Comments on

Draft EIR/EIS, Sunrise Powerlink Project

Prepared by the San Diego Chapter of the Sierra Club

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I. DEIR/EIS DOES NOT TAKE INTO CONSIDERATION THE WILLIAMS LAND ACT

I.A. The California Land Conservation Act of 1965

The California Land Conservation Act of 1965 is commonly known as the "Williams Land Act." The Williams Land Act was established to create an Agriculture conservative ship between the property owner and the county in which the property is located. The agreement is a legally bond contract that requires all the property to be maintained as an agriculture preserve and/or open space. The agreement is entered into a ten (10) year contract renewing itself for each year for ten years. Under the contract the property owner is given a tax relief as adopted under the Revenue & Taxation code Section 423.3.

In section "Impact AG-4," the DEIR states the proposed project would convert 254.3 acres of the Williams Land Act land to non-agricultural use. In review of the Rules of Procedures to Implement the California Land Conservation Act of 1965, California Farm Bureau Federation and California Department of Conservation, it appears that the preparers of the EIR are not aware of the rules and regulations of the Williams Land Act.

Specifically:

I.A.1 Why does the EIR fail to indicated if any the proposed acreage is considered to be part of wetland preserve?

I.A.2 The EIR failed to indicate if the soil condition of the proposed property could be highly erodible. Has this been addressed?

The DEIR did not indicated how long the proposed property has been in the Williams Land Act. Under the stipulations of the Williams Land Act, the proposed property is bonded into agreement for ten years, with the contract automatically renewing itself each year for another year. It is the responsibility of the property owner to "request " a release from the contract. Once the request from the contract has been approved by the County Board of Supervisors, the request will be granted. From that time, a minimum (9) years must pass until the contract has expired. During the minimum (9) years it is still the property owners responsibility to maintain the property as agricultural preserve and or open space as terms of the Williams Land Act.

I.A.3 The EIR failed to report if any of the 254 acres has been requested to be released from the Williams Land Act by County Board of supervisors. Has this been done?

I.A.4 The EIR failed to state if any of the property is to still considered be wetland preserve, highly erodable potential, and so forth. Has this been studied?

The EIR failed to state under the terms of the Williams Land Act if any contract cancellation will involve a comprehensive review and approval process, and a cancellation payment fee to the landowner of 12.5 percent of the full market value of the property in question. After this fee/fine has been imposed all property taxes will return to estimated equal tax value of surround property regardless if the surrounding property is agricultural or developed area.

I.A.5. Will such a review be conducted?

Please note that research indicates that one out of every three families enrolled in the Williams Land Act would not be in the agriculture business if not for the tax-saving incentive created under the Williams Land Act.

In addition to the California Land Act of 1965, in 1998 SB1182 was signed into law to establish the Farm Land Security Zones, sometimes referred to as the "Super Williams Land Act." This bill allows landowners to receive an additional 35 percent tax reduction in the lands value for property tax reduction. The additional requirement for this law requires the property owner to commit to a (20) twenty year program.

I.A.6. The EIR failed to indicate if any of the property was enrolled under the program of the "Super Williams Land Act." Was this studied, and did any of the affected properties fall under this program?

On January 1, 2004 a new deterrent to Williams Land Act abuses went into effect. AB 1492 was enacted to address the most egregious violations by substantially increasing the penalities for contract violations. If incompatible development takes place on the contracted property, the penalty can be as much as 25 percent of the unrestricted fair market value of not only the land, but also of the buildings and related improvements of the land.

Impacts of the project re: The Williams Land Act

I.A.7. Is SDG&E fully informing property owners as required by the conditions and requirements of the California Land Act of 1965, with its strict conditions regarding property upgrades and commitment to the contract?

Many of the families who have family farm and ranch land enrolled in this program are dependant on this program to maintain their agricultural business and rural heritage.

I.A.8. The Rules of Procedure to Implement the California Land Conservation Act of 1965 list approximately (22) compatible uses of property enrolled in the Williams Land Act, none of which include public utilities crossing the property. Does the proposed project consider this impact?

I.A.9. If the Sunrise Power Link is allowed to transverse through or cross any property enrolled in the Williams Land Act, property owners will be subjected to a significant

increase in tax of the property only, forcing owners to sell off family inheritance due to inability to maintain tax levies. Has this impact been considered, and if so, where is that documented in the DEIR?

I.B. Seismic Hazard Zones and Regulations

The California Department of Conservation and California Geological Survey is the principal state agency charged with implementing the 1990 Seismic Hazard Mapping Act. The zones identify areas where site specific geotechnical investigation must be Conducted to assess liquefaction hazard before development and if a hazard exists, to provide a technical basis for mitigation. In review of the recommended Criteria for Delineating Seismic Hazard Zones in California.

The EIR failed to list any of the property in which the Sunrise Power Link Project would cross or transverse any of the Liquefaction Hazard zones not limited to:

- a. Areas known to have experienced liquefaction during historical earthquakes.
- Areas of uncompacted fills that are saturated, nearly saturated, or may be expected to become saturated.
- Areas where analyses of existing data indicates that the soil are potentially liquefiable.

I.B.1. Where is this significant area of oversight dealing with the construction of the transmission towers addressed?

II. DEIR DOES NOT ADDRESS POTENTIAL FOR INCREASED EROSION, WATER RUNOFF (Section D.12: Water Resources)

Since specific information on the proposed routes for the proposed Sunrise Powerlink is not provided, it is very difficult to make intelligent comments on how this project might impact local water supplies and quality. San Diego still gets a significant percent of its water from local streams and degrading these in any way imperils a critical resource already under assault.

II.A. Erosion

The deeply dissected terrain this project transverses from Ocotillo to Penesquitos Lagoon suggests severe erosion problems in many areas along the project.

II.A.1. Have those erosion problems been studied?

II.B. Disturbed soils and runoff

Disturbed soils during construction and subsequent access road use for maintenance increases erosion, which unavoidably adds unwanted debris to the water supply. That, in

increase in tax of the property only, forcing owners to sell off family inheritance due to inability to maintain tax levies. Has this impact been considered, and if so, where is that documented in the DEIR?

I.B. Seismic Hazard Zones and Regulations

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II.B. Disturbed soils and runoff

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turn, accelerates rainfall runoff which in turn reduces percolation into the groundwater for future contribution to streams during dryer periods.

II.B.2. Has this issue with runoff and potential groundwater contamination been studied?

II.C. Transmission losses

II.C.3. Transmission losses over these distances suggest that a better investment could be made in locally generated electricity AND conservation. Has this been studied?

III. DEIR DOES NOT ADEQUATELY ADDRESS FIRE DANGER

III.A. Potential for Wildfires

Wildfires significantly reduce the ability to transmit electricity through the areas under consideration during periods when it is most needed [hot, dry, windy conditions].

III.A.1. What consideration of wildfire potential from the proposed routing of these lines has been done in light of changing climate conditions and the long term presence of the line? How has the October 2007 fires changed the landscape and how will this impact future potential for catastrophic fires?

IV. DEIR INDICATES AN IMPROPER RELIANCE ON LEAPS PROJECT, WHICH IS PROBLEMATIC IN ITSELF (ALTERNATIVE 3, "LEAPS TRANSMISSION-ONLY ALTERNATIVE")

Concerning LEAPS: The LEAPS project at Lake Elsinore is mentioned, and represents current thinking about energy generation. However, the LEAPS project is NOT a perpetual motion machine, AND would result in increased fossil fuel usage and consequent release of carbon dioxide to the atmosphere, adding to global warming. In addition it increases loss of water by evaporation in a water-deficient area.

IV.A.1. Has this potential damage the LEAPs project will inflict been considered as part of the downside to the proposed Alternative 3?

V. DEIR DOES NOT ADDRESS SPECIFIC USE OF LINES

V.A. Unintended use of lines after construction

It appears that this project needs to be restricted in a very specific way to prevent it from becoming a "back door" to importing cheaper electricity from relatively polluting Mexican power plants where environmental standards are lower and enforcement is relatively lax.

V.A.1. What steps will the CPUC and BLM take to prevent this from happening?

VI. DEIR INADEQUATELY ESTIMATES IMPACT ON BIOLOGICAL RESOURCES; RESOURCES INCORRECTLY SURVEYED

V.I.A. Native Tecate Cypress tree

Regarding Alternative D, the DEIS does not contain any note of the rare native Tecate Cypress along this route. Several examples of this very rare tree are located between D-5 and D-6:

VI.A.1. Why were these trees not noted in this report?

VI.A.2. Will SDGE be sending biologists in to check on these trees, which are almost 4 feet high and clearly visible?

VI.A.3. What damage to these Tecate Cypress will construction of Alternative D and 25 miles of access roads cause to these trees?

VI.A.4. If mitigation is the answer, how does one mitigate a tree that grows naturally in only two areas in the United States?

Regarding Alternative D, the DEIR (Section E.3.2-7) refers to exactly 616 trees that will be trimmed or destroyed in this route:

VI.A.5. How was this conclusion reached, when only 30% of the proposed route was surveyed?

VI.A.6. Will SDGE do an exact count of how many trees will be destroyed if the line and the required access roads are built?

VI.A.7 In addition, the DEIR does not address whether the tree count referenced above included the 25 miles of new access roads that would be required by Alternative D.

VI.B Biological survey techniques

Regarding Alternative D, the DEIR refers to biological surveys. Regarding survey techniques:

VI.B.1. Was a GPS used to survey Alternative D? This is specific to all surveying, regarding the finding of items of biological significance, including Plants and Animals.

VI.B.2. If No, why was a GPS not used? GPS reference points would allow the public to cross-check the data reported by the firm preparing the DEIR.

VI.B.3. Was a track log or record of on-the-ground foot travel made when the biological survey was conducted?

VI.B.4. If yes, can that track log be made public information for examination?

VI.B.5. What percentage and number of miles of the Alternative D, North of Interstate 8 route was covered by survey personnel on foot?

VI.B.6. What were the dates of the surveys along the Alternative D route?

VI.B.7. Were the plant studies done in accordance with standard practice, which is to survey for plants in the flowering (wet) season?

VI.C Western Pond Turtles

Regarding Alternative D, the draft EIR/EIS states that no rare Western Pond Turtles were found in Boulder or Cedar Creeks: In fact, a photograph taken on April 7, 2007, shows a large Western Pond Turtle sunbathing in Cedar Creek near D-13 of the proposed Sunrise Powerlink Alternative D (see attached photo).

VI.C1. Why did biologists fail to find any Western Pond Turtles in Cedar Creek?

VI.C.2. In fact, the survey of this area for water-based animals was conducted during the hottest part of the year, when Cedar Creek was largely dry. Will this be rectified in the final EIR? And if so, in what way?

VI.D New roads required by Alternative D

VI.D.1. What will be done to further study the approximately 25 miles of new access roads proposed with Alternative D?

The DEIR neglected to conduct a study specific to the effect of those roads on waterbased animals in Cedar Creek, Boulder Creek, The San Diego River, and other watersheds.

VI.D.2. Will a study of this area, specific to the effects of roadways on these animals, be done?

VII. DEIR DOES NOT FULLY ADDRESS VISUAL IMPACT OF POWER LINES (Section D.3: Visual Resources)

Numerous individuals and entities, including the County of San Diego, have expressed concern over the visual impact of the proposed project, which in many areas will erect dozens or even hundreds of poles averaging 130 to 150 feet.

VII.A. Clear visual differences between existing and proposed new poles

VII.A.1. Existing poles are 70 feet; new poles will average more than twice that, at 150 feet. There is a significant difference in terms of how far such a 70 foot pole versus a 150-foot pole is visible. Has that been considered?

In addition, current poles are simple wooden telephone poles. The portion of the proposed line carrying 150 KV lines would be giant metal towers with many arms. There is no comparison between the two, so contending that running the new poles along the existing right of way does not constitute new impacts simply isn't correct.

VII.A.2. How does SDGE plan to mitigate for the loss of scenic value created by the huge towers proposed?

VII.B. Property values impacted by visual degradation

One of the reasons people chose to purchase homes in rural areas is the absence of reminders of industrial society. Homes commanding a view of undisturbed land commonly draw a higher price on the real estate market. The impact on rural property values of huge unsightly power towers, both near to property as occurs in a number of places along the line, or even far on the horizon, is highly significant and has been documented. ["Power Lines and Property Values: The Good, the Bad and the Ugly," The Urban Lawyer, The National Quarterly on State and Local Government Law, Spring 1999, Volume 31, Number 2.]

While the argument of inverse condemnation has not been upheld by the courts, at least in California (see San Diego Gas & Electric Co. v. Covalt²⁹, in which a landowner tried to make out a claim for inverse condemnation caused by a pre-existing power line based in part on a diminution in value of his property due to fear in the marketplace of EMFs), there is research to show the placing power lines near property after the fact cause a clear devaluing of property.

In fact, the undesirability of nearby power lines is so great that despite the expense, nine out of 10 new subdivisions now bury power lines, and dozens of cities have adopted comprehensive plans to bury or otherwise relocate utility lines, including San Antonio, TX; Colorado Springs, CO; New Castle, DE; Saratoga Springs, NY; Williamsburg, VA; Tacoma, WA; and Frederick, MD. ["The impact of transmission lines on property values," Peter Elliott, David Wadley, 2002, Property Management Journal.]

VII.B.1. How does SDGE propose to compensate land owners thus affected?

VII.B.2. How does SDGE proposed to compensate the people of California, whose public parks are clearly reduced in value by the placement of power lines across them (i.e., Anza-Borrego State Park and Cleveland National Forest)?

VII.C. Property values degraded by fear of EMFs

Although data on the health effects of electromagnetic fields is still inconclusive, the public perception is not. As such, electrical towers anywhere near private property will degrade property values significantly due to fear of EMFs: "At the time of the original article, scientific findings on the issue of negative health effects were inconclusive, sending mixed signals to the public. The author found, however, that general public perception that EMFs were harmful uniformly drove the values of adjacent property downwards... Emerging case law at the time supported the admissibility of expert testimony based on "fear in the market place" diminishing the prices of affected properties. In addition, some municipalities had already enacted subdivision plat requirements and other regulations which seemed to support the author's effective easement theory." [The Southwestern Legal Foundation in the Proceedings of the INSTITUTE ON PLANNING, ZONING AND EMINENT DOMAIN, Municipal Legal Studies Center, Dallas, Texas, November 18-20, 1998; and The Urban Lawyer, The National Quarterly on State and Local Government Law, Spring 1999, Volume 31, Number 2.]

VII.D. Visual impact measured at wrong time of year

The DEIR measured the aesthetic impact of the towers in various areas in September. Mitigation suggestions in the DEIR including changing the color of the towers to more closely match surrounding landscape. But landscape at what time of year? In many if not most of the areas the proposed power line will cross, the sky and surrounding land will change colors dramatically throughout seasons, if not throughout each day.

VII.D.1. Which color, of what part of the land, and during which season, does SDGE propose to construct the towers to match?

VIII. DEIR DOES NOT ADEQUATELY ADDRESS PUBLIC HEALTH AND SAFETY CONCERNS RAISED BY PROPOSED ROUTES

(Section D.10: Public Health and Safety)

The EIR offers an extensive array of graphs and requirements to avoid damage and pollution. Expressions such as "monitor and evaluate" were extensive, but provide inadequate information on what the impact will be, how it can be prevented in the first instance, and how remaining impacts will be mitigated.

VIII.A. Long-term monitoring of health impacts

VIII.A.1. How does SDGE propose to "monitor and evaluate" the extensive issues this project raises, on a continuous basis, for however long this method of power conduction is used? That would require continuous patrolling and evaluation of the entire 150-mile route, including underground cables.

VIII.A.2 How would this extensive monitoring affect the fees paid by ratepayers?

VIII.A.3 Electromagnetic fields are known to affect biological systems, both human and animal. How would accurate projections of potential damage and prevention be made with any degree of accuracy?

VIII.A.4. How would the company control damage to the cables in the case of a large, out- of-control fire?

VIII.A.5. Regarding damage, would high-intensity wire breakage be preventable?

VIII.A.6. Regarding public safety, have studies been done regarding the chance of electrocution during an electrical storm or heavy rains if lines fail?

VIII.B Inability to public measure impact of lost wilderness

Regarding public health: Clearly, there will be loss of open space with this project, regardless of the alternative selected. People use open space to get away from the pressures of modern life. The cables will produce a humming sound and the cement standards will be denuded of vegetation for several feet or yards. Yet another sanctuary will be stolen from the people.

VIII.B.1 How can adequate mitigation ever compensate for the loss of open space and intrusions into our remaining backcountry?

VIII.B.2. Have studies been done measuring the affect on the mental health of our population when undeveloped or intruded-upon open space is no longer available to them for recreation and mental health?

VIII.C. Effects of construction

The construction of the large towers proposed will entail many truck trips along the route, causing increased dust in the air, construction noise, traffic congestion, exhaust fumes in the air and the debris of construction such as oil saturation in the ground. Imperial County is already heavily impaired as far as air, water and ground pollution goes.

VIII.C.1. What studies have been done of the effects of building the line itself?

VIII.C.2. How does SDGE plan to prevent further contamination of Imperial County, already heavily impaired?

VIII.C.3. Is SDGE prepared to find ways to do this project without contributing to greenhouse gas production in the course of this heavy construction?

VIII.C.4. How will the company mitigate for the loss of biodiversity which this project will undoubtedly cause?

IX. COMMENTS ON ALL ELEMENTS OF OPTION D

Impact or other item stated in DEIR/EIS	Page reference	EIR/EIS conclusion should be	Comment on this issue
		conclusion	Cedar Fire started in this area adjacent to Cedar Gorge where this line crosses Cedar Creek. Wind speeds often over 80 mph dropping off Cuyamaca Peak. Recent McCoy Fire started right by this route due to shorting power line in 100 mph winds and failed shutoff breaker (conclusion still under investigation). All lightning arrestors on Boulder Creek line were replaced two weeks later only 4 years after the entire line was replaced in the Cedar fire. McCoy almost took 20 lives late at night when most were in bed. McCoy fire took 3 homes, damaged two additional homes, two other properties Oct 2006 Powerline broke right on this line and started a fire. Witch Fire damaged a home in this area, burned 10,000 acres of sensitive habitat for the 2nd time in 4 years, debunking must of the popular control burning theories. Witch Fire was started by a downed power line 3 of the 4 fires in four years were started by power lines. Cedar Fire destroyed numerous homes and structures in the area. Fire fighters cannot get near a 500 KV line. What criteria did you use to make this determination?
			Did you consider local weather stations in place for this purpose.?
			Have you done a study of the data that considers impacts to the ecology when chaparral is burning more often than every 15 years?
			I don't think you have considered the impacts that the fires in the last fire years have had on wind speed.
			I don't think you have considered the impacts of wind speed upon fire damage and containment. I don't think you have considered the source of nearly all of these fires was just to the east of your line and in every case would have crossed it.
			I don't think you have considered the fact that this crossing can occur with 100 mile per hour winds, 150 foot fire plums, faster than you have the ability to even drive to the location.

