

APPENDIX (Volume Two)

To February 20, 2015 DRECP Comment Letter

from

Alliance for Desert Preservation,

Mojave Communities Conservation Collaborative

Morongo Basin Conservation Association

- and -

Desert Protective Council, and Basin and Range Watch

Containing:

EXHIBITS L through O

EXHIBIT L

A Memo on the DRECP Preliminary Transmission Cost Estimates

To: Alliance for Desert Preservation

From: Pushkar Wagle, Ph.D., Senior Consultant, Flynn Resource Consultants Inc.

Date: October 23, 2014

Background:

In September 2014, Draft Desert Renewable Energy Conservation Plan (DRECP) was published.¹ Appendix K of the Draft DRECP includes a Conceptual Transmission Plan developed by Transmission Technical Group (TTG) Report identifying the level of transmission infrastructure needed for several DRECP alternatives. Alliance for Desert Preservation (ADP) has requested Flynn Resource Consultants Inc. (Flynn RCI) to develop a preliminary capital cost estimate associated with the transmission infrastructure needed to implement the Draft DRECP plan.

Preliminary Transmission Cost Estimates:

Per the scope of work approved by ADP, dated October 15, 2014, Flynn RCI has developed a range of preliminary capital cost estimates for the new 500kV delivery lines and primary connector lines for the “Alternative 1” included in the Appendix K of the Draft DRECP plan.² Based upon our preliminary analysis, we estimate the capital cost associated with the new delivery lines and primary connector 500kV lines under “Alternative 1” needed to accommodate the renewable development envisioned under DRECP will range anywhere from **\$9.75 to \$22.5 billion**.

In Table 1 below we have provided the details of the mileage and the preliminary capital cost estimates associated with the transmission projects. In order to develop the low range of the capital cost estimates, we used the capital cost of the existing Colorado River to Valley (CRV) 500 kV line (i.e., \$1,064 million or \$6.9 million per mile), whereas for the high range, we used the capital cost for the Sunrise Powerlink (i.e., \$1,900 million or \$15.8 million per mile) as the reference. The higher end of the capital cost estimate captures that some components of the transmission lines may need undergrounding. Applying the capital cost of the Tehachapi Transmission Project of nearly \$2.7 billion (or \$15.6 per mile) to the DRECP delivery lines would result in the overall capital cost of

¹ The DRECP is being prepared by a collaboration of state and federal agencies called the Renewable Energy Action Team (REAT), which includes: California Energy Commission (CEC), California Department of Fish and Wildlife (CDFW), U.S. Bureau of Land Management (BLM), and the U.S. Fish and Wildlife Service (USFWS). The Plan Area for the DRECP encompasses the Mojave Desert and Colorado/Sonoran Desert ecoregion subareas in California and includes all or a portion of the following counties: Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego.

² The **Connector** lines connect lower voltage substations (e.g., the 230/66 kV collector substations) with the higher voltage substations (e.g., the 500/230 kV collector substations). Connector lines can also connect large substations (e.g., 500 kV substations). The **Delivery** lines are 500 kV (AC or DC) and 230 kV (AC) transmission lines are used as delivery lines. Delivery lines would connect collector substations or super collector substations with the major grid substations and support the bulk power transfer of electricity between generation centers and load centers. In this analysis, delivery lines usually cross the DRECP Plan Area boundary, or are completely outside of the DRECP area.

\$22 billion (not included in Table 1), which is close to the higher end of the capital cost range.

Table 1: Preliminary Capital Cost Estimates of the New Delivery Lines and Primary Connector Lines Identified in Draft DRECP Report

Delivery Lines*	Total Miles**	# of Segments	Estimated Capital Cost*** (M\$)	
			Low (CRV)	High (Sunrise)
Colorado River to Valley 500 kV line	155	1	\$1,064	\$2,454
Devers to Vincent 500 kV line	117	1	\$803	\$1,853
Devers to Rancho Vista 500 kV line	60	1	\$412	\$950
Imperial Valley to Sycamore (San Diego) 500 kV lines	94	2	\$1,291	\$2,977
Vincent to Lighthipe 500 kV line	45	1	\$309	\$713
Vincent to Mesa 500 kV line	36	1	\$247	\$570
Midway X to Devers 500 kV lines	90	3	\$1,853	\$4,275
Midway X to Imperial Valley 500 kV line	60	1	\$412	\$950
Midway to Tesla/Tracy 500 kV lines	210	2	\$2,883	\$6,650
Whirlwind to Midway 500 kV line	70	1	\$481	\$1,108
Total Estimate Capital Cost (M\$)			\$9,754	\$22,499
* Source: Section 4.5 Transmission Scenarios Based on DFAs in the Appendix K of the Draft Desert Renewable Energy Conservation Plan (DRECP, September 2014)				
** Source: Transmission Impacts in the DRECP, Dudek/ICF, June 11, 2012 (http://www.drecp.org/meetings/2012-04-2526-meeting/background/Transmission-Planning/Transmission-Technical-Group-report-final-4-16-12.pdf)				
*** Based upon the Capital Cost of existing Colorado River to Valley (CRV) 500 kV line, i.e., \$1,064 million and Sunrise Powerlink, i.e., \$1,900 million (Source: California Public Utilities Commission (CPUC) Evaluation Metric Calculator (EMC) dated July 1, 2011)				

There are several 34.5 and 66 kV Collector Lines³, and 230 kV Collector Lines⁴ that are needed under the DRECP alternatives. However, our preliminary cost estimate range of \$9.75 - \$22.5 billion does not include any capital cost associated with those additional transmission facilities.

