & Cannabis
Engineering: Civil, Structural & Soils
Surveying: ALTA, Land, Construction & GPS

Reports: CEQA, Biological, Native Plant & Phase 1
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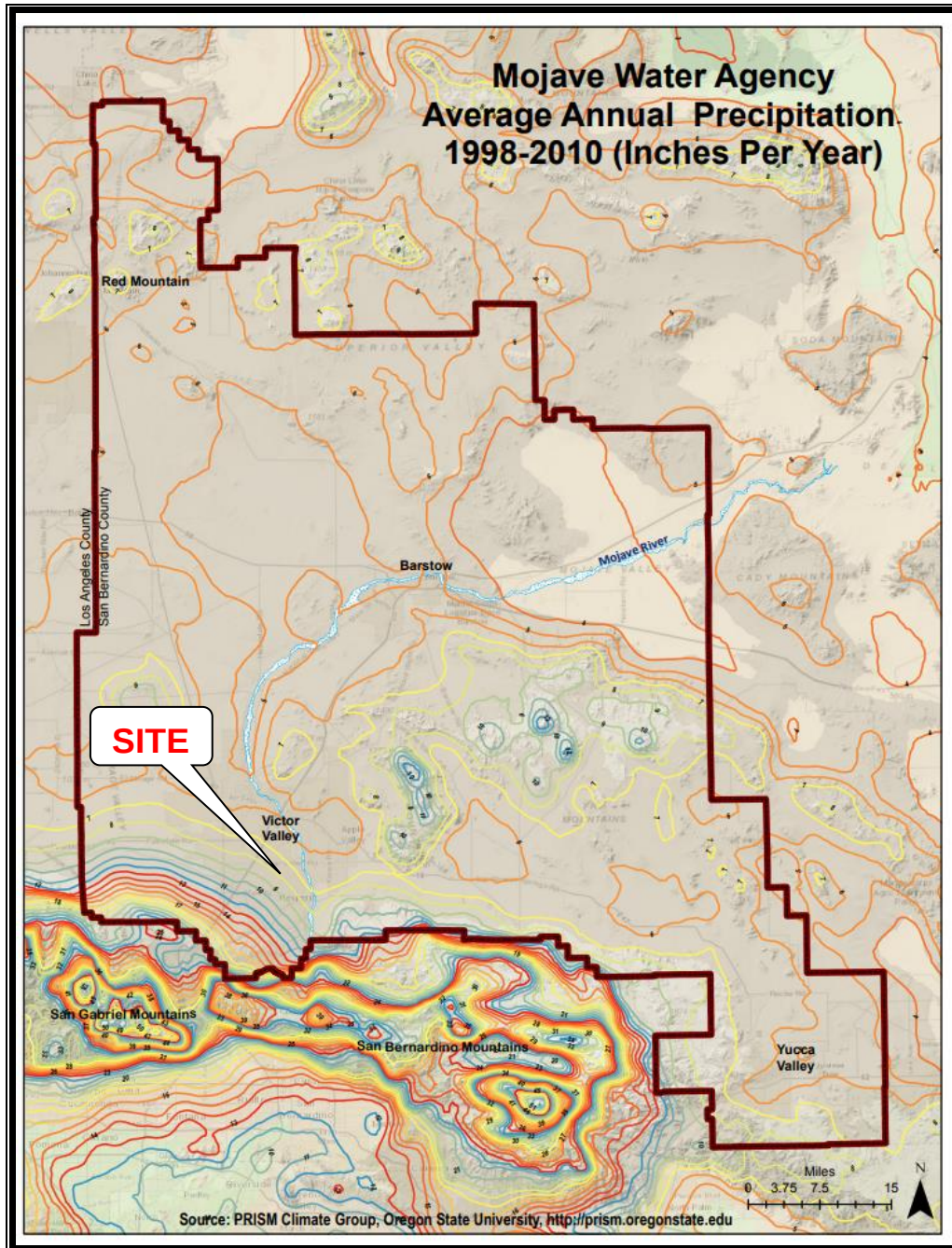
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AVERAGE ANNUAL PRECIPITATION 1998-2010 (inches per year)

<https://www.mojavewater.org/wp-content/uploads/2022/01/precipe.pdf>



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R-CUBED FACILITIES MAP (Mojave Water Agency)

<https://www.mojavewater.org/basin-management/facilities/r-cubed/>



DRAWING 4C/C

Planning: Land, GIS & Cannabis
Engineering: Civil, Structural & Soils
Surveying: ALTA, Land, Construction & GPS

Reports: CEQA, Biological, Native Plant & Phase 1
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Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595

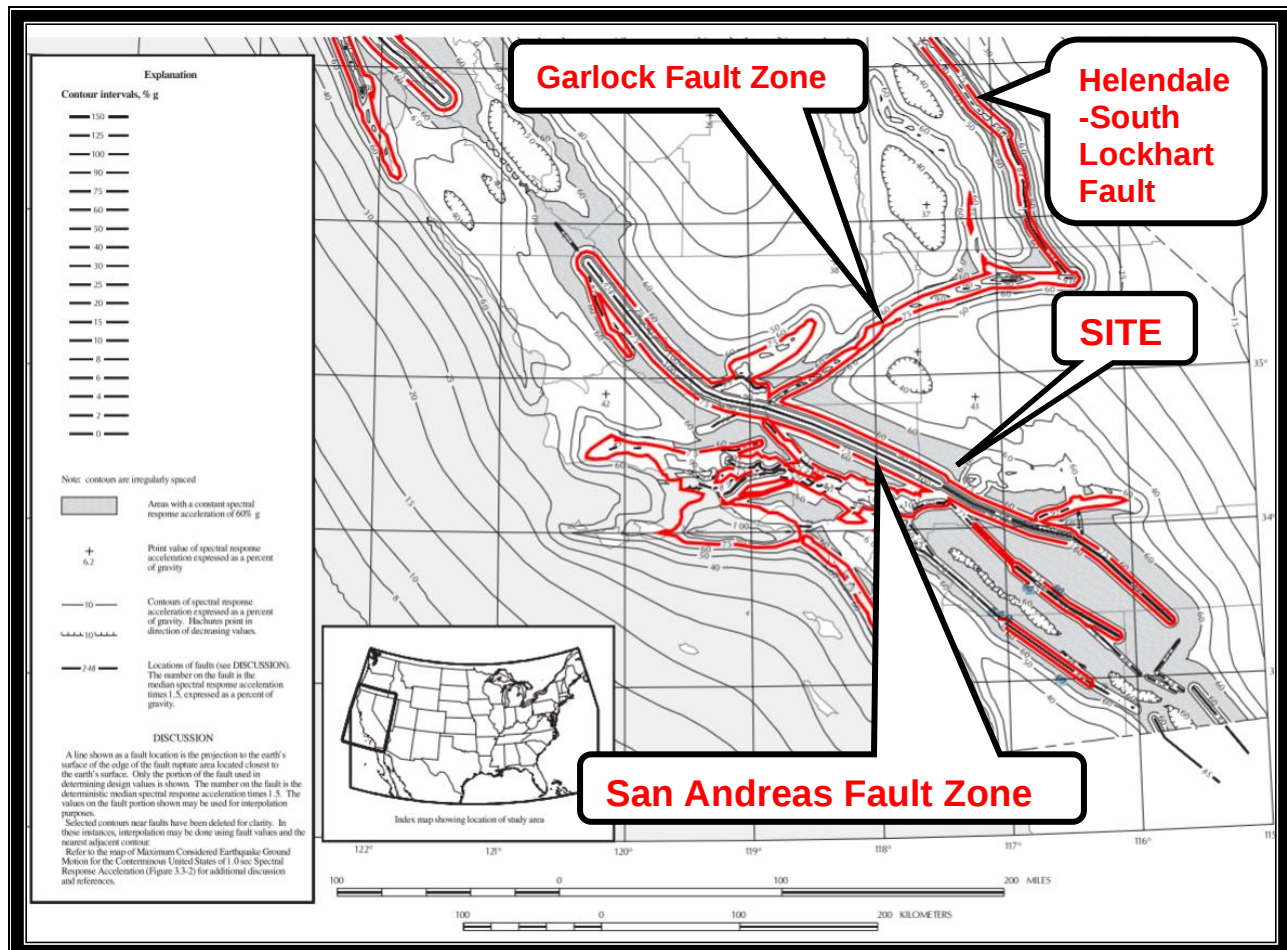
(760) 242-9917

ALTEC1Eng@gmail.com

RandyAICP@gmail.com

SEISMIC LOCATION MAP

1.0 second spectral response acceleration map, with 0.75g contours shown



GoogleEarthPro: 34.442000° N / 117.288150° W & Elevation 3,090

DRAWING 5A/C

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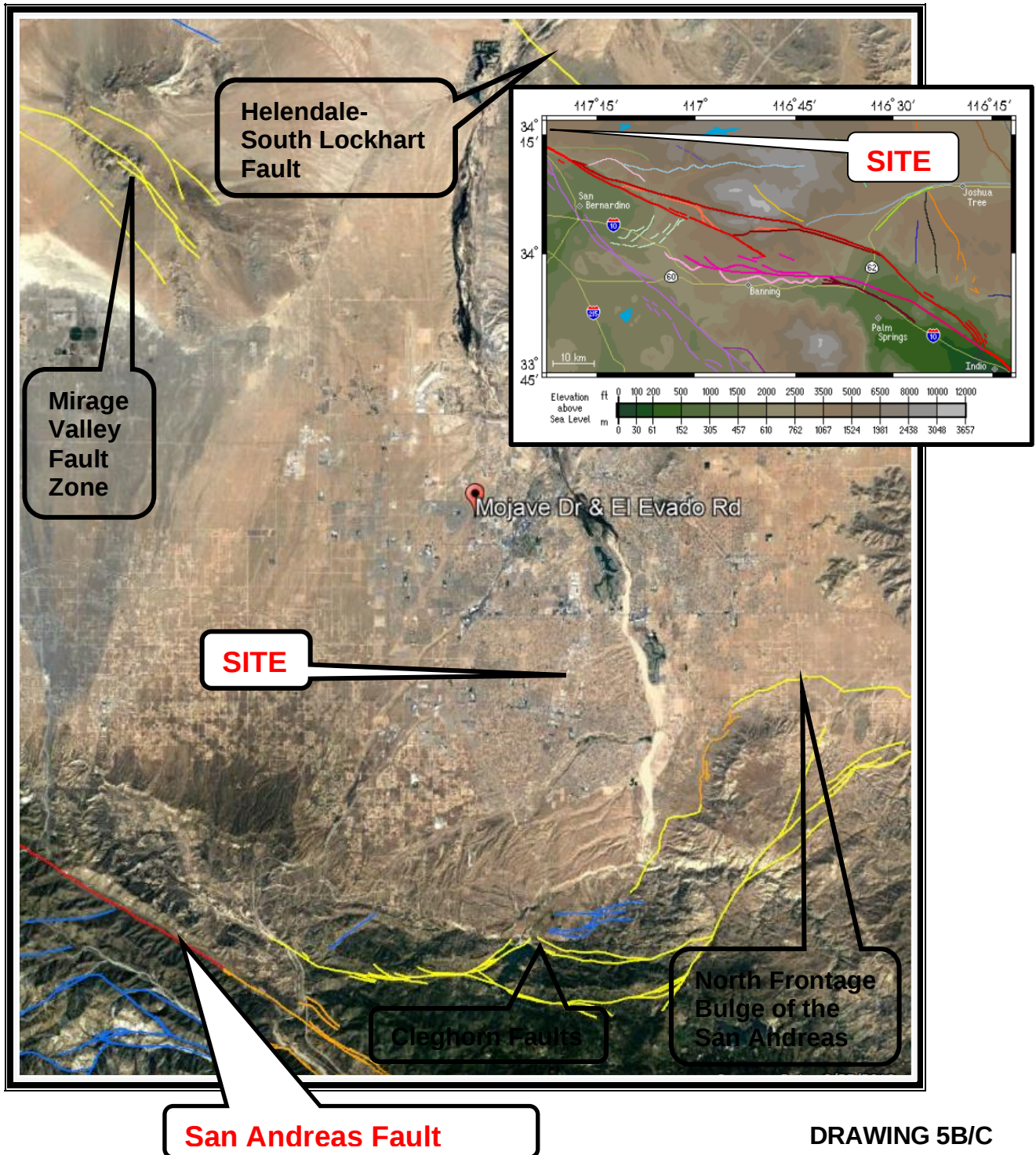
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SEISMIC MAP - SIGNIFICANT EARTHQUAKE FAULTS



San Andreas Fault

DRAWING 5B/C

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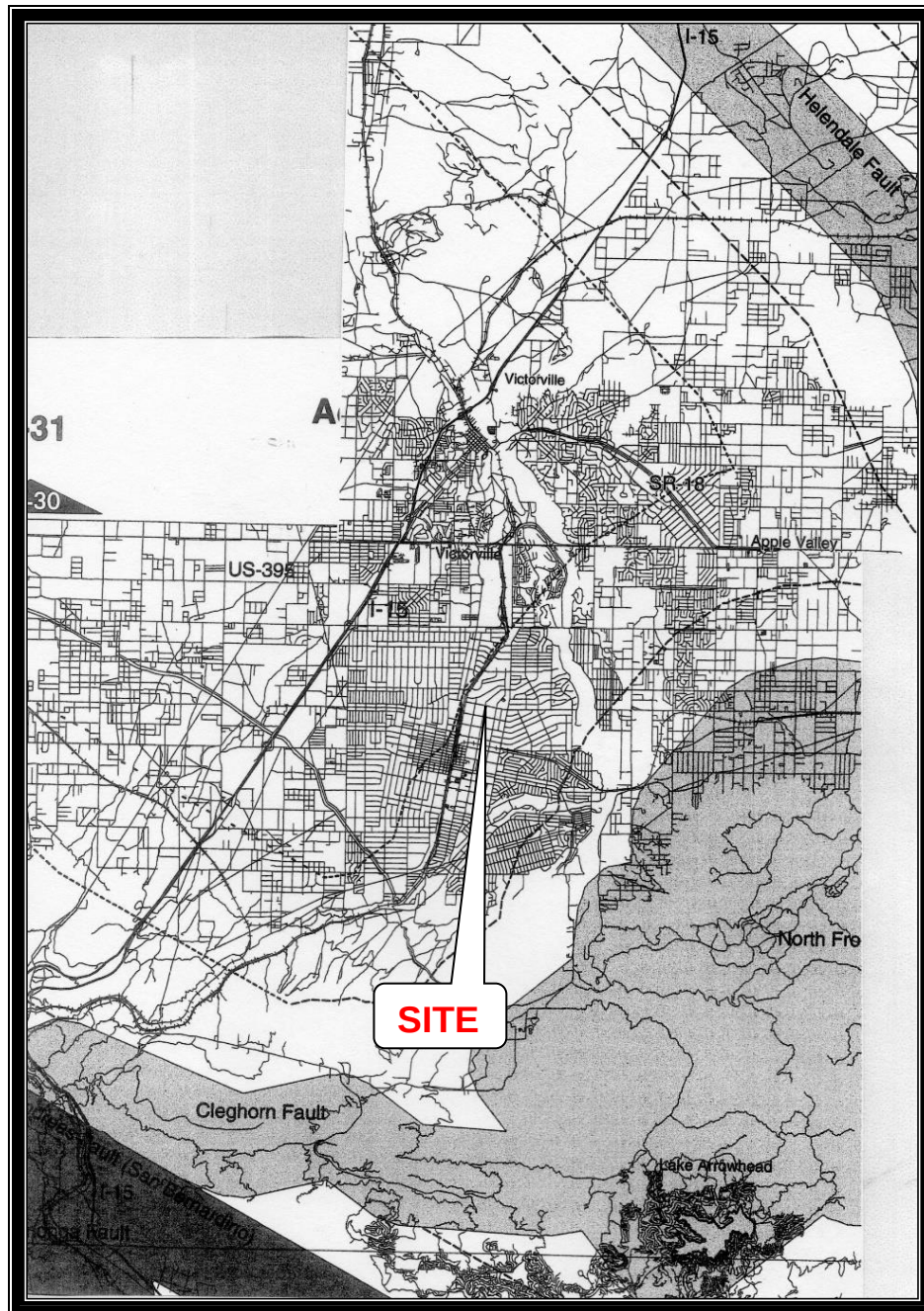
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ALQUIST PRIOLO SEISMIC MAP