			How are you able to accurately assess the impacts to this option when it was recently burned?
Biological Resources	E.3.2	How can you mitigate for perpetuity. I do not think you have considered this.	I think you need to do a study for the reasons that you did NOT find native impacts in Cedar Gorge. This may seem counter intuitive but actually it is highly significant. This may be an environment that has very little impact from humans at all, including native Americans, making it one of the rarest biological riparian study areas in the county for riparian and chaparral systems., not to mention the Indian reasons for avoiding the gorge? Why was Cindy Buxton mentioned as a biological resource in the report? I recommended contacting the San Diego Natural History Museum and the coordinators of their plant atlas for the most exhaustive study of plants on Sunshine Mountain and Cedar Creek. Did you do this? How can you study plants in July when they can not be definitively identified without flowers and most of the flowering plants occur in the spring? Jeri Hershberg is the most knowledgeable taxonomist with experience in the San Diego River gorge, Sunshine Mountain, and Cedar Gorge. Have you contacted her? There is a meadow and series of seeps about 300 yards below the line crossing onto the mountain with the "wall of elders" which lays to the south of Dubois road. Did you study this? I don't see how it would have been effective or possible in July. Did you go there? Why are Cuyamaca Cypress not listed in rare plants found as there are near your service roads? Why are Fish not listed in your list of species found, as there are steel head living right under where the line would cross Boulder Creek and also near where it would cross Cedar Creek? Why are furtles not listed in your list of species found. We found several on an outing where subsequently, within an hour later, we found your footprints! Have you considered that there are golden eagles sited on Boulder Creek, Cedar Creek just to the north of the potential power line crossing, and one was spotted recently in nesting season just overhead at Mildred Falls? Have you considered the impacts to an unroaded area that running lights for 2 years at nig

			that cutting off their ability to migrate from higher elevations to lower ones would have especially for two years during constructions. Do you really believe this rugged country would only take two years to recuperate? Have you considered the impacts of basically subdividing an already relatively small area by placing this line right in the middle of it? This is about 60,000 acres. By placing the line where it is, you've cut off wildlife between Boulder Creek Road and the ridge and cliffs to the west.
Visual Resources	E.3.3	There are some of the most gorgeous views in San Diego from this route especially when one hikes off of the road a bit. I don't think you have considered even a 10th of what this region is. You can not effectively mitigate a visual resource for perpetuity.	Line would cross several major recreational trails. Line would be very visible from most of the hike to Cedar Creek Falls. Line would be very visible from most of the hike to Three Sisters Water fall. Line would be very visible for most of the drive along Boulder Creek Road. How did you prepare your hypothetical photos of the power line? It appears as though unequal positioning was given the power line and poles in the layering or "transparency rating" process on a photo editor such as Photoshop. I don't think this depiction is accurate and the visible impacts would be considerably more severe from the top of Cuyamaca, from the city, and from Boulder Creek Road. We will provide our mock-up of the Visual Impacts to Mildred Falls. From your maps you did not consider the impact of the service roads. You did not consider the impacts of doubling or even tripling this line in ten years. Have you done a study of hits to Google or Yahoo to see how many people search for waterfalls? Or creeks/streams/rivers? I don't think you considered the visual impacts to Mildred Falls at all. Are you aware that this is a waterfall that is more accessible to handicap than any other when flowing in the spring being that the view spot it is only a few feet from Eagle Peak Road? I don't think you considered the visual impacts to the Devils Jumpoff at all. Your maps show a route for the Sea to Sea multi-agency trans-county trail running over Eagle Peak. I studied this trail at length and this is not the former route. A quick question to Jeff Wells, the recreation manager for the Palomar District for the Cleveland National Forest disclosed that the route on your map is not a route that he knew anything about. The Forest Service proposed route through the Forest Service proposed r

Land Use	E.3.4	The designation of service roads is unfathomable. Did someone actually go to see these?
		Did you consider the visual impacts from the top of Sunshine Mountain that currently has a 360-degree view of pristine proposed and undisturbed wilderness?
		Did you consider the visual impacts to the San Diego River Park's Eagle Peak Preserve and the 85,000 members that support this preserve?
		Did you consider the visual impacts of additional runoff muddying up Boulder Creek, Cedar Creek, Conejos Creek, and the San Diego River?
		Did you consider the visual impacts to each and every land owner that is close or adjacent to this line.
		Did you consider the visual impacts from North Peak?
		Did you consider the visual impacts from Middle Peak?
		Did you Consider the visual impacts from Sill Hill waterfall?
		Did you consider the visual Impacts from Sill Hill?
		Did you consider the visual impacts to the "wall of Elders" overlooking the ancient Conejos village?
		Did you consider the visual impacts from Dubois Road?
		Did you consider the visual impacts from Tule Springs Road?
		Have you made plans to review in the spring? Did you consider the visual impacts from Eagle Peak Road?
		I think you need to review the visual impacts during the spring months of February, March, and April for green landscape and flowing roaring water.
		I think your visual impacts are highly inaccurate because your study was done in July and the land was dry and brown.
		Why did you not consult and provide data for this trail provided by the agency that manages the area sited?
		Where did you acquire the data for the map of this trail?
		Hence the power line proposed in Alternate D would parallel 4 miles or better of the Trans- county Trail.
		on Cedar Creek Road. It is doubtful they would consider the route shown on your map as it crosses two restricted Eagle nesting areas.

			Did you walk the route on the San Diego River Park Foundation preserve or just pick it off an old map? Have you considered that some of the "roads" on the topo in dotted lines do not exist? We have spent ample time during the documentation process of the California Wild Heritage Act on hands and knees trying to find the continued road cut that was on a map. How can you begin to justify the road that leads into the San Diego River? Did you walk this route? After building these roads, will the line be economically feasible? Are you aware that the Forest region in and around Cedar Creek and Sunshine Mountain was "backcountry unroaded" until there was talk of a power line coming through? The first round in the 15-year plan had this designation, as it did ever since the land was first purchased. Have you consulted the former owners, the Rutherfords?
Wilderness and Recreation	E.3.5	Unclear and inaccurate distinction.	Why are the items "wilderness" and "recreation" under the same heading? Have you considered clarifying the usage of these two words further? I do not think it is valid to put these under the same heading as their definitions are entirely different and the implications of those definitions are entirely different. Why are these together? Wilderness is land as unaffected by us as possible in the year 2008. A wilderness designated in 1890 (in different terms) would probably be different in some ways than one designated today, but the concept of "untrammeled-ness" persists. The difference as I've come to experience it is almost the exact opposite as is being assumed here. In wilderness it is the land that has the direction. In Recreation it is us. In other words, those who would seek a "formal" form of recreation such as hiking—with trails, shooting, dirt biking, fishing, off-roading (not the same as dirt biking, or skiing, would involve eyeing a piece of land and modifying it in some way as to make it conducive to the sport/recreation/activity at hand: "We need more places to rock climb, we need more places to mine for rocks(as in rock hounds not commercial mining), more trails, we need more swim holes. These could involve modification to some degree or to a great degree, the building of trails of various sizes according to some standard and some allowable usage, the daming of streams for swim holes, setting up safe area to shoot, noise not withstanding. There are official trails within official wilderness, as is some mining and grazing allowed.
			Nevertheless, in wildemess by contrast we are the ones that bear the responsibility and accountability to modify, to be there. We go to

			a place with spikes of poison oak around a 300 year old live oak tree, a 4 foot rattle snake sunning on a rock, a view that stretches for miles, water that cascades without interference, or no water at all. We take it in exactly as it is, for what it is. We are the ones that must modify for poison oak, for snakes, and we come to the land and accept it exactly as it stands, its hazards, its gifts, and as the natives say in their Indian prayer "to learn the lessons hidden in every leaf and rock". —And God willing the ultimate gift and value of wilderness is that we take that lesson of acceptance and accountability home to be practiced with each other. In the times we bear in 2008 I can't think of anything more crucial to the integrity of our existence than our continued ability to access wilderness on wilderness terms. You can not mitigate wilderness, and land with wilderness character!
Wilderness	E.3.5	Cannot mitigate for wilderness and wilderness character	Are you aware, and have you made the documenters aware, that the word "trammeled" that appears in the official federal definition of wilderness in the original Wilderness Act is not the same as the word "trampled"? I've seen these two words misunder stood and misused interchangeably even by government agency officials! The definition of "Wilderness" in the main body in the desert section of the EIS is expanded but the definition of wilderness in the mountain section does not appear to be the same. We were informed that they were written by two different organizations. Is it your intention to use a different set of standards for one area over another? Have you done a theoretical or practical analysis of the value of wilderness? True hunting for the purpose of food gathering might be removed from the first list for these reasons. It would be a wise observation at this point that off-trail hiking and hunting in true wilderness is very similar, probably more in common with the relationship between these two groups and how they interact with the land than with and between the other aforementioned recreationists. The NRA, wildliffe federation, and its followers should take heart and notice, as should the environmentalists. This entire corridor is very popular among deer and turkey hunters. The power line would affect the ability of hunters to shoot to the west. Have you consulted the imput from the hunting community? Have you considered the impact to cross-country hikers? This line would severely impact all five units of the proposed Federal Wilderness status for the proposed Federal Wilderness. This bill has already endured five sessions of Congress, a

	lengthy process. This bill was endorsed by twenty thousand signatures statewide and sits adjacent to the River Park preserve, among others.
	There have been several other impact studies for this bill and for the 15 year plan which indicated much of this land was rare, sensitive and in dire need of preserving. By definition, you can not mitigate wilderness or land with wilderness character!
Recreation	Have you considered the fact that the Cleveland purchased a lot of the affected land in the last decade and a half, so much is still new to them. It is likely that more recreation will occur here as the time and resources and general public knowledge is cultivated. The region is close and accessible from town, contains most of the water recreational resources for the county, much of the high elevation that is cooler and wetter. What hiking areas did you consider? Have you considered the impacts to hiking along Sunshine Mountain? Have you considered the impacts to the old Hwy 80 River Park trail? Are you aware that you used their trail as an access road? Have you considered the impacts to the Sea to Sea Trail? Why / how was the location of the Sea to Sea Trail changed for this document? I asked the recreation manager for the Palomar District of the Cleveland National Forest why the route was changed. He replied that it hasn't changed to his knowledge. It appears in the EIS that he has no knowledge of it, and no power over what was published in a document that he wasn't consulted on. Have you considered the implications of this? The Sea to Sea trail is a multiagency trail running from the Torrey Pines State Beach to the Salton Sea. I've been in several of their meetings and participated in an expedition 3 years ago that went through area in Option D. This was not the route and the former Palomar District ranger said that it would be years before this route could be completely identified. Anyone who is even mildly interested in this area would know that there has been a very serious investigation and debate concerning golden eagle disclosures on Eagle Peak. These have a likelihood of occurring at least during the spring months during nesting season. It is not possible that the Sea to Sea trail, being clearly identified as an interagency trail with each agency weighing in on its own turf, could
	have placed the trail where they did.

Cultural Resources	E.3.7	Critical	I've provided further information to Jeff Wells concerning Golden Eagles just to the East of Boulder Creek Road where this line goes as well as considerable occurrence of red tailed hawk nesting sights on Mineral Hill, also where the power line could be places. Construction is not allowed near and during any rapture nesting season, so this would clearly impact both the power line and the Sea to Sea trail. In addition, there is considerable data on seeps located along the new route of the Sea to Sea trail on your maps. The trail also goes on a route that is way too steep to be feasible without considerable blasting to give it a legal grade for a public trail. And finally the trail uses a route much too close to both Kelly Creek and Cedar Creek to be allowable according to the Clean Water Act. If Jeff did not provide this information than who did and how can it be considered at all official? Cleveland National Forest officials would surely know these things. At the time of my inquiry anyone within the Cleveland office would have had amble time to consult with Jeff. So if the documentor did not get information from the right resources surely there are guidelines on who they can consult. If the Sea to Sea trail remains on Cedar Creek Road, already built and paid for in an extremely rugged and forbidding area, as it would seem that the visionaries of this trail would capitalize on this advantage, than the Sea to Sea trail would run close and parallel for 4 miles to the power line buzzing overhead. Likewise, if for some reason the Sea to Sea Trail were to take a route different from Cedar Creek Road, the likely alternative would be the top of Sunshine Mountain, not Eagle Peak. My deepest concern here is that inappropriate collaboration has taken place. Surely the wrong map was provided and this needs only to be identified. So what did happen with this route? Who provided the Sea to Sea trail information? When was it first provided? How many times was it provided? Why would it have been provided more than once if
Cultural Resources	E.3.1	Crucai	Why is there no mention of the impact to the ancient Conejos Village and ancient native American Route? Why is there no mention of the ancient healing rock, and other landmarks close by that were cherished by this culture to this day? What resources have you contacted that have actual on the ground knowledge of this area for cultural resources? What percentage of the route did you perform on the ground surveys for cultural resources?
			Why is there no mention of the collective

			cultural significance of Sunshine Mountain?
			Why is there no mention of the other upper Conejos creek village where this line crosses Conejos Creek? Did you go there?
			Why is there no mention of the two Kelly Creek villages? Did you go there?
			Why is there no mention of considerable sites on the River Park preserve?
			Why is there no mention of the Boulder Creek sites and ancient trail?
			There are possibly six shaman sites along this area why have you not mentioned any of them?
			I think you need to do a study for the reasons that you did NOT find native impacts in Cedar Gorge. This may seem counterintuitive but actually it is highly significant. This may be an environment that has very little impact from humans at all, including native Americans, making it one of the rarest biological study areas in the county for riparian and chaparral systems.
			You need to consider the potential cultural impacts of placing a tower at the "Wall of Elders," located on the mountain top immediately south of Dubois Road. You need to consider viewing this feature from below on Dubois Road along Conejos Creek. Have you been there?
			You need to consider the potential cultural impacts at the side of the tower immediately below Mildred Falls to the North adjacent to the San Diego River. Did you go there?
Noise	E.3.8		I do not think you have considered the effects of the noise from these lines on wildlife.
			I do not think you have considered the effects these lines will have on cattle.
			I do not think you have considered the effects of line construction at night on the wildlife and the residents.
Transportation and Traffic	E.3.9		I don't think you have considered the effects of additional traffic on dirt-graded Boulder Creek Road on the lives of the people residing in that area.
Public Health and Safety, Contamination	E.3.10		Have you researched the possibility that substances used in mining in the last century, such as arsenic, and explosives might still be buried along this line?
Air Quality	E.3.11		I don't think you have considered the effects of the construction of all of the service roads will have on putting dust into the air. A lot of residents moved to the back country to get away from city pollution.
Water Resources	E.3.12	Critical	This proposal affects Conejos, King, Boulder, Cedar, Kelly Creeks and the San Diego River. Collectively in this region these make up the watershed for the San Diego River. The Cleveland National Forest was originally created to protect this watershed as it is the primary and central watershed for San Diego.

		The federal Clean Water Act says that once a watercourse is in recovery for over-siltation from fire or other disaster, no further construction can occur upstream. This line would create all kinds of siltation for every major and minor tributary for the entire watershed. The service roads run parallel and through several streams and tributaries. SDG&E has significant difficulty protecting the watershed now. They have not demonstrated the ability to disseminate regulatory information to their vendors, and to manage and monitor them. Several cases where equipment has gotten stuck going where it wasn't supposed to go. Personnel have gotten lost not knowing where their routes and easements were designated and cut private owners locks they were not allowed to cut. If you can't insure it now how are you going to effectively manage and monitor your employees and the vendor employees in the future for
Geology, Mineral Resources, and Soils	E.3.13	perpetuity? Have you considered a study of the existing mines and their relationship to San Diego history?
Combined considerations		These impacts, when viewed together, point to a corridor of biological, natural, environmental significance that when viewed collectively can not be mitigated, as this resource is unique. Any natural movement from lower to higher elevations or higher to lower elevations, or from west to east and east to west, would be severely affected by this line as it cuts through the entire length of it. This affects all resources, including biological, fire, wind, geological, cultural, and recreational. For all of the impacts cited here, I do not support consideration of Alternative D for the Surrise Powerlink.

X. CONCLUSION

As discussed here, the Draft EIR/EIS for the proposed Sunrise Powerlink project fails to adequately address a wide range of highly significant and long-term issues, including legal questions around the Williams Land Act, water erosion and runoff, forest fires, use of the lines after construction, impact on a number of biological resources, visual impact of the lines, and public health and safety. Consequently, the Draft EIR/EIS fails to comply with the requirements of either CEQA or NEPA, and should be revised to address the above issues and re-circulated for public review.