³ 34.5 and 66 kV collector lines connect generation projects less than or equal to 100 MW to substations.

⁴ 230 kV collector lines are required for projects greater than 100 MW and have varying lengths.

EXHIBIT M

DOCKETED

Docket Number:	15-IEPR-01
Project Title:	General/Scope
TN #:	203617
Document Title:	Bay Area Municipal Transmission Group's Comments On the Draft 2015 Draft IEPR Scoping Order
Description:	N/A
Filer:	System
Organization:	Bay Area Municipal Transmission Group
Submitter Role:	Public
Submission Date:	2/6/2015 1:41:50 PM
Docketed Date:	2/6/2015

Comment Received From: Pushkar Wagle

Submitted On: 2/6/2015

Docket Number: 15-IEPR-01

Bay Area Municipal Transmission Group's Comments on the CEC Draft 2015 Draft IEPR Scoping Order

Attached please accept the Bay Area Municipal Transmission Group's (BAMx) Comments on the CEC's Draft 2015 Draft IEPR Scoping Order (Notice of Request for Public Comments on Draft 2015 Integrated Energy Policy Report Scoping Order, dated 1/26/2015).

Additional submitted attachment is included below.

Bay Area Municipal Transmission Group's Comments on the CEC Draft 2015 Draft IEPR Scoping Order

February 6, 2015

The Bay Area Municipal Transmission Group¹ (BAMx) appreciates the opportunity to comment on the California Energy Commission's (CEC) Draft 2015 Integrated Energy Policy Report ("2015 IEPR" hereafter) scoping order, dated January 26, 2015.

Introduction

The CEC's scope of the *2015 IEPR* deals with variety of issues involving energy efficiency, new renewable goals, and continuation of several other topics that were initiated in the *2014 IEPR*. BAMx supports the CEC's focus on many of these areas and looks forward to active participation in the proposed public workshops, which are expected to offer more details regarding the scope for each topic.

Identification of issues and potential solutions for reaching Governor Brown's goal of Renewables for 50 percent of California's electricity use by 2030

BAMx supports the State's 2050 goal of reducing greenhouse gas (GHG) emissions by 80% below the 1990 level. BAMx also supports a State policy that allows utilities the flexibility to address these emission reduction goals in a manner that controls costs to consumers and maintains reliability. Flexibility could include the use of renewable resources, energy efficiency, demand response, and energy storage. Allowing utilities to use and combine these tools in a way that best meets their local resource, load profile, infrastructure, and financial needs of their customers has delivered proven results to date. BAMx members look forward to working through Northern California Power Agency (NCPA) and California Municipal Utilities Association (CMUA) to help achieve the State's climate policies in a cost-effective and reliable manner. Controlling consumer cost is a major priority for BAMx. Efforts to reduce carbon emissions and other greenhouse gasses should be measured by their costs to the public. Significant or rapid cost increases for residents could compromise the state's important climate goals.

BAMx believes major changes are needed to the methodology used in the infrastructure planning process in regards to building additional renewable projects to move beyond the States' energy-based goals for beyond 2020 in a cost-effective manner. BAMx appreciates the CEC's efforts toward promoting renewable energy planning by streamlining transmission planning and land use permitting to increase efficiency. We support the CEC position outlined in the *2014 IEPR* that California needs to build on best practices to help ensure that efforts to advance renewable energy development are made thoughtfully and with careful stewardship of the state's natural

¹ BAMx consists of Alameda Municipal Power, City of Palo Alto Utilities, and the City of Santa Clara's Silicon Valley Power.

² The CPUC RPS Calculator included a methodology that was used to generate an environmentally-preferred RPS

resources. The development of these practices will be even more important in identifying issues and potential solutions for reaching Governor Brown's goal of renewables for 50 percent of California's electricity use by 2030.

While the recent and projected unprecedented increase in transmission costs is only one of many issues driving up electric rates in California, it is seemingly growing at a rate faster than any other sector. We need to accomplish the State's renewable goals while minimizing the adverse impact on the natural environment and at minimum cost to customers. For example, billions of dollars of customer money has been spent, and are planned to be spent, in building transmission infrastructure to access not the energy, but the full capacity of renewable generation, while the state is long in this system capacity. In other words, billions of dollars are being spent to deliver a product that is already over supplied. We hope this subject will get significant attention in the *2015 IEPR*. We believe the CEC and the California Public Utility Commission (CPUC) should be responsible in determining this aspect of how to get our future capacity needs in the State. In the recent past, the Participating Transmission Owners (PTO), renewable developers, and the CAISO have, in essence decided to build transmission to obtain system capacity from renewables. This is now occurring as the CAISO declares that transmission is needed as "Policy-Driven" projects under their FERC approved Tariff.