<https://maps.conservation.ca.gov/cgs/EQZApp/app/>

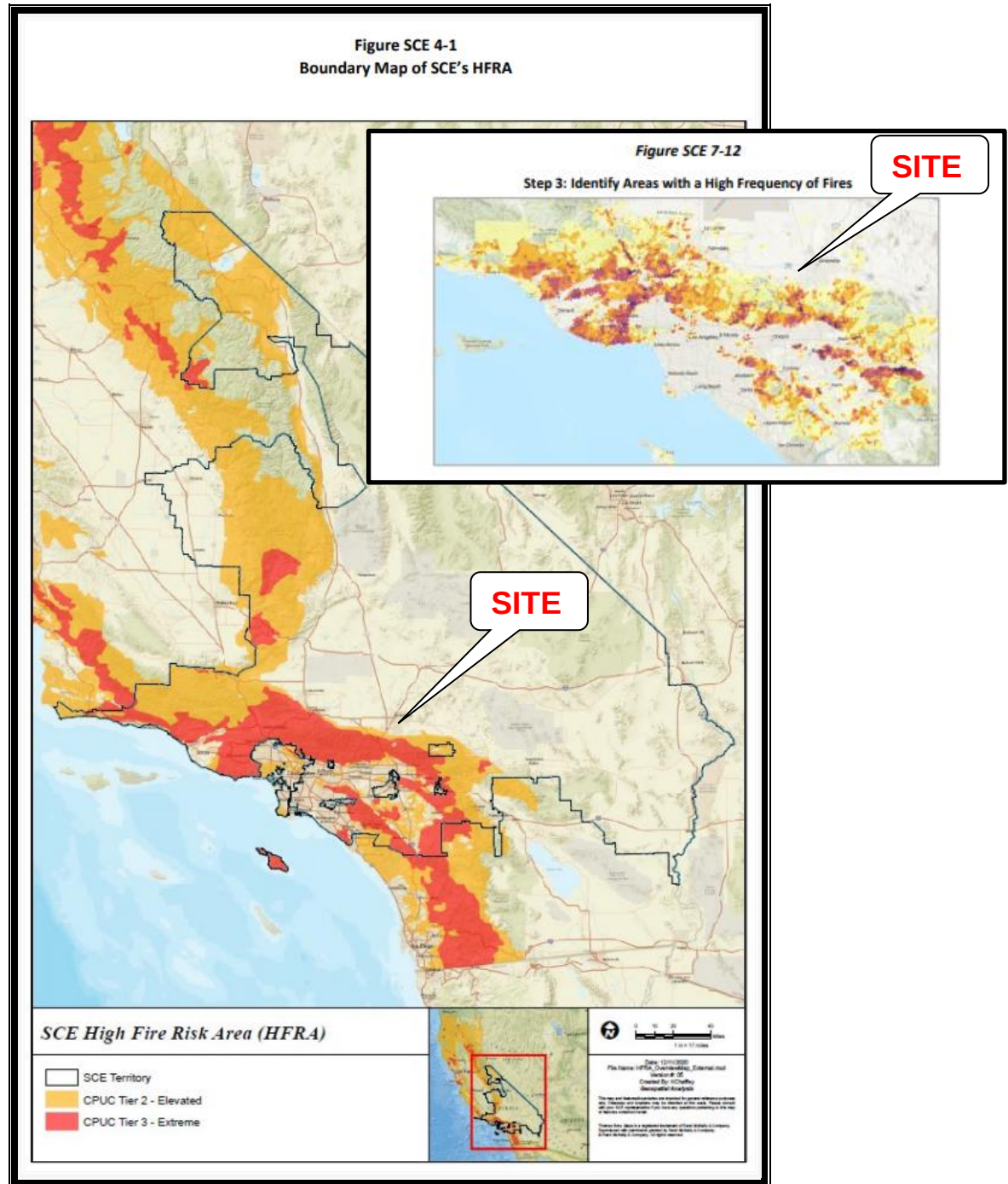


DRAWING 5C/C

Planning: Land, GIS & Cannabis
Engineering: Civil, Structural & Soils
Surveying: ALTA, Land, Construction & GPS

Reports: CEQA, Biological, Native Plant & Phase 1
Community Relations & Marketing Studies
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Southern California Edison - High Risk Fire Area Map (HRFA)**DRAWING 6**

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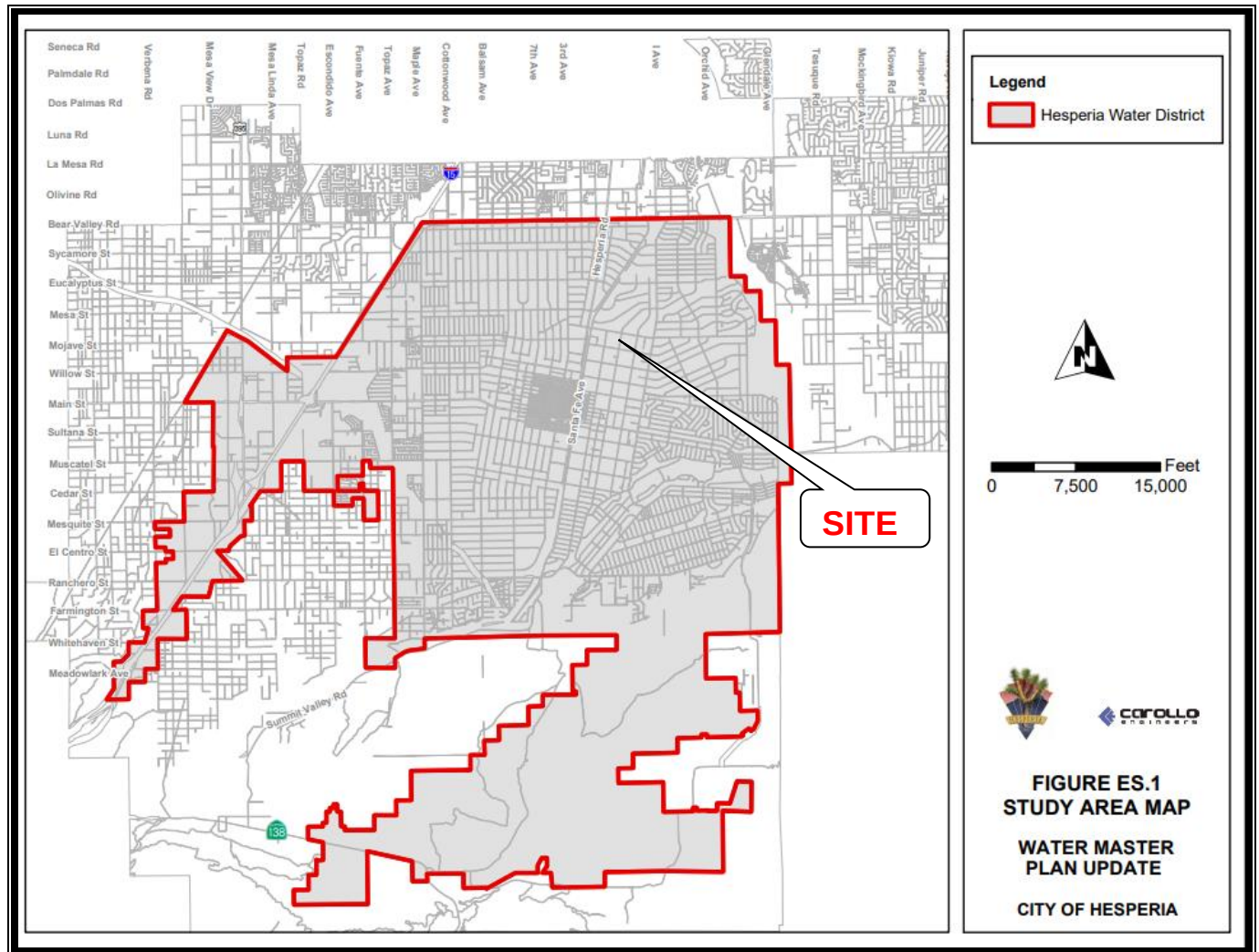
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WATER DISTRICT BOUNDARY MAP – City of Hesperia



DRAWING 7

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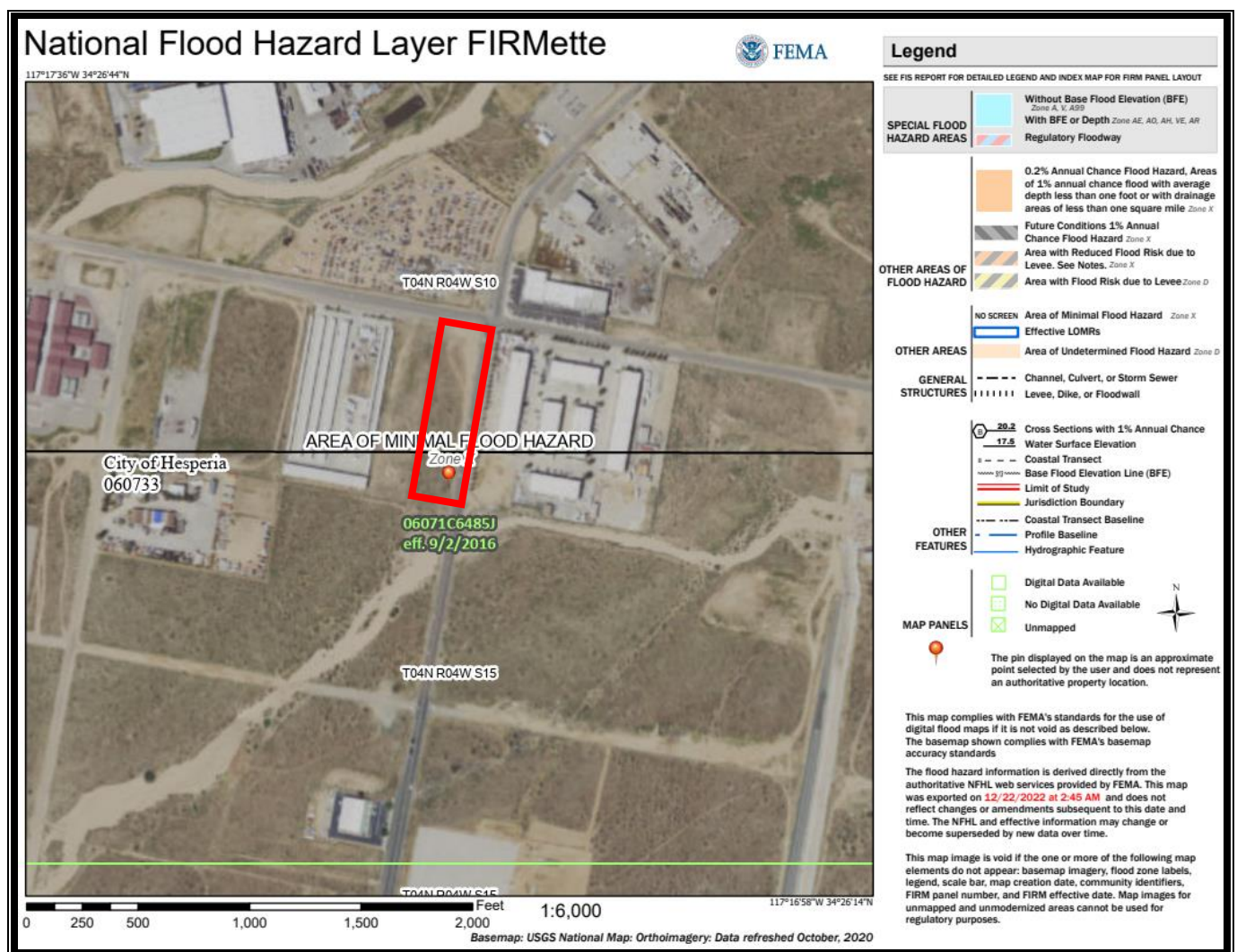
RandyAICP@gmail.com

FEMA FLOOD MAP ZONE & INFORMATION

SAN BERNARDINO COUNTY – CITY OF HESPERIA

06071C6485J – PRINTED (DATED: 09/02/2016)

AREA OF MINIMAL FLOOD HAZARD – ZONE “X”



DRAWING 8

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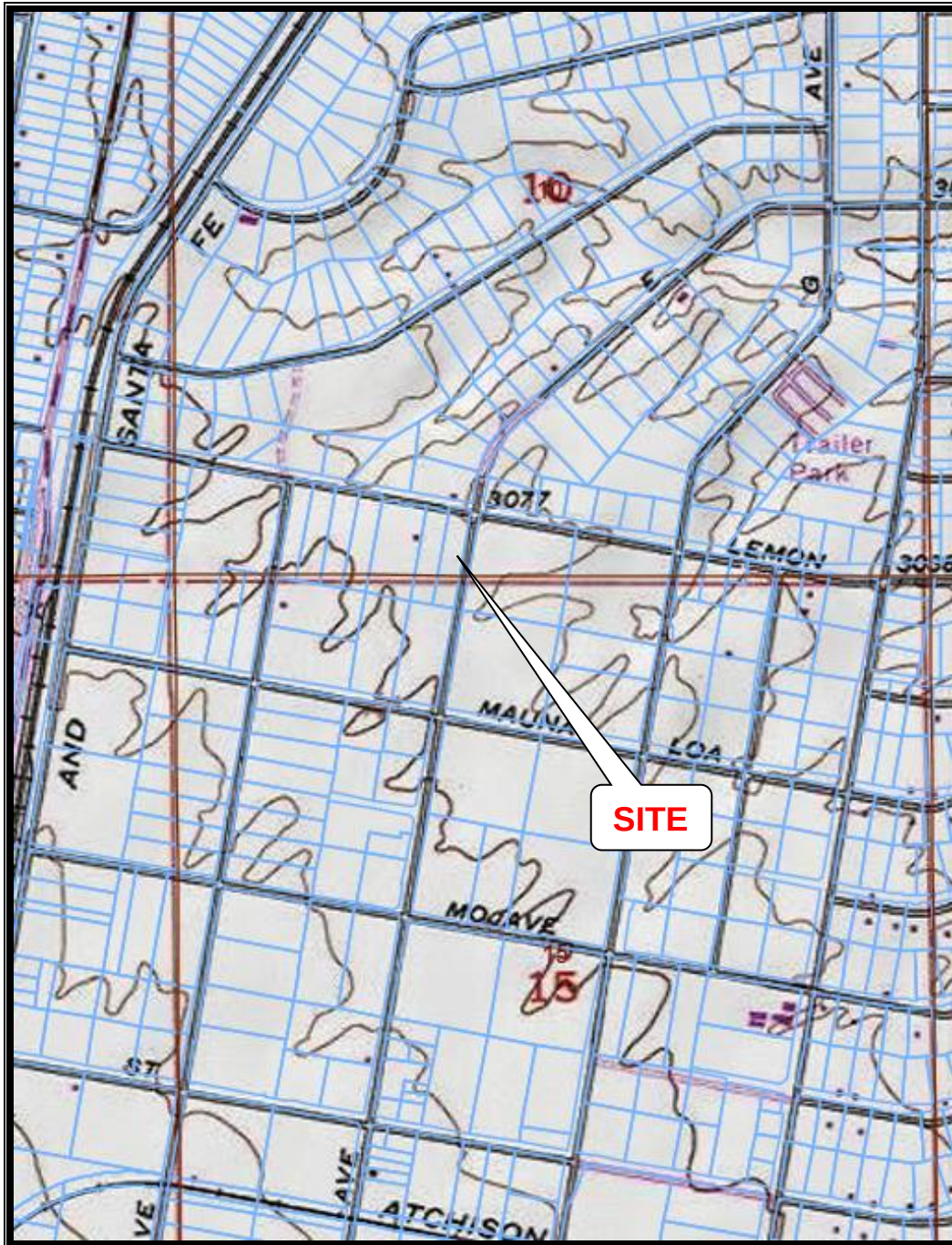
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USGS QUAD SHEET -HYBRID WITH ASSESSOR'S MAP OVERLAY



DRAWING 9

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NEIGHBORHOOD AERIAL MAP – CITY OF HESPERIA



DRAWING 10

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SITE AERIAL MAP – AND LOCATION OF BUILDING



DRAWING 11

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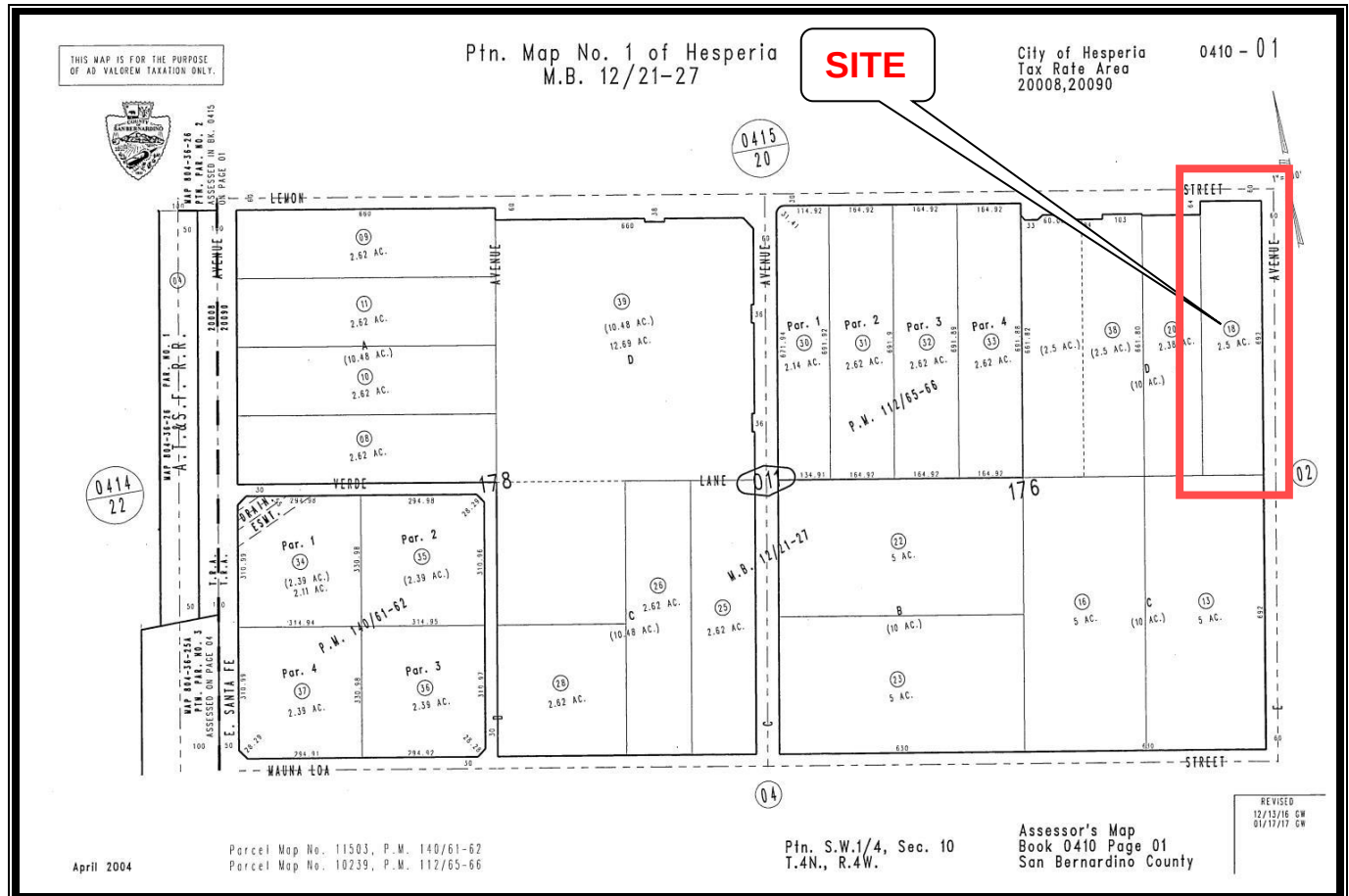
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ASSESSOR'S PARCEL NUMBER



DRAWING 12

Planning: Land, GIS & Cannabis
Engineering: Civil, Structural & Soils
Surveying: ALTA, Land, Construction & GPS

Reports: CEQA, Biological, Native Plant & Phase 1
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ASSESSOR'S AND OTHER INFORMATION

E Ave, Hesperia, CA 92345			
Property Information			
Owner(s):	Ordaz , Crystal / Ordaz , Rogelio	Mailing Address:	14953 Poplar St, Hesperia, CA 92345
Owner Phone:	Unknown	Property Address:	E Ave, Hesperia, CA 92345
Vesting Type:	N/A	Alt. APN:	0410-011-18-0000
County:	San Bernardino	APN:	0410-011-18-0000
Map Coord:	346-D5	Census Tract:	010019
Lot#:	D	Block:	176
Subdivision:	Town Hesperia	Tract:	
Legal:	Town Of Hesperia E 1/2 E 1/2 Lot D Blk 176 Ex Water Rts And Ex 1/2 Int Mnl Rts Without S E 2.5 Ac M/L		
Property Characteristics			
Use:	Vacant Land (Nec)	Year Built / Eff. :	/ Sq. Ft. :
Zoning:		Lot Size Ac / Sq Ft:	2.51 / 109336 # of Units:
Sale and Loan Information			
Sale / Rec Date:	11/02/2020 / 12/01/2020	*\$/Sq. Ft.:	2nd Mtg.:
Sale Price:	\$180,000	1st Loan:	Prior Sale Amt:
Doc No.:	000000485661	Loan Type:	Prior Sale Date:
Doc Type:	Grant Deed	Transfer Date:	12/01/2020 Prior Doc No.:
Seller:	Brascia Jerry Joan Lee	Lender:	Prior Doc Type:
*\$/Sq. Ft. is a calculation of Sale Price divided by Sq. Feet.			
Tax Information			
Imp Value:		Exemption Type:	
Land Value:	\$183,600	Tax Year / Area:	2022 / 020-090
Total Value:	\$183,600	Tax Value:	
Total Tax Amt:	\$2,211.65	Improved:	

DRAWING 13A/C

ALTEC LAND PLANNING

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GRANT DEED

RECORDING REQUESTED BY: Fidelity National Title Company Order No. 00115009-991-IE1-SC1 Escrow No. 171015-HH Parcel No. 0410-011-18 AND WHEN RECORDED MAIL TO: CRYSTAL ORDAZ 14953 POPLAR STREET HESPERIA, CA 92345	 Electronically Recorded in Official Records County of San Bernardino Bob Dutton Assessor-Recorder-County Clerk DOC# 2020-0485661 12/01/2020 04:33 PM SAN B9246 <table style="width: 100%; border-collapse: collapse;"><tr><td style="width: 50%;">Titles: 1</td><td style="width: 50%;">Pages: 2</td></tr><tr><td>Fees</td><td style="text-align: right;">\$27.00</td></tr><tr><td>Taxes</td><td style="text-align: right;">\$198.00</td></tr><tr><td>CA SB2 Fee</td><td style="text-align: right;">\$0.00</td></tr><tr><td>Total</td><td style="text-align: right;">\$225.00</td></tr></table>	Titles: 1	Pages: 2	Fees	\$27.00	Taxes	\$198.00	CA SB2 Fee	\$0.00	Total	\$225.00
Titles: 1	Pages: 2										
Fees	\$27.00										
Taxes	\$198.00										
CA SB2 Fee	\$0.00										
Total	\$225.00										
SPACE ABOVE THIS LINE FOR RECORDER'S USE											
GRANT DEED											
THE UNDERSIGNED GRANTOR(S) DECLARE(S) THAT DOCUMENTARY TRANSFER TAX IS \$198.00 ☒ computed on full value of property conveyed ☐ computed on full value less liens or encumbrances remaining at the time of sale. ☐ unincorporated area: ☒ Hesperia, and FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Jerry Brascia and Joan Lee Brascia, as Trustees of The Brascia Family Living Trust under Declaration of Trust dated November 30, 2000 hereby GRANT(S) to Crystal Ordaz and Rogelio Ordaz, Wife and Husband as Joint Tenants the following described real property in the County of San Bernardino, State of California: The East ½ of the East ½ of Parcel D of Block 176, town of Hesperia, as per map recorded in Book 12, Page(s) 21 through 27, inclusive of maps, in the office of the Recorder of said County. More commonly known as: Vacant Land, APN# 0410-011-18, Hesperia, CA 92345											
Mail Tax Statement As Directed Above											

DRAWING 13B/C

ALTEC LAND PLANNING

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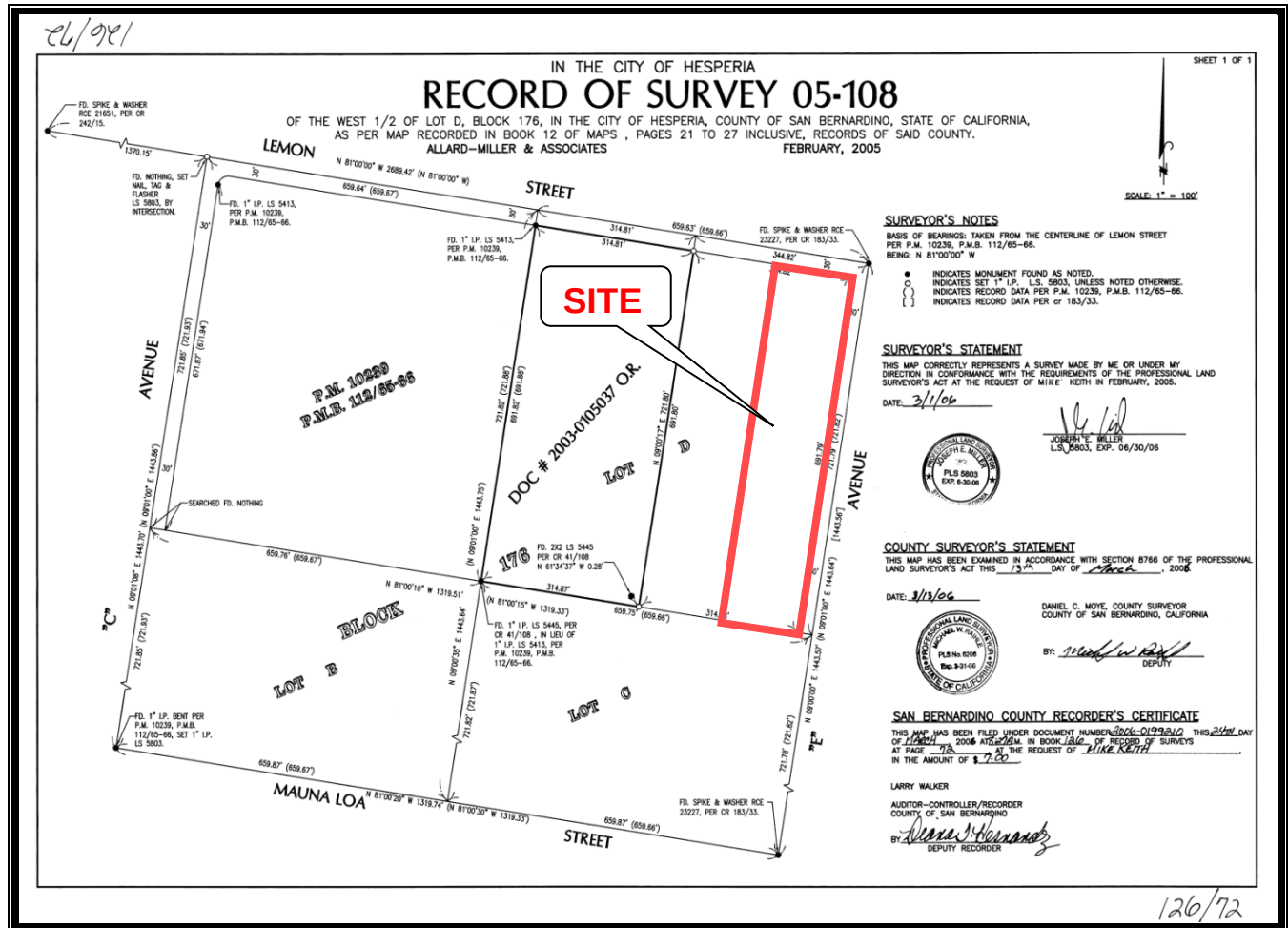
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RECORD OF SURVEY



DRAWING 13C/C

Planning: Land, GIS & Cannabis
Engineering: Civil, Structural & Soils
Surveying: ALTA, Land, Construction & GPS

Reports: CEQA, Biological, Native Plant & Phase 1
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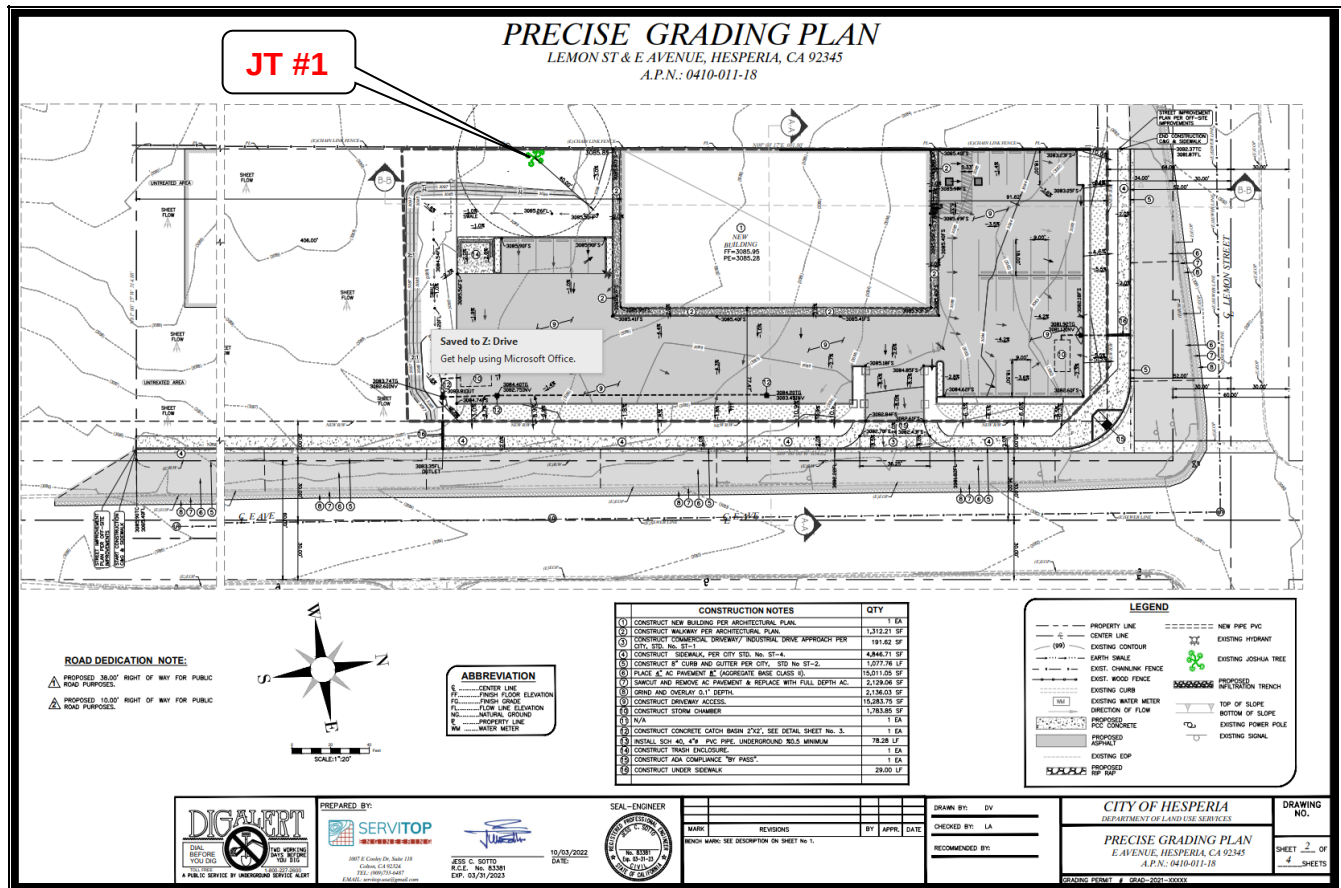
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SITE & GRADING PLAN



DRAWING 14

Planning: Land, GIS & Cannabis
Engineering: Civil, Structural & Soils
Surveying: ALTA, Land, Construction & GPS

Reports: CEQA, Biological, Native Plant & Phase 1
Community Relations & Marketing Studies
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Construction Management & Inspections

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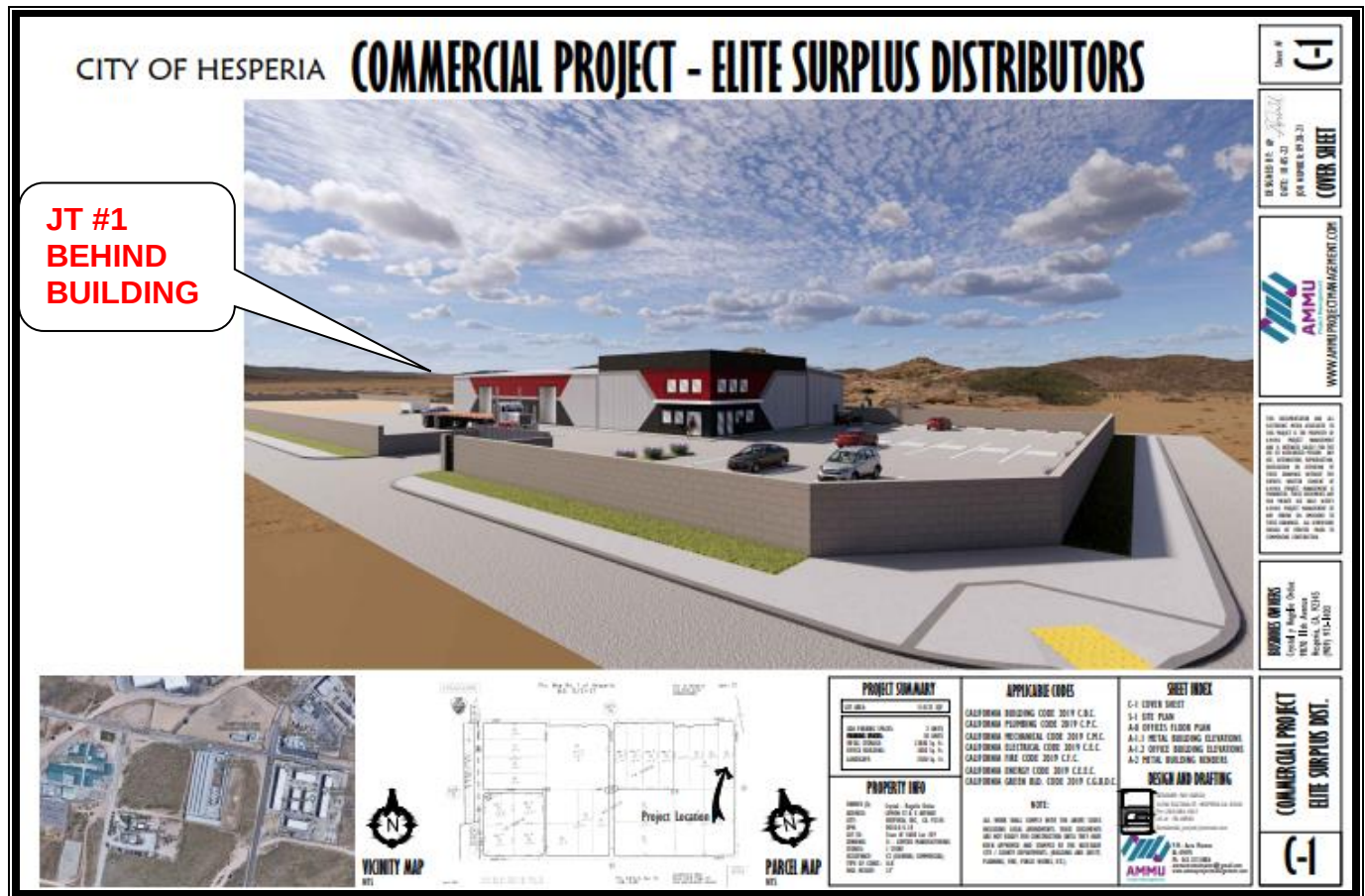
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PERSPECTIVE OF PROJECT FROM INTERSECTION

DRAWING 15

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JOSHUA TREE LEGEND & INFORMATION

Joshua Trees, Other Desert Trees and Plants and Cactus can have a variety of health issues and/or structural issues that create difficulties with relocation alternatives (Tree Spade use, backhoe use, hand replanting, etc.). Relocating any potential Native Desert Trees, Plants and Cacti is not planned at this time. The proposed project layout and Landscaping Plans, if applicable, are subject to change during development. During any relocation process, a review of Final Design Plans and review of individual trees or plants for fungus and insect damage will be completed and if present will prevent relocation of Joshua Trees, Plants and Cacti to prevent the spread to healthier plants. The following is a list of these common Tree and common distinctive Joshua Tree issues:

Binj	Basal Injury	Dleg	Dogleg	IB	Included Bark
B/I	Beetle and insect damage	Du	Dusty	InjO/N	Injury – Old/New
CoD	CoDominate Trunk(s)	F	Fungus damage	L	Lean/Leaning
Cr	Crowded	Fbl	Florescence Blooms	LB	Low Branches
Db	Dieback	Fbd	Florescence Buds	MC	Multiple Clones
Dbh	Diameter at 4.5'	Fgd	Florescence Ground	OB	Over Balanced
DC/CG	Dependent Clone/Clone Group	G	Grainery Tree	OM	Over Mature
DK	Decay	Hf	Health Fair	OT	Over Tall
DL	Down Live	Hok	Health OK	S	Seedling (<3')
Dg/DS	Dead - Ground/Standing	Hp	Health Poor	Tcrk	Torsional Crack

Point Number	Issues	Height Feet±	Health	Protect in Place	
				Relocate	Dispose of
#1	NONE	13	Hok	Protect in Place	

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JOSHUA TREE #1 – LOOKING NORTH ALONG WEST BOUNDARY OF SITE

NO OBSERVABLE INSECT [*Yucca weevils (Scyphophorus yuccae)*] DAMAGE

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FROM JOSHUA TREE LOOKING TOWARDS NORTHEAST CORNER

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ALTEC1Eng@gmail.com
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FROM JOSHUA TREE: LOOKING SOUTHEAST AT SOUTH PORTION OF SITE

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STREET SCENE: LOOKING SOUTH ALONG WEST PROPERTY LINE

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STREET SCENE: LOOKING EAST ALONG LEMON AVENUE

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BIOLOGICAL & ENVIRONMENTAL RESUME SUMMARY: RANDY COLEMAN, AICP, CA, CWB, LS, PE, QSD/P

PROFESSIONAL MEMBERSHIPS & DESIGNATIONS:

LIFE MEMBER: International Society of Arboriculture, The Wildlife Society- Western Chapter, Desert Tortoise Council, Society for the Conservation of Bighorn Sheep (SCBS), Sierra Club, NRA Patriot Life Endowment

CERTIFIED ARBORIST #WE-8024A (2007 - original and updated*2 to 12/31/2023)

TREE RISK ASSESSMENT QUALIFIED (2014 - Original SoCal group 1st Updated 03/07/2024)

CERTIFIED WILDLIFE BIOLOGIST #43090 - (2010) & Professional Development Certificate (2015 & 2020)

SCIENTIFIC COLLECTING PERMIT #11586 - (2011 & Updated - California Department of Fish & Wildlife)

Foundations of Utility Vegetation Management Certificate (2021 - Univ. Wisconsin-Steven's Pt./UVM Assn)

CERTIFICATES: University of California RIVERSIDE (2001-2012)

- **Botany, Desert Ecology, Field Ecology, Ornithology, Geology, GIS, GPS,** Educational Facility Planning

School Business Management: CSU San Bernardino (2000 - Dr. Arthur Townley)

Environmental Leadership Academy: CSU San Marcos (2012 - Dr. Matt Rahm)

Master Naturalist: Joshua Tree National Park Desert Institute – (8 courses with UC Riverside)

EDUCATION: Bachelor of Science Civil & Environmental Engineering: University of California IRVINE, 1980

EXPERIENCE:

Mr. Coleman is an independent Certified Arborist and owner of ALTEC Land Planning since 1990 providing comprehensive consulting for a large variety of land planning projects; acquisitions; environmental compliance, native plants and endangered/threatened species protocol surveys; monitoring, mitigation and recommendations; including for re-establishment of native and locally endemic plant species for Mojave Desert, Mojave River riparian corridor and other Mojave and Sonoran Desert micro-environments; expert witness and litigation services, bird nesting studies and clearances, and jurisdictional entitlements, governmental compliance and permitting.

These experiences and expertise have included expert witness services and native re-landscaping plans for the Mojave River riparian corridor for a 175 felony count criminal litigation by Agency District Attorney requiring approval from US Fish & Wildlife Services, Army Corp of Engineers, California Department of Fish and Wildlife, County Flood Control District, and local city agencies. Additionally, expert witness services and prepared reports and testimony for a \$100,000 Fine (\$1,000 per tree -100+ native trees for a City); Black Walnut, Palm and Oak Tree Reports for southern California cities, tree and landscaping post-fire valuations, wildland urban interface fire (fuel) mitigation plans, market studies, community relations and fiscal analysis; native tree and plant assessments, preservation and relocations services; diagnosis of desert tree growth and relocation issues, construction impact mitigation and monitoring; preparation of landscaping assessment district plans; landscaping and irrigations plans and associated inspections and monitoring; right-of-way services, E-220 Multi-modal High Desert freeway corridor between I-15 and I-14, expert witness services, hazardous waste, Federal Bankruptcy, Airport master planning and approvals by state agencies for runway expansion issues & hazards evaluation; Fuel Modification Reports and Mapping for planned residential developments in fire-prone chaparral at the wildland-suburban interface; prepared approved Specific Plans with landscaping recommendations and native plant selection and monitoring/bonding programs.

Mr. Coleman is also President and founded BCA Engineering Corp. in 1981 where he has been providing professional Civil Engineering, Land Planning, Land Surveying, Project/Construction Management, Design-Build and community relations for non-profits/private/public sectors and public/private/charter schools.

Mr. Coleman has consulted for USDA Rural Utilities for water systems in disadvantage communities, state agencies, San Bernardino County and cities throughout SoCal, redevelopment agencies, special and school districts, banks, FDIC/RTC, insurance companies, national & local developers, homeowners' associations, theme park, homeowners, architects, landscape architects/contractors, property managers, NGOs/non-profits, and attorneys.

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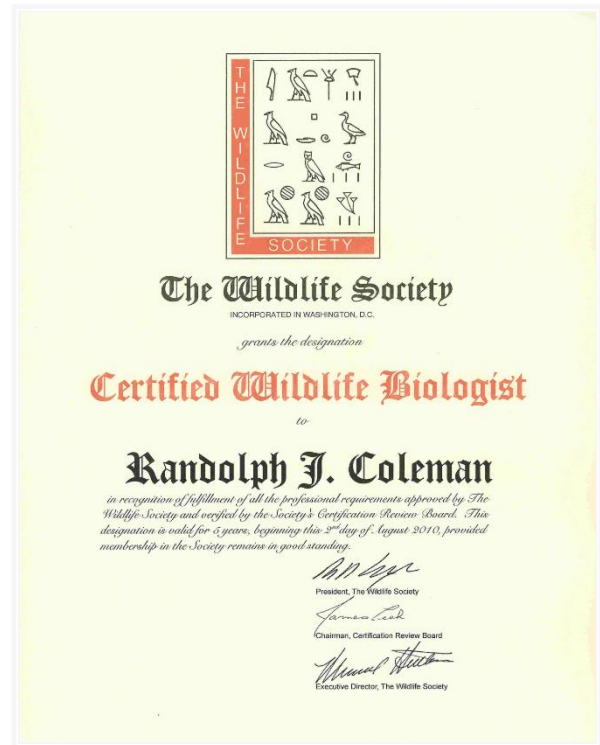
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Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595



Joshua trees' quest to gain protection just got longer

By Caleigh Wells **Oct. 12, 2022**



By the year 2100, 80% of the iconic plants will be gone in the national park that straddles the Colorado Desert and the Mojave Desert, according to recent studies. *Photo by Caleigh Wells.*

The California Fish and Game Commission delayed the decision again today over whether to grant state protection to the western Joshua tree.

The petition to protect the plant under the California Endangered Species Act (CESA) was submitted in 2019. If it is listed, it would be the first

species to earn protection in the state because of climate change.

But the process has been contentious. And even when the decision is made, the fate of the plant is far from sealed.

How to save a tree

A member of the public must make a case to the California Fish and Game Commission that a species needs protection. In this case, the case is over the western Joshua tree, which primarily grows in California.

Their champion is Brendan Cummings. As conservation director for the Center of Biological Diversity, he's litigated plenty of endangered species' cases. "Fifteen or so years ago, I did the ... litigation that forced the Bush administration to protect the polar bear under the Federal Endangered Species Act."

But this species is personal. He's got dozens of them in his backyard in the town of Joshua Tree. "If you look around us here, the adult



Joshua trees we're seeing were recruited into the population under a climate that no longer exists," he says. But the case he's making isn't easy. Millions of these trees are still spanning thousands of square miles. Listing a species means businesses and residents must either avoid killing it if possible, or move it, or pay a fee if it must be killed. With so many trees left, that could be burdensome. Kelly Herbinson says it's worth the trouble. She's the co-executive director of the Mojave Desert Land Trust, whose whole mission is to set aside acres of desert habitat for preservation.

"What we're seeing right now is unprecedented. This is serious. And I don't know that that's always obvious if you're not doing this every day and working on the land every day," she says.

At lower elevations, the western Joshua tree is facing the effects of the worst drought in more than a thousand years.

"If you were to go to, say, the West Mojave, or even areas

ALTEC LAND PLANNING

19531 U.S. Highway 18
Apple Valley, CA 92307

(760) 242-9917

ALTEC1Eng@gmail.com
RandyAICP@gmail.com

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nearby where the drought has been really bad, I mean, they're mostly brown," she says.

In its middle elevations, the Joshua tree has been separated into small island habitats by decades of development as the human population in the desert continues to grow. That cuts off genetic flow between populations and creates problems like what LA's mountain lions are facing.

And then of course, at its middle and higher elevations, the Joshua tree is facing a threat it rarely encountered before: increased wildfire. Warmer, dryer weather conditions have helped create larger wildfires that kill millions of Joshua trees. Photo by Caleigh Wells.

On a protected parcel of land across the street from where Herbinson works, a stray cigarette in 2020 burned most of the Joshua trees on a quarter of the 600 acres that the Mojave Desert Land Trust saved from becoming a housing development.

"That is not something that happened historically," she says. "There's this massive overgrowth of invasive plant species that are blanketing the desert and creating this massive fuel load. And then it dries out because we're in a drought. And then you just have this carpet of dried up plants that are ripe to burn."



There's also the problem of the tree's lifelong partner: the yucca moth. They're completely reliant on each other to survive.

The moth lives underground at the base of its tree for years, waiting for it to flower, and in the spring when it finally does, it emerges and pollinates the tree in exchange for food and a safe place to produce larvae.

Joshua trees don't flower every year, but when they do, they rely on the yucca moth for pollination. Photo courtesy of the Mojave Desert Land Trust.

But as the climate changes, scientists have found that the moths aren't reproducing like they used to.

The California Department of Fish and Wildlife spent months studying the trees. Their job is to provide all the data and expertise that the commission needs to make a decision.

In June, the department determined

that there isn't compelling evidence that the western Joshua tree is in danger of going extinct in the foreseeable future. It said the plant has time to adapt to climate change.

Almost all of the peer-reviewed scientists disagreed. At the meeting in June, hundreds of members of the public showed up to throw in their opinion too.

Local politicians, the local water board, building developers, and labor unions all argued that listing an abundant plant in the desert as endangered would hurt development and jobs.

National politicians, conservationists, scientists, local residents, and tribal groups all made the case that the western Joshua tree is disappearing, and needs to be protected.

The commission reached a stalemate in June, and then on Wednesday they decided unanimously to delay the decision again, to leave room for more tribal consultation. Cummings says he is not surprised by the delay. But even if the commission lists the western Joshua tree next year, he doubts the fight will end there either.

"If they vote to protect Joshua trees, various business interests will undoubtedly sue, trying to overturn that protection. And conversely, if the commission votes against protecting Joshua trees, I will sue, attempting to overturn that unlawful, unscientific decision. So, the future of the species is likely to be contested for the next few years," he says. For now, the Joshua tree has temporary protection since it is a candidate species for CESA. The commission will revisit the decision in February 2023.

ALTEC LAND PLANNING

19531 U.S. Highway 18
Apple Valley, CA 92307

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(760) 242-9917

ALTEC1Eng@gmail.com

RandyAICP@gmail.com



Dear Randy,

The fate of the western Joshua tree remains in limbo. California Fish and Game Commission members failed to reach a unanimous decision on whether to grant the western Joshua tree threatened species status on June 16, 2022. Despite the tied vote by members, we were heartened by the Commission's thoughtful discussion regarding the science behind the imperiled status of the western Joshua tree. We welcome their decisions to expand tribal input and consider initiating a conservation plan.

The species remains protected under its candidacy for the California Endangered Species Act until a decision is made by the Commission in October.



Thank you to everyone who came out to the rally at our HQ, signed our petition, and took the time to make such compelling public comments before and during the Commission meeting.

Thank you to Brendan Cummings of the Center for Biological Diversity for his leadership in this effort and Senator Dianne Feinstein and Assembly Member James C. Ramos for speaking out during the Commission meeting in support of listing.

We know that the western Joshua tree decision will ultimately have great bearing on the role of California's Endangered Species Act in protecting species threatened by climate change. We hope the Commission chooses to take bold, decisive action in applying CESA as a tool to protect our state's most vulnerable species, including the western Joshua tree, against this extraordinary threat.

We will keep you informed and look forward to working alongside you to continue supporting the western Joshua tree.

Cody Hanford and Kelly Herbinson
Joint Executive Directors

California won't immediately list western Joshua tree as threatened



By Associated Press - **June 16, 2022** - SACRAMENTO, CA — California won't be listing the iconic western Joshua tree as a threatened species for now after the four-member Fish and Game Commission couldn't reach agreement on how best to protect the plant from climate change.

After deadlocking on whether to list the species under the California Endangered Species Act, commissioners decided to reconsider in October. In the meantime, they voted to pursue more feedback from tribes and directed the California Department of Fish and Wildlife to work on a conservation plan for the species.

The desert plant is known for its unique appearance, with spiky leaves on the end of its branches, and is found in the national park that bears its name about 130 miles (209 kilometers) east of Los Angeles and through

a stretch of desert up to Death Valley National Park. There are two types of trees, the eastern and western, but only the western is up for consideration.

Western Joshua tree is being considered for endangered protections. [Jae C. Hong/AP]

If the tree is listed as a threatened species, killing one would require special approval from the state. That would make it harder to win approval for housing, solar fields, or other development projects on land where Joshua trees are abundant. The trees are now under conditional protection while the state decides whether to deem them threatened. The state has never listed a species as threatened based primarily on threats from climate change, said Brendan Cummings, conservation director for the Center for Biological Diversity.

The center petitioned in 2019 to have the western Joshua tree listed as threatened, saying hotter temperatures and more intense periods of drought fueled by climate change will make it harder for the species to survive through the end of the century. It also argued wildfires and development threats harm the trees' ability to live and reproduce.

The state's ongoing drought, which scientists say is part of the worst megadrought in 1,200 years, is likely harming the trees' ability to survive, Cummings said. "We're likely witnessing a single, large-scale mortality event right now," he told the commission.

The commissioners broadly agreed that hotter temperatures and more extreme droughts fueled by climate change will put the species in danger over the coming decades. But they were split on whether the Endangered Species Act was the best way to address those concerns. The California Department of Fish & Wildlife has recommended against listing the species as threatened. The department acknowledged that areas suitable for the western Joshua trees growth are likely to decline due to climate change by 2100. But it said in an April report that



ALTEC LAND PLANNING

19531 U.S. Highway 18
Apple Valley, CA 92307

(760) 242-9917

ALTEC1Eng@gmail.com
RandyAICP@gmail.com

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the tree remained “abundant and widespread,” which lowers the risk of extinction.

“The question is not, ‘Will climate change be bad for Joshua tree?’ The question is, ‘How bad will it be, and how quickly?’ And the truth is we don’t know yet,” Jeb McKay Bjerke, who presented the Department of Fish & Wildlife’s recommendation to the commission, said Wednesday. Fires swept through an area where the Joshua tree is found

in California. [Marcio Jose Sanchez/AP]

It’s unknown how many Joshua trees exist in the state, but it could be anywhere from 4.8 million to 9.8 million, he said. It was a “close call” for the department not to recommend listing the species as threatened, he said, and three of five outside peer reviewers who were asked to look at the recommendation by the department disagreed with the conclusion.

About 40% of the Joshua trees in the state are on private land. Many of the comments focused on the development of housing and solar projects in the region. Several local and state politicians and union workers said listing the species as threatened would make it harder to move forward with necessary projects, including those that aim to fight climate change by boosting renewable energy.

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California holds off on listing western Joshua tree as threatened

Erin Rode, Palm Springs Desert Sun **June 16, 2022,****Joshua Trees grow on protected Mojave Desert Land Trust lands which create wildlife linkages near the border of Joshua Tree and Yucca Valley, November 18, 2021.**

The western Joshua tree will remain a protected species after the California Fish and Game Commission failed to come to a majority decision on Thursday on whether the iconic plant should be listed under the California Endangered Species Act.

High desert cities, construction and real estate trade groups, and renewable energy developers oppose the listing, arguing it would stymie development of housing and renewable energy. Conservation groups, scientists, and advocates, however, have argued that listing the tree is integral to protecting the species from climate change, as well as other threats like wildfire and development.

The commission considered four hours of public comments on Wednesday, and also heard presentations from the Center for Biological Diversity, which submitted the petition to list the species as threatened, and from the California Department of Fish and Wildlife, which issued a report recommending against listing the species in April.

Commission Vice President Erika Zavaleta and President Samantha Murray supported listing the western Joshua tree on Thursday, but commissioners Jacque Hostler-Carmesin and Eric Sklar said they want to delay the decision and encouraged all involved parties to work on a range-wide conservation plan in the meantime, although both indicated they would likely support listing the species at a future date. The fifth commissioner position currently vacant.

"Based on the models and the evidence, I come to a different conclusion than the scientists at the department... This strong suite of models and ground-truthing have led me to the conclusion that we have a lot of work to do to protect the species from becoming endangered in the next 80 years mainly throughout most of the southern part of its range," Zavaleta said.

Murray said the commission is tasked with evaluating whether a species is threatened or endangered, not with evaluating the potential economic impacts or impacts on housing and development of a listing.

"Listing doesn't mean that there can't be housing, that there can't be renewable energy projects, it just means they'll happen under a more careful watch," she said. "Over the last 18 months (while the species had candidate status), development and projects have still been happening. It just means it will be paired with numerical caps of trees that are taken and paired with habitat conservation planning efforts."

But Sklar said he preferred to continue the item to the commission's October meeting, with the hopes that delaying the decision would incentivize all parties to work on a conservation plan, and prompt the legislature to pass legislation related to protections for the species.