Name / Agency	Length (miles)	New Power Transmitted through lines (kV)	# of impacts / category
Sunrise Powerlink / SDG&E	91	500	50 total
	59	230	http://www.cpuc.ca.gov/environme nt/info/aspen/sunrise/deir/02%20Ex ec%20Summary.pdf
Sierra Alturas - Reno / CPUC	160 (140 in CA)	345	6 total 1 cultural, 2 land use, 1 traffic, 2 visual (ES 44-46)
			ftp://ftp.cpuc.ca.gov/gopher-data/alt uras/disk2/ex-sum/
			ES-44-46 (impact summary table)
Northeast San Jose / PG&E	7.3	230	2 total 1 land use, 1 visual (ES 12, 21)
			http://www.cpuc.ca.gov/Environme nt/info/aspen/nesanjo/FEIRTOC.ht m
			ES-12, ES-21
Viejo System / SCE	3.1	66	none
			http://www.cpuc.ca.gov/Environme nt/info/aspen/viejosystem/viejosyst em.htm
			ES-A-1 (Mitigated Negative Declaration)

	1		i i
Six Flags / SCE	1.15	66	none
			http://www.cpuc.ca.gov/Environment/info/6flag.htm
			A.97-12-049 includes a Negative Declaration
			A-1
Valley Auld / SCE	11.5	115	none
			http://www.cpuc.ca.gov/Environme nt/info/aspen/valleyauld/review.ht ml http://www.cpuc.ca.gov/Environme nt/info/aspen/valleyauld/mitNegDe c.pdf
			A.03-03-043 includes Mitigated Negative Declaration
			A-1, A-2, A-3
Otay Mesa	18 above ground	230	none identified, created extensive mitigation project to eliminate significant impacts
	10 below ground	230	http://www.dudek.com/cpuc/sdge-o mppa-trans-proj/
	ground		Final EIR - Section D. 4-113
Los Banos - Gates / PG&E	84	500	4 total 1 air quality, 1 biological, 1 land use, 1 public safety
			http://www.cpuc.ca.gov/Environme nt/info/aspen/path15/fseir%20execu tive%20summary.pdf
			ES-5

Jefferson Martin / PG&E	27	230	11 total 9 visual, 1 land use, 1 recreational http://www.cpuc.ca.gov/Environme nt/info/aspen/jefferson_martin/feir/t ext/03%20exec_summary.pdf ES-67
Devers No. 2 / SCE	230	500	9 total 3 visual, 1 recreational, 1 agricultural, 2 cultural, 1 noise, 1 air quality http://www.cpuc.ca.gov/environme nt/info/aspen/dpv2/toc-feir.htm ES-74

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of San Diego Gas & Electric Company (U 902-E) for a Certificate of Public Convenience and Necessity for the Sunrise Powerlink Transmission Project

Application 06-08-010 (Filed August 4, 2006)

PHASE II DIRECT TESTIMONY OF ILEENE ANDERSON ON BEHALF OF THE CENTER FOR BIOLOGICAL DIVERSITY AND THE SIERRA CLUB

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Dated: March 12, 2008

Review of Botanical Resources Described in the Draft Environmental Impact Report/Environmental Impact Statement for the Proposed Sunrise Powerlink Project TESTIMONY OF ILEENE ANDERSON

Background

I am currently a staff biologist with the Center for Biological Diversity (Center), where I have been employed since 2005. I focus on areas of southern California, including Imperial, San Diego, San Bernardino, Riverside, Orange, Los Angeles, Kern and Inyo counties. I am a research associate with the Rancho Santa Ana Botanic Garden, which is affiliated with the Claremont Graduate School in Claremont California and also a research associate with the California State University, Northridge in Northridge, California. From 1997 to 2005, I was the Southern California Regional Botanist for the California Native Plant Society (CNPS), a non-profit organization dedicated to the understanding and appreciation of California's native plants and how to conserve them and their natural habitats. One of the areas that I focused on for the CNPS was the California deserts, the southern California national forests and cismontane California, including areas of the proposed Sunrise Powerlink project. From 1998 to 2002, I was a federal appointee to the Bureau of Land Management's Desert Advisory Council, which was established under the Federal Lands Management Policy Act. In that capacity, I advised the BLM California Desert staff on issues relating to renewable resources in the 25 million acre California Desert Conservation Area. I also chaired the Council for one year. From 1992 to 2005, I was a consulting botanist on numerous projects throughout the southwest United States. Attachment A provides a more detailed description of my qualifications. My testimony discusses the analysis of botanical resources presented in the draft environmental impact statement/environmental impact report (DEIR/EIS) for the proposed Sunrise Powerlink project.

General Comments

I concur with the determination in the DEIR/EIS that the impacts to the botanical resources in the proposed project and its alternatives may not be adequately mitigated and are therefore significant. Additionally, I concur that the proposed project and alternatives may not be able to be adequately mitigated and could have significant impacts to jurisdictional waters and wetlands.

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The DEIR/EIS is unusual in that it describes the impacts to sensitive plants (plants that are rare, endangered or threatened) and sensitive plant communities (groups of plants found living together that are not common) as significant, yet many of the mitigation measures involve surveys for such species. Typically, these types of documents include numerous years worth of surveys to more comprehensively identify the resource conflicts and then try to craft a proposed project and alternatives that avoid sensitive resources, or minimize the impacts to them. If avoidance and minimization of impacts still results in an impact, then mitigation is proposed. However, in this document, impacts to rare plants and sensitive plant communities from a single survey year in drought conditions are determined to be significant without conducting requisite follow-up plant surveys commonly included in an environmental impact report.

Mitigation measures in the DEIR/EIS focus on conducting the surveys in the future instead of a more typical approach of conducting them where they will be used to assess significance, and then mitigating for impacts caused by the project. This approach seems hurried and rushed and certainly is not a comprehensive evaluation of the botanical resources nor does it follow the accepted plant survey protocols (CDFG 2000, CNPS 2001). Failure to conduct sufficient surveys prior to construction of the project also effectively eliminates the most important function of plant surveys - using the information from the surveys to minimize harm caused by the project and reduce the need for mitigation. Often efforts to mitigate harm are far less effective than preventing the harm in the first place. In addition, without understanding the scope of harm before it occurs, it is difficult to quantify an appropriate amount of mitigation.

As noted in the DEIR/EIS, 2007 was one of the driest years on record in California. The DEIR/EIS also notes that the drought condition precluded implementation of US Fish and Wildlife Service approved surveys for the Quino checkerspot butterfly. Likewise, the lack of adequate rainfall would preclude the ability of even seasoned botanists to unequivocally identify species, particularly annual species, which germinate, grow, flower and set seed in a single season. While the DEIR/EIS recognizes that the impact to sensitive plant communities and sensitive, rare or listed plant species will be significant, it fails to quantify the impact or the significance of that impact on the species or plant community from the proposed action.

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Rare Plants

The evaluation of the impacts to rare plants is not adequate. Adequate evaluation of significant impacts is particularly important for the three plant species that are listed under the Federal and/or State Endangered Species Act: The San Diego button-celery (Eryngium aristulatum var. parishii), San Diego thorn-mint (Acanthomintha ilicifolia) and the Del Mar manzanita (Arctostaphylos glandulosa ssp. crassifolia). All of these species were found within the proposed project boundaries. The San Diego button-celery was only found as a single plant at one location, and is proposed to be avoided by the use of the existing dirt road. However, additional San Diego button-celery plants may be present on the site as a seed bank (ungerminated seeds found in the soil) or more unusually as perennial plants (USFWS 1993) that simply did not germinate or exhibit above-ground leaves or flowers in response to the unprecedented low precipitation of 2007. The San Diego thorn-mint is an annual plant and may also exist on the project site as a seed bank in 2007. The Del Mar manzanita is a perennial plant identifiable throughout the year. According to the DEIR, seventy-eight Del Mar Manzanita plants will be impacted by the proposed project. However, no context is provided to indicate what portion of the population(s) these 78 individuals represent.

The impacts to these species are noted as significant, yet the analysis fails to identify if the impact will jeopardize the existence of the species, which is the analysis required under the federal Endangered Species Act. Populations of annual plants and perennial herbaceous plants (which live more than one season, but die back to below ground part after producing flowers and seeds) are difficult to evaluate, especially during drought years. Their seeds may not germinate, young plants may dry up prior to flowering or fruiting, making them unidentifiable, or dry conditions may prevent below-ground parts from breaking through to the surface. Information about the size of the population is typically an important part of a jeopardy analysis.

In addition to the three rare species discussed above, seven other "listed" species were not identified on site during the surveys of 2007 but have potential to occur in the project areas: San Diego ambrosia [Ambrosia pumila], Orcutt's spineflower [Chorizanthe orcuttiana], Willowy monardella [Monardella viminea], Spreading navarretia [Navarretia fossalis], California Orcutt grass [Orcuttia californica], and San Diego mesa mint [Pogogyne abramsii]. Impacts to these species were determined to be significant, but again, due to lack of data, actual measures to

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avoid, minimize or mitigate have not been accurately evaluated, and there is no analysis of whether the project would jeopardize the species' existence.

The DEIR/EIS appears to disregard any avoidance or minimization of impacts to the rare plant species - basically stating that all impacts are significant. Yet the mitigation measures propose to do surveys, and avoid the species or minimize the impact. This seems backwards. Typically when planning a project, the project site is surveyed for sensitive resources and their habitat. Then the project is designed to avoid any impacts, usually by moving the project to an area where rare plants and their habitat are not present. If that is not possible, then the project is designed to have the smallest impact possible, again usually achieved by moving the project to primarily a less sensitive area. Sometimes plants will still be impacted despite minimization of impacts, and then mitigation is incorporated. Mitigation is usually structured to reduce the effects of the impact to the rare plants to a non-significant level. However, in this DEIR/EIS, data from a single drought year is used to determine that a significant impact will occur. Although additional surveys are proposed, the DEIR/EIS does not provide sufficient information to assess whether appropriate measures are proposed to minimize the impacts of the project, or to address the adequacy of future mitigation measures. The determination of a significant impact without acquiring adequate survey data is contrary to common practices in preparing an EIR. Making project design decisions without this data seems premature and lacks the due diligence necessary to actually reduce impacts through project design.

I also have concern about the non-listed plant species and the impact that the project will have on them. A number of plant species at risk of needing state or federal protection are identified to occur within the proposed project area. As stated in the DEIR/EIS, these species are listed as either L1B or L2. L1B plants are rare, threatened, or endangered in California and elsewhere and eligible for State listing. L2 plants are rare, threatened, or endangered in California but more common elsewhere and also eligible for State listing. In addition, the California Native Plant Society designates the following L1B or L2 Threat Code extensions (CNPS 2007):

- .1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- o .2 Fairly endangered in California (20-80% occurrences threatened)

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 .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Plant species are not accurately represented beyond their CNPS list in the document. For instance, the following sensitive plant species that occur within the proposed project have more accurate threat codes that are not included in the document:

- Nuttall's scrub oak (<u>Ouercus dumosa</u>) is a L1B.1 and 4,061 individuals would be affected by construction of the Proposed Project.
- San Diego sand aster (<u>Corethrogyne filaginifolia</u> var. <u>incana</u>) is a L1B.1 and a total of up to 865 individuals would be affected by construction of the Proposed Project.
- San Felipe monardella (<u>Monardella nana</u> ssp. <u>leptosiphon</u>) is a L1B.2 and up to 300 of the individuals would be removed during construction of an access road.
- 4) Summer-holly (<u>Comarostaphylis diversifolia</u> ssp. <u>diversifolia</u>) is a L1B.2. and two individuals of summer holly would be removed during trenching for the underground portion of the Proposed Project.
- Delicate clarkia (<u>Clarkia delicata</u>) is a L1B.2 and 225 individuals would be removed by the Proposed Project.
- 6) San Diego gumplant (<u>Grindelia hirsutula</u> var. <u>hallii</u>) is a L1B.2 and up to five individuals of this species would be affected during construction.
- Felt-leaved monardella (<u>Monardella hypoleuca</u> ssp. <u>lanata</u>) is a L1B.2 and up to 70 individuals would be affected by the Proposed Project.
- Ramona horkelia (<u>Horkelia truncata</u>) is a L1B.3 and up to 75 individuals would be affected by construction.
- Pygmy lotus (<u>Lotus haydonii</u>) is a L1B.3 and only a single plant was found on the project site, and it would not be affected by the Proposed Project.
- 10) San Diego sunflower (<u>Hulsea californica</u>) is a L1B.3 and a total of up to 403 individual San Diego sunflower plants would be affected by construction of the Proposed Project.
- 11) San Diego barrel cactus (<u>Ferocactus viridescens</u>) is a L2.1 and a total of up to 92 barrel cacti would be affected by construction of the Proposed Project.
- 12) California adolphia (<u>Adolphia californica</u>) is a L2.1 and 1,920 individuals would be removed by the Proposed Project.
- Coves' cassia (<u>Senna covesii</u>) is a L2.2 and 356 individuals would be removed by the Proposed Project.

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All of these species qualify for listing under the State Endangered Species Act, and the DEIR/EIS identifies the impacts to the species as significant. However, it fails to evaluate the effect of the project on the persistence of these species. The lack of data on the Nuttall's scrub oak and the San Diego sand aster are particularly problematic, because of their current rarity, threat, and the large number of plants that will be destroyed by the proposed project.

Again, the determination is made that impacts to these species will be significant, but many of the proposed mitigation measures merely require surveys for the plants followed by avoidance, minimization and then mitigation. These surveys need to be done prior to the environmental documentation being produced and the project being implemented, because detailed surveys are the basis for the evaluation of impacts to botanical resources as required by CEQA and NEPA. Including basic surveys in the DEIR/EIS is necessary if the public is to have an opportunity to comment on measures to avoid, minimize and then mitigate the effects of the project.

The DEIR/EIS also does not consider a full range of mitigations for sensitive plant species. Mitigation measure B-5a includes translocation and reseeding. Unfortunately, translocation of rare plants is not always successful – with only 8% of mitigation-related transplantation, relocation or re-introduction projects being successful (Fiedler 1991). While restoration or revegetation plans are not typically included in a DEIR/EIS, it would be helpful to have an identification and assessment of the species and number of rare plants that would be potentially transplanted. Another potential mitigation would be collection and deposition of rare plant seeds in a long-term conservatory for potential future use in revegetation efforts, genetic studies and long term conservation of these rare species.

Plant Communities

Plant communities are groups of plants that live in similar conditions. While the DEIR/EIS uses the plant community descriptions based on a refinement of Holland's (1986) vegetation descriptions by Oberbauer (1996), a more recent publication by the State of California's Department of Fish and Game (CDFG 2003) has superceded these systems and has standardized vegetation community descriptions along with recognizing sensitive plant communities (plant communities that are rare in California). It is impossible to compare all of the plant communities listed in the DEIR/EIS with the current CDFG list of plant communities

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because not all of the plant community names (or numbers) "cross-walk" to the CDFG treatment. Regardless, seven plant communities in the project area are considered rare and worthy of consideration by the California Natural Diversity Data Base developed by the CDFG (2003). They include Valley Needlegrass Grassland, Red Shank Chaparral, Engelmann Oak Woodland, Mesquite Bosque, Southern Willow Scrub, Southern Coast Live Oak Riparian Forest, and Southern Cottonwood-Willow Riparian Forest (CDFG 2003). Additionally, some plant communities that I could not "cross-walk" are rare, including Scrub Oak chaparral, because it is dominated by Nuttall's scrub oak, itself a rare plant which CNPS notes as a List 1B.1 plant. The Scrub Oak chaparral as described in the DEIR/EIS appears to actually be southern maritime chaparral, which is a recognized rare plant community (Hogan et al. 1996, CDFG 2003).

Different types of vernal pools support different types of plant communities. Vernal pool plant communities are rare and a Recovery Plan is dedicated to their conservation in southern California (USFWS 1998). The mitigation measures in the DEIR/EIS fail to meet any of the four criteria identified in the recovery plan to protect these communities. Criterion 1 requires "Existing vernal pools and their associated watersheds... should be secured from further loss and degradation in a configuration that maintains habitat function and species viability." Criterion 2 requires that "The existing vernal pools and their associated watersheds ... are secured in a configuration that maintains habitat function and species viability (as determined by recommended research)." Criterion 3 requires that "Secured vernal pools are enhanced or restored such that population levels of existing species are stabilized or increased." Criterion 4 requires that "Population trends must be shown to be stable or increasing for a minimum of 10 consecutive years prior to consideration for reclassification. Monitoring should continue for a period of at least 10 years following reclassification to ensure population stability." The off-site mitigation proposed for project impacts will potentially secure some vernal pools in conservation, but it will allow for destruction of the on-site pools (and the species that inhabit them). This results in a cumulative loss in vernal pool habitat from the present condition. As of 1998, it is estimated that as much as 97% of vernal pool habitat had already been lost in southern California (USFWS 1998). The proposed mitigation measures in the DEIR/EIS will result in a cumulative loss in vernal pool habitat occurs. Consideration of project design that simply avoids the 0.02 acres of permanent impact and the 0.15 acres of temporary impacts to these very rare

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and declining vernal pool plant communities needs to be more thoroughly evaluated and discussed.

The applicant proposed mitigation measures for sensitive plant communities are the same as for rare plants - perform surveys then outside of the public process, avoid, minimize and mitigate. Yet like the rare plants, the impact analysis has already determined that the impact to the sensitive plant communities is significant, regardless of any future avoidance, minimization or mitigation. This determination of significant unmitigable impact prior to on-the-ground surveys appears to assume the worst possible conservation scenario. As discussed elsewhere, surveys themselves are not mitigation and conducting them after determining the project route eliminates the most valuable function of the surveys, which is to minimize the impact of the project. If final routing decisions are made after conducting adequate surveys, many of the impacts could be avoided. Conducting surveys after routing or construction activities have begun basically makes it difficult or impossible to evaluate the impacts or determine appropriate mitigation measures.

With regards to the mitigation ratios listed in Table D.2-7, these ratios are set up to mitigate impacts to plant communities. The ratios were identified as being "developed in consultation with the USFWS, BLM, and State Parks, and are based primarily on the requirements established in regional habitat conservation plans and also on mitigation required for other projects." It is unclear if the determination of significance for impacts to plant communities is because the mitigation ratios are not sufficient or if the mitigation is simply not feasible. Either way, there are actions that can be taken to reduce the impacts of the project. If the issue is that the mitigation ratios are not adequate to off-set the impact to plant communities, the project can be designed to avoid or minimize locating it in undisturbed plant communities. This design will minimize the need for mitigation, making it more feasible to accomplish mitigation goals if they prove necessary. The currently proposed 1,359.60 acres of mitigation necessary to off-set impacts is noted as perhaps not being feasible, however on the scale of other mitigation projects that I have reviewed, acquisition of this amount of mitigation acreage and diversity seems achievable and the DEIR/EIS provides no analysis of why it would not be achievable. Another option for some of the sensitive plant communities is to increase the mitigation ratios, which may help to reduce the impacts to less-than-significant levels from the proposed project.

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The mitigation ratio for tamarisk scrub (a type of riparian scrub in table D.2-7) is unjustifiable primarily because tamarisk is a highly invasive exotic species in wetland areas, especially in the desert. Literally millions of dollars have been spent on on-going eradication programs throughout the western United States for this problematic plant. The appropriate mitigation for this plant community would be to remove it and restore the wetland area with native riparian scrub, which is an example of how impacts could be mitigated for other sensitive riparian plant communities (most all of which are rare).