Chapter 8 of the *2014 IEPR Update* was dedicated to "Integrating Environmental Information in Renewable Energy planning Processes." We understand that the CEC staff has worked with the CPUC to develop an environmental scoring metric that was used in the 2013 LTPP proceeding. BAMx strongly endorses this activity, but is disappointed in the relatively light use of this past work in the CPUC and CAISO planning processes. For example, the CEC has played a key role in providing environmental scoring input into the CPUC's RPS Calculator model that produces RPS portfolios used in the CAISO's annual Transmission Planning Process (TPP). However, the environmental scoring has played a very minor role in the selection of RPS portfolios used in the TPP thus far.²

In our comments to the CEC on the *2014 IEPR Update*, we had explained how the current infrastructural planning practices could be improved.³ We hope that the CEC through its *2015*

² The CPUC RPS Calculator included a methodology that was used to generate an environmentally-preferred RPS portfolio (with 100% weight on environmental scoring). However, the environmental portfolio was not part of the CAISO 2014-15 TPP portfolios. We understand from the CPUC ED proposal that it is unlikely to be part of the CAISO 2015-16 TPP. The base 2014-15 TPP portfolios have only 20% weight for environmental scoring. The RPS calculator utilizes environmental scoring approach that was created in 2010 and utilized the same map that was used in the 2010 LTPP RETI process. (Source: Attachment 2: Standardized Planning Assumptions (Part 2 – Renewables) for System Resource Plans, CPUC 2010 LTPP Proceeding, R12-03-014, February 10, 2011) The CPUC Energy Division staff plans on updating the environmental scoring methodology in a separate Ruling in the near future and vet the updated methodology with stakeholders before being incorporated into the RPS Calculator. This update (version 6.1) will likely be used for the 2016-17 transmission plan. (Source: California Public Utilities Commission Energy Division's Staff Proposal on the RPS Calculator, CPUC RPS Proceeding, R.11-05-005, October 10, 2014.)

³ "Bay Area Municipal Transmission Group's Comments on the CEC 2014 Draft IEPR Update." dated December 11, 2014 (http://www.energy.ca.gov/2014_energypolicy/documents/2014-11-24_workshop/comments/), pp.1-4.

IEPR and its cooperation with the CPUC and the CAISO in infrastructural planning activities will facilitate those positive changes. Our comments in the *2014 IEPR Update* also drew the CEC's attention to the CPUC's RPS Calculator update, which would serve as an important screening mechanism in deciding the need for new transmission to meet State RPS goals. This new version of the RPS calculator will be used to develop a greater than 33% RPS Portfolio, which will form the basis for a special study by the CAISO within the 2015-2016 TPP cycle. The CEC's *2015 IEPR* proceeding could draw upon many issues that the CPUC staff is currently working on in the development of a resource portfolio that considers an RPS penetration level greater than 33%.

BAMx is aware that the CPUC's RPS calculator is only a screening tool and is not expected to be used to provide all the solutions to issues related to reaching Governor Brown's 50% renewable goal by 2030. In some cases we would need to explore alternative mechanisms and processes. For instance, to the extent the RPS Calculator cannot accurately incorporate the costs and benefits of the transmission lines selected to provide deliverability, a more rigorous economic and congestion analysis is required. This analysis would determine whether the benefit of a proposed transmission project (relative to other feasible alternatives) exceeds its cost. If the benefits do not exceed the cost, then the proposed transmission project should not be approved and the more beneficial alternative should be pursued instead. Although the CAISO has the tools to conduct this analysis including using its security constrained production cost models to determine the impact of congestion, it has not performed this type of analysis in the past. BAMx believes this economic assessment for system capacity, including the option of obtaining it from renewable resources needs to occur, and the CEC has the capability to help ensure that analysis is completed on a timely basis.

Continuation of the Analysis of Southern California Electricity Reliability Due to Loss of SONGS and OTC Retirements

The *2015 IEPR* scoping order includes the continuation of the analysis of Southern California electricity reliability due to loss of San Onofre Nuclear Generation Station (SONGS) and retirements of once-through cooling (OTC) power plants. The analysis will continue to examine California's need for new electricity infrastructure (transmission and conventional power plants), preferred resources, and electricity contingency planning. BAMx supports the inclusion of this topic in the *2015 IEPR*.

The CEC and other state agencies are to be commended for coordinating in an unprecedented manner on the issue of providing for a reliable electric grid in light of the pressures of the San Onofre shutdown in addition to the probable shutdown of some existing South Coastal OTC plants. Meetings like the one held on August 20, 2014 as part of the *2014 IEPR* are extremely important. It is critical that the state agencies make transparent their knowledge of progress towards meeting the Local Capacity Requirements (LCR) needs of the South Coast. Therefore, we are encouraged to hear about the CEC's development of the *Accounting tool* to keep track of developments in and for the South Coast. We assume the CEC will maintain its past practices of

keeping the public informed on the development of the tool and the details of analysis based upon the tool.

The South Coast reliability issue is a prime example of how there are a multitude of options to supply the reliability needs of a major metropolitan area. It is an area where the CPUC has taken steps forward to incent meeting those reliability needs through the development of preferred resources based upon the State's loading order. The transmission and new conventional generation solutions that are not preferred require longer lead times than the preferred resources. The CEC's tracking of the development process with their *Accounting tool* in combination with their understanding of the timing for OTC compliance obligations, place them in a key position to make sure we can meet the reliability needs through timely additions of preferred resources or look to delays of compliance obligations if more time is needed. The CEC can also play an important role in making sure we meet the reliability needs at least cost to ratepayers. There has been little stakeholder discussion of finding ways to meet the reliability needs at least cost.

The current structure of the State's electricity industry makes economic studies comparing alternative methods of meeting the reliability needs of the grid more difficult to perform than in the past when the utilities were more vertically integrated. Even with the increased difficulty of performing this analysis, such efforts should not be abandoned. Satisfying the South Coast reliability issue may provide the best example to illustrate the capability and limitations of using standard industry tools to approximate the cost of meeting the reliability needs for the area. It is a very common planning practice to study the cost of providing needed resources close to load versus doing so remotely and building transmission. Unfortunately it is more challenging to do so in the current power procurement and contracting structure that keeps prices confidential, though using the CEC developed capital and operating costs for new power plants allow for a reasonable proxy. Utilizing its cost information for local preferred and conventional electric supply and the utility estimates for transmission expansion, the CEC has the expertise to develop the comparative economics of meeting the reliability needs of the South Coast basin associated with the various solution options.⁴

There appears to be a general consensus that the infrastructure approved so far by the CAISO and the CPUC should be sufficient, with margin to spare, to meet the reliability needs if the infrastructure and programs all come to fruition and provide the expected reliability benefits. It also seems to be generally recognized there is considerable uncertainty around the likelihood of timely completion of this infrastructure and preferred resources.

We also need to recognize that the event that drives the LCR need for the South Coast is extremely unlikely. As illustrated in the Track IV of the 2012 LTPP procurement proceeding, it is a cost effective strategy to shed load for such events in a controlled fashion while long-term

⁴ CEC has developed several tools to perform such comprehensive analysis. For example, see (i) Cost of Generation Model referred in the "Estimated Cost Of New Renewable And Fossil Generation In California," dated May 2014 CEC-200-2014-003-SD, and (ii) "Integrated Transmission And Distribution Model For Assessment Of Distributed Wholesale Photovoltaic," dated APRIL 2013 CEC-200-2013-003.

plans are being implemented.⁵ As the timing for eliminating the dependence on the current load shedding scheme is completely within the control of the Agencies, we recommend the State recognize this existing capability as an interim strategy to protect against a delay in proposed additions for the South Coast as part of the *2015 IEPR* efforts.

Discussion of Deliverability as Part of the Strategic Transmission Investment Plan

BAMx is encouraged that the CEC proposes to discuss deliverability of renewable and other generation as part of the Strategic Investment Plan⁶ in the *2015 IEPR*. In our comments to the CEC on the *2014 IEPR Update*⁷, we have outlined a number of issues involving stringent CAISO “deliverability” requirements that have driven billion of dollars of transmission infrastructure expenditure⁸ primarily to access the full capacity of renewable generation. We have asked for an economic assessment to be made in our comments above. Hopefully, the concept of “Strategic Transmission Investment, including a **discussion of deliverability** and western regional planning activities” mentioned in the scoping order indicates the intention to provide a forum to debate whether more transmission should be built with its inherent environmental and economic adverse impacts or whether there are better ways to meet our system resource needs.

Concluding Remarks

BAMx appreciates the opportunity to comment on the proper scope for the *2015 IEPR*. We recognize that any meaningful resolution to the proposed *2015 IEPR* topics would require the support of multiple state agencies. We support the cooperation of those agencies and are encouraged to see that it is happening. This provides for a more efficient and effective planning process. The CEC has historically been careful to provide maximum opportunity for Stakeholder participation in policy decisions affecting the State’s resources. We encourage it to make sure that the good cooperation that is occurring among State agencies does not interfere with broader Stakeholder involvement.

Thank you for the opportunity to comment and we look forward to continued public stakeholder participation.

If you have any questions concerning these comments, please contact Barry Flynn (888-634-7516 and brflynn@flynnrci.com) or Dr. Pushkar Waglé (888-634-3339 and pushkarwagle@flynnrci.com)

⁵ Moreover, it can be effectively argued that such controlled load shedding should be compared economically against the construction of new transmission as a long-term means to cost-effectively manage the reliability needs of the South Coast, especially if an event is extremely unlikely. Though allowed by NERC, unfortunately the CAISO has taken a position against its long term use in this application without any consideration for economics.

⁶ As required by Senate Bill 1565 [Bowen, Chapter 692, Statutes of 2004].

⁷ “Bay Area Municipal Transmission Group’s Comments on the CEC 2014 Draft IEPR Update.” dated December 11, 2014 (http://www.energy.ca.gov/2014_energypolicy/documents/2014-11-24_workshop/comments/). pp.2-4.

⁸ Since 2007 an estimated \$8 billion in large-scale deliverability-driven transmission projects have been approved, permitted and/or are under construction

EXHIBIT N

December 5, 2014

James G. Kenna
State Director, United States Bureau of Land Management
California State Office
2800 Cottage Way, Suite W-1623
Sacramento, CA 95825

Dear Director Kenna:

The undersigned—representing a broad spectrum of political jurisdictions, community organizations, public-interest companies, and environmental perspectives—unanimously and urgently call on the Bureau of Land Management to grant National Conservation Land status to the 101,272-acre Juniper Flats Recreation Area in the High Desert of Southern California.

As you know, National Conservation Lands are nationally significant landscapes with “outstanding cultural, ecological, and scientific values” and receive the BLM’s highest level of protection. Juniper Flats deserves a place among these few, highly unique national landscapes.

Juniper Flats, also known as the Grapevine Canyon Recreation Area, comprises a narrow stretch of land along the north slope of the San Bernardino Mountains, extending north toward the desert floor and about 21 miles east-west, from California State Highway 18 nearly to the Mojave River.

Ecologically, Juniper Flats is of a piece with the San Bernardino National Forest, which abuts Juniper Flats immediately to the south. This mountain/desert landscape is a rare and complex ecosystem that embraces the signature Joshua trees of the High Mojave Desert, as well as foothills and ridgelines rich with piñon, juniper, and oak woodlands where the desert meets the San Bernardino Mountains. Juniper Flats has historically been a cultural center for American Indians and early American loggers and miners, and contains a historic access route that led from the mountains across the desert to the town of Victor, now known as Victorville. The Pacific Crest National Scenic Trail skirts the southern portion of Juniper Flats for several miles.

Juniper Flats is currently protected with an “L” (limited) designation, the second-most-restrictive available for BLM land. In the current draft Desert Renewable Energy Conservation Plan (DRECP), much, but not all, of Juniper Flats is designated as an Area of Critical Environmental Concern (ACEC). The western portion of Juniper Flats has had ACEC status since 1988—an acknowledgment of the extraordinary environmental and cultural value of this landscape. This 3,100-acre ACEC is proposed for National Conservation Land status in the draft DRECP.

The most easterly portion of Juniper Flats is also currently an ACEC and is proposed for National Conservation Land status in the DRECP, in recognition of its rare carbonate-endemic plants, found nowhere else in the world.

We appreciate that the BLM, by proposing ACEC status for one portion of Juniper Flats and National Conservation Land status for another small part, has already taken strides toward conserving the natural, human, and historical resources of Juniper Flats. We submit that all of the criteria exist to extend this recognition to the rest of this extraordinary and vulnerable landscape.

According to the DRECP, “The Juniper Flats Cultural Area is an extremely diverse and dense region for cultural resources. There are numerous sites that meet criteria for the National Register of Historic Places. This area is of great importance for the San Manuel Band of Mission Indians.”

Yet many parts of Juniper Flats have never been surveyed for prehistoric and historic resources. With National Conservation Land status, these areas will be given their full and due attention.

The DRECP further points to Juniper Flats’ “relevant biological resources, including wildlife and plant assemblages. The area is critical for bighorn sheep, golden eagles, desert tortoise, prairie falcon, and Mohave ground squirrel.” More than 40 additional protected, threatened, and endangered species of plants and animals abide within Juniper Flats. Among them are six threatened and endangered avian species as well as 17 avian species of special concern, whose survival would have been threatened by the 71-turbine wind farm that was proposed for the site. Any such development would also gravely affect the many migratory bird species that pass above the Juniper Flats ridgelines that have been targeted for development.

The DRECP also states that the San Bernardino–Granite Mountains Wildlife Corridor and Linkage (which traverses Juniper Flats) is critical for wildlife populations to the north and south. Any commercial development in one of these strategic corridors would exact an extraordinary environmental cost.

Please see the attached list of endangered, threatened, and species of special concern that occur in and around Juniper Flats.

National Conservation Land status for Juniper Flats would also safeguard its extreme susceptibility to wildfire—an especially critical consideration, because industrial-scale wind development in Juniper Flats could render aerial firefighting efforts impossible. In 1999 the 64,000-acre Willow Fire swept from the national forest northward to the foothills of Juniper Flats and to rural Apple Valley. Successful suppression of such fires depends heavily on airborne firefighting, which would be impossible if wind turbines were to crown the dry ridgetops. For this reason, several well-respected fire safety experts have spoken out against any wind turbine development in Juniper Flats or the surrounding areas. The National Forest Service declined to permit a wind project in the nearby Cleghorn area, for similar reasons.

National Conservation Land status for Juniper Flats would ensure that this land will remain precisely what it is—a precious resource that is highly accessible to thousands of residents, visitors, educators, and students who utilize Juniper Flats and its adjacent lands for hiking, bird-watching, nature study, OHV touring, and for the pleasures of quiet and solitude.

We acknowledge the BLM's mission of balancing a great range of uses of lands under its jurisdiction. We also respect its stewardship over the vast land holdings in its care. The Juniper Flats Recreation Area merits the bureau's highest degree of protection, so that this extraordinary landscape can be enjoyed unimpaired by present and future generations. It is highly qualified for National Conservation Land status, and we respectfully request that the BLM grant it this designation.

Very truly yours,

Richard Ravana, President
Alliance for Desert Preservation

Sam Goldman, California Program Director
Conservation Lands Foundation

David Lamfrom, Associate Director
National Parks Conservation Association

Edward L. LaRue Jr., Chairperson
Desert Tortoise Council, Ecosystems Advisory Committee

Tim Thomas, President
Mojave Chapter, California Native Plant Society

Terry Frewin, Chair
Sierra Club California/Nevada Desert Committee

Jenny Wilder, Chair
Mojave Group, Sierra Club

Kim F. Floyd, Conservation Chair
San Gorgonio Chapter, Sierra Club

Sarah Kennington, President
Morongo Basin Conservation Association

Drew Feldman, Conservation Chair
San Bernardino Valley Audubon Society

Kevin Emmerich, Cofounder
Basin and Range Watch

Dan Silver, Executive Director
Endangered Habitats League

Terry Weiner, Projects and Conservation Coordinator
Desert Protective Council

Jill Bays, President
Transition Habitat Conservancy

Denis Trafecanty, President
Protect Our Communities

Lorrie L. Steely, Founder
Mojave Communities Conservation Collaborative

Susan Stueber, Designated Representative
Friends of Juniper Flats

Chuck Bell, President
Lucerne Valley Economic Development Association

Dave Cole, President
Friends of Johnson Valley

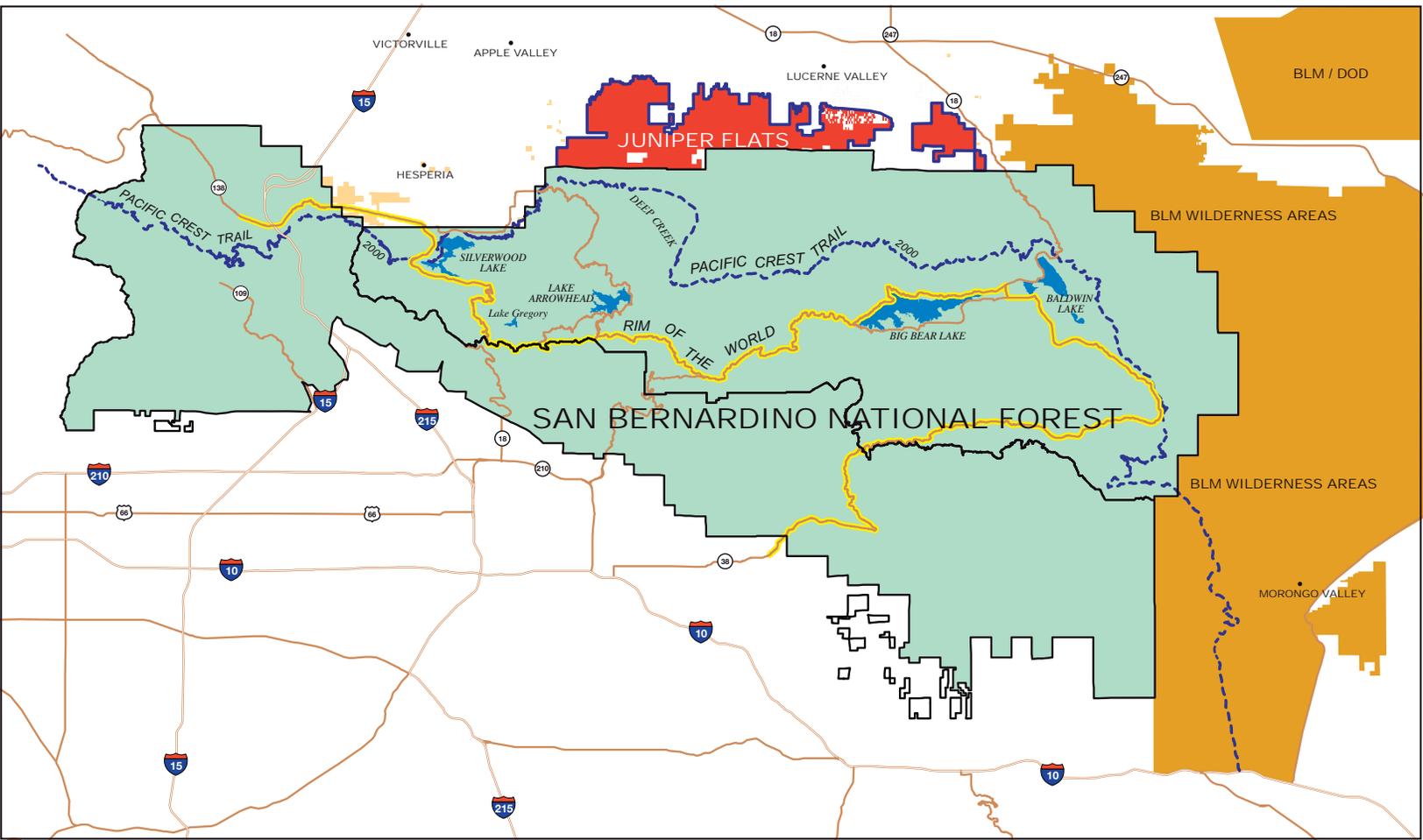
Harvey Helfand, President
Johnson Valley Improvement Association

Shaun G., Publisher
Mojave Desert Blog

Gerald T. Braden
Wildlife Ecologist

Steve Loe
San Bernardino National Forest Biologist, Retired

cc: Neil Kornze, Director, US Bureau of Land Management
Carl Rountree, Director, BLM Office of National Landscape Conservation System
Katrina Symons, BLM District Manager, Barstow
Senator Dianne Feinstein
Senator Barbara Boxer
Congressman Paul Cook
San Bernardino County Supervisor Robert Lovingood
San Bernardino County Supervisor Janice Rutherford
San Bernardino County Supervisor James Ramos
San Bernardino County Supervisor Gary Ovitt
San Bernardino County Supervisor Josie Gonzales



Threatened, Endangered, and Special-Status Species in Juniper Flats

The following species occur in and around Juniper Flats, or migrate through the area.

Threatened and Endangered: Avian

Bald Eagle: state endangered, protected by Eagle Protection Act

California Condor: state and federally endangered

Golden Eagle: state and federally protected species

Least Bell's Vireo: state and federally endangered

Southwestern Willow Flycatcher: state and federally endangered

Western Yellow-billed Cuckoo: state and federally endangered

Threatened and Endangered: Terrestrial

Arroyo Toad: federally endangered, state special concern

Desert Tortoise: state and federally threatened

Mohave Ground Squirrel: state threatened

Sierra Madre Yellow-Legged Frog: federally threatened, state special concern

State and Federal listed Species of Special Concern: Avian

Arizona Bell's Vireo

Bendire's Thrasher

Burrowing Owl

Cooper's Hawk

Crissal Thrasher

Ferruginous Hawk

Gray Vireo

Hepatic Tanager

LeConte's Thrasher

Loggerhead Shrike

Northern Harrier

Southern Spotted Owl

Summer Tanager

Tricolored Blackbird

Virginia's Warbler

Yellow Warbler

Yellow-Breasted Chat

Migratory Birds

Migration studies by USFWS in 1986 and Southern California Edison in the early 1990s established that the San Bernardino Mountains are a major bird migration corridor. As many as 200 avian species visit the Upper Mojave River area adjacent to Juniper Flats. Significant numbers of endangered, threatened, and sensitive species are known to occur in the adjacent San Bernardino National Forest and in adjacent desert and cismontane environments.

Species of Special Concern: Bats

Pallid Bat
Spotted Bat
Townsend's Big-Eared Bat
Western Mastiff Bat
Western Red Bat
Western Small-Footed Myotis
Western Yellow Bat
Yuma Myotis

Other Species of Special Concern

American Badger
Burrowing Owl
California Mountain King Snake
Coast Horned Lizard
Cooper's Hawk
Long-Eared Owl
Pallid San Diego Pocket Mouse
San Bernardino Flying Squirrel
Two-Striped Garter Snake

Other Significant Species

Badger: reliant on linkage between San Bernardino Mountains and Granite Mountains
Bighorn Sheep: reliant on broad areas of linkages between San Bernardino Mountains and Granite Mountains.
Mountain Lion: indicator of the connectivity of natural habitats, reliant on linkage between San Bernardino Mountains and Granite Mountains
Mule Deer: indicator of habitat diversity and overall ecosystem health

Federally Endangered Flora

Cushenbury Buckwheat
Cushenbury Milkvetch
Cushenbury Oxytheca
Mojave Tarplant

Federally Threatened Flora

Parish's Daisy

California Rare Plants

San Bernardino Milkvetch
Big Bear Valley Woollypod
Alkali Mariposa Lily
Baldwin Lake Linanthus
Big Bear Valley Phlox
San Bernardino Aster

State and County Protected Flora

Joshua Tree
California Oak Woodlands

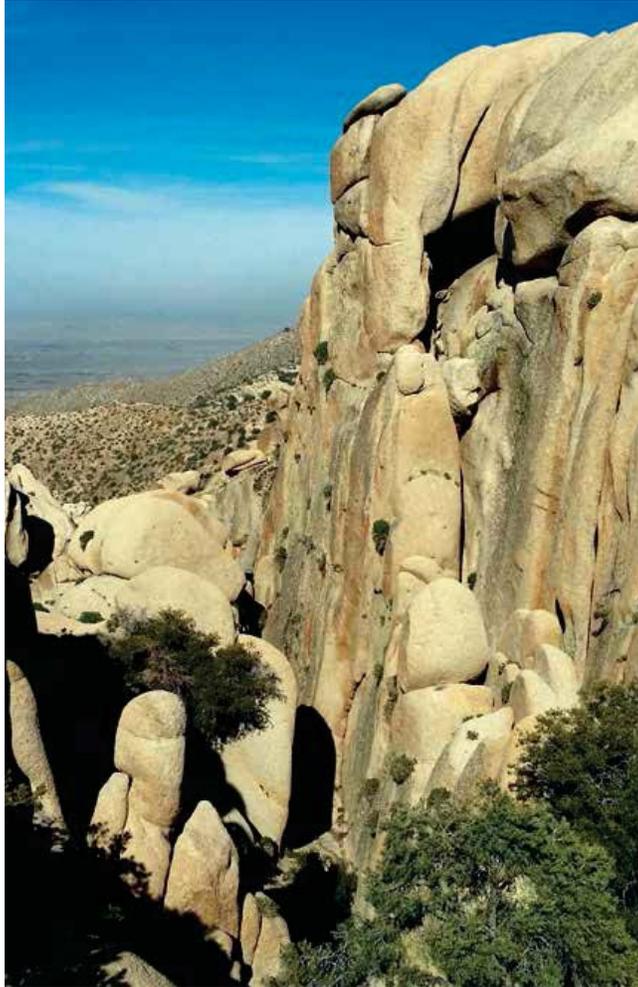
JUNIPER FLATS
A NATIONAL TREASURE



Hot Springs Road, Juniper Flats, looking northwest



Grapevine Canyon, Juniper Flats, at sunset



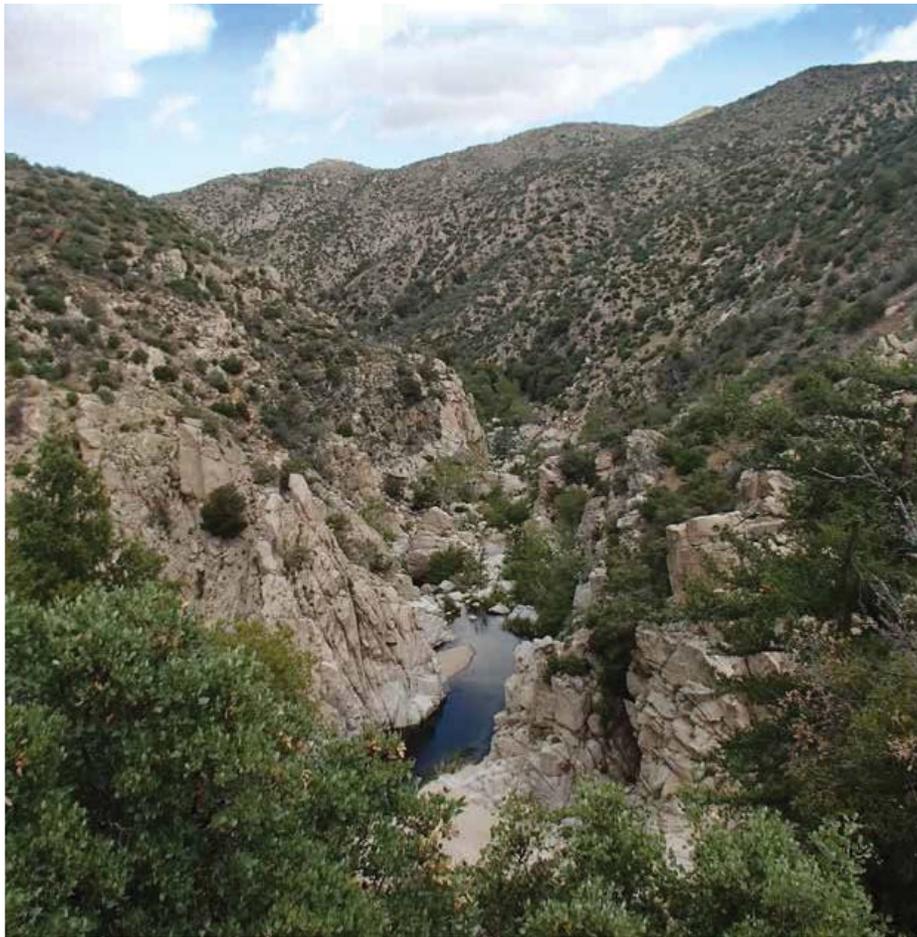
Grapevine Canyon, Castle Rock formation, Juniper Flats



Pacific Crest National Scenic Trail, looking northeast, with Juniper Flats in the background



Arrastre Canyon, Juniper Flats



Deep Creek, along the Pacific Crest National Scenic Trail,
in the San Bernardino National Forest near Juniper Flats



Deep Creek, Pacific Crest National Scenic Trail, adjacent to Juniper Flats



Castle Rock formations, Juniper Flats



Deep Creek Hot Springs, Pacific Crest National Scenic Trail, near Juniper Flats



Castle Rock area, looking toward the Granite Mountains and Ord Mountains



Deep Creek Hot Springs, adjacent to Juniper Flats



Lovelace Canyon, Juniper Flats, looking south



Juniper Flats, looking toward the Granite Mountains

EXHIBIT O

JUNIPER FLATS PHOTO TOUR