"I think it puts pressure on all parties, those for listing, those going against the listing, to work together to craft a really good solution," he said. "Not listing today keeps the pressure on all the groups in a greater way." He added that after listing a species it could take years before a conservation plan is developed.

Murray and Zavaleta said they doubted delaying the vote would in fact incentivize these actions more than listing the species as threatened would. The discussion also raised the broader question of how to best use the California Endangered Species Act to protect species from climate change, with Sklar calling protecting individual species "like fiddling while Rome burns." The western Joshua tree represents the first time the state law has been used to protect a species that is primarily threatened by climate change.

A motion from Sklar to continue the item to the August meeting, and reopen the public record then for additional tribal input and ideas from the Department of Fish and Wildlife on creating a range-wide recovery and conservation plan, failed 2-2 with Murray and Zavaleta voting no. A second motion made by Zavaleta to list the species as threatened also failed 2-2, with Sklar and Hostler-Carmesin voting no, so the item will be continued to the commission's October meeting.

As a candidate for listing, the tree temporarily receives the same protections as a state-listed endangered or threatened species. This includes a prohibition on the import, export, take (or kill), possession, purchase, or sale of the western Joshua tree, or any part or product of the tree, without proper authorization.

The commission did agree to narrowly reopen the public record to receive additional input from California tribes in response to criticism that there wasn't sufficient engagement from tribes on the issue. The commission also voted to have the Department of Fish and Wildlife provide an update in October on legislative efforts to protect the species, and an update on a potential range-wide conservation plan.

Climate change reducing habitat

In their presentations on Wednesday, the Center for Biological Diversity and the Department of Fish and Wildlife presented similar science related to threats to the western Joshua tree, but different conclusions on whether or not these threats warrant listing under the California Endangered Species Act.

Chuck Bonham, director of the California Department of Fish and Wildlife, led off the meeting by saying the western Joshua tree likely represents

ALTEC LAND PLANNING

19531 U.S. Highway 18
Apple Valley, CA 92307

(760) 242-9917

ALTEC1Eng@gmail.com
RandyAICP@gmail.com

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the "most complex petition presented to the commission" he's seen during his time as director.

The Center for Biological Diversity submitted a petition to list the species in 2019 to protect the trees from the threats of climate change, wildfires, and development. The tree's suitable habitat is expected to decline substantially by 2100 due to climate change, especially in the southern portions of its range — meaning the Joshua tree would largely be unable to survive in its namesake park by the end of this century.

Outside of the park, the western Joshua tree's habitat extends northeast through fast-growing high desert cities like Victorville, Hesperia, and Palmdale. Approximately 40% of the western Joshua tree's range is on private lands, which advocates say makes protecting the tree even more vital.

The California Department of Fish and Wildlife recognized that "there will be a substantial reduction in areas with suitable climate conditions for western Joshua tree in the foreseeable future," which in combination with other threats "is expected to have negative effects on the abundance of western Joshua tree and is cause for substantial concern."

But the department recommended against listing the tree as threatened, concluding that the "currently abundant and widespread" population lessens the overall impact of these threats and threat of extinction for the foreseeable future, which the department defined as through 2100.

"The question is not 'will climate change be bad for the Joshua tree?' The question is, 'How bad will it be? And how quickly? And the truth is we don't know yet. There's a lot of uncertainty and speculation when it comes to the timing and magnitude of climate change impacts on the species. This is a close call, the recommendation was not easy for the department," said Jeb Bjerke with the department's native plant program.

Bjerke noted that only one of the five peer reviewers agreed with the recommendation.

As the western Joshua tree loses its current suitable habitat, identifying and protecting areas known as "climate refugia," where Joshua trees may be able to thrive at higher elevations amid rising temperatures and climate change, will become even more important to the species' survival. But Bjerke noted that western Joshua trees would be unlikely to colonize these areas on their own, and would instead require human assistance to be moved into these areas of suitable habitat.

"Available scientific evidence could support the conclusion to either list the species or to not list the species, and it's reasonable to come to different conclusions based on the same set of facts," Bjerke said. "Our recommendation was therefore based on what we consider to be the more likely outcome at the end of this century. With widespread distribution, high abundance, and lack of negative demographic trends, the western Joshua tree is likely to continue to persist and reproduce in many areas of California."

In the Center for Biological Diversity's presentation, Conservation Director Brendan Cummings said he agreed with the scientific evidence in the department's report, but disagreed with the conclusion.

Cummings noted studies in 2012 and 2019 that predicted "catastrophic" loss of suitable habitat in Joshua Tree National Park, with a 90-plus percent decline of the tree's range in the park. Those studies were modeled on a 3-degree rise in summer maximum temperatures, an increase that state climate reports have estimated could occur as soon as 2035 or 2040.

Cummings criticized the department's portrayal of climate change as a longer-term threat to the western Joshua tree with unknown impacts.

Reading out loud one line from the department's report that says the department expects "that any changes in the range of the western Joshua tree that are ultimately caused by climate change will likely occur very slowly, perhaps over 1,000 years," he called it the "most disappointing sentence" of the report.

"This reflects a profound misunderstanding of climate change and how fast impacts are being felt," he said. "We don't have 1,000 years to protect Joshua trees, summer maximum temperatures that likely preclude recruitment will be here in two or three decades under the most optimistic scenarios. The western Joshua tree clearly is likely to become endangered in the foreseeable at a minimum in a significant portion of its range. You must list it as such."

People visit information booths during the Mojave Desert Land Trust's "Save the Western Joshua Tree" rally at the trust headquarters in Joshua Tree, Calif., on May 26, 2022.

High desert cities opposed listing: The commission received over 200 public comments during the meeting this week, including from elected officials representing the high desert, who largely commented against the listing. From the general public, comments in support of the listing were roughly double the number of commenters speaking against the listing.

Supporters of the listing criticized the California Department Fish and Wildlife's characterization of how climate change could impact the western Joshua tree, calling it short-sighted, and the department's finding that the tree is "abundant and widespread."

Some commenters pointed to other endangered or extinct species that they said were once "abundant and widespread," from the desert tortoise to the giant sloth.

Opponents of the listing, including elected officials representing high desert cities, real estate and construction trade groups, construction unions, and chambers of commerce, as well as representatives of solar energy developers, argued that existing local protections are sufficient for the western Joshua tree, that the tree is currently abundant, and that the listing would stymie renewable energy and housing development. The Fish and Game Commission also received over 1,700 written public comments regarding the potential listing ahead of the meeting, with most comments in support of the petition and just over 250 opposed.

State should step in to protect Joshua trees



Brendan Cummings, Special to CalMatters
June 16, 2022,
Editor's note: The California Fish and Game Commission failed to come to a majority decision on Thursday on whether the western Joshua tree should be listed as threatened under the California Endangered Species Act. The matter will be reconsidered by the panel this fall. Commission Vice President Erika Zavaleta and President Samantha Murray supported listing the iconic species as threatened, but commissioners Jacque Hostler-Carmesin and Eric Sklar said they wanted to delay the

decision and encouraged all involved parties to work on a range-wide conservation plan in the meantime, although both indicated they would likely support listing the species at a future date. The fifth commissioner position is vacant.

Our state is widely viewed as a climate leader, but California never has protected a single plant or animal under its endangered species law because of the threat of climate change.

That could have changed this past week, when the state's Fish and Game Commission met to decide whether to list western Joshua trees under the California Endangered Species Act.

Commissioners could have decided to safeguard Joshua trees, offering proof of California's commitment to fighting climate change and ensuring that the iconic plant survives for future generations.

Or they could have followed the wishful thinking of the state Department of Fish and Wildlife, which in March discounted the objections of independent scientific peer reviewers to recommend against protecting Joshua trees.

A decision remains in limbo.

From my San Bernardino home in Joshua Tree, I've watched the slow-motion extinction of these sentinels of the high desert as they are killed off by climate change, development, and wildfire. These are problems for many species, but the Joshua tree is particularly vulnerable.

Reproduction and growth for these trees isn't easy. They only flower in certain years, then need to be pollinated by their symbiotic yucca moth. The tree's seeds need to be dispersed by rodents, without all of them being eaten. Those seeds lucky enough to sprout then must escape hungry jackrabbits and survive desiccating summers until they are robust enough to withstand the Mojave Desert's demanding conditions.

And that was before climate change started making life so much harder.

ALTEC LAND PLANNING

19531 U.S. Highway 18
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ALTEC1Eng@gmail.com
RandyAICP@gmail.com

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In 2019, I petitioned the California Fish and Game Commission to protect western Joshua trees under the state's Endangered Species Act. Nearly two decades earlier, I led the legal effort at the Center for Biological Diversity that forced the Bush administration to list polar bears as threatened under the federal Endangered Species Act due to climate change.

If the Bush administration could recognize climate change and take steps to protect vulnerable species, surely California can, too. Sadly, the Department of Fish and Wildlife's recent report on western Joshua trees isn't what you would expect from a California agency in 2022. It downplays the grave risks to these trees and ignores the science, inaccurately claiming there's no proven link between rising temperatures and Joshua tree declines and theorizing that "any changes in the range of western Joshua tree that are ultimately caused by climate change will likely occur very slowly, perhaps over thousands of years."

This reflects a profound misunderstanding of climate change and how quickly its effects are being felt. We don't have a thousand years to protect Joshua trees. Summer temperatures are rising so quickly that they will likely doom any new trees within two or three decades. The department's report failed to account for exhaustive studies documenting the severe and accelerating harms of climate change. It ignored the fact that western Joshua trees in California are struggling through the worst drought in more than a millennium, and that such droughts could become the norm.

The report minimized the risk of fire, ignoring scientific warnings about irreversible effects and instead declaring that harm to Joshua tree habitat from fire is "temporary."

Fueled by invasive grasses, more area burned in the Mojave Desert in 2005 than in the 25 previous years combined, and in 2020, thousands of acres of Joshua trees were lost to fire in the Mojave.

To make matters worse, the higher-elevation areas where Joshua trees are most likely to survive warming temperatures also are the most vulnerable to fire.

While the department's report is flawed, the good news is that the Fish and Game commissioners don't have to follow it. Their vote is crucial to the survival of western Joshua trees, and it's a litmus test for how seriously California is taking climate change.



Brendan Cummings is the conservation director at the Center for Biological Diversity.

Commissioners
Samantha Murray, President
Del Mar
Erika Zavaleta, Vice President
Santa Cruz
Jacque Hostler-Carmesin, Member
McKinleyville
Eric Sklar, Member
Saint Helena
Vacant, Member

STATE OF CALIFORNIA
Gavin Newsom, Governor

Melissa Miller-Henson
Executive Director
P.O. Box 944209
Sacramento, CA 94244-2090
(916) 653-4899
fgc@fgc.ca.gov
www.fgc.ca.gov

Fish and Game Commission



Wildlife Heritage and Conservation
Since 1870

MEETING AGENDA June 15-16, 2022

Participate in Person

California Department of Transportation
Conference Room 1.040 (1st Floor)
100 S. Main Street
Los Angeles, CA 90012

Trinidad Rancheria
Administrative Office Conference Room
1 Cher-Ae Lane
Trinidad, CA 95570

Participate via Webinar/Teleconference

The meeting will be live streamed; visit www.fgc.ca.gov the day of the meeting to watch or listen. To provide public comment during the meeting, please join at an in-person location, via Zoom, or by telephone; [click here for instructions on how to join](#).

Note: See important meeting deadlines and procedures, including written public comment deadlines, starting on page 12. Unless otherwise indicated, the California Department of Fish and Wildlife is identified as Department.

Invitation: The Commission invites members of the public to join commissioners and staff for a field trip that will take place Wednesday night to observe a California grunion run— a species of marine fish found only along the coast of southern California and northern Baja California. Details will be available in advance of the Commission meeting. Members of the public are welcome to join, but must provide their own transportation.

Day 1 – June 15, 2022, 8:30 AM

CALL TO ORDER/ROLL CALL TO ESTABLISH QUORUM

1. Consider approving agenda and order of items

DISCUSSION AND ACTION ITEMS

2. **Recognition of former Commission president**
Recognize former President Peter S. Silva for his commitment and service to the Commission.

3. Commission executive director and Department reports

Receive updates on items of note since the previous Commission meeting.

(A) **Commission executive director's report**

I. Justice, equity, diversity and inclusion update

(B) **Department director and Law Enforcement Division**

4. Wildlife Prosecutor of the Year

Announce recipient of the Commission's annual Wildlife Prosecutor of the Year award, consistent with the Commission's policy adopted in 2016.

5. Western Joshua tree

Consider the petition, the Department's status review report, and comments received to determine whether listing western Joshua tree (*Yucca brevifolia*) as threatened under the California Endangered Species Act (CESA) is warranted.

(Pursuant to sections 2075 and 2075.5, Fish and Game Code)

Note: Findings will be adopted at a future meeting.

6. Temblor legless lizard

Consider and potentially act on the petition, Department's evaluation report, and comments received to determine whether listing Temblor legless lizard (*Anniella alexanderae*) as threatened or endangered under CESA may be warranted.

(Pursuant to sections 2074 and 2074.2, Fish and Game Code)

7. Milo Baker's lupine

Consider the petition, the Department's status review report, and comments received to determine whether changing the status of Milo Baker's lupine (*Lupinus milo-bakeri*) from threatened to endangered under CESA is warranted.

(Pursuant to sections 2075 and 2075.5, Fish and Game Code)

Note: Findings will be adopted at a future meeting.

CONSENT ITEMS

Note: Items on the consent calendar are expected to be routine and non-controversial. After public comment, the Commission will consider approving items on the consent calendar in a single vote without discussion. The presiding commissioner may choose to remove any item from the consent calendar and allow a separate discussion and potential action on that item in response to a request by a Commission member, staff, or an interested person.

8. White Seabass Fishery Management Plan

Receive the Department's White Seabass Fishery Management Plan 2020-2021 Annual Review report.

(Pursuant to Section 5.9, White Seabass Fishery Management Plan)

9. Pink (ocean) shrimp fishery management plan implementing regulations

Consider adopting proposed additions and amendments to existing prawn or shrimp commercial trawling regulations that implement the *Pink (Ocean) Shrimp*, *Pandalus jordani*, *Fishery Management Plan*.

(Add sections 56.00 and 56.01 and amend sections 120, 120.1 and 705, Title 14, CCR)

What Does the Future Hold for the Joshua Tree?

The beloved desert denizen is feeling the heat

Usha Lee McFarling

November 2021



A starlit night at Joshua Tree National Park. Getty Images

As the legend goes, it was 19th-century Mormon settlers who gave the Joshua tree its name, inspired by the plant's bent and clubbed branches, which recall the biblical Joshua raising his arms in prayer. The etymology is apocryphal, but given the threats posed by climate change, these eccentric plants, and the California park named after them, might well need divine intervention—as well as new legal protections and conservation measures.

Ringed by mountains and covering parts of the Mojave and Colorado deserts, Joshua Tree National Park's rugged landscape features granite boulders, miles of cactus-filled flats, animals like the darkling beetle that can go a lifetime without a sip of water and the park's namesake plant in all its twisted glory.

Now completely arid, the land cradling the park once contained grasslands where mammoths and saber-toothed cats roamed; during the last ice age, giant ground sloths fed on Joshua trees, dispersing their seeds. The earliest known people in the area, the Pinto culture, were big-game hunters whose spear points have been found across today's park. Even as the area warmed and dried, it has remained home to Native peoples—the Serrano, the Mojave, the Chemehuevi, and the Cahuilla—who have drawn water from lush palm oases, gathered acorns and mesquite pods for food and used the tough leaves of the Joshua tree, which the Cahuilla call *humwichawa*, to weave baskets and sandals. By the mid-1800s, Native inhabitants were partly displaced by Western cowboys, ranchers and miners, whose long-abandoned homesteads are now disappearing under the sand.

Among the park's long history of defenders, Minerva Hamilton Hoyt—a wealthy Southerner who moved from Mississippi to California in the late 1890s and grew to love the desert—is foremost. She spent two decades seeking to protect the area from cactus poachers, leading

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #43090, Certified Arborist #WE-8024A, CDFW: SCP #11586

Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595

Franklin Delano Roosevelt to designate it a national monument in 1936; it became a national park in 1994. (Hoyt is celebrated in a 5,405-foot-high mountain named after her, and in *Mammillaria hamiltonhoytea*, a species of cactus.)

Minerva Hamilton Hoyt worked with Secretary of the Interior Harold Ickes and others to protect the Joshua Tree region. [National Park Service](#)

Today, driving past teddybear cholla cacti, one glimpses jackrabbits, roadrunners, and coyotes. Surprisingly, cozy campsites sit tucked amid giant monzogranite boulders that beckon rock climbers, and a short hike can bring you to a shady palm oasis perched atop an earthquake fault.

The Joshua tree, *Yucca brevifolia*, is a succulent—some botanists don't consider it a tree. There are two distinct species: one with a tall, trunklike stem, one bushier. The plant's contortions have won generations of fans. As author Jeannette Walls [writes](#), "It's the Joshua tree's struggle that gives it its beauty."

Able to live for hundreds of years and rise more than 40 feet, the plants provide some of the park's scarce shade. A keystone species supporting the area's wildlife, Joshua trees—pollinated by a special species of moth—reproduce by bearing seeds. They offer shelter for pack rats and sharp leaves on which loggerhead shrikes impale their prey, and are a hallmark of the Mojave, which stretches across the park's western half. To the east lies the Colorado Desert, a land of creosote, kangaroo rats and wildflowers that bloom after winter rains. In August 2020, [a 43,000-acre fire killed more than a million Joshua trees](#) in the nearby Mojave National Preserve. Though the plants have existed for some 2.5 million years, ecologists warn that they could be nearly eliminated in the park that bears their name by 2100 unless global warming is curbed soon.