Mitigation measures B-1a through B-1c are typical mitigation measures and if implemented properly should reduce the impacts from the proposed project and alternatives. Undisturbed habitat acquisition and conservation is preferred over restoration, revegetation or reclamation because no creation or enhancement costs are involved, just management. Additionally, restoration typically is not successful in recreating the complex biological web that occurs in undisturbed natural areas (Longcore et. al. 1997).

If restoration, revegetation or reclamation is to be used as a mitigation strategy, clear and concise standards for each vegetation type including success criteria, site monitoring, and ongoing maintenance practices should be identified. For instance, revegetating desert lands, which typically take much longer than 5 years to successfully revegetate (Lovich and Bainbridge 1999), is very different from revegetating riparian areas (Goodwin et al. 1997).

Wetlands and Jurisdictional Waters

The determination of jurisdictional waters needs to be identified in order for impacts to be evaluated. Delaying the delineation of the jurisdictional waters to some point in the future does not fully disclose the impacts of the actions in either the proposed action or the alternatives for analysis. Therefore, the environmental impacts between the proposed action and the alternatives cannot be compared.

Since 1989, each federal administration has embraced a no-net-loss of wetlands policy. In fact by 1989, southern California had lost up to 97% of its wetland areas (Bowler 1989). The DEIR/EIS anticipates that "there would be no net loss of jurisdictional habitat" yet, many of the sensitive plant communities in the proposed project area are located in "jurisdictional waters" regulated by the Army Corps of Engineers or the State Department of Fish and Game and Regional Water Quality Control Board and the DEIR/EIS has determined that non-mitigable

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turn, accelerates rainfall runoff which in turn reduces percolation into the groundwater for future contribution to streams during dryer periods.

II.B.2. Has this issue with runoff and potential groundwater contamination been studied?

II.C. Transmission losses

II.C.3. Transmission losses over these distances suggest that a better investment could be made in locally generated electricity AND conservation. Has this been studied?

III. DEIR DOES NOT ADEQUATELY ADDRESS FIRE DANGER

III.A. Potential for Wildfires

Wildfires significantly reduce the ability to transmit electricity through the areas under consideration during periods when it is most needed [hot, dry, windy conditions].

III.A.1. What consideration of wildfire potential from the proposed routing of these lines has been done in light of changing climate conditions and the long term presence of the line? How has the October 2007 fires changed the landscape and how will this impact future potential for catastrophic fires?

IV. DEIR INDICATES AN IMPROPER RELIANCE ON LEAPS PROJECT, WHICH IS PROBLEMATIC IN ITSELF (ALTERNATIVE 3, "LEAPS TRANSMISSION-ONLY ALTERNATIVE")

Concerning LEAPS: The LEAPS project at Lake Elsinore is mentioned, and represents current thinking about energy generation. However, the LEAPS project is NOT a perpetual motion machine, AND would result in increased fossil fuel usage and consequent release of carbon dioxide to the atmosphere, adding to global warming. In addition it increases loss of water by evaporation in a water-deficient area.

IV.A.1. Has this potential damage the LEAPs project will inflict been considered as part of the downside to the proposed Alternative 3?

V. DEIR DOES NOT ADDRESS SPECIFIC USE OF LINES

V.A. Unintended use of lines after construction

It appears that this project needs to be restricted in a very specific way to prevent it from becoming a "back door" to importing cheaper electricity from relatively polluting Mexican power plants where environmental standards are lower and enforcement is relatively lax.

increase in tax of the property only, forcing owners to sell off family inheritance due to inability to maintain tax levies. Has this impact been considered, and if so, where is that documented in the DEIR?

I.B. Seismic Hazard Zones and Regulations

The California Department of Conservation and California Geological Survey is the principal state agency charged with implementing the 1990 Seismic Hazard Mapping Act. The zones identify areas where site specific geotechnical investigation must be Conducted to assess liquefaction hazard before development and if a hazard exists, to provide a technical basis for mitigation. In review of the recommended Criteria for Delineating Seismic Hazard Zones in California.

The EIR failed to list any of the property in which the Sunrise Power Link Project would cross or transverse any of the Liquefaction Hazard zones not limited to:

- a. Areas known to have experienced liquefaction during historical earthquakes.
- Areas of uncompacted fills that are saturated, nearly saturated, or may be expected to become saturated.
- Areas where analyses of existing data indicates that the soil are potentially liquefiable.

I.B.1. Where is this significant area of oversight dealing with the construction of the transmission towers addressed?

II. DEIR DOES NOT ADDRESS POTENTIAL FOR INCREASED EROSION, WATER RUNOFF (Section D.12: Water Resources)

Since specific information on the proposed routes for the proposed Sunrise Powerlink is not provided, it is very difficult to make intelligent comments on how this project might impact local water supplies and quality. San Diego still gets a significant percent of its water from local streams and degrading these in any way imperils a critical resource already under assault.

II.A. Erosion

The deeply dissected terrain this project transverses from Ocotillo to Penesquitos Lagoon suggests severe erosion problems in many areas along the project.

II.A.1. Have those erosion problems been studied?

II.B. Disturbed soils and runoff

Disturbed soils during construction and subsequent access road use for maintenance increases erosion, which unavoidably adds unwanted debris to the water supply. That, in

turn, accelerates rainfall runoff which in turn reduces percolation into the groundwater for future contribution to streams during dryer periods.

II.B.2. Has this issue with runoff and potential groundwater contamination been studied?

II.C. Transmission losses

II.C.3. Transmission losses over these distances suggest that a better investment could be made in locally generated electricity AND conservation. Has this been studied?

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IV.A.1. Has this potential damage the LEAPs project will inflict been considered as part of the downside to the proposed Alternative 3?

V. DEIR DOES NOT ADDRESS SPECIFIC USE OF LINES

V.A. Unintended use of lines after construction

It appears that this project needs to be restricted in a very specific way to prevent it from becoming a "back door" to importing cheaper electricity from relatively polluting Mexican power plants where environmental standards are lower and enforcement is relatively lax.

V.A.1. What steps will the CPUC and BLM take to prevent this from happening?

VI. DEIR INADEQUATELY ESTIMATES IMPACT ON BIOLOGICAL RESOURCES; RESOURCES INCORRECTLY SURVEYED

V.I.A. Native Tecate Cypress tree

Regarding Alternative D, the DEIS does not contain any note of the rare native Tecate Cypress along this route. Several examples of this very rare tree are located between D-5 and D-6:

VI.A.1. Why were these trees not noted in this report?

VI.A.2. Will SDGE be sending biologists in to check on these trees, which are almost 4 feet high and clearly visible?

VI.A.3. What damage to these Tecate Cypress will construction of Alternative D and 25 miles of access roads cause to these trees?

VI.A.4. If mitigation is the answer, how does one mitigate a tree that grows naturally in only two areas in the United States?

Regarding Alternative D, the DEIR (Section E.3.2-7) refers to exactly 616 trees that will be trimmed or destroyed in this route:

VI.A.5. How was this conclusion reached, when only 30% of the proposed route was surveyed?

VI.A.6. Will SDGE do an exact count of how many trees will be destroyed if the line and the required access roads are built?

VI.A.7 In addition, the DEIR does not address whether the tree count referenced above included the 25 miles of new access roads that would be required by Alternative D.

VI.B Biological survey techniques

Regarding Alternative D, the DEIR refers to biological surveys. Regarding survey techniques:

VI.B.1. Was a GPS used to survey Alternative D? This is specific to all surveying, regarding the finding of items of biological significance, including Plants and Animals.

VI.B.2. If No, why was a GPS not used? GPS reference points would allow the public to cross-check the data reported by the firm preparing the DEIR.

VI.B.3. Was a track log or record of on-the-ground foot travel made when the biological survey was conducted?

VI.B.4. If yes, can that track log be made public information for examination?

VI.B.5. What percentage and number of miles of the Alternative D, North of Interstate 8 route was covered by survey personnel on foot?

Vl.B.6. What were the dates of the surveys along the Alternative D route?

VI.B.7. Were the plant studies done in accordance with standard practice, which is to survey for plants in the flowering (wet) season?

VI.C Western Pond Turtles

Regarding Alternative D, the draft EIR/EIS states that no rare Western Pond Turtles were found in Boulder or Cedar Creeks: In fact, a photograph taken on April 7, 2007, shows a large Western Pond Turtle sunbathing in Cedar Creek near D-13 of the proposed Sunrise Powerlink Alternative D (see attached photo).

VI.C1. Why did biologists fail to find any Western Pond Turtles in Cedar Creek?

VI.C.2. In fact, the survey of this area for water-based animals was conducted during the hottest part of the year, when Cedar Creek was largely dry. Will this be rectified in the final EIR? And if so, in what way?

VI.D New roads required by Alternative D

VI.D.1. What will be done to further study the approximately 25 miles of new access roads proposed with Alternative D?

The DEIR neglected to conduct a study specific to the effect of those roads on waterbased animals in Cedar Creek, Boulder Creek, The San Diego River, and other watersheds.

VI.D.2. Will a study of this area, specific to the effects of roadways on these animals, be done?

VII. DEIR DOES NOT FULLY ADDRESS VISUAL IMPACT OF POWER LINES (Section D.3: Visual Resources)

Numerous individuals and entities, including the County of San Diego, have expressed concern over the visual impact of the proposed project, which in many areas will erect dozens or even hundreds of poles averaging 130 to 150 feet.

VII.A. Clear visual differences between existing and proposed new poles

VII.A.1. Existing poles are 70 feet; new poles will average more than twice that, at 150 feet. There is a significant difference in terms of how far such a 70 foot pole versus a 150-foot pole is visible. Has that been considered?

In addition, current poles are simple wooden telephone poles. The portion of the proposed line carrying 150 KV lines would be giant metal towers with many arms. There is no comparison between the two, so contending that running the new poles along the existing right of way does not constitute new impacts simply isn't correct.

VII.A.2. How does SDGE plan to mitigate for the loss of scenic value created by the huge towers proposed?

VII.B. Property values impacted by visual degradation

One of the reasons people chose to purchase homes in rural areas is the absence of reminders of industrial society. Homes commanding a view of undisturbed land commonly draw a higher price on the real estate market. The impact on rural property values of huge unsightly power towers, both near to property as occurs in a number of places along the line, or even far on the horizon, is highly significant and has been documented. ["Power Lines and Property Values: The Good, the Bad and the Ugly," The Urban Lawyer, The National Quarterly on State and Local Government Law, Spring 1999, Volume 31, Number 2.]

While the argument of inverse condemnation has not been upheld by the courts, at least in California (see San Diego Gas & Electric Co. v. Covalt²⁹, in which a landowner tried to make out a claim for inverse condemnation caused by a pre-existing power line based in part on a diminution in value of his property due to fear in the marketplace of EMFs), there is research to show the placing power lines near property after the fact cause a clear devaluing of property.

In fact, the undesirability of nearby power lines is so great that despite the expense, nine out of 10 new subdivisions now bury power lines, and dozens of cities have adopted comprehensive plans to bury or otherwise relocate utility lines, including San Antonio, TX; Colorado Springs, CO; New Castle, DE; Saratoga Springs, NY; Williamsburg, VA; Tacoma, WA; and Frederick, MD. ["The impact of transmission lines on property values," Peter Elliott, David Wadley, 2002, Property Management Journal.]

VII.B.1. How does SDGE propose to compensate land owners thus affected?

VII.B.2. How does SDGE proposed to compensate the people of California, whose public parks are clearly reduced in value by the placement of power lines across them (i.e., Anza-Borrego State Park and Cleveland National Forest)?

VII.C. Property values degraded by fear of EMFs

Although data on the health effects of electromagnetic fields is still inconclusive, the public perception is not. As such, electrical towers anywhere near private property will degrade property values significantly due to fear of EMFs: "At the time of the original article, scientific findings on the issue of negative health effects were inconclusive, sending mixed signals to the public. The author found, however, that general public perception that EMFs were harmful uniformly drove the values of adjacent property downwards... Emerging case law at the time supported the admissibility of expert testimony based on "fear in the market place" diminishing the prices of affected properties. In addition, some municipalities had already enacted subdivision plat requirements and other regulations which seemed to support the author's effective easement theory." [The Southwestern Legal Foundation in the Proceedings of the INSTITUTE ON PLANNING, ZONING AND EMINENT DOMAIN, Municipal Legal Studies Center, Dallas, Texas, November 18-20, 1998; and The Urban Lawyer, The National Quarterly on State and Local Government Law, Spring 1999, Volume 31, Number 2.]

VII.D. Visual impact measured at wrong time of year

The DEIR measured the aesthetic impact of the towers in various areas in September. Mitigation suggestions in the DEIR including changing the color of the towers to more closely match surrounding landscape. But landscape at what time of year? In many if not most of the areas the proposed power line will cross, the sky and surrounding land will change colors dramatically throughout seasons, if not throughout each day.

VII.D.1. Which color, of what part of the land, and during which season, does SDGE propose to construct the towers to match?

VIII. DEIR DOES NOT ADEQUATELY ADDRESS PUBLIC HEALTH AND SAFETY CONCERNS RAISED BY PROPOSED ROUTES

(Section D.10: Public Health and Safety)

The EIR offers an extensive array of graphs and requirements to avoid damage and pollution. Expressions such as "monitor and evaluate" were extensive, but provide inadequate information on what the impact will be, how it can be prevented in the first instance, and how remaining impacts will be mitigated.

VIII.A. Long-term monitoring of health impacts

VIII.A.1. How does SDGE propose to "monitor and evaluate" the extensive issues this project raises, on a continuous basis, for however long this method of power conduction is used? That would require continuous patrolling and evaluation of the entire 150-mile route, including underground cables.

VIII.A.2 How would this extensive monitoring affect the fees paid by ratepayers?

VIII.A.3 Electromagnetic fields are known to affect biological systems, both human and animal. How would accurate projections of potential damage and prevention be made with any degree of accuracy?

VIII.A.4. How would the company control damage to the cables in the case of a large, out- of-control fire?

VIII.A.5. Regarding damage, would high-intensity wire breakage be preventable?

VIII.A.6. Regarding public safety, have studies been done regarding the chance of electrocution during an electrical storm or heavy rains if lines fail?

VIII.B Inability to public measure impact of lost wilderness

Regarding public health: Clearly, there will be loss of open space with this project, regardless of the alternative selected. People use open space to get away from the pressures of modern life. The cables will produce a humming sound and the cement standards will be denuded of vegetation for several feet or yards. Yet another sanctuary will be stolen from the people.

VIII.B.1 How can adequate mitigation ever compensate for the loss of open space and intrusions into our remaining backcountry?

VIII.B.2. Have studies been done measuring the affect on the mental health of our population when undeveloped or intruded-upon open space is no longer available to them for recreation and mental health?

VIII.C. Effects of construction

The construction of the large towers proposed will entail many truck trips along the route, causing increased dust in the air, construction noise, traffic congestion, exhaust fumes in the air and the debris of construction such as oil saturation in the ground. Imperial County is already heavily impaired as far as air, water and ground pollution goes.

VIII.C.1. What studies have been done of the effects of building the line itself?

VIII.C.2. How does SDGE plan to prevent further contamination of Imperial County, already heavily impaired?

VIII.C.3. Is SDGE prepared to find ways to do this project without contributing to greenhouse gas production in the course of this heavy construction?

VIII.C.4. How will the company mitigate for the loss of biodiversity which this project will undoubtedly cause?

IX. COMMENTS ON ALL ELEMENTS OF OPTION D

Impact or other item stated in DEIR/EIS	Page reference	EIR/EIS conclusion should be	Comment on this issue												
Fire and Fire management	E.3.15	Severe	Cedar Fire started in this area adjacent to Cedar Gorge where this line crosses Cedar Creek. Wind speeds often over 80 mph dropping off Cuyamaca Peak.												
			Recent McCoy Fire started right by this route due to shorting power line in 100 mph winds and failed shutoff breaker (conclusion still under investigation). All lightning arrestors on Boulder Creek line were replaced two weeks later only 4 years after the entire line was replaced in the Cedar fire. McCoy almost took 20 lives late at night when most were in bed.												
			McCoy fire took 3 homes, damaged two additional homes, two other properties Oct 2006 Powerline broke right on this line and started a fire.												
			Witch Fire damaged a home in this area, burned 10,000 acres of sensitive habitat for the 2nd time in 4 years, debunking must of the popular control burning theories.												
			Witch Fire was started by a downed power line 3 of the 4 fires in four years were started by power lines.												
				Cedar Fire destroyed numerous homes and structures in the area.											
			Fire fighters cannot get near a 500 KV line.												
															What criteria did you use to make this determination?
										How local was the data used to record wind speed?					
									Did you consider local weather stations in place for this purpose.?						
			Have you done a study of the data that considers impacts to the ecology when chaparral is burning more often than every 15 years?												
									I don't think you have considered the impacts that the fires in the last fire years have had on wind speed.						
			I don't think you have considered the impacts of wind speed upon fire damage and containment. I don't think you have considered the source of nearly all of these fires was just to the east of your line and in every case would have crossed it.												
			I don't think you have considered the fact that this crossing can occur with 100 mile per hour winds, 150 foot fire plums, faster than you have the ability to even drive to the location.												

			How are you able to accurately assess the impacts to this option when it was recently burned?
Biological Resources	E.3.2	How can you mitigate for perpetuity. I do not think you have considered this.	I think you need to do a study for the reasons that you did NOT find native impacts in Cedar Gorge. This may seem counter intuitive but actually it is highly significant. This may be an environment that has very little impact from humans at all, including native Americans, making it one of the rarest biological riparian study areas in the county for riparian and chaparral systems., not to mention the Indian reasons for avoiding the gorge? Why was Cindy Buxton mentioned as a biological resource in the report? I recommended contacting the San Diego Natural History Museum and the coordinators of their plant atlas for the most exhaustive study of plants on Sunshine Mountain and Cedar Creek. Did you do this? How can you study plants in July when they can not be definitively identified without flowers and most of the flowering plants occur in the spring? Jeri Hershberg is the most knowledgeable taxonomist with experience in the San Diego River gorge, Sunshine Mountain, and Cedar Gorge. Have you contacted her? There is a meadow and series of seeps about 300 yards below the line crossing onto the mountain with the "wall of elders" which lays to the south of Dubois road. Did you study this? I don't see how it would have been effective or possible in July. Did you go there? Why are Cuyamaca Cypress not listed in rare plants found as there are near your service roads? Why are Tecate Cypress not listed in rare plants found as they are near your service roads? Why are Fish not listed in your list of species found, as there are steel head living right under where the line would cross Deudler Creek and also near where it would cross Deudler Creek and also near where it would cross Cedar Creek? Why are turtles not listed in your list of species found. We found several on an outing where subsequently, within an hour later, we found your footprints! Have you considered that there are golden eagles sited on Boulder Creek Road just to the north of Boulder Creek, Cedar Creek just to the north of the potential power lin
			Have you considered the impacts to the wildlife

			that cutting off their ability to migrate from higher elevations to lower ones would have especially for two years during constructions. Do you really believe this rugged country would only take two years to recuperate? Have you considered the impacts of basically subdividing an already relatively small area by placing this line right in the middle of it? This is about 60,000 acres. By placing the line where it is, you've cut off wildlife between Boulder Creek Road and the ridge and cliffs to the west.
Visual Resources	E.3.3	There are some of the most gorgeous views in San Diego from this route especially when one hikes off of the road a bit. I don't think you have considered even a 10th of what this region is. You can not effectively mitigate a visual resource for perpetuity.	Line would cross several major recreational trails. Line would be very visible from most of the hike to Cedar Creek Falls. Line would be very visible from most of the hike to Three Sisters Water fall. Line would be very visible for most of the drive along Boulder Creek Road. How did you prepare your hypothetical photos of the power line? It appears as though unequal positioning was given the power line and poles in the layering or "transparency rating" process on a photo editor such as Photoshop. I don't think this depiction is accurate and the visible impacts would be considerably more severe from the top of Cuyamaca, from the city, and from Boulder Creek Road. We will provide our mock-up of the Visual Impacts to Mildred Falls. From your maps you did not consider the impact of the service roads. You did not consider the impacts of doubling or even tripling this line in ten years. Have you done a study of hits to Google or Yahoo to see how many people search for waterfalls? Or creeks/streams/rivers? I don't think you considered the visual impacts to Mildred Falls at all. Are you aware that this is a waterfall that is more accessible to handicap than any other when flowing in the spring being that the view spot it is only a few feet from Eagle Peak Road? I don't think you considered the visual impacts to the Devils Jumpoff at all. Your maps show a route for the Sea to Sea multi-agency trans-county trail running over Eagle Peak. I studied this trail at length and this is not the former route. A quick question to Jeff Wells, the recreation manager for the Palomar District for the Cleveland National Forest disclosed that the route on your map is not a route that he knew anything about. The Forest Service proposed route through the Forest Service proposed route through the Forest Service proposed route through the Forest Service proposed route in the currently on record is

Land Use	E.3.4	The designation of service roads is unfathomable. Did someone actually go to see these?
		Did you consider the visual impacts from the top of Sunshine Mountain that currently has a 360-degree view of pristine proposed and undisturbed wilderness?
		Did you consider the visual impacts to the San Diego River Park's Eagle Peak Preserve and the 85,000 members that support this preserve?
		Did you consider the visual impacts of additional runoff muddying up Boulder Creek, Cedar Creek, Conejos Creek, and the San Diego River?
		Did you consider the visual impacts to each and every land owner that is close or adjacent to this line.
		Did you consider the visual impacts from North Peak?
		Did you consider the visual impacts from Middle Peak?
		Did you Consider the visual impacts from Sill Hill waterfall?
		Did you consider the visual Impacts from Sill Hill?
		Did you consider the visual impacts to the "wall of Elders" overlooking the ancient Conejos village?
		Did you consider the visual impacts from Dubois Road?
		Did you consider the visual impacts from Tule Springs Road?
		Have you made plans to review in the spring? Did you consider the visual impacts from Eagle Peak Road?
		I think you need to review the visual impacts during the spring months of February, March, and April for green landscape and flowing roaring water.
		I think your visual impacts are highly inaccurate because your study was done in July and the land was dry and brown.
		Why did you not consult and provide data for this trail provided by the agency that manages the area sited?
		Where did you acquire the data for the map of this trail?
		Hence the power line proposed in Alternate D would parallel 4 miles or better of the Trans- county Trail.
		on Cedar Creek Road. It is doubtful they would consider the route shown on your map as it crosses two restricted Eagle nesting areas.

			Did you walk the route on the San Diego River Park Foundation preserve or just pick it off an old map? Have you considered that some of the "roads" on the topo in dotted lines do not exist? We have spent ample time during the documentation process of the California Wild Heritage Act on hands and knees trying to find the continued road cut that was on a map. How can you begin to justify the road that leads into the San Diego River? Did you walk this route? After building these roads, will the line be economically feasible? Are you aware that the Forest region in and around Cedar Creek and Sunshine Mountain was "backcountry unroaded" until there was talk of a power line coming through? The first round in the 15-year plan had this designation, as it did ever since the land was first purchased. Have you consulted the former owners, the Rutherfords?
Wilderness and Recreation	E.3.5	Unclear and inaccurate distinction.	Why are the items "wilderness" and "recreation" under the same heading? Have you considered clarifying the usage of these two words further? I do not think it is valid to put these under the same heading as their definitions are entirely different and the implications of those definitions are entirely different. Why are these together? Wilderness is land as unaffected by us as possible in the year 2008. A wilderness
			designated in 1890 (in different terms) would probably be different in some ways than one designated today, but the concept of "untrammeled-ness" persists. The difference as I've come to experience it is almost the exact opposite as is being assumed here. In wildemess it is the land that has the direction. In Recreation it is us. In other words, those who would seek a "formal" form of recreation such as hiking—with trails, shooting, dirt biking, fishing, off-roading (not the same as dirt biking, or skiing, would involve eyeing a piece of land and modifying it in some way as to make it conducive to the sport/recreation/activity at hand: "We need more places to quail hunt, we need more places to rock climb, we need more places to rock climb, we need more swim holes. These could involve modification to some degree or to a great degree, the building of trails of various sizes according to some standard and some allowable usage, the daming of streams for swim holes, setting up safe area to shoot, noise not withstanding. There are official trails within official wilderness, as is some mining and grazing allowed.
			Nevertheless, in wildemess by contrast we are the ones that bear the responsibility and accountability to modify, to be there. We go to

			a place with spikes of poison oak around a 300 year old live oak tree, a 4 foot rattle snake sunning on a rock, a view that stretches for miles, water that cascades without interference, or no water at all. We take it in exactly as it is, for what it is. We are the ones that must modify for poison oak, for snakes, and we come to the land and accept it exactly as it stands, its hazards, its gifts, and as the natives say in their Indian prayer "to learn the lessons hidden in every leaf and rock". —And God willing the ultimate gift and value of wildemess is that we take that lesson of acceptance and accountability home to be practiced with each other. In the times we bear in 2008 I can't think of anything more crucial to the integrity of our existence than our continued ablity to access wilderness on wilderness terms. You can not mitigate wildemess, and land with wildemess character!
Wilderness	E.3.5	Cannot mitigate for wilderness and wilderness character	Are you aware, and have you made the documenters aware, that the word "trammeled" that appears in the official federal definition of wilderness in the original Wilderness Act is not the same as the word "trampled"? I've seen these two words misunderstood and misused interchangeably even by government agency officials! The definition of "Wilderness" in the main body in the desert section of the EIS is expanded but the definition of wilderness in the mountain section does not appear to be the same. We were informed that they were written by two different organizations. Is it your intention to use a different set of standards for one area over another? Have you done a theoretical or practical analysis of the value of wilderness? True hunting for the purpose of food gathering might be removed from the first list for these reasons. It would be a wise observation at this point that off-trail hiking and hunting in true wilderness is very similar, probably more in common with the relationship between these two groups and how they interact with the land than with and between the other aforementioned recreationists. The NRA, wildlife federation, and its followers should take heart and notice, as should the environmentalists. This entire corridor is very popular among deer and turkey hunters. The power line would affect the ability of hunters to shoot to the west. Have you considered the imput from the hunting community? Have you considered the impact to cross-country hikers? This line would severely impact all five units of the proposed Eagle Peak Wilderness status for the proposed Eagle Peak Wilderness. This bill has already endured five sessions of Congress, a

	- F
	lengthy process. This bill was endorsed by twenty thousand signatures statewide and sits adjacent to the River Park preserve, among others.
	There have been several other impact studies for this bill and for the 15 year plan which indicated much of this land was rare, sensitive and in dire need of preserving. By definition, you can not mitigate wildemess or land with wildemess character!
Recreation	
	each agency weighing in on its own turf, could have placed the trail where they did.

Cultural Resources	E.3.7	Critical	I've provided further information to Jeff Wells concerning Golden Eagles just to the East of Boulder Creek Road where this line goes as well as considerable occurrence of red tailed hawk nesting sights on Mineral Hill, also where the power line could be places. Construction is not allowed near and during any rapture nesting season, so this would clearly impact both the power line and the Sea to Sea trail. In addition, there is considerable data on seeps located along the new route of the Sea to Sea trail on your maps. The trail also goes on a route that is way too steep to be feasible without considerable blasting to give it a legal grade for a public trail. And finally the trail uses a route much too close to both Kelly Creek and Cedar Creek to be allowable according to the Clean Water Act. If Jeff did not provide this information than who did and how can it be considered at all official? Cleveland National Forest officials would surely know these things. At the time of my inquiry anyone within the Cleveland office would have had amble time to consult with Jeff. So if the documentor did not get information from the right resources surely there are guidelines on who they can consult. If the Sea to Sea trail remains on Cedar Creek Road, already built and paid for in an extremely rugged and forbidding area, as it would seem that the visionaries of this trail would capitalize on this advantage, than the Sea to Sea trail would run close and parallel for 4 miles to the power line buzzing overhead. Likewise, if for some reason the Sea to Sea Trail were to take a route different from Cedar Creek Road, the likely alternative would be the top of Sunshine Mountain, not Eagle Peak. My deepest concern here is that inappropriate collaboration has taken place. Surely the wrong map was provided the Sea to Sea trail information? When was it first provided? How many times was it provided? Why would it have been provided more than once if this is the case? Have you considered the impacts to a Boy Scout Camp when you run a p
Caliural Resources	E.3./	Cruca	Why is there no mention of the impact to the ancient Conejos Village and ancient native American Route? Why is there no mention of the ancient healing rock, and other landmarks close by that were cherished by this culture to this day? What resources have you contacted that have actual on the ground knowledge of this area for cultural resources? What percentage of the route did you perform
			on the ground surveys for cultural resources?

			cultural significance of Sunshine Mountain?
			Why is there no mention of the other upper Conejos creek village where this line crosses Conejos Creek? Did you go there?
			Why is there no mention of the two Kelly Creek villages? Did you go there?
			Why is there no mention of considerable sites on the River Park preserve?
			Why is there no mention of the Boulder Creek sites and ancient trail?
			There are possibly six shaman sites along this area why have you not mentioned any of them?
			I think you need to do a study for the reasons that you did NOT find native impacts in Cedar Gorge. This may seem counterintuitive but actually it is highly significant. This may be an environment that has very little impact from humans at all, including native Americans, making it one of the rarest biological study areas in the county for riparian and chaparral systems.
			You need to consider the potential cultural impacts of placing a tower at the "Wall of Elders," located on the mountain top immediately south of Dubois Road. You need to consider viewing this feature from below on Dubois Road along Conejos Creek. Have you been there?
			You need to consider the potential cultural impacts at the side of the tower immediately below Mildred Falls to the North adjacent to the San Diego River. Did you go there?
Noise	E.3.8		I do not think you have considered the effects of the noise from these lines on wildlife.
			I do not think you have considered the effects these lines will have on cattle.
			I do not think you have considered the effects of line construction at night on the wildlife and the residents.
Transportation and Traffic	E.3.9		I don't think you have considered the effects of additional traffic on dirt-graded Boulder Creek Road on the lives of the people residing in that area.
Public Health and Safety, Contamination	E.3.10		Have you researched the possibility that substances used in mining in the last century, such as arsenic, and explosives might still be buried along this line?
Air Quality	E.3.11		I don't think you have considered the effects of the construction of all of the service roads will have on putting dust into the air. A lot of residents moved to the back country to get away from city pollution.
Water Resources	E.3.12	Critical	This proposal affects Conejos, King, Boulder, Cedar, Kelly Creeks and the San Diego River. Collectively in this region these make up the watershed for the San Diego River. The Cleveland National Forest was originally created to protect this watershed as it is the primary and central watershed for San Diego.

		The federal Clean Water Act says that once a watercourse is in recovery for over-siltation from fire or other disaster, no further construction can occur upstream. This line would create all kinds of siltation for every major and minor tributary for the entire watershed. The service roads run parallel and through several streams and tributaries. SDG&E has significant difficulty protecting the watershed now. They have not demonstrated the ability to disseminate regulatory information to their vendors, and to manage and monitor them. Several cases where equipment has gotten stuck going where it wasn't supposed to go. Personnel have gotten lost not knowing where their routes and easements were designated and cut private owners locks they were not allowed to cut. If you can't insure it now how are you going to effectively manage and monitor your employees and the vendor employees in the future for
Geology, Mineral Resources, and Soils	E.3.13	perpetuity? Have you considered a study of the existing mines and their relationship to San Diego history?
Combined considerations		These impacts, when viewed together, point to a corridor of biological, natural, environmental significance that when viewed collectively can not be mitigated, as this resource is unique. Any natural movement from lower to higher elevations or higher to lower elevations, or from west to east and east to west, would be severely affected by this line as it cuts through the entire length of it. This affects all resources, including biological, fire, wind, geological, cultural, and recreational. For all of the impacts cited here, I do not support consideration of Alternative D for the Surrise Powerlink.

X. CONCLUSION

As discussed here, the Draft EIR/EIS for the proposed Sunrise Powerlink project fails to adequately address a wide range of highly significant and long-term issues, including legal questions around the Williams Land Act, water erosion and runoff, forest fires, use of the lines after construction, impact on a number of biological resources, visual impact of the lines, and public health and safety. Consequently, the Draft EIR/EIS fails to comply with the requirements of either CEQA or NEPA, and should be revised to address the above issues and re-circulated for public review.

Name / Agency	Length (miles)	New Power Transmitted through lines (kV)	# of impacts / category
Sunrise Powerlink / SDG&E	91	500	50 total
	59	230	http://www.cpuc.ca.gov/environme nt/info/aspen/sunrise/deir/02%20Ex ec%20Summary.pdf
Sierra Alturas - Reno / CPUC	160 (140 in CA)	345	6 total 1 cultural, 2 land use, 1 traffic, 2 visual (ES 44-46)
			ftp://ftp.cpuc.ca.gov/gopher-data/alt uras/disk2/ex-sum/
			ES-44-46 (impact summary table)
Northeast San Jose / PG&E	7.3	230	2 total 1 land use, 1 visual (ES 12, 21)
			http://www.cpuc.ca.gov/Environme nt/info/aspen/nesanjo/FEIRTOC.ht m
			ES-12, ES-21
Viejo System / SCE	3.1	66	none
			http://www.cpuc.ca.gov/Environme nt/info/aspen/viejosystem/viejosyst em.htm
			ES-A-1 (Mitigated Negative Declaration)

Six Flags / SCE	1.15	66	none
Six Tiags / Sell	1.13	00	
			http://www.cpuc.ca.gov/Environme nt/info/6flag.htm
			A.97-12-049 includes a Negative Declaration
			A-1
Valley Auld / SCE	11.5	115	none
			http://www.cpuc.ca.gov/Environme nt/info/aspen/valleyauld/review.ht ml http://www.cpuc.ca.gov/Environme nt/info/aspen/valleyauld/mitNegDe c.pdf
			A.03-03-043 includes Mitigated Negative Declaration
			A-1, A-2, A-3
Otay Mesa	18 above ground	230	none identified, created extensive mitigation project to eliminate significant impacts
	10 below ground	230	http://www.dudek.com/cpuc/sdge-o mppa-trans-proj/
	ground		Final EIR - Section D. 4-113
Los Banos - Gates / PG&E	84	500	4 total 1 air quality, 1 biological, 1 land use, 1 public safety
			http://www.cpuc.ca.gov/Environme nt/info/aspen/path15/fseir%20execu tive%20summary.pdf
			ES-5

Jefferson Martin / PG&E	27	230	11 total 9 visual, 1 land use, 1 recreational http://www.cpuc.ca.gov/Environme nt/info/aspen/jefferson_martin/feir/t ext/03%20exec_summary.pdf ES-67
Devers No. 2 / SCE	230	500	9 total 3 visual, 1 recreational, 1 agricultural, 2 cultural, 1 noise, 1 air quality http://www.cpuc.ca.gov/environme nt/info/aspen/dpv2/toc-feir.htm ES-74

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of San Diego Gas & Electric Company (U 902-E) for a Certificate of Public Convenience and Necessity for the Sunrise Powerlink Transmission Project

Application 06-08-010 (Filed August 4, 2006)

PHASE II DIRECT TESTIMONY OF ILEENE ANDERSON ON BEHALF OF THE CENTER FOR BIOLOGICAL DIVERSITY AND THE SIERRA CLUB

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Dated: March 12, 2008

Review of Botanical Resources Described in the Draft Environmental Impact Report/Environmental Impact Statement for the Proposed Sunrise Powerlink Project TESTIMONY OF ILEENE ANDERSON

Background

I am currently a staff biologist with the Center for Biological Diversity (Center), where I have been employed since 2005. I focus on areas of southern California, including Imperial, San Diego, San Bernardino, Riverside, Orange, Los Angeles, Kern and Inyo counties. I am a research associate with the Rancho Santa Ana Botanic Garden, which is affiliated with the Claremont Graduate School in Claremont California and also a research associate with the California State University, Northridge in Northridge, California. From 1997 to 2005, I was the Southern California Regional Botanist for the California Native Plant Society (CNPS), a non-profit organization dedicated to the understanding and appreciation of California's native plants and how to conserve them and their natural habitats. One of the areas that I focused on for the CNPS was the California deserts, the southern California national forests and cismontane California, including areas of the proposed Sunrise Powerlink project. From 1998 to 2002, I was a federal appointee to the Bureau of Land Management's Desert Advisory Council, which was established under the Federal Lands Management Policy Act. In that capacity, I advised the BLM California Desert staff on issues relating to renewable resources in the 25 million acre California Desert Conservation Area. I also chaired the Council for one year. From 1992 to 2005, I was a consulting botanist on numerous projects throughout the southwest United States. Attachment A provides a more detailed description of my qualifications. My testimony discusses the analysis of botanical resources presented in the draft environmental impact statement/environmental impact report (DEIR/EIS) for the proposed Sunrise Powerlink project.

General Comments

I concur with the determination in the DEIR/EIS that the impacts to the botanical resources in the proposed project and its alternatives may not be adequately mitigated and are therefore significant. Additionally, I concur that the proposed project and alternatives may not be able to be adequately mitigated and could have significant impacts to jurisdictional waters and wetlands.

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The DEIR/EIS is unusual in that it describes the impacts to sensitive plants (plants that are rare, endangered or threatened) and sensitive plant communities (groups of plants found living together that are not common) as significant, yet many of the mitigation measures involve surveys for such species. Typically, these types of documents include numerous years worth of surveys to more comprehensively identify the resource conflicts and then try to craft a proposed project and alternatives that avoid sensitive resources, or minimize the impacts to them. If avoidance and minimization of impacts still results in an impact, then mitigation is proposed. However, in this document, impacts to rare plants and sensitive plant communities from a single survey year in drought conditions are determined to be significant without conducting requisite follow-up plant surveys commonly included in an environmental impact report.

Mitigation measures in the DEIR/EIS focus on conducting the surveys in the future instead of a more typical approach of conducting them where they will be used to assess significance, and then mitigating for impacts caused by the project. This approach seems hurried and rushed and certainly is not a comprehensive evaluation of the botanical resources nor does it follow the accepted plant survey protocols (CDFG 2000, CNPS 2001). Failure to conduct sufficient surveys prior to construction of the project also effectively eliminates the most important function of plant surveys - using the information from the surveys to minimize harm caused by the project and reduce the need for mitigation. Often efforts to mitigate harm are far less effective than preventing the harm in the first place. In addition, without understanding the scope of harm before it occurs, it is difficult to quantify an appropriate amount of mitigation.

As noted in the DEIR/EIS, 2007 was one of the driest years on record in California. The DEIR/EIS also notes that the drought condition precluded implementation of US Fish and Wildlife Service approved surveys for the Quino checkerspot butterfly. Likewise, the lack of adequate rainfall would preclude the ability of even seasoned botanists to unequivocally identify species, particularly annual species, which germinate, grow, flower and set seed in a single season. While the DEIR/EIS recognizes that the impact to sensitive plant communities and sensitive, rare or listed plant species will be significant, it fails to quantify the impact or the significance of that impact on the species or plant community from the proposed action.

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Rare Plants

The evaluation of the impacts to rare plants is not adequate. Adequate evaluation of significant impacts is particularly important for the three plant species that are listed under the Federal and/or State Endangered Species Act: The San Diego button-celery (*Eryngium aristulatum* var. *parishii*), San Diego thorn-mint (*Acanthomintha ilicifolia*) and the Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*). All of these species were found within the proposed project boundaries. The San Diego button-celery was only found as a single plant at one location, and is proposed to be avoided by the use of the existing dirt road. However, additional San Diego button-celery plants may be present on the site as a seed bank (ungerminated seeds found in the soil) or more unusually as perennial plants (USFWS 1993) that simply did not germinate or exhibit above-ground leaves or flowers in response to the unprecedented low precipitation of 2007. The San Diego thorn-mint is an annual plant and may also exist on the project site as a seed bank in 2007. The Del Mar manzanita is a perennial plant identifiable throughout the year. According to the DEIR, seventy-eight Del Mar Manzanita plants will be impacted by the proposed project. However, no context is provided to indicate what portion of the population(s) these 78 individuals represent.

The impacts to these species are noted as significant, yet the analysis fails to identify if the impact will jeopardize the existence of the species, which is the analysis required under the federal Endangered Species Act. Populations of annual plants and perennial herbaceous plants (which live more than one season, but die back to below ground part after producing flowers and seeds) are difficult to evaluate, especially during drought years. Their seeds may not germinate, young plants may dry up prior to flowering or fruiting, making them unidentifiable, or dry conditions may prevent below-ground parts from breaking through to the surface. Information about the size of the population is typically an important part of a jeopardy analysis.

In addition to the three rare species discussed above, seven other "listed" species were not identified on site during the surveys of 2007 but have potential to occur in the project areas: San Diego ambrosia [Ambrosia pumila], Orcutt's spineflower [Chorizanthe orcuttiana], Willowy monardella [Monardella viminea], Spreading navarretia [Navarretia fossalis], California Orcutt grass [Orcuttia californica], and San Diego mesa mint [Pogogyne abramsii]. Impacts to these species were determined to be significant, but again, due to lack of data, actual measures to

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avoid, minimize or mitigate have not been accurately evaluated, and there is no analysis of whether the project would jeopardize the species' existence.

The DEIR/EIS appears to disregard any avoidance or minimization of impacts to the rare plant species - basically stating that all impacts are significant. Yet the mitigation measures propose to do surveys, and avoid the species or minimize the impact. This seems backwards. Typically when planning a project, the project site is surveyed for sensitive resources and their habitat. Then the project is designed to avoid any impacts, usually by moving the project to an area where rare plants and their habitat are not present. If that is not possible, then the project is designed to have the smallest impact possible, again usually achieved by moving the project to primarily a less sensitive area. Sometimes plants will still be impacted despite minimization of impacts, and then mitigation is incorporated. Mitigation is usually structured to reduce the effects of the impact to the rare plants to a non-significant level. However, in this DEIR/EIS, data from a single drought year is used to determine that a significant impact will occur. Although additional surveys are proposed, the DEIR/EIS does not provide sufficient information to assess whether appropriate measures are proposed to minimize the impacts of the project, or to address the adequacy of future mitigation measures. The determination of a significant impact without acquiring adequate survey data is contrary to common practices in preparing an EIR. Making project design decisions without this data seems premature and lacks the due diligence necessary to actually reduce impacts through project design.

I also have concern about the non-listed plant species and the impact that the project will have on them. A number of plant species at risk of needing state or federal protection are identified to occur within the proposed project area. As stated in the DEIR/EIS, these species are listed as either L1B or L2. L1B plants are rare, threatened, or endangered in California and elsewhere and eligible for State listing. L2 plants are rare, threatened, or endangered in California but more common elsewhere and also eligible for State listing. In addition, the California Native Plant Society designates the following L1B or L2 Threat Code extensions (CNPS 2007):

- .1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- o .2 Fairly endangered in California (20-80% occurrences threatened)

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 .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Plant species are not accurately represented beyond their CNPS list in the document. For instance, the following sensitive plant species that occur within the proposed project have more accurate threat codes that are not included in the document:

- Nuttall's scrub oak (<u>Quercus dumosa</u>) is a L1B.1 and 4,061 individuals would be affected by construction of the Proposed Project.
- San Diego sand aster (<u>Corethrogyne filaginifolia</u> var. <u>incana</u>) is a L1B.1 and a total of up to 865 individuals would be affected by construction of the Proposed Project.
- San Felipe monardella (<u>Monardella nana</u> ssp. <u>leptosiphon</u>) is a L1B.2 and up to 300 of the individuals would be removed during construction of an access road.
- 4) Summer-holly (<u>Comarostaphylis diversifolia</u> ssp. <u>diversifolia</u>) is a L1B.2. and two individuals of summer holly would be removed during trenching for the underground portion of the Proposed Project.
- Delicate clarkia (<u>Clarkia delicata</u>) is a L1B.2 and 225 individuals would be removed by the Proposed Project.
- 6) San Diego gumplant (<u>Grindelia hirsutula</u> var. <u>hallii</u>) is a L1B.2 and up to five individuals of this species would be affected during construction.
- Felt-leaved monardella (<u>Monardella hypoleuca</u> ssp. <u>lanata</u>) is a L1B.2 and up to 70 individuals would be affected by the Proposed Project.
- Ramona horkelia (<u>Horkelia truncata</u>) is a L1B.3 and up to 75 individuals would be affected by construction.
- Pygmy lotus (<u>Lotus haydonii</u>) is a L1B.3 and only a single plant was found on the project site, and it would not be affected by the Proposed Project.
- 10) San Diego sunflower (<u>Hulsea californica</u>) is a L1B.3 and a total of up to 403 individual San Diego sunflower plants would be affected by construction of the Proposed Project.
- 11) San Diego barrel cactus (<u>Ferocactus viridescens</u>) is a L2.1 and a total of up to 92 barrel cacti would be affected by construction of the Proposed Project.
- 12) California adolphia (<u>Adolphia californica</u>) is a L2.1 and 1,920 individuals would be removed by the Proposed Project.
- Coves' cassia (<u>Senna covesii</u>) is a L2.2 and 356 individuals would be removed by the Proposed Project.

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All of these species qualify for listing under the State Endangered Species Act, and the DEIR/EIS identifies the impacts to the species as significant. However, it fails to evaluate the effect of the project on the persistence of these species. The lack of data on the Nuttall's scrub oak and the San Diego sand aster are particularly problematic, because of their current rarity, threat, and the large number of plants that will be destroyed by the proposed project.

Again, the determination is made that impacts to these species will be significant, but many of the proposed mitigation measures merely require surveys for the plants followed by avoidance, minimization and then mitigation. These surveys need to be done prior to the environmental documentation being produced and the project being implemented, because detailed surveys are the basis for the evaluation of impacts to botanical resources as required by CEQA and NEPA. Including basic surveys in the DEIR/EIS is necessary if the public is to have an opportunity to comment on measures to avoid, minimize and then mitigate the effects of the project.

The DEIR/EIS also does not consider a full range of mitigations for sensitive plant species. Mitigation measure B-5a includes translocation and reseeding. Unfortunately, translocation of rare plants is not always successful – with only 8% of mitigation-related transplantation, relocation or re-introduction projects being successful (Fiedler 1991). While restoration or revegetation plans are not typically included in a DEIR/EIS, it would be helpful to have an identification and assessment of the species and number of rare plants that would be potentially transplanted. Another potential mitigation would be collection and deposition of rare plant seeds in a long-term conservatory for potential future use in revegetation efforts, genetic studies and long term conservation of these rare species.

Plant Communities

Plant communities are groups of plants that live in similar conditions. While the DEIR/EIS uses the plant community descriptions based on a refinement of Holland's (1986) vegetation descriptions by Oberbauer (1996), a more recent publication by the State of California's Department of Fish and Game (CDFG 2003) has superceded these systems and has standardized vegetation community descriptions along with recognizing sensitive plant communities (plant communities that are rare in California). It is impossible to compare all of the plant communities listed in the DEIR/EIS with the current CDFG list of plant communities

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because not all of the plant community names (or numbers) "cross-walk" to the CDFG treatment. Regardless, seven plant communities in the project area are considered rare and worthy of consideration by the California Natural Diversity Data Base developed by the CDFG (2003). They include Valley Needlegrass Grassland, Red Shank Chaparral, Engelmann Oak Woodland, Mesquite Bosque, Southern Willow Scrub, Southern Coast Live Oak Riparian Forest, and Southern Cottonwood-Willow Riparian Forest (CDFG 2003). Additionally, some plant communities that I could not "cross-walk" are rare, including Scrub Oak chaparral, because it is dominated by Nuttall's scrub oak, itself a rare plant which CNPS notes as a List 1B.1 plant. The Scrub Oak chaparral as described in the DEIR/EIS appears to actually be southern maritime chaparral, which is a recognized rare plant community (Hogan et al. 1996, CDFG 2003).

Different types of vernal pools support different types of plant communities. Vernal pool plant communities are rare and a Recovery Plan is dedicated to their conservation in southern California (USFWS 1998). The mitigation measures in the DEIR/EIS fail to meet any of the four criteria identified in the recovery plan to protect these communities. Criterion 1 requires "Existing vernal pools and their associated watersheds... should be secured from further loss and degradation in a configuration that maintains habitat function and species viability." Criterion 2 requires that "The existing vernal pools and their associated watersheds ... are secured in a configuration that maintains habitat function and species viability (as determined by recommended research)." Criterion 3 requires that "Secured vernal pools are enhanced or restored such that population levels of existing species are stabilized or increased." Criterion 4 requires that "Population trends must be shown to be stable or increasing for a minimum of 10 consecutive years prior to consideration for reclassification. Monitoring should continue for a period of at least 10 years following reclassification to ensure population stability." The off-site mitigation proposed for project impacts will potentially secure some vernal pools in conservation, but it will allow for destruction of the on-site pools (and the species that inhabit them). This results in a cumulative loss in vernal pool habitat from the present condition. As of 1998, it is estimated that as much as 97% of vernal pool habitat had already been lost in southern California (USFWS 1998). The proposed mitigation measures in the DEIR/EIS will result in a cumulative loss in vernal pool habitat occurs. Consideration of project design that simply avoids the 0.02 acres of permanent impact and the 0.15 acres of temporary impacts to these very rare

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and declining vernal pool plant communities needs to be more thoroughly evaluated and discussed.

The applicant proposed mitigation measures for sensitive plant communities are the same as for rare plants - perform surveys then outside of the public process, avoid, minimize and mitigate. Yet like the rare plants, the impact analysis has already determined that the impact to the sensitive plant communities is significant, regardless of any future avoidance, minimization or mitigation. This determination of significant unmitigable impact prior to on-the-ground surveys appears to assume the worst possible conservation scenario. As discussed elsewhere, surveys themselves are not mitigation and conducting them after determining the project route eliminates the most valuable function of the surveys, which is to minimize the impact of the project. If final routing decisions are made after conducting adequate surveys, many of the impacts could be avoided. Conducting surveys after routing or construction activities have begun basically makes it difficult or impossible to evaluate the impacts or determine appropriate mitigation measures.

With regards to the mitigation ratios listed in Table D.2-7, these ratios are set up to mitigate impacts to plant communities. The ratios were identified as being "developed in consultation with the USFWS, BLM, and State Parks, and are based primarily on the requirements established in regional habitat conservation plans and also on mitigation required for other projects." It is unclear if the determination of significance for impacts to plant communities is because the mitigation ratios are not sufficient or if the mitigation is simply not feasible. Either way, there are actions that can be taken to reduce the impacts of the project. If the issue is that the mitigation ratios are not adequate to off-set the impact to plant communities, the project can be designed to avoid or minimize locating it in undisturbed plant communities. This design will minimize the need for mitigation, making it more feasible to accomplish mitigation goals if they prove necessary. The currently proposed 1,359.60 acres of mitigation necessary to off-set impacts is noted as perhaps not being feasible, however on the scale of other mitigation projects that I have reviewed, acquisition of this amount of mitigation acreage and diversity seems achievable and the DEIR/EIS provides no analysis of why it would not be achievable. Another option for some of the sensitive plant communities is to increase the mitigation ratios, which may help to reduce the impacts to less-than-significant levels from the proposed project.

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The mitigation ratio for tamarisk scrub (a type of riparian scrub in table D.2-7) is unjustifiable primarily because tamarisk is a highly invasive exotic species in wetland areas, especially in the desert. Literally millions of dollars have been spent on on-going eradication programs throughout the western United States for this problematic plant. The appropriate mitigation for this plant community would be to remove it and restore the wetland area with native riparian scrub, which is an example of how impacts could be mitigated for other sensitive riparian plant communities (most all of which are rare).

Mitigation measures B-1a through B-1c are typical mitigation measures and if implemented properly should reduce the impacts from the proposed project and alternatives. Undisturbed habitat acquisition and conservation is preferred over restoration, revegetation or reclamation because no creation or enhancement costs are involved, just management. Additionally, restoration typically is not successful in recreating the complex biological web that occurs in undisturbed natural areas (Longcore et. al. 1997).

If restoration, revegetation or reclamation is to be used as a mitigation strategy, clear and concise standards for each vegetation type including success criteria, site monitoring, and ongoing maintenance practices should be identified. For instance, revegetating desert lands, which typically take much longer than 5 years to successfully revegetate (Lovich and Bainbridge 1999), is very different from revegetating riparian areas (Goodwin et al. 1997).

Wetlands and Jurisdictional Waters

The determination of jurisdictional waters needs to be identified in order for impacts to be evaluated. Delaying the delineation of the jurisdictional waters to some point in the future does not fully disclose the impacts of the actions in either the proposed action or the alternatives for analysis. Therefore, the environmental impacts between the proposed action and the alternatives cannot be compared.

Since 1989, each federal administration has embraced a no-net-loss of wetlands policy. In fact by 1989, southern California had lost up to 97% of its wetland areas (Bowler 1989). The DEIR/EIS anticipates that "there would be no net loss of jurisdictional habitat" yet, many of the sensitive plant communities in the proposed project area are located in "jurisdictional waters" regulated by the Army Corps of Engineers or the State Department of Fish and Game and Regional Water Quality Control Board and the DEIR/EIS has determined that non-mitigable

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significant impacts will occur to them. The DEIR/EIS fails to provide any analysis of why significant impacts can be mitigated to jurisdictional waters, but cannot be mitigated for the sensitive plant communities in them. It seems that if significant impacts cannot be mitigated to a non significant level for the sensitive plant communities that live in the jurisdictional waters, the jurisdictional waters significant impacts may not be able to be mitigated to non-significant levels either.

Studies of wetland mitigation in Orange County documented no riparian mitigation projects success from a functional perspective (Ambrose 2000). More recent studies on projects throughout southern California documented that approximately 84% of the wetland mitigation projects were not successful based on assessments of habitat quality, even though 55% of all of the projects were compliant of the permit conditions (Sudol and Ambrose 2002). These findings suggest that the permitting process alone will not guarantee the success of the mitigation. Therefore, the DEIR/EIS needs to be much more comprehensive in the analysis of the impacts to jurisdictional waters, first by identifying avoidance and minimization measures to these rare resources, and ultimately how many acres and what types of wetlands will be impacted. Based on that analysis then mitigation can be more adequately addressed, and not rely upon future permitting by agencies, who's processes do not ensure successful habitat quality functioning.

Conclusion

The lack of basic survey data makes the evaluation of the proposed project's and alternatives impacts on the botanical resources very difficult, and is the basis for the resulting problems with the environmental analyses. The analyses presented in the DEIR/EIS of the impacts appear to represent the worst case scenario for environmental impacts to the botanical resources, without any analyses of avoidance and minimization through project design. To simply write off the impacts as significant without a more comprehensive approach to data collection and impact analyses is highly unusual compared to the dozens of CEQA and NEPA documents that I have reviewed.

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I declare under penalty of perjury this testimony is, to the best of my knowledge, true and correct.

/s/ Ileene Anderson

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California Department of Fish and Game (CDFG)

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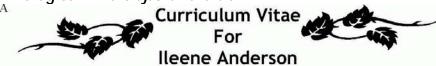
List of Attachments

Attachment A: Curriculum Vitae of Ileene Anderson

Testimony of Ileene Anderson Sunrise Powerlink Project

Comment Set B0041, cont.

Center for Biological Diversity/Sierra Club



Education

- M.S. with Distinction, Biology, California State University, Northridge, 1992
- . B.A. Cum Laude, Biology, California State University, Northridge, 1989
- · A.S. with Honors, Electronics, Bakersfield College, 1981

Professional Experience

2005 - present

Biologist with the non-profit Center for Biological Diversity. Provide scientific expertise necessary for the conservation of California's internationally recognized unique flora and fauna in a variety of public and private land use arenas. My primary projects focus on central and southern California, including the California deserts, Tejon Ranch, Santa Ana River issues, Santa Clara River issues and numerous projects that occur within their watersheds. I comment on California Environmental Quality Act and/or National Environmental Policy Act, write petitions for plant and animal protection under the federal and state Endangered Species Act, provide scientific expertise for lawsuit settlement agreements, do public/media relations, and organize volunteers for a variety of conservation issues.

1997-2005

Southern California Regional Botanist for the non-profit California Native Plant Society (CNPS). Provided scientific expertise necessary for the conservation of California's unique vegetation types in a variety of public and private land use plans, including the Four Southern California Forests Updated Land Use Management Plan, the West Mojave Habitat Conservation Plan, the West Riverside Multiple Species Habitat Conservation Plan, the Northern and Eastern Colorado Desert Plan, the Northern and Eastern Mojave Desert Plan, and many other smaller planning efforts. I have commented on hundreds of California Environmental Quality Act and/or National Environmental Policy Act documents, written petitions for plant protection under the federal Endangered Species Act, provided scientific expertise for lawsuit settlement agreements, done public relations

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CV- lleene Anderson

in both print and radio, ran CNPS internal consensus building meetings, and organized volunteers for a variety of conservation and fund-raising issues.

1995 - 2005

Consultant on a variety of botanical projects, including rare plant surveys, quantitative and qualitative vegetation community characterization, restoration plans, vegetation monitoring and weed surveys. Project locations comprise a variety of plant communities in southern/central California including riparian, coastal sage scrub, alluvial fan scrub, alkali meadows, chaparral, and a variety of desert scrubs. A full list of projects is available upon request.

1996 - 1999

Part-time instructor at College of the Canyons (community college in Valencia, California). Courses included Introductory Biology for majors (Organismal/Environmental and Cellular/Molecular), Current Topics in Environmental Biology, and Botany. I also developed a course in Economic Botany.

1992 - 1995

Lead Botanist for The Chambers Group (an environmental consulting firm). Projects for which I was responsible included mapping, inventories, and rare plant surveys, which were written in compliance with NEPA and/or CEQA guidelines, including impact analysis and mitigation. This information was typically included in Biological Assessments (BAs), Environmental Assessments (EAs), Environmental Impact Reports (EIRs) or Environmental Impact Statements (EISs). Supervisory duties included coordinating two other botanists. Project management was also part of my duties.

1990 - 1994

Sales Associate at the Theodore Payne Foundation. This part-time job primarily included helping customers select appropriate native plant material for their gardens. Other duties included propagation and transplantation of native plant species.

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1990-1992

Herbarium Curatorial Assistant at Rancho Santa Ana Botanic Gardens. Herbarium specimen mounting and curation from international collections was the primary responsibility.

Professional Courses/Seminars

Methods of Habitat Restoration - University of California, Riverside, Winter 1993

Desert Restoration - SERCAL, October 1993

Habitat Restoration Evaluation - University of California, Riverside, Winter 1994

Basic Wetlands Delineation - Wetland Training Institute, Inc. November 1995

Mycorrhizae in Habitat Restoration - University of California, Riverside, Winter 1995

Soils Workshop - Natural Resources Conservation Service, November 1998

Plant Community Characterization and Series Identification- Native Plant Society, June 1999

Statistical Analysis for the Modified Whittaker Plot - Colorado State University, August 2002

Professional Affiliations

BLM California Desert Advisory Council - Appointee Representing Renewable Resources (Chairperson 2001) from 1996-2002

California Botanical Society

California Native Plant Society - Conservation Committee; Legal Committee.

Friends of the Santa Clara River - Director at Large

CV- lleene Anderson

Rancho Santa Ana Botanic Gardens - Research Associate.

Society for Ecological Restoration - Coastal Sage Scrub Guild Co-coordinator (1995-2001)

Southern California Botanists - Director at Large (1994-2002)

Publications and Posters

Dickey, John, Maurice Hall, Mark Madison, Jason Smesrud, Margot Griswold, Quitterie Cotten, Mica Heilmann, Greg Roland, Jim Jordahl, Richard Harasick, Wayne Bamossy, Richard Coles, Lizanne Wheeler, Pat Brown, Kevin Burton, Rick Fornelli, Ileene Anderson, Melissa Riedel-Lehrke, Ron Tiller, and Jim Richards 2005. Managing salt to stabilize the Owens Playa with saltgrass. Presented at the Center for Water Resources, Salinity Conference, Sacramento California.

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Anderson, Ileene, Margot Griswold, Dana Kamada, and Adrian Wolf. 2001. Coyote Canyon Landfill: Native Vegetation Restoration Results in Habitat Creation for a Threatened Species. Poster given at Society for Conservation Biology. July 2001.

Hartman, Steve and Ileene Anderson 1999. California Deserts in Transition: Ecosystem Planning. Fremontia 27(2): 13-17.

Anderson, Ileene 1998. Status of Sensitive Plant Populations on Public Grazing Allotments within the California Desert Conservation Area. California Native Plant Society. August 1998 Pgs. 34.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of San Diego Gas & Electric Company (U 902-E) for a Certificate of Public Convenience and Necessity for the Sunrise Powerlink Transmission Project

Application 06-08-010 (Filed August 4, 2006)

PHASE II DIRECT TESTIMONY OF JERRE ANN STALLCUP ON BEHALF OF THE CENTER FOR BIOLOGICAL DIVERSITY AND THE SIERRA CLUB

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Email: jaugustine@biologicaldiversity.org

Dated: March 12, 2008

Testimony of Jerre Ann Stallcup, Conservation Biology Institute Sunrise Powerlink Transmission Line Project

My name is Jerre Ann Stallcup. I am a conservation ecologist with the Conservation Biology Institute (CBI), a nonprofit organization that provides science support for habitat conservation through applied research, planning, education, and community service. I have been working in conservation planning and habitat management in California, with a focus in San Diego County, for 20 years, and I am intimately familiar with the conservation plans and the specific areas that may be impacted by the Sunrise Powerlink alternatives. I was project manager for the Multiple Species Conservation Program (MSCP) in southwestern San Diego County and project director for the Multiple Habitats Conservation Program (MHCP) in north coastal San Diego County. In addition, I am providing expert advice to County staff and wildlife agencies on the North County MSCP plan, the East County MSCP plan, and General Plan 2020. My work on the Las Californias Binational Conservation Initiative over the past 6 years has given me additional experience and familiarity with biological resources in the southern and eastern parts of San Diego County, southern Imperial County, and Baja California. In addition to these regional planning programs, I have been working in habitat management and monitoring of conserved natural areas for the past 9 years and have personally observed the profound impacts created by edge effects and fragmentation, and the management issues and costs that arise on habitat patches isolated by development and roads.

The following comments reference the Draft EIR/EIS (DEIR/DEIS) for the Sunrise Powerlink Project and incorporate by reference my earlier Phase I testimony and attachments, including my CV (Stallcup 2007).

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General Comments

In general, the DEIR/DEIS provides a fairly comprehensive and accurate assessment of direct impacts for each of the proposed alignments. I agree with the environmental documents' conclusions that many of the impacts to biological resources associated with all of the proposed routes are significant and not mitigable. I also agree that the Environmentally Superior Routes reduce direct impacts and, in some cases, indirect impacts as well. Of the Northern and Southern Environmentally Superior Routes mapped in the documents, the Northern Route would have fewer direct and indirect impacts because much of it is underground and would be accessed primarily along existing roads. The Southern Route would require the construction of more new access roads than the Northern Route, thus creating greater indirect and regionwide impacts as a result of greater habitat fragmentation. However, the Northern Route is more likely to be expanded, requiring overhead transmission lines through Anza-Borrego Desert State Park, which would result in significant, unmitigable impacts equivalent to or even more unacceptable than the Southern Route.

In my earlier scoping comments (Stallcup 2007), I raised a series of biological resources-related issues that were not adequately addressed in the DEIR/DEIS. These comments are incorporated in this letter by reference. The environmental documents are particularly deficient in describing indirect, regionwide, and cumulative impacts to biological resources, which would be significant and unmitigable. The documents do not address the significance of the area to be impacted within a regional ecological context, nor the impacts to the conservation values of existing public investments or ecosystem services that natural open space provides. I focus my comments on these impacts, organized by the following issues:

1. Landscape-scale fragmentation

- a. Impacts to high-integrity core wildland areas in San Diego County
- b. Access roads as a source of fire-ignition and further type conversion
- c. Implications of fragmentation impacts in the face of global climate change
- d. Impacts to ecosystem services

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- Conflicts with provisions of Natural Community Conservation Planning (NCCP) programs
 - a. Implications for MSCP covered species take authorizations
 - b. Impacts to lands proposed for conservation and impacts to plans in process
- Conflicts with Las Californias Binational Conservation Initiative and existing conservation investments

Landscape-scale Fragmentation

The DEIR/DEIS does not adequately address landscape-scale fragmentation impacts of the proposed project. One of the significance criteria in the environmental documents is *impacts* that result in fragmentation of a species population (p. D.2-72). However, this criterion narrowly assesses potential fragmentation impacts and does not adequately address comprehensive impacts to the species populations or ecosystems that the project would affect. Habitat fragmentation is one of the most significant threats to biological resources because it alters so many properties of natural ecosystems. Fragmentation of natural landscapes can reduce connectivity of habitats and species populations, thus reducing species viability and increasing local extinction rates, change hydrologic and fire regimes, allow for greater intrusion of humans into natural areas, and increase the potential for nonnative species invasions. These changes occur at large spatial scales (e.g., San Diego County region) and, in the case of the proposed project, can have very significant, permanent, and unmitigable impacts to the highest quality resources remaining in the region.

All of the proposed alternatives, except those portions that follow existing roads, would require not only the construction of temporary construction roads but new, permanent access roads. For example, the proposed project would require construction of 102 miles (347 acres of impacts) of new access roads. Refer to the maps in DEIR/DEIS Appendix 11 for a visual assessment of how these roads will fragment, or divide up, the landscape into isolated habitat patches of varying sizes. As ecosystem processes are often related to patch size, the fragmentation of the landscape into smaller patches will separate or isolate populations of plants and animals and tend to

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increase the potential for local extinction of species in any given patch. These roads are often the sources of invasion of nonnative plant species, changes in runoff, and erosion and depositional processes. They can also serve as access points for unauthorized human uses, and greater human access into intact and undisturbed natural areas can result in physical disturbances radiating outward from the road corridor itself (Forman et al. 2003). In addition, it is well-documented that there is an increased probability of fire ignitions along road corridors. Thus, the landscape-scale effects of fragmentation from the proposed project would be substantially adverse, permanent, and unmitigable.

a. Impacts to high-integrity core wildland areas in San Diego County

The DEIR/DEIS does not provide the regional context for its analysis of impacts, particularly landscape-scale fragmentation impacts. The proposed project would adversely affect land with some of the highest ecological integrity remaining in San Diego County and Southern California. Ecological integrity is the degree to which an ecosystem is free of conversion, fragmentation, and other modifications from humans, and thus retains its constituent parts and naturally functioning processes that produce and maintain the biological diversity for which San Diego County is renowned. CBI has measured ecological integrity in San Diego County, using 574acre grids (5,000 ft on a side) as the unit of analysis, as affected by the distribution of roads and urban and agricultural development as a measure of the loss of ecological integrity (Stallcup et al. 2005). Map 1 shows that the proposed project and alternatives would cut through the areas of highest ecological integrity in San Diego County, and thus these areas would experience the greatest degree of adverse fragmentation effects. These areas also represent the cornerstones of San Diego's natural preserve system, crucial for maintaining biodiversity across the entire region. The DEIR/DEIS does not consider the regionwide impacts of construction and maintenance of the Powerlink on landscape-scale ecological processes within these highintegrity core wildland areas. The proposed project would permanently convert some of the highest integrity areas of the county to lower integrity areas—a highly significant and completely unmitigable impact because there are no comparable high integrity areas as large as the core wildland areas that would be impacted. Thus, there would be a net loss of functional core habitat values in Southern California.

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b. Access roads as a source of fire-ignition and further type conversion

The environmental documents acknowledge the increased threat of fires as a result of the powerlines, but do not address increased public access as an additional threat facilitated by the construction of new roads. More roads and thus greater public access to backcountry areas will increase the threat of fires (Keeley and Fotheringham 2001, Syphard et al. 2007). As the documents state, overly frequent fires may type-convert shrublands to grasslands of exotic annual species. These annual grasses provide a fuel load that decreases the return interval between fires, creating a positive feedback loop that favors nonnative grasses over native species even more (Minnich and Dezzani 1998). Furthermore, invasion of nonnative grasses and annuals along road corridors is likely to increase the potential for ignitions along roads, exacerbating the problem. Overly frequent fires can ultimately extirpate species by not allowing an adequate interval between fires for individuals to reach reproductive maturity. Invasion of nonnative grasses and annuals and the associated changes in fire regimes is becoming an increasingly serious problem in desert ecosystems.

Moreover, the environmental documents should reassess cumulative impacts of type conversion after the October 2007 fires, which burned approximately 369,000 acres of San Diego County, 123,000 of which also burned in the 2003 fires in San Diego County. The DEIR/DEIS should particularly assess where the Powerlink crosses these areas that burned twice in 4 years' time, and thus are more susceptible to type conversion.

With these issues in mind, the environmental documents should reassess the adequacy of the proposed mitigation with respect to the age of the habitat, relative to the last fire, and its suitability for supporting sensitive species, especially those covered by the MSCP Plan (see comments in 2a below).

c. Implications of fragmentation impacts in the face of global climate change

By the beginning of the next century, Southern California is predicted to experience significantly different temperature and precipitation regimes than we currently observe (Field et al. 1999).

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One effect of climate change already being observed in many places is shifting distributions of both vegetation communities and individual species to higher elevations and latitudes (Field et al. 1999, Wilson et al. 2003). Changes in climate will also affect sea levels, fog dynamics, fire regimes, and other ecological processes, which in turn will affect vegetation communities and the species they support. The combined effects of climate change, altered ecological processes, and urbanization on already threatened vegetation communities, such as coastal sage scrub and other coastal communities, could be dramatic (Lenihan et al. 2003). For example, future urbanization is predicted to replace >20% of existing coastal sage scrub by the year 2100, primarily between Ventura and the Mexican border, and climate change could result in a *three times greater loss* of coastal sage scrub (Lenihan et al. 2003).

Many researchers have used historical records of species occurrence patterns to show changes in range over time, and often these changes are in the directions predicted by patterns in temperature change (Parmesan 1996, Parmesan 2006, Parmesan and Yohe 2003). Endemic species, whose ranges are already restricted by climate, soil type, or other micro-habitat characteristics, will likely be most threatened by the effects of climate change (Kueppers et al. 2005), and these threats will be exacerbated by the effects of new roads and habitat fragmentation (Pearson and Dawson 2005). See further comments on endemic species in San Diego County as part of 2a below.

Some small species that disperse over relatively small areas and those species (such as some reptiles) that do not cross roads or would be subject to roadkill could be significantly affected by climate changes, as well as species dependent on water, such as coast range newt or western pond turtles. Populations of species that are dependent on vectors for dispersal, such as some plants and fairy shrimp (cysts), could also be dramatically affected in terms of gene flow and genetic diversity (Davies et al. 1997), if they are restricted by habitat patch size and fragmentation.

As intact landscapes continue to be fragmented by development and roads, many individual species and vegetation communities will be unable to shift their distributions in response to changing climate. Therefore, maintenance of intact landscapes across elevational gradients, e.g.,

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conserved lands within the San Dieguito River Park, which extends from the coast to the mountains, is the only way ecosystems can naturally adapt to changing climates, and large intact landscapes also preserve land management options to deal with uncertain future changes (e.g., management of forest stands and fuel loads).

As a result of the construction of new roads and other facilities, the Powerlink project will contribute to cumulative impacts of regional habitat fragmentation; these significant impacts will be further exacerbated by climate changes and, in turn, decrease ecosystem resiliency to climate change and limit land management options to address biological responses to climate change. The DEIR/DEIS should address this issue and the implications of greater fragmentation across ecological gradients in light of climate change.

d. Impacts to ecosystem services

While the environmental documents identify significant impacts to wilderness areas, they do not address impacts to the broad suite of ecosystem services that natural areas provide. Aside from acknowledging the intrinsic values of the natural world, the extraordinary biodiversity of this part of the world in particular, and the concentration of state and federally listed species in San Diego and Imperial counties, the impact assessment must also recognize that the existing system of conserved lands in San Diego and Imperial counties is part of an essential infrastructure, that (i) natural ecosystems provide services on which our economic, social, cultural, and political systems depend, (ii) when these processes are altered, our quality of life declines, and (iii) when the processes fail, life becomes very difficult or impossible (Brussard and Tull 2007). Ecosystem services include drinking water provisioning, wood and fiber provisioning, water quality regulation, flood regulation, carbon sequestration, and biodiversity support, as well as aesthetics and recreation. Like any infrastructure, the preserve system needs upgrading as well as regular management and monitoring to ensure it is functioning effectively. Regular management and monitoring is a requirement of the MSCP Plan.

An extensive *green infrastructure* makes San Diego and Imperial counties unique among other Southern California areas and is the underpinning of our economic enterprise. Natural resources

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and the environmental services they support function across large landscapes. These large landscapes also allow effective fire management and serve to buffer urban areas from wildfires. Conversely, fragmented landscapes, with areas of development divided by small patches of habitat, make fire management much less efficient and thus are more difficult to protect from wildfires.

Undeveloped lands help to regulate water absorption and thus prevent flood flows and erosion. The construction of new roads and other facilities will result in the incremental loss of natural water conservation areas and, conversely, contribute to the area of impermeable surfaces in the region. The DEIR/DEIS does not calculate the area of impermeable surfaces added by the project nor address the resulting changes in stormwater runoff and flow patterns. At the same time, the Powerlink project will remove natural lands that provide pollutant filtering services and, instead, allow greater vehicle access—authorized and unauthorized—to the backcountry, resulting in the addition of pollutant sources to landscapes that currently buffer our drinking water reservoirs. Natural lands also absorb carbon dioxide (CO₂) from the atmosphere, through photosynthesis, and store carbon in biomass (tree trunks, branches, foliage, and roots) and soils, thus reducing the accumulation of greenhouse gases. The roads added by the Powerlink project will allow maintenance vehicles, as well as unauthorized vehicles, to contribute emissions to the atmosphere. The DEIR/DEIS should assess the impacts of the loss of carbon sequestration and other ecological services currently provided by the natural lands that will be lost as a result of the project.

Conflicts with Provisions of NCCP Programs

One of the significance criteria in the DEIR/DEIS is *impacts that result in conflicts with the provisions of an adopted NCCP* (p. D.2-72). This criterion is not adequately addressed in the impact analyses, particularly with respect to how the proposed Powerlink would affect the NCCP stakeholders' ability to maintain compliance with their take authorizations if the Powerlink significantly affects these species, as the documents maintain, and the ability to manage their habitats. Of the 85 species covered for *take authorizations*, or permits, under the MSCP program, the DEIR/DEIS identifies 47 of these species—more than half of the total covered

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species—that may be impacted by the project. Thus the proposed project has the potential to significantly affect compliance of regional stakeholders (i.e., County of San Diego, City of San Diego, City of Chula Vista, City of Poway, and other plans not yet adopted) with MSCP take authorizations. The DEIR/DEIS does not indicate the significance of the impacts to these 47 species covered by the MSCP (many of which are also covered by the MHCP), nor any of the other species in the county to be impacted, in the context of regional population sizes and their distributions.

a. Implications for MSCP covered species take authorizations

The Powerlink was not part of the analysis for issuance of MSCP permits (i.e., was not a project covered by the permits or considered in the analysis for permits issued), and yet this project would impact land conserved as a MSCP permit condition (Stallcup 2007). Because of the small population sizes and sensitivity of the covered species, complex analyses were conducted for MSCP permit issuance to ensure that species populations could be sustained by the level of conservation proposed in light of the extent of regional development impacts to be permitted by the Plan (USFWS and CDFG 1996). Additional impacts to these conserved species and their habitats as a result of the project are beyond what was projected by the MSCP Plan, and have major implications for the amount of future development originally proposed to be covered by the Plan by the permit holders and their third-party beneficiaries. From a regional perspective, implementation of the proposed Powerlink project would reduce the amount of development that could be permitted to occur under the MSCP, in order to maintain an adequate ratio of impact acreage to mitigation acreage. Furthermore, the proposed project would adversely impact habitats that have already been protected as mitigation for projects approved under the MSCP (i.e., would impact approved regional mitigation areas) as is discussed further below.

Table 1 lists 30 (of the 47) MSCP covered species. These 30 MSCP covered species were observed or have a high potential to be present in the Powerlink impact zone. (The other 17 covered species have a lower potential of being present.) Of these 30 species, 6 are considered to be Narrow Endemics—plants with restricted geographic distributions, soil affinities, and/or habitats—and an additional 4 species are Vernal Pool species. The MSCP Plan requires the

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highest degree of protection for both Narrow Endemics and Vernal Pool species. The rationale for finding of adequate MSCP coverage was the condition that management of these species include control of edge effects, defined by impacts such as trampling, dumping, vehicular traffic, invasive species, cowbird parasitism, predation by domestic animals, noise, collecting, recreational activities, increased fire frequency, and other human intrusion. However, the increased direct impacts and edge effects associated with the Powerlink are in direct conflict with the coverage findings for Narrow Endemic and Vernal Pool species.

In addition, a central premise of the MSCP is that there will be no net loss of habitat quality in the face of habitat losses to covered projects, because management efforts will be increased on lands conserved by the Plan. However, management for all 85 MSCP covered species will be made more difficult and costly, and thus less likely to occur, as a result of the fragmentation and edge effects caused by the Powerlink. It has been demonstrated that managing fragmented and edge-effected lands is substantially more expensive than managing connected, contiguous landscapes. For example, per-acre management costs increase as habitat patch or fragment size decreases in suburban settings (Figure 1). Additional impacts to these species from the Powerlink project could also result in reduced species viability and recovery potential and thus decrease the likelihood of the permit holders to meet their MSCP obligations, a return to projectby-project mitigation, and additional costs to government and their third-party beneficiaries, primarily developers (Stallcup 2007). The potential for MSCP permit obligations not being met has also increased since the October 2007 wildfires. The impact of the proposed project to permit holders successfully implementing the existing obligations of the MSCP, and the implications of the increased likelihood of not meeting these obligations, has not been adequately addressed by the DEIR/DEIS and these impacts to management efforts and management costs are not mitigated. The environmental documents should address how impacted lands will be managed and monitored and how the proponents will assist in managing and monitoring MSCP lands as a result of the fragmentation and indirect effects caused by the Powerlink.

Selected examples of the species whose take authorizations will be most jeopardized by construction of the Powerlink are discussed below.

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San Diego homed lizard. The principal threats to the San Diego homed lizard are habitat loss, fragmentation, and degradation. Invasions by Argentine ants, which are now superabundant in and near developed areas in Southern California, eliminate native ant species, which typically comprise over 95% of the homed lizard's diet (Fisher et al. 2002). Argentine ants readily invade all mesic habitats (e.g., riparian areas) as well as more xeric upland areas within about 200 m (656 ft) of impermeable surfaces (such as roads) and irrigated landscapes, and there is no known successful control program for Argentine ants. Thus, only habitat blocks of at least 400 acres may be able to sustain a viable population of homed lizards, which generally cannot successfully cross paved roads. Fragments of habitat isolated by unsuitable habitat, roads, or development are not likely to be naturally recolonized following local extinctions. The Powerlink documents should evaluate the implications of project impacts in the Anza-Borrego, Central, Inland Valley, and Coastal areas to MSCP take authorizations for San Diego homed lizard.

Golden eagle. USFWS and CDFG (1996) stated that this species is still at high risk, even after MSCP implementation, due to the loss of nesting habitat and the fragmentation and loss of foraging habitat, which may preclude long-term successful breeding. In San Diego County, the eastward push of residential development has resulted not only in the loss of foraging habitat but also human disturbance of nesting eagles. The golden eagle population in the county has plummeted as a result of nest site abandonment, even with conservation of foraging habitat by the MSCP in San Diego County. For example, the golden eagle nest site on San Miguel Mountain was identified in MSCP coverage criteria as 1 of 7 nesting sites presumed to remain viable. This eagle pair abandoned this nest site in 2006, presumably as a result of development, roads, and other infrastructure from the west. The MSCP Plan assumed that 14 active nesting territories, primarily outside of the MSCP area (east and northeast of the plan area), would remain. The Powerlink environmental documents do not address how cumulative impacts of the Anza-Borrego, Central Valley, and Inland Valley links would impact MSCP-South County assumptions for coverage and whether these impacts would preclude coverage for the golden eagle in the MSCP-North County and MSCP-East County plans.

<u>Burrowing owl.</u> USFWS and CDFG (1996) stated that this species is still at *high risk*, even after MSCP implementation, due to the loss of nesting habitat and the fragmentation and loss of

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foraging habitat. Like most of North America, the population of the burrowing owl in Southern California has steadily declined over the past century with development of its grassland habitats, and the population in San Diego County has decreased since approval of the MSCP, with abandonment at some areas conserved by the MSCP Plan-Lake Hodges, San Pasqual Valley, Future Urbanizing Area 4, Otay River Valley, and Otay Mesa-and loss of habitat on areas not conserved by the plan (personal observation and C. Winchell personal communication). No bird is in more imminent danger of being extirpated from San Diego County than the burrowing owl (Unitt 2004), and the U.S. Fish and Wildlife Service is actively experimenting with relocation and augmentation of this species' population in San Diego County (C. Winchell personal communication). The burrowing owl is highly sensitive to habitat fragmentation, which would be exacerbated by the Powerlink. The DEIR/EIS should address how additional loss and fragmentation of habitat in Imperial County (Imperial County link north of Imperial Valley substation) will further stress the Southern California population and contribute to the potential for extirpation in Southern California. Future development planned on East Otay Mesa, where the only potentially sustainable population occurs in San Diego County, could be jeopardized by further loss of this species' habitat as a result of the Powerlink.

Northern harrier. USFWS and CDFG (1996) stated that this species is still at high risk, even after MSCP implementation, and urge additional conservation of grassland habitats. Harriers are known to nest in the Tijuana River Valley and South San Diego Bay/Sweetwater Marsh. The Powerlink has the potential to impact this species' habitat in the Coastal portion of the project, and thus the environmental documents should address how project impacts will affect MSCP take authorizations for this species. Fewer than two dozen pairs breed in southwestern San Diego County (Unitt 2004).

Coastal sage scrub. Much of the coastal sage scrub in San Diego and Orange counties has burned over the past decade and, where monitored, California gnatcatcher, California rufous-crowned sparrow, and coastal cactus wren populations have declined immediately after the fires (Mitrovich and Hamilton 2007, Wirtz et al. 1997, Mayer and Wirtz 1995). Some of this same scrub burned during the October 2007 fires in both counties, further exacerbating the problem, as these species prefer more mature habitat (generally at least 3-4 years old) for nesting (Atwood et

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al. 2002, Minnich and Dezzani 1998, O'Connell and Erickson 1998, Rea and Weaver 1990, Morrison 2000). These fires were an additional blow to populations that have already been diminished by habitat loss, degradation, fragmentation, and public recreational uses. In fact, the wildlife agencies and take authorization holders are evaluating the need to reprioritize for conservation habitat patches that did not burn, even if they were not originally prioritized for conservation. The DEIR/DEIS should assess the net loss of mature, versus recently burned, coastal sage scrub and re-evaluate mitigation requirements accordingly.

Similarly, impacts of the Powerlink should be reevaluated after the October 2007 fires with respect to rare perennial plant species (e.g., wart-stemmed ceanothus, Del Mar manzanita, variegated dudleya) which are patchily distributed and in some areas were badly hit by the fires. Additional impacts as a result of the Powerlink project (Inland Valley, Coastal, and Reconductor Sycamore Canyon to Elliot), especially in light of the 2007 wildfires which occurred after the Powerlink analyses were completed, should be evaluated because they could have regionwide implications for both the MSCP and MHCP covered species.

b. Impacts to lands proposed for conservation and impacts to plans in process

While the Powerlink DEIR/DEIS identifies impacts to conserved lands, it does not address impacts to lands proposed for conservation, or in process of conservation but not yet conserved, as part of the MSCP Plan and the implications of this to the successful implementation of the MSCP Plan. For example, the proposed project would impact habitat within the pre-approved mitigation area (PAMA) of the unincorporated County in the vicinity of San Vicente Reservoir and bordering the western edge of National Forest lands in the Greater Lakeside-Jamul portion of the County's MSCP subarea plan.

The environmental documents also do not address potential impacts to the North County and East County MSCPs in process and the implications of Powerlink impacts to these planning efforts. The environmental documents should address whether the proposed and alternative alignments could preclude conservation opportunities in these areas and subsequent impacts to MSCP preserve design, as well as the regional impacts to populations of species, and species

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distributions, prioritized by the plans.

 Conflicts with Las Californias Binational Conservation Initiative and existing conservation investments

The Las Californias Binational Conservation Initiative (LCBCI) has been adopted by the U.S. Bureau of Land Management (BLM), California State Parks, and the California Biodiversity Council (CBC), among others, as part of the planning visions of these agencies, and yet the Powerlink documents do not address the implications of the proposed project to this regionwide conservation planning effort (Stallcup 2007). For example, BLM is incorporating LCBCI objectives and conservation targets in the updates for its South Coast Resource Management Plan, and California State Parks just acquired the cornerstone for the Parque-to-Park binational linkage which has been adopted by a border coordination committee appointed by the CBC (Eade-Jacumba property, Map 2). Conservation efforts are also underway in the Sierra Juárez to make this binational park a reality. The Powerlink documents should evaluate the implications and impacts of the I-8 alternative, which would impact the newly acquired Eade-Jacumba property, as well as the impacts of the La Rumorosa wind farm in the Sierra Juárez (Map 3). The Powerlink documents should also evaluate the implications and impacts of the I-8 alternative-Campo North Option and Modified Route D alternative on the La Posta linkage, which is a critical part of LCBCI (Map 4).

Conclusions

An enormous amount of money, time, resources, and passion has been invested in conservation in San Diego County and, as a result, over 1.9 million acres of natural areas have been protected in San Diego County alone (not including western Imperial County), through unprecedented cooperation and partnerships among local, state, and federal agencies and private conservation groups (Stallcup 2007). Maintaining the long-term viability of these protected areas relies on buffering them from habitat loss and degradation and securing connections to other intact areas. Only in this way can the integrity of the land and the natural ecosystem processes that shape its

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biodiversity be maintained and can the return on the public's investments in land acquisition be realized. Within the MSCP and NCCP programs as a whole in San Diego County, hundreds of millions of dollars have been spent in the conservation of land since 1996 when the MSCP was approved, relying on the promise of an unfragmented core habitat in the backcountry as an anchor and a link between coastal and inland habitats. As the DEIR/DEIS accurately concludes, the Powerlink's impacts on the public's investment are unmitigable.

I declare under penalty of perjury this testimony is, to the best of my knowledge, true and correct.

/s/ Jerre Ann Stallcup

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List of Attachments:

Map 1: Ecological Integrity in San Diego County

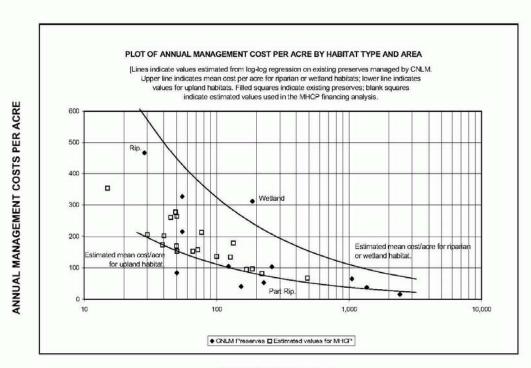
Table 1: MSCP covered species with a high potential to be impacted by the Powerlink

Figure 1: Annual management cost per acre by habitat type and area

Map 2: Eade-Jacumba property

Map 3: Potential Bighorn Sheep Habitat in Baja California Norte

Map 4: La Posta Linkage

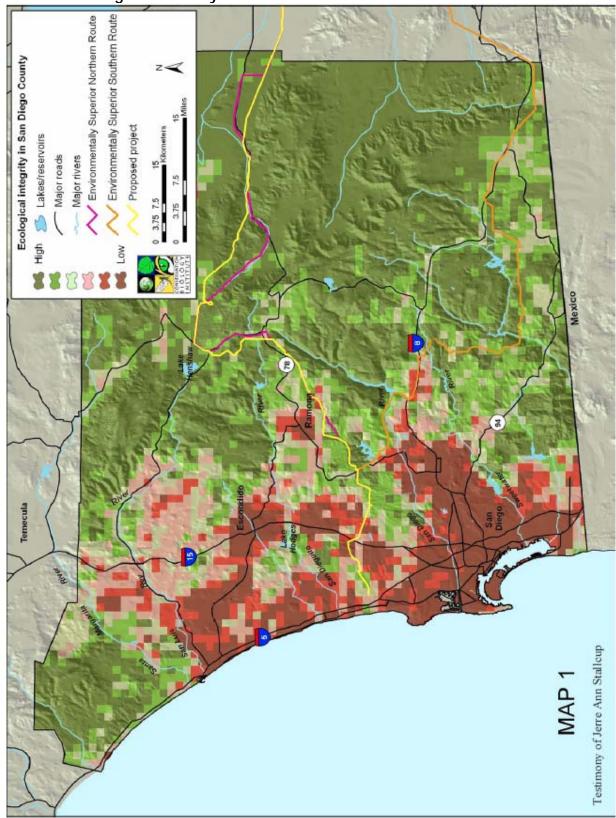


HABITAT AREA (acres)

Figure 1. Annual management cost per acre by habitat type and area.

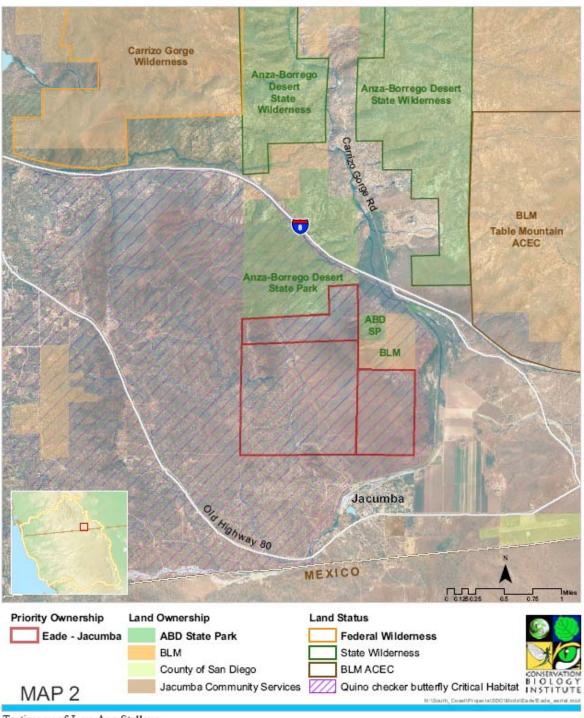
Source: Onaka 2003. Note that the original regression analysis was based on 2002 prices. To convert to 2007 prices, results from the log-log regression should be multiplied by 1.179 (that is, increased by 17.9%; based on ratio of price indices, 233.321/197.9), to reflect inflation in San Diego (U.S. Bureau of Labor Statistics).

FIGURE 1





Las Californias Binational Conservation Initiative
Figure 1: Eade-Jacumba Property, Context - Las Californias



Testimony of Jerre Ann Stallcup