

April 8, 2013

Mr. Oscar Biondi State Water Resources Control Board Division of Water Rights P.O. Box 2000 Sacramento, CA 95812-2000

# **RE: Eagle Mountain Pumped Storage Project**

Dear Mr. Biondi

The National Parks Conservation Association (NPCA) is a nonprofit dedicated to "Protecting and enhancing America's national parks for present and future generations." On behalf of our 750,000 active members and supporters nationwide and over 100,000 in the state of California, NPCA would like to thank you for the opportunity to provide comments on the Draft Final Water Quality Certification for the Eagle Crest Pumped Storage Project. Our members care deeply for America's shared natural and cultural heritage that is preserved by units of the National Park System.

The Sierra Club is a national nonprofit organization of about 760,000 members with more than 195,000 living in California. As part of the Sierra Club, the San Gorgonio Chapter is dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and encouraging humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Chapter boundaries include all of San Bernardino and Riverside Counties which means this pumped storage project is in our local area of concern. Chapter members use, enjoy and value the lands that will be affected by the project.

Eagle Crest Energy Company (ECEC) has proposed its Eagle Mountain Pumped Storage Project for an area directly to the south and adjacent to Joshua Tree National Park. Joshua Tree National Park was established by the California Desert Protection Act of 1994 to preserve and protect the natural and cultural resources of the Colorado and Mojave Desert. In 2010, Joshua Tree National Park had over 1.4 million visits from tourists all over the world who contributed almost 60 million dollars to the economies of gateway communities. The park is recognized as an outstanding rock climbing, hiking, stargazing and wildlife viewing area and boasts two intact desert ecosystems meeting in a distinct transition zone, thousands of years of cultural history, and vast areas of federally designated wilderness—including wilderness areas to the immediate north and south of the proposed project area. The proposed project area lies a mere 1.5 miles from the border of Joshua Tree National Park.

The Eagle Crest Pumped Storage Project is located near the town of Desert Center, California. It consists of an upper and lower reservoir which would be created from two inactive mining pits; a 13.5 mile long power line, an underground powerhouse and groundwater supply facilities. The project would pump water from the lower reservoir to the upper reservoir during periods of low energy demand and discharge water to the lower reservoir to create electricity during periods of high demand. The total generating capacity of the project is 1300 Megawatts of electricity. Construction will be followed by an initial fill of

8,100 Acre feet of water per year in (AFY) about 2014 with replacement pumping of 1,800 AFY starting in 2018 and continuing through the 50-year life of the Project. The water will be deposited in two depleted mining pits in the former Eagle Mountain Mine in Riverside County, California, adjacent to Joshua Tree National Park. This project is proposed to occupy federal lands currently administered by the Bureau of Land Management (BLM) and private lands currently owned by Kaiser Eagle Mountain and, according to project proponents, would not preclude development of the proposed Eagle Mountain Landfill.

## We have the following concerns with the Eagle Crest Pumped Storage Project:

# Groundwater Impact

The project will mine groundwater from the Chuckwalla Basin, which is in communication with several of the surrounding aquifers, including the Pinto Basin Aquifer, which lies underneath Joshua Tree National Park. According to project proponents, project pumping and existing pumping will create overdraft conditions in the Chuckwalla Basin for the first four years, but after that recharge would exceed project and existing pumping uses by about 1700 acre feet/year because project pumping would be reduced to only provide reservoir make up water. Total groundwater use for the project over its 50 year lifespan is estimated at 109,620 acre feet/year.

However, the assumptions behind these calculations are based on the assertion that the recharge rate of the Chuckwalla Basin is 12,700 acre feet/year, a figure that the National Park Service (NPS) disputes. NPCA supports the NPS estimates, which state that the recharge rate is substantially lower than the rate proposed in the Final EIS, 3000 acre feet/year or even less. In fact, a 2004 United States Geologic Survey study in the Joshua Tree area, which includes several basins located immediately to the west and northwest of Pinto Valley provides compelling evidence that there is negligible recharge for basins in this part of the Mojave Desert, and that nearly all water being removed from basins in this area is likely depleting groundwater storage. Even more recently, a study conducted for the USGS by T.M. Mathany indicates that no modern recharge has occurred in the Chuckwalla Basin, based on Carbon 14 and Tritium values used to date groundwater. This discrepancy not only calls into question recharge rates, but the groundwater storage, impact assessments and projected aquifer recovery described in the environmental documents of the Eagle Crest Pumped Storage Project. NPCA believes that the substantial overestimation of groundwater recharge could result in an underestimation of the potential effects of project pumping on groundwater in the basin and surrounding areas.

### **Impacts to Tortoise**

The proposed Eagle Crest pumped Storage Project will artificially inflate populations of ravens and other predators that consume desert tortoise by subsidizing water and food resources for these animals. The presence of lakes in the Mojave Desert may also attract seagulls from the Salton Sea that could also prey on desert tortoises. Joshua Tree National Park's resources staff have analyzed the impacts of the Eagle Crest Pumped Storage Project by extrapolating W.I. Boarman et al's. research on ravens and creating a robust habitat model which indicates that a lake at Eagle Mountain would adversely affect nearly 330,000 acres of prime desert tortoise habitat within 31 kilometers of the site, including 178,000 acres or 75% of prime desert tortoise habitat within Joshua Tree National Park. This is particularly significant because Joshua Tree National Park has some of the Mojave Desert's most protected desert tortoise habitat within its boundaries. Desert tortoise habitat within Joshua Tree National Park is relatively free of habitat fragmentation, habitat loss, off road vehicle use, development and feral dogs.

### Acid Mine Drainage

There are significant unknown impacts related to the level of acid rock drainage production, the amount of reservoir seepage, the ability to adequately treat acid drainage and control seepage and impacts to sensitive species that may use the proposed reservoir and associated evaporation ponds.

### **Cumulative Impacts**

The Eagle Crest Pumped Storage Project must be evaluated in the context of other development in the area that will impact groundwater resources. There are numerous proposed projects along Joshua Tree National Park's southern and eastern boundary, including the Eagle Mountain Landfill, Glorious Land Company's Paradise Valley Development, numerous solar projects both within the Riverside East Solar Energy Zone and outside this designated area. It is our contention that cumulatively, these proposed projects, along with the Eagle Crest Pumped Storage Project have the potential to adversely impact groundwater resources, air quality and sensitive species habitat inside and outside Joshua Tree National Park.

# Proper Evaluation of Environmental Setting and Impacts Analysis

NPCA echoes the concerns of other organizations and agencies that the Eagle Crest Pumped Storage Project's environmental documents do not properly evaluate environmental setting and environmental impacts of the project because significant onsite surveys have not occurred on some of the proposed project area. In this case, the use of prior environmental documents, historical information, mining studies and "similar" areas to prepare environmental documents is insufficient in establishing meaningful baseline data on species, cultural resources, geology and hydrology, as well as mitigation measures. Without on-the-ground physical, biological and cultural surveys, it is next to impossible to ascertain baseline data about the current environmental conditions of the proposed site. The project proponent's assertion that surveys can be conducted after licensing has occurred is in our view, grossly inadequate and is a poor precedent for other projects. It is our contention that the project should not be considered until a thorough evaluation of resources based on actual surveys and monitoring, are conducted.

In closing, National Parks Conservation Association and the San Gorgonio Chapter of the Sierra Club would like to thank the State Water Resources Board for the opportunity to provide comments on the Draft Final Water