Already, botanists are seeing fewer juvenile Joshua trees, which need moister ground to survive. They've also seen "fairy rings"—circles of baby Joshua trees that sprouted not through pollination but as clones, unable to disperse; the plants' unique pollinators, yucca moths, face an uncertain future as the climate warms. One conservationist calls the Joshua tree "a symbol of our utter failure as a society to address climate change." The plant's loss could mean the collapse of the Mojave's high-desert ecosystem.

Nearly three million people visit the park each year, and entering vehicles back up for miles on busy days. With limited spots for camping and parking, many visitors flout regulations and camp or park on delicate lands. During a 35-day government budget shutdown [in 2018 and 2019](#), [vandals cut down Joshua trees](#) and carved new roads through protected areas.

Meanwhile, smog from Los Angeles flows east through the San Geronio Pass, bringing ozone and soot. Nitrogen borne by smog fertilizes invasive grasses, which fuel wildfires that kill Joshua trees.

Last year, California began debating whether the Joshua tree should become the state's [first plant protected by law because of climate change](#). Conservationists continue to remove invasive grasses, to bank seeds and to grow seedlings to replace Joshua trees lost in fires or windstorms. They're also buying land so that Joshua trees can expand into cooler, higher pockets. The 19th-century explorer John Frémont may have called the plant "the most repulsive tree in the vegetable kingdom," but those who love these gnarled treasures aren't giving up on them, or on the park they call home.

To the Rescue

Working to preserve the unique life-forms and ancient heritage of the Joshua tree's habitat

By Rebecca Worby

Mojave Desert Land Trust Seed Bank

(Mojave Desert Land Trust) Since 2016, this organization has collected seeds and spores from more than 500 Mojave Desert species to provide an insurance policy against the plants' extinction. Specimens are harvested, cleaned, documented, and stored in refrigerators. The group has already deployed seeds from the depository in restoration projects, including in places where wildfires have destroyed wide swaths of vegetation.

Native American Land Conservancy

(Native American Land Conservancy) This group works to protect and restore sacred sites within the ancestral territories of the Cahuilla, Chemehuevi, Mojave, and Serrano peoples of Southern California. Recently the conservancy acquired a petroglyph-filled area at the northwestern edge of the park that has been continuously occupied by Indigenous peoples for thousands of years.

The Joshua Tree Genome Project

(The Joshua Tree Genome Project) As climate change threatens to eliminate the Joshua tree, these scientists are working to sequence the plant's genome. With help from citizen scientists and local conservation organizations, the project has also planted thousands of Joshua trees at four different sites that represent the climatic range spanning the Mojave. By monitoring these plants, scientists hope to pinpoint the genes that help seedlings survive.



Joshua tree one step closer to federal Endangered Species Act listing

We issued this [press release](#) at WildEarth Guardians today. – **September 22, 2021**, by [Matthew Koehler](#)

WildEarth Guardians scores groundbreaking legal win for the Joshua tree - Court rules that the federal government cannot ignore impact of climate change on iconic—and imperiled—Joshua trees

Los Angeles, CA—A federal district court in Los Angeles [has ruled](#) that the U.S. Fish and Wildlife Service (the “Service”) violated the law when they failed to list the imperiled Joshua tree under the Endangered Species Act (“ESA”).

The Service disregarded overwhelming scientific evidence showing that climate change poses a major threat to the

Joshua tree’s survival when the agency denied listing the species as threatened under the Act. The decision stems from a [2019 lawsuit](#) filed by WildEarth Guardians, challenging the Service’s decision that the desert icon did not warrant federal protection, despite all the available scientific evidence pointing to the same conclusion: Joshua trees will be in danger of extinction throughout most of their current range by century’s end from climate change driven habitat loss, invasive grass fueled wildfire, and other stressors.

“The Court’s decision represents a monumental step forward for the Joshua tree, but also for all climate-imperiled species whose fate relies upon the Service following the law and evaluating the best scientific data available with respect to forecasting future climate change impacts,” said Jennifer Schwartz, staff attorney for WildEarth Guardians and lead attorney on the case. “The Court’s unequivocal holding—that the Service cannot summarily dismiss scientific evidence that runs counter to its conclusions—will force the federal government to confront the reality of climate change and begin focusing on how to help species adapt.”

WildEarth Guardians first filed a petition to list the Joshua tree as “threatened” under the ESA [in 2015](#) and the Service found the listing “not warranted” in August 2019. Under the Trump administration, the Service ignored [every available peer-reviewed study](#) to model future climate impacts to Joshua tree—all of which agree that the vast majority (roughly 90%) of the species’ current range will be rendered unsuitable by the end of the 21st century. The Court lambasted the Service’s decision in the ruling stating that “[i]n concluding that climate change will not affect Joshua trees at a population- or species level, the Service relies on speculation and unsupported assumptions.”

Notably, while the decision was issued by the Service under the Trump administration, the Service refused to budge from its indefensible position—or even consider taking a fresh look at the finding—even under the Biden administration. In addition to the litigation, Guardians filed [emergency petitions](#) to protect two species of Joshua tree in May 2021, following the release of even more conclusive climate change findings and the large Cima Dome fire that swept through the Mojave National Preserve and killed an estimated 1.3 million Joshua trees. But the Service has failed to respond to the renewed petitions.

“While we are grateful to the Court for this positive decision, we are very disappointed that the Biden administration failed at several junctures to do what’s right by these iconic Joshua trees,” said Lindsay Larris, wildlife program director for WildEarth Guardians. “The time and money the federal government spent defending a decision that the Court could clearly see was wrong—instead of using these funds to conserve species and determine how to mitigate massive biodiversity loss from climate change—is tragic and, unfortunately, telling. We need this administration to take swift action to protect species and habitat, not just deliver nice messages about the importance of fighting climate change while defending the damaging actions of the prior administration.”

The [Court order](#) now directs the Service to reconsider its decision, taking into account the best available science, including climate change models, in issuing a new decision for the Joshua tree. Pursuant to the ESA, this decision is required to be issued within the next 12 months, though the Service will now have 60 days to decide whether or not to appeal the decision.

“For the sake of the Joshua tree and the overwhelming majority of the public who believe in conservation, science, and protection of species and habitat, we are optimistic that the Service will use this opportunity to quickly issue a decision to protect the Joshua tree,” said Schwartz. “Our climate-imperiled species—plants and animals alike—do not have time for political gamesmanship that questions unambiguous science. Now is the time for action to preserve what we can of the natural world before it is too late.”

ALTEC LAND PLANNING

19531 U.S. Highway 18
Apple Valley, CA 92307

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #43090, Certified Arborist #WE-8024A, CDFW: SCP #11586

Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595

(760) 242-9917

ALTEC1Eng@gmail.com

RandyAICP@gmail.com

Couple fined \$18,000 for bulldozing dozens of Joshua trees to make way for home.

Los Angeles Times June 28, 2021

A couple who bulldozed and buried 36 Joshua Trees to make way for a home were recently fined \$18,000 — a punishment authorities hope will deter others from destroying the iconic trees.

"I would hope that the person that would otherwise take, remove, bulldoze a Joshua tree would understand that they are facing fairly significant criminal liability for doing so," said Douglas Poston, supervising deputy district attorney with the San Bernardino County district attorney's office. An investigation into the destruction began Feb. 11, when a Morongo Basin resident saw his neighbors using a tractor to mow down dozens of the twisted, bristled trees and reported it to the California Department of Fish and Wildlife through a tip line, wildlife officials said.

Not long before, the neighbor — who was not identified — noticed the trees were marked for removal and warned Jeffrey Walter and Jonetta Nordberg-Walter not to take them out.



An image provided by the California Dept. of Fish and Wildlife shows some of the bulldozed Joshua trees. (California Dept. of Fish and Wildlife)

The western Joshua tree is a [candidate for protection](#) under the California Endangered Species Act. It is illegal to cut down, damage or remove the sensitive desert tree without a permit while they are under review for more lasting protection.

According to Poston, the couple believed that small trees, under a certain diameter, could legally be removed. The two own the land where the trees were and planned to build a home on the lot.

"But that's not accurate, obviously," he said. "It doesn't matter if it's a foot tall or 20 feet tall, it's under that protection."

By the time a state wildlife officer arrived at the scene, three dozen Joshua trees were buried in a "giant hole" that was freshly covered over, according to Patrick

Foy, a captain with the state Department of Fish and Wildlife's law enforcement division.

Ultimately, the owner-developer couple rehired the backhoe operator who had buried the trees to dig them back up.

The county district attorney's office filed 36 misdemeanor charges against Walter and Nordberg-Walter, one for each destroyed tree. Each charge carried a fine up to \$4,100 and/or six months in jail. On Tuesday, a judge placed the couple in a diversion program. As part of their agreement, each agreed to pay \$9,000 in fines.

A portion of the overall fine has been paid, and the Walter family can earn credit toward it by completing volunteer work for Joshua Tree National Park or the Mojave Desert Land Trust, according to a news release.

Poston said he sees a few cases a year involving threatened or endangered species, "but usually it's wildlife." This is the first case he has prosecuted involving Joshua trees. The flora has enjoyed legal protection for nearly a year.

In September, the California Fish and Game Commission [granted the trees temporary endangered species status](#) after environmentalists petitioned for its protection. Supporters say the species faces the [threat of extinction](#) amid climate change, wildfires and habitat destruction from urban sprawl.

A yearlong review process is underway, and a final decision by the commission is expected this year.

Incidental Take Permit (ITP) Information

March 11, 2021

Candidacy

Western Joshua tree became a candidate species under the California Endangered Species Act (CESA) on October 9, 2020. As a candidate species, western Joshua tree has full protection under CESA and any take of the species, including removal or relocation of western Joshua tree or similar actions, require authorization under CESA. In addition, the exceptions and permitting process under the California Desert Native Plants Act and the separate exceptions under the Native Plant Protection Act do not apply to western Joshua tree in any manner.

Take

Any activity that results in the removal or relocation of a western Joshua tree, or any part thereof, or impacts the seedbank surrounding one or more western Joshua trees may result in "take" of the species which is prohibited by State law unless otherwise authorized. Therefore, the California Department of Fish and Wildlife (CDFW) recommends that CESA authorization be obtained from CDFW prior to such impact. For projects where "take" is incidental to carrying out an otherwise lawful activity, an Incidental Take Permit (ITP) may be obtained from CDFW.

I do not have western Joshua tree or will not impact western Joshua tree; I need to inform my (town/city/county) that no permit is required from CDFW.

It is the obligation of project proponent to ensure that "take" of western Joshua tree does not occur or to obtain appropriate CESA authorization. CDFW does not provide written determinations that a permit is not required.

Permitting/Mitigation Process

Details of the application process and requirements to obtain a California Endangered Species Act (CESA) ITP from CDFW are described here: <https://wildlife.ca.gov/Conservation/CESA/Permitting>. As a brief summary, the ITP process requires preparation of an application and payment of fees. The application requires several elements described in regulation including analysis of project impacts, mitigation measures, funding, and other elements. Preparation of an application and related mitigation often requires biological studies and professional consultation services. Mitigation will vary from project to project but could include project revisions to reduce or minimize impacts on-site, and compensatory off-site mitigation to acquire, conserve, and manage western Joshua trees and their associated habitat. Before CDFW may issue an ITP, compliance with the California Environmental Quality Act is required.

What is the timeline to obtain a permit (ITP)?

The timelines to obtain an incidental take permit (ITP) are described in California Code of Regulations Title 14 (14 CCR) Section 783.5 titled "Incidental Take Permit Process". The regulatory timelines provide 30 days for the California Department of Fish and Wildlife (CDFW) to review an application for completeness. Once an application is deemed complete by CDFW, regulations provide an additional 90 days to 150 days to issue an ITP. In practice, the timeline for obtaining an ITP can range anywhere from 4-6 months or longer. CDFW must comply with the California Environmental Quality Act (CEQA) when issuing an ITP. The CEQA process has timelines separate from those for issuance of an ITP.

Thank you, Julia Karo, *Environmental Scientist - Inland Deserts Region* - Julia.Karo@wildlife.ca.gov

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #43090, Certified Arborist #WE-8024A, CDFW: SCP #11586

Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595

Court Upholds Protection for California's Western Joshua Trees***Judge Rejects Effort to Strip State Endangered Species Act Safeguards*****February 22, 2021** – FRESNO, CA. - [Brendan Cummings](#) (951) 768-8301; bcummings@biologicaldiversity.org

A Fresno County Superior Court judge has [rejected](#) an effort by construction & real estate interests, along with city of Hesperia, to strip away legal protections that currently apply to the imperiled western Joshua tree. "This is a critical victory for these beautiful trees and their fragile desert ecosystem," said Brendan Cummings, the Center for Biological Diversity's conservation director, and a Joshua Tree resident. "If Joshua trees are to survive the inhospitable climate, we're giving them, the most important thing we must do is protect their habitat, and this decision ensures recent protections will remain in place."

On Sept. 22, 2020, the California Fish and Game Commission [unanimously voted](#) to grant western Joshua trees candidate status under the California Endangered Species Act, giving them legal protection during a yearlong review to determine whether the species should be formally protected. The commission's protection decision came in response to a [petition](#) from the Center. On Oct. 21, 2020, a coalition of interests opposed to protection of the Joshua tree filed a lawsuit in Fresno County Superior Court seeking to overturn the commission's decision and moved to set aside the tree's candidate status. In her ruling last week rejecting the stay request, Judge Kapetan found that "it is clear to the court that a stay would be against the public interest."

In rejecting arguments that threats to the species are not immediate, the court found "that the Joshua tree is under a real, significant and immediate threat from development, fire, drought, and climate change."

The growing popularity of Joshua Tree National Park has spurred a building boom in Joshua Tree and adjacent communities, resulting in the widespread cutting down of the namesake trees to make way for vacation rentals and second homes. Recent state protection makes killing Joshua trees illegal absent special permits. Among the entities seeking to overturn state protection of western Joshua trees is the High Desert Association of Realtors.

"It's a sad irony that the very real estate agents marketing the iconic beauty of Joshua trees are also leading the charge to kill them," said Cummings. "Fortunately, their misguided and selfish lawsuit was not successful."

The Fish and Game Commission is scheduled to make a final decision on listing the western Joshua tree as a threatened species by the end of the year. If the species wins permanent protection, state and local agencies will have to manage threats to them, including developing a recovery plan outlining a strategy to protect the species in the face of climate change and other threats.

Background

While the direct killing of western Joshua trees by developers is the most visible threat, climate change and fire are also pushing the species towards extinction. Recent studies show Joshua trees are dying off because of hotter, drier conditions, with very few younger trees becoming established. Even greater changes are projected over the coming decades. Scientists in 2019 projected that the Joshua tree will be largely gone from its namesake national park by the end of the century.

Prolonged droughts are projected to be more frequent and intense over the coming decades, shrinking the species' range and leading to more tree deaths. Higher elevations, where Joshua trees might survive increasing temperatures and drying conditions, are at risk of fire due to invasive non-native grasses.

Approximately 40% of the western Joshua tree's range in California is on private land, with only a tiny fraction protected from development. Current projections show that virtually all this habitat will be lost without stronger legal protections for the trees. Joshua trees comprise two distinct species, the western Joshua tree (*Yucca brevifolia*) and eastern Joshua tree (*Y. jaegeriana*). The two species occupy different areas of the desert, are genetically and morphologically distinguishable, and have different pollinating moths. Only the western species is currently protected under the California Endangered Species Act.

"Before state protections went into effect, developers were bulldozing Joshua trees by the thousands to build roads, powerlines, strip malls and vacation rentals," said Cummings. "If these beautiful plants are to have any hope of surviving in a warming world, we have to stop killing them. The California Endangered Species Act may be the only hope for saving these iconic symbols of the Mojave Desert."

The lawsuit was filed by the California Construction and Industrial Materials Association, California Business Properties Association, California Cattlemen's Association, California Farm Bureau Federation, California Manufacturers and Technology Association, High Desert Association of Realtors, and the city of Hesperia. The Center and the solar company Terra-Gen separately intervened in the lawsuit to defend the commission's decision.

The case is California Business Properties Association v. California Fish and Game Commission, Case # 20CECG03125

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California Commission OKs Petition Protecting Joshua Trees Under State's Endangered Species Act*Iconic Desert Plant Legally Protected During Yearlong Review* – by [Center for Biological Diversity](#) September 23, 2020.

SACRAMENTO, Calif. September 22, 2020— The California Fish and Game Commission agreed today to accept a petition protecting western Joshua trees under the state's Endangered Species Act, granting legal protection to the iconic trees for at least a year. Joshua trees are threatened by climate change, fire and habitat destruction from urban sprawl and other development in their Mojave Desert home.

"This is a huge victory for these beautiful trees and their fragile desert ecosystem," said Brendan Cummings, the Center for Biological Diversity's conservation director, and a Joshua Tree resident. "If Joshua trees are to survive the inhospitable climate, we are giving them, the first and most important thing we can do is protect their habitat. This decision will do that across most of their range."

Today's vote grants Joshua trees candidate status under the California Endangered Species Act, giving them legal protection during a yearlong review to determine whether the species should be formally protected under the state law.

The vote affirms the California Department of Fish and Wildlife's April [recommendation](#), which came in response to a [petition](#) from the Center.

Commissioners also agreed to give developers of 15 shovel-ready industrial solar projects in Kern and San Bernardino counties so-called "take authorization," allowing them to kill Joshua trees. In exchange the developers must pay into a state fund that will be used to purchase and permanently preserve Joshua tree habitat. This exemption applies only during the review period and requires developers to pay approximately \$10,000 an acre, based on a ratio of 1.5 acres for every acre of occupied habitat that is destroyed.

"This summer's raging wildfires, heatwaves and hurricanes confirm our dire climate crisis and the need to urgently achieve 100% renewable energy," said Cummings. "But the best places to put solar panels are on rooftops, parking lots and degraded farmland, not pristine desert habitats. We disagree that these exemptions are needed, but we understand the commission's decision."

Recent studies show Joshua trees are dying off because of hotter, drier conditions, with very few younger trees becoming established. Even greater changes are projected over the coming decades. Earlier this year scientists projected that the Joshua tree will be largely gone from its namesake national park by the end of the century.

Last year the U.S. Fish and Wildlife Service denied federal protection to the species.

"Joshua trees face extinction in the wild and there's not much time left to save them. Human-caused climate change is making matters worse," said Cummings. "It's critical that the state stood up for these spectacular trees, because the federal government, local officials and for-profit corporations are facilitating their destruction."

Climate change could wipe out western Joshua trees, which already are failing to reproduce at drier, lower elevations. Prolonged droughts are projected to be more frequent and intense over the coming decades, shrinking the species' range and leading to more tree deaths. Higher elevations, where Joshua trees might survive increasing temperatures and drying conditions, are at risk of fire due to invasive grass and plant species. Habitat loss and degradation are also major threats. Outside of Joshua Tree National Park, off-road vehicle use, cattle grazing, powerlines and pipelines and large-scale energy projects are destroying habitat. Approximately 40% of the western Joshua tree's range in California is on private land, with only a tiny fraction protected from development. Current projections show that virtually all of this habitat will be lost without stronger legal protections for the trees.

"Developers are bulldozing Joshua trees every day to build roads, powerlines, strip malls and vacation rentals," said Cummings. "If these beautiful plants are to have any hope of surviving in a warming world, we have to stop killing them. The California Endangered Species Act may be the only hope for saving these iconic symbols of the Mojave Desert."

The Joshua tree has recently been recognized as composed of two distinct species, the western Joshua tree (*Yucca brevifolia*) and the eastern Joshua tree (*Y. jaegeriana*). The two species occupy different areas of the desert, are genetically and morphologically distinguishable, and have different pollinating moths.

Today's vote addresses the western species. The western Joshua tree has a boomerang-shaped range stretching from Joshua Tree National Park westward along the northern slopes of the San Bernardino and San Gabriel Mountains, through the Antelope Valley, northward along the eastern flanks of the southern Sierra Nevada and eastward to the edges of Death Valley National Park and into Nevada.

The eastern Joshua tree's range in California is centered in the Mojave National Preserve and extends east into Nevada, Arizona, and Utah.

If Joshua trees win protection under California's Endangered Species Act, state and local agencies will have to manage threats to them, including developing a recovery plan outlining a strategy to protect the species in the face of climate change.

Mojave Desert fire in August destroyed the heart of a beloved Joshua tree forest**September 6, 2020, BETTINA
BOXALL -LOS ANGELES TIMES***J.T. Sohr, fire engine captain in the Mojave National Preserve, walks in the charred Cima Dome Joshua tree forest.*

The first day of California's lightning siege, thunderstorms rolled across the Mojave National Preserve, slicing the afternoon sky with dry strikes. Smoke rose from the top of Cima Dome, marking the start of a wildfire that would ravage the heart of one of the world's largest Joshua tree forests. A drive down Cima Road that only weeks ago was a trip through a magical landscape is now a tour of the world's biggest Joshua tree graveyard. Most of the charred trees are still standing. In the evening light, their leaves, bleached with scorch, take on an eerie beauty. But they are doomed, and the 43,273



acres of the Dome fire are forever transformed.

"That stand with that many big trees was developing for thousands of years, said Todd Esque, a U.S. Geological Survey research ecologist who has studied the forest. "We won't replace that. The Aug. 15 Dome fire was not a surprise. In 2005, roughly 1 million acres of the Mojave burned, including part of the preserve to the southeast of Cima Dome. "We were expecting this to happen. We've been talking about this for years, said Debra Hughson, the preserve's science, and resource chief.

Fire has emerged as the top threat to the Mojave in recent decades. The relentless spread of invasive grasses across the desert is making it more flammable, increasing the number and size of wildfires in ecosystems that rarely burned and are ill-adapted to survive flames.

When preserve fire captain J.T. Sohr and a handful of engine crews reached the source of smoke rising above Cima Dome that Saturday afternoon, winds were pushing the roughly 70-acre blaze in all directions. The temperature was in the mid-90s — hot for the dome's 5,000-foot elevation. Relative humidity was in the mid-teens. The summer monsoon season, which normally delivers about half the area's rainfall, had been a bust. Vegetation was dry.

The fire chewed into wilderness areas that firefighters couldn't reach. A little more help arrived Saturday evening. But with lightning fires erupting all over California, Sohr's initial requests for additional support went unfilled. He pulled back the small band of 16 firefighters and they bedded down for the night. By noon the next day, the fire had ballooned to 15,000 acres. Winds gusting to 20 mph continued to drive flames through Joshua trees and an understory of native shrubs and grass peppered with red brome, an ubiquitous invader.

On Sunday, a team of six smoke jumpers arrived from Redding, along with a helicopter, more engines and a couple of air tankers. The fire began to peter out on the third day, when winds died down and the flames hit rocky areas. On Aug. 20, half an inch of rain fell on the burn. The 68-square-mile fire was contained on Aug. 24.

An old adobe bunkhouse at Valley View Ranch burned when the Dome fire swept through part of the Mojave National Preserve. The fire burned more than 1.3 million Joshua trees, an old adobe bunkhouse at Valley View Ranch and a historic ranch house and outbuildings at Kessler Springs Ranch. "It could have been a lot worse, said preserve superintendent Mike Gauthier, noting that vast expanses of the Joshua tree woodland were untouched.

Preserve botanist Drew Kaiser estimated that about a quarter of the sprawling Cima Dome Joshua tree forest — which extends beyond the preserve boundaries north of Interstate 15 — was destroyed. But that quarter is a place that some desert lovers call one of their favorite spots on the planet. "I lost the center of my world last week. I'm feeling a kind of vertigo of the soul, Chris Clarke of the National Parks Conservation Assn. wrote in a blog post in the fire's aftermath.

COLEMAN OBSERVATION: Annual rainfall is highly-variable, and this 2011/22 season (October thru April) is higher than normal at this point in the season, but this can mean little like previous years where a statistically high precipitation in October 2019 was then followed by very minimal rainfall for the remainder of the season, therefor overall was considered a drought year.

'Fires of hell': How dry lightning has sparked some of California's biggest infernos**Aug. 23, 2020**

He recounted how he had camped on the dome for more than two decades, shedding the stress of urban life and personal problems while stars paraded across the desert sky. "There's something about that landscape that taps into something really primal with people, Esque said. "I get a rush when I see it. It will be "a little bit scary, he added, to see the fire's devastation firsthand when he checks his research plots. Although the Cima Dome Forest is known as the world's largest Joshua tree woodland, Esque and another researcher have documented a bigger stand and a thicker one elsewhere in the Mojave.

The dome forest nonetheless stands out for its size and a density that preserve scientists suspect may not be wholly natural. "This dense Joshua tree forest might actually be an artifact of cattle grazing, Hughson said. She cites two photographs that were taken in the same spot. There are no Joshua trees in the first one, from the early 1900s. There are many in the 2000 photo. Debra Hughson, science chief of the Mojave National Preserve, talks about the ecological effects of the Dome fire.

Cattle grazing, which started in the area in the late 1800s and continued until after the preserve was established by the 1994 California Desert Protection Act, left a lasting mark on the desert.

Hooves disturbed the soil. What the animals liked or didn't like to eat changed the vegetation. Seeds of alien annual grasses that were deliberately and accidentally introduced by settlers hitched rides on cattle who carried them across the range. On the dome, cattle munched on native perennial bunch grasses but left native blackbrush, one of the desert's most flammable plants, alone. Blackbrush also acts as an important nursery plant for Joshua tree seeds by shading them and hiding them from hungry rodents.

In that way, preserve scientists theorize that cattle grazing helped create the dome's unusually thick Joshua tree stands — but also set the stage for last month's conflagration. Hughson and Kaiser don't have early accounts to prove it, but they believe that grazing changed the dome from a more open savanna of native grasses studded with big old Joshua trees to a dense Joshua woodland that was undergrown by a mixture of native shrubs, bunch grasses and invasive red brome. "The fire would not have burned so hot had it not been overgrazed and didn't have an increased fuel load, Kaiser said. A less intense fire would have been less disastrous. As it is, of the estimated 1.33 million burned Joshua trees, Kaiser says fewer than 200,000 are topped by green leaves and have any chance of survival.

"The Joshua tree forest was not sustainable, Hughson said. Now, she added, "what we are afraid of and want to avoid is seeing the charred desert floor turn into a permanent carpet of red brome that fuels more and more fire. Drew Kaiser checks for red brome, an invasive grass, in an unburned portion of the Joshua tree forest. Kaiser stood among piles of ash — all that was left of incinerated Joshua trees and yuccas in an area where the blaze was especially hot, consuming the vegetation and even the root systems of native grasses and shrubs. "This is the area I'm most concerned about, he said. But he spied a little patch of hope: a small, unburned spot with cholla, blackbrush and Mormon tea.

It was a place where the preserve could plant a few baby Joshua trees and hope they survived long enough to produce seeds that rodents would cache, slowly seeding the surrounding area. Recovery plans will focus on doing small Joshua tree plantings in selected areas and keeping the red brome from running wild, Kaiser said. "I know there has been a lot of heartbreak and distress and people want it to come back. But we don't create artificial gardens, he said. "We restore the ecological processes that drive the native vegetation

A Joshua tree sprouts in an area that burned in the 2005 Hackberry Complex fire. Regardless, Joshua tree restoration efforts are very much in the experimental stages and have yet to succeed on a large scale. Seeds blow away in the wind or get eaten by rodents.

Plantings have to be watered for the first couple of years and caged to protect them from nibbling rabbits. A few years of drought can kill youngsters. "The environmental conditions that have to line up for a Joshua tree to make it are somewhat remarkable, Esque said.

Fortunately, the vast majority of the Dome burn was of moderate severity, leaving the root systems of many native shrubs and grasses intact. With some luck, Kaiser said, next year nature will launch its own recovery as big galleta, black grama and other native perennial grasses start poking through the ashen ground. Resprouting banana yucca, paper bag bush, California buckwheat and other natives will follow, keeping the red brome in check. Wood rats and mice will spread Joshua tree seeds from unburned patches. But more fire and drought could abort that rebirth. Meanwhile, global warming is shrinking the range of Joshua trees and accentuating the swings between wet years that produce bumper crops of grassy invaders and drought that stresses the natives. "Where is this going and what is the new state we can expect to be in? Hughson wondered. Still, she said, "we're not going to give up. The Dome fire, one of hundreds of wildfires that erupted during California's lightning siege, scorched 43,000 acres in the Mojave National Preserve.

California Looks at Protections for Iconic Joshua Tree

April 13, 2020 [NATHAN SOLIS](#)

Conservationists say climate change and urban sprawl could erase the Joshua tree from California's deserts by the end of the century.



The iconic Joshua tree in California's Mojave Desert.

(CN) — The Joshua trees of the Mojave Desert may get a lifeline from California following the Trump administration's refusal to give them federal endangered species protection last year.

The emblematic species of the West face threats from urban sprawl on undeveloped wilderness and the unrelenting effects of climate change. Researchers estimate with more frequent drought and wildfires in California, most, or all of the Joshua trees in the Golden State could be gone in the next 80 years.

This past October, the Center for Biological Diversity petitioned California Fish and Game Commission to list the Joshua tree as threatened, which would require state and

local agencies to mitigate harm to the species' habitat and slow down the destruction of undeveloped land.

On Monday, the California Department of Fish and Wildlife wrote in summary memo there is "sufficient scientific information available to indicate that the petitioned action may be warranted and recommends that the petition be accepted and considered.

In its 39-page report, the California Department of Fish and Wildlife writes that the petitioners provide enough evidence on the western Joshua tree (*Yucca brevifolia*) that "identifies predation, invasive species, wildfires, climate change, and habitat loss to human development as the factors affecting the ability of western Joshua tree to survive and reproduce, stating that these factors are often related, synergistic, and collectively threaten the continued viability of the species.

Drought will likely lead to higher deaths of Joshua trees along with invasive grass species which will lead to more frequent fires according to the report's findings.

Later this summer, the state's Fish and Game Commission could take up the petition and determine if they will accept Fish and Wildlife's recommendation to consider the western species of the Joshua tree as a candidate for protection under California's Endangered Species Act.

We are elated that Joshua trees are a step closer to protection," said Brendan Cummings, the center's conservation director and a Joshua Tree resident. "These beautiful trees face huge threats that could drive them extinct in the wild. We urge the state to finalize these protections quickly so Joshua trees can survive and thrive in California for generations to come.

According to the Center for Biological Diversity, approximately 40% of the Joshua tree range in California is located on private land. Joshua Tree National Park spans an area larger than the state of Rhode Island across portions the Mojave and Colorado deserts.

The Joshua tree was identified as one species until recently, when botanists determined there are two distinct species. The petition seeks to address the species in the national park westward toward the northern slopes of the San Bernardino and San Gabriel mountains, through the Antelope Valley, north toward the southern Sierra Nevada and east to the edges of Death Valley National Park and into Nevada.

ALTEC LAND PLANNING

19531 U.S. Highway 18
Apple Valley, CA 92307

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #43090, Certified Arborist #WE-8024A, CDFW: SCP #11586

Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595

(760) 242-9917

ALTEC1Eng@gmail.com

RandyAICP@gmail.com

Drought hastens decline of the Joshua tree, California's desert symbol



JUNE 6, 2015

By **LOUIS SAHAGUN**

The current drought has hastened the decline of the Joshua tree, regarded as the symbol of California deserts.

If drought conditions continue, modeling suggests Joshua trees will lose 90% of range in 800,000-acre park.

Wildlife officials are trying to assess effects of climate change on Joshua trees and the species they harbor

Under canopies of dead angular

branches and drooping fronds, UC Riverside ecologist Cameron Barrows made his way across a forest of skeletal Joshua trees that have not reproduced in decades.

As Barrows explained, it's a tough time to be a Joshua tree. Climate change is taking an enormous toll, and the current drought has



hastened the decline of a species that is regarded as the symbol of California deserts.

"For Joshua trees, hotter, drier conditions are a problem — but a bigger problem is that what little rainfall occurs evaporates faster," Barrows said. "So, seedlings shrivel up and die before they can put down strong roots."

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The region, including nearby Joshua Tree National Park, has not reached average precipitation rates of about 4 inches in several years. So far this year, it's gotten 1.71 inches of rain.

If warmer, drier conditions continue in the coming decades, scientific modeling suggests the trees will lose 90% of their current range in the 800,000-acre park by the end of the century.

With funding from federal wildlife officials, Barrows is trying to find ways to assess the effects of climate change on Joshua trees and the many species they shelter yucca moths, skipper butterflies, termites, ants, desert night lizards, kangaroo rats and 20 species of birds including Scott's orioles, ladder-backed woodpeckers, and great horned owls.

There is more at stake than the fate of the park's estimated 2.5 million Joshua trees, said biologist Rebecca R. Hernandez, a post-doctoral fellow at UC Berkeley. "Beyond its importance as a critical refuge for desert species, the Joshua tree is a cultural signature of California's desert landscape," Hernandez said.

Joshua trees, which grow in the Mojave Desert and nowhere else, have become mainstays for movies, fashion shoots, advertising campaigns and wedding ceremonies. The one that adorned the cover of U2's 1987 album "The Joshua Tree" became a pilgrimage site for fans from around the world until it was blown over by strong winds in 2000.

The species scientists know as *Yucca brevifolia* isn't actually a tree; it's a succulent. Joshua trees grow to 40 feet high, live more than 200 years and bloom sporadically. In 2013, extensive stands were festooned with yellow and white bell-shaped blossoms that drew tourists eager to take in the scenery before the bloom wilted in the harsh desert sun.

Since they grow for about 200 years, we won't see massive die-offs in our lifetime. But we will see less recruitment of new trees.- David Smith, superintendent of Joshua Tree National Park

They were named for the biblical figure Joshua by members of a band of Mormons traveling through the Cajon Pass back to Utah in 1857. They imagined the trees as shaggy prophets, their outstretched limbs pointing the way to their promised land. During the 1980s, development in desert boom towns such as Lancaster and Palmdale replaced about 200,000 Joshua trees with housing tracts and shopping centers. Many more were removed over the last decade to make way for renewable energy facilities.

In the 1990s, moist El Niño conditions triggered explosive growth of exotic grasses among the trees. Feeding off nitrogen-laden smog wafting in from Los Angeles, the grasses have established themselves, leaving Joshua tree forests vulnerable to large-scale brush fires such as one that charred 14,000 acres in 1999.

Now, the biggest threat is climate change, which most of the trees may not be able to overcome. The globe's average temperature is expected to rise roughly by an additional 5 degrees to 7 degrees Fahrenheit by the end of the century, scientists say.

Computer models depicting the distribution of suitable habitat after a roughly 5-degree Fahrenheit rise show Joshua trees retaining just 2% to 10% of their current range, according to studies led by Barrows and published in the scientific journal Biological Conservation.

In a collaborative effort launched this year, the park, the U.S. Fish and Wildlife Service and a research team led by Barrows organized the first long-term project designed to monitor the Joshua trees' responses to climate change and drought. The data, collected with help from volunteer citizen scientists from the nonprofit group Earthwatch, will create baseline information to help guide conservation decisions as Joshua trees retreat to cooler and wetter higher elevations. The group has also established monitoring stations to gauge changes in the distributions of Joshua trees and species they support.

Will the region have to change its name one day to, say, "Creosote National Park"?

"Nah," Barrows said with a smile. "There's still going to be enough Joshua trees around here and there."

Barrows scanned the drought-stricken Joshua tree woodlands for signs of new life. Minutes later, he spotted a knee-high bouquet of dagger-like leaves. "Look here, a baby," he said, smiling down on the Joshua tree he estimated was about 10 to 15 years old. "Will it survive. Depends on how much rain we get."

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 SAN BERNARDINO COUNTY	Land Use Services Building and Safety Division Information Bulletin	Number: IB-0016
		Code References: 2019 CBC 2019 CRC
Building Official Signature:	Jack Leonard, PE, CBO	Original Effective Date: October 27, 2020
Subject: Joshua Trees		

1.0 PURPOSE

The purpose of this Information Bulletin is to clarify the requirements related to work conducted on a site designated as potentially including Joshua trees.

2.0 HISTORY

Original Effective Date: October 27, 2020

3.0 BACKGROUND

Joshua trees are now protected by the State of California as a candidate for listing as an endangered species. At this time, the County cannot issue a permit to take (by removal or transplanting) any Joshua tree. Also, construction activity near the Joshua may impact the roots and damage the plant. Therefore, any proposed construction within forty (40) feet of an existing Joshua tree must be evaluated by a Desert Native Plant Specialist to certify avoidance of impact to the Joshua tree.

Upon application for a building permit, Building and Safety will notify you if your parcel is within an area that potentially contains Joshua trees. If your parcel is within one of these areas, prior to proceeding with your project, there are two options available for your project to proceed: a) Field Investigation or b) Report by a Desert Native Plant Specialist determining no Joshua trees are affected by the proposed grading/construction.

3.1 EXCEPTION

If sufficient evidence can be presented to show that the proposed grading/structure is not within forty (40) feet of a Joshua tree, the Building Official may waive the requirement for a Field Investigation or Report. Evidence would include: On-site photos showing the location of the proposed grading/structure in relation to existing Joshua trees, with an accompanying site plan drawn to scale, showing the limits of grading/construction and all existing Joshua trees. If, after Building Official evaluation, it is determined that no Joshua trees will be affected by the development, the project can proceed without any Field Investigation or Report.

4.0 FIELD INVESTIGATION PROCESS

To request a Field Investigation, an applicant will need to apply for a Residential Alteration Permit through the County's EZOP website, listing the description as "Field Investigation to Determine On-Site Joshua Trees" and pay the investigation fee once invoiced by staff. A Building Inspector will coordinate the site visit with the applicant. The investigation will entail photo documentation and an evaluation on-site to determine if any Joshua tree will be affected by the project. Once the investigation is complete, the applicant will receive a "Field Investigation Report" outlining the finding.

The County's EZOP website can be accessed at the following link:
<https://ezop.sbcounty.gov/citizenaccess>

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

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Land Use Services
Building And Safety Division
Information Bulletin
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4.1 FIELD INVESTIGATION FINDINGS

If it is determined that no Joshua trees will be affected by the proposed grading/construction, the project can proceed without any additional requirements.

If it is determined that the proposed grading/construction would require the taking (by removal or transplanting) of any Joshua tree, the project will have to be redesigned to avoid the impact to the trees.

If it is found that the proposed grading/construction is within forty (40) feet of a Joshua tree and the applicant does not desire to redesign the project, a report, prepared by a Desert Native Plant Specialist, can be submitted. In order for the project to proceed without redesign, the report must conclude that the proposed grading/construction will not detrimentally affect any Joshua tree.

5.0 REPORT BY A DESERT NATIVE PLANT SPECIALIST

An applicant has the option to submit a report, prepared by a Desert Native Plant Specialist, to the County for review. The report must include a site plan, drawn to scale, showing the location of proposed grading/construction, as well as all existing Joshua trees, on-site photos showing all Joshua trees on-site in relation to the proposed grading/construction. The Desert Native Plant Specialist must provide their findings, based on their evaluation, and the report must be signed and include all pertinent license/qualifications information.

5.1 DEFINITION OF DESERT NATIVE PLANT SPECIALIST

A Desert Native Plant Specialist includes the following:

- a) A certified arborist;
- b) An individual with a four-year college degree in ecology or fish and wildlife related biological science and at least two years of professional experience with relocation or restoration native California desert vegetation; or
- c) An individual with at least five-years professional experience with relocation or restoration of native California desert vegetation

6.0 REQUIREMENTS SUBJECT TO CHANGE

San Bernardino County Land Use Services Department and the State of California Fish & Game Commission are exploring mitigation measures related to relocation and/or removal of Joshua trees. Due to this, the above requirements may be subject to change.

Section 749.11 Title 14, CCR, is added to read:**749.11 Special Order Relating to Take of Western Joshua Tree (*Yucca brevifolia*) During Candidacy Period.**

The commission authorizes the take of western Joshua tree during the candidacy period for each of the activities described in this section, subject to the terms and conditions specified for each activity.

(a) Definitions.**(1) Desert native plant specialist means:**

(A) An arborist certified by the International Society of Arborists; or

(B) An individual with a four-year college degree in ecology or fish and wildlife related biological science from an accredited college and at least two years of professional experience with relocation or restoration of native California desert vegetation; or

(C) An individual with at least five years of professional experience with relocation or restoration of native California desert vegetation.

(2) Western Joshua tree means an individual western Joshua tree (*Yucca brevifolia*) that has emerged from the ground, regardless of age or size, including all stems that have emerged from the ground within a one-meter radius measured from a single point at the base of the largest stem.

(b) The department may issue a permit to authorize either the removal of a dead western Joshua tree or the trimming of a western Joshua tree. The project proponent or its agent may remove a detached dead western Joshua tree or detached limb of a western Joshua tree. All other removals and all trimming of western Joshua trees authorized by permits issued pursuant to this subsection shall be completed by a desert native plant specialist. The department may issue permits pursuant to this subsection, without payment of mitigation fees or other mitigation, provided that the dead western Joshua tree or any limb(s) to be removed:

(1) Has fallen over and is within 30 feet of a structure; or

(2) Is leaning against an existing structure; or

(3) Creates an imminent threat to public health or safety.

(c) Permit Process.

(1) A property owner seeking a permit pursuant to subsection (b) shall submit a permit request to the Department by emailing to WJT@wildlife.ca.gov, or mailing to California Department of Fish and Wildlife, Habitat Conservation Planning Branch, Attention: Western Joshua Tree Permitting, P.O. Box 944209, Sacramento, CA 94244-2090 the following information:

(A) The name, telephone number, mailing address, and email address of the property owner seeking the permit.

ALTEC LAND PLANNING

19531 U.S. Highway 18
Apple Valley, CA 92307

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Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595

(760) 242-9917

ALTEC1Eng@gmail.com

RandyAICP@gmail.com

(B) The street address of the property on which the western Joshua tree to be removed or trimmed is located. If no street address is available, the property owner may include the assessor's parcel number.

(C) Photographs of the western Joshua tree that visually depict either:

1. That the tree is dead and meets one or more of the three requirements of subsection (b); or
2. The specific limb or limbs to be trimmed and that the limb or limbs to be trimmed meet one or more of the three requirements of subsection (b).

(2) Within thirty days of receipt of a request for a permit pursuant to subsection (c)(1), the department shall either issue a permit allowing for the removal or trimming or deny the request if the request does not demonstrate a permit can be issued pursuant to this section.

(A) If the department issues the permit, it shall do so by email, or by U.S. mail if the permit request was received by mail, and it will provide the property owner sixty days in which to complete the removal or trimming.

(B) If the department denies the permit request, the property owner may resubmit the request with additional information and photographs. Resubmissions pursuant to this subsection shall be processed as new permit requests.

(3) Within thirty days of completing the removal of a dead western Joshua tree or trimming one or more limbs from a western Joshua tree in accordance with a permit issued pursuant to this section, to demonstrate compliance with this section the property owner shall by mail or email photographs of the site at which the dead western Joshua tree was removed or the western Joshua tree that was trimmed pursuant to the permit.

(d) Limitations.

(1) Nothing in this section is intended to be or shall be construed to be a general project approval. It shall be the responsibility of each project proponent receiving take authorization pursuant to this section to obtain all necessary permits and approvals and to comply with all applicable federal, state, and local laws.

(2) Nothing in this section is intended to or shall be construed to limit the terms and conditions, including those relating to compensatory mitigation, the department includes in incidental take permits for western Joshua tree issued pursuant to Fish and Game Code section 2081, subdivision (b).

Note: Authority cited: Sections 399 and 2084, Fish and Game Code. Reference: Sections 399 and 2084, Fish and Game Code.

Emergency Regulatory Language**Section 749.10 Title 14, CCR, is added to read:****749.10 Special Order Relating to Take of Western Joshua Tree (*Yucca brevifolia*) During Candidacy Period.**

The commission authorizes the take of western Joshua tree during the candidacy period for each of the activities described in this section, subject to the terms and conditions specified for each activity.

(a) Incidental take associated with development of solar energy projects in Kern and San Bernardino counties.

(1) Project list.

(A) Aratina Solar Farm, 8minute Solar Energy/64NB 8ME LLC, Kern County.

(B) Bellefield Solar Farm, 8minute Solar Energy/50LW 8ME LLC, Kern County.

(C) Big Beau Solar, EDF Renewables, Inc./Big Beau Solar, LLC, Kern County.

(D) Camino Solar, Avangrid Renewables, LLC/Aurora Solar, LLC, Kern County.

(E) Chaparral Solar, First Solar, Inc./Chaparral Solar, LLC/Chaparral Springs, LLC, Kern County.

(F) Edwards AFB Solar, Terra-Gen Power Holdings II, LLC/Edwards Solar, LLC, Kern County.

(G) Kudu Solar Farm, 8minute Solar Energy/69SV 8ME LLC, Kern County.

(H) Rabbitbrush Solar, First Solar, Inc./Rabbitbrush Solar, LLC, Kern County.

(I) RE Gaskell West 2, Recurrent Energy, LLC/ RE Gaskell West 2 LLC, Kern County.

(J) RE Gaskell West 3, Recurrent Energy, LLC/ RE Gaskell West 3 LLC, Kern County.

(K) RE Gaskell West 4, Recurrent Energy, LLC/ RE Gaskell West 4 LLC, Kern County.

(L) RE Gaskell West 5, Recurrent Energy, LLC/ RE Gaskell West 5 LLC, Kern County.

(M) Rubita Solar, SF Rubita, LLC, San Bernardino County.

(N) Willow Springs Solar 3, First Solar, Inc./Willow Springs Solar 3, LLC/Chaparral Springs, LLC, Kern County.

(O) Windhub Solar B, First Solar, Inc./Windhub Solar B, LLC, Kern County.

(2) Definitions.

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #43090, Certified Arborist #WE-8024A, CDFW: SCP #11586

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(A) Project impact area means all areas in which there will be permanent or temporary impacts to an individual western Joshua tree and the area around each western Joshua tree, defined by a radius, as measured from a single point at its trunk, of:

1. 40 feet for western Joshua trees five meters or greater in height.
2. 12 feet for western Joshua trees one meter or greater but less than five meters in height.
3. 6 feet for western Joshua trees less than one meter in height.

If the areas around individual western Joshua trees overlap, the area of overlap shall be counted only once to avoid over-counting in assessing the project impact area.

(3) Take authorization.

The commission authorizes each solar project listed in subsection (a)(1) to take western Joshua tree on the project site, in accordance with the project specifications provided to the department pursuant to this section and subject to the terms and conditions set forth in subsection (a)(4).

(4) Take of western Joshua tree.

(A) Prior to removing any western Joshua tree or engaging in ground-breaking activities within a project site, each project proponent shall conduct a complete census (count) of all western Joshua trees within the project site.

1. The census shall be conducted by one or more qualified biologist(s), approved in advance in writing by the department, which approval shall not be unreasonably withheld or delayed.

2. The census shall be conducted by walking transect surveys so that 100 percent visual coverage of the project impact areas is achieved.

3. For purposes of calculating the number of acres to be mitigated and for purposes of providing information for the department's status review of western Joshua tree to be prepared pursuant to Fish and Game Code Section 2074.6, the census shall count and classify western Joshua trees by height into the following three categories: trees less than one meter in height, trees one meter or greater but less than five meters in height, and trees five meters or greater in height.

(B) Within six months of the effective date of this section and prior to removing any western Joshua tree or engaging in ground-breaking activities within project impact areas, the qualified biologist shall prepare, and the project proponent shall submit to the department, a Tree Census Report for department review and approval. Within 15 days of receipt, the department shall either approve the Tree Census Report or inform the project proponent in writing of any additional information required for its approval. The Tree Census Report shall contain, at a minimum, the following:

1. The name(s) and affiliation of the qualified biologist(s) who conducted the census.
2. The date(s) of the census.

3. A map of the project site, indicating the total project footprint and all project impact areas.

4. The number of acres in the census area.

5. The distance between transects.

6. A map of the census area that depicts the number and location of western Joshua trees visually identified.

7. Photographs of the project impact area, including at a minimum two photographs per acre depicting different aspects, such as east and south orientation, and a visual representation of the scale of the height of the trees in the photographs.

8. The number of western Joshua trees in each of the three height categories defined in subsection (a)(4)(A)3.

9. The total number of acres to be mitigated, as calculated pursuant to subsection (a)(4)(F).

(C) The project proponent shall limit herbicide use for invasive plant species and shall use herbicides only after it has documented that hand or mechanical efforts are infeasible and submitted that documentation to the department. To prevent drift, the project proponent shall apply herbicides only when wind speeds are less than seven miles per hour. All herbicide application shall be done by a licensed applicator in accordance with this subsection and all applicable federal, state, and local laws and regulations.

(D) The project proponent shall submit as-built development plans in portable document format (PDF) to the department at CESA@wildlife.ca.gov within 90 days of completing all construction and ground-disturbing activities. The as-built plans shall:

1. Delineate and quantify the extent of permanent project features, including roads, utilities, and all other facilities associated with the project.

2. Include an estimate of the permanent disturbance area.

3. Be at a scale of 1":250' (one inch to 250 feet) or smaller.

4. Be derived from survey data acquired after project construction has been completed and shall be verified by the project proponent and the qualified biologist(s).

(E) Compensatory mitigation ratios for impacts to western Joshua tree shall be determined by the functional quality of the habitat based on the size and reproductive class of trees within the project impact area as confirmed in the department-approved census. The compensatory mitigation ratio for impacts to western Joshua tree shall be at 1.5:1 of the project impact area as confirmed in the department-approved census.

(F) The number of acres to be mitigated shall be calculated by multiplying the total number of acres of the project impact area by the applicable mitigation ratio set forth in subsection (a)(4)(E).

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(G) To satisfy the compensatory mitigation requirement, prior to commencing any project activities in areas that may contain western Joshua trees, the project proponent shall pay a mitigation fee to be deposited into the Western Joshua Tree Mitigation Fund established pursuant to subsection (a)(5). The fee for each project shall be \$10,521.95 per acre to be mitigated, as calculated pursuant to subsection (a)(4)(F).

(5) The department shall establish a Western Joshua Tree Mitigation Fund to receive project fees required by subsection (a)(4)(G). The department shall ensure the fund is expended for the purpose of addressing threats to western Joshua tree, including but not limited to, acquiring and conserving western Joshua tree mitigation lands to offset impacts of the projects listed in subsection (a)(1). Prior to removing any western Joshua tree or engaging in ground-breaking activities within project impact areas, each participating project listed in subsection (a)(1) shall contribute the sum of \$10,000 to cover the account fees and the cost of retaining a land acquisition specialist to assist the department in locating, acquiring, and conserving the mitigation lands.

(6) Credit for existing mitigation.

(A) If a project listed in subsection (a)(1) has already completed or is legally obligated to complete compensatory mitigation for take of or impacts to western Joshua tree woodlands, the project proponent may elect to provide the department with information about the project impacts, the mitigation obligation, and all compensatory mitigation land acquired and conserved. The department shall assess this information and, if it determines in its reasonable discretion that the mitigation land has comparable western Joshua tree density as the density in the project impact area or is otherwise reasonably comparable in western Joshua tree habitat quality to the project impact area and is subject to a conservation easement or reasonably comparable instrument with adequate management funding, the department shall credit the project at a 1:1 ratio for all such mitigation lands acquired by the project proponent.

(B) If a project listed in subsection (a)(1) has already completed or is legally obligated to complete compensatory mitigation for take of or impacts to a species other than western Joshua tree, the project proponent may elect to provide the department with information about the project impacts, the mitigation obligation, all compensatory mitigation acquired and conserved, and the existence of suitable habitat for and individual western Joshua trees on the mitigation land. The department shall assess this information and, if it determines in its reasonable discretion that the mitigation land has comparable western Joshua tree density as the density in the project impact area or is otherwise reasonably comparable in western Joshua tree habitat quality to the project impact area and is subject to a conservation easement or reasonably comparable instrument with adequate management funding, the department shall credit the project at a 1:1 ratio for all such mitigation lands acquired by the project proponent.

(7) Limitations.

(A) Nothing in this section is intended to be or shall be construed to be a general project approval. It shall be the responsibility of each project proponent receiving take authorization for a project listed in subsection (a)(1) to obtain all necessary permits and approvals and to comply with all applicable federal, state, and local laws.

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Apple Valley, CA 92307

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #43090, Certified Arborist #WE-8024A, CDFW: SCP #11586

Civil Engineer: AZ#16969, CA#36293 & NV #7441, Land Surveyor CA#5413 & NV#7441, Real Estate Broker CA#836955, QSD/P CA#21595

(760) 242-9917

ALTEC1Eng@gmail.com

RandyAICP@gmail.com

(B) Nothing in this section is intended to be or shall be construed to prohibit any of the projects listed in subsection (a)(1) from electing to obtain incidental take coverage through Fish and Game Code Section 2081, subdivision (b).

(C) Nothing in this section is intended to or shall be construed to limit the terms and conditions, including those relating to mitigation ratios and compensatory mitigation, the department includes in incidental take permits for western Joshua tree.

(b) Ongoing research and monitoring.

(1) Public agencies and private parties.

(A) Take of western Joshua tree in the course of ongoing research and monitoring for this species by public agencies other than the department and by private parties is authorized provided that a written, detailed project progress report describing objectives, methods (gear, sampling schedules and locations), efforts to minimize adverse effects to the species, and estimated level of take of the species shall be provided to the department's Habitat Conservation Planning Branch chief.

(B) Take of western Joshua tree incidental to the course of research and monitoring by public agencies other than the department and by private parties is authorized subject to the restrictions in subsection (b)(1)(A).

(C) Research and monitoring activities not addressed by the procedures in subsections (b)(1)(A) and (B) may receive separate authorization for take of western Joshua tree pursuant to Fish and Game Code Section 2081.

Note: Authority cited: Sections 399 and 2084, Fish and Game Code. Reference: Sections 399 and 2084, Fish and Game Code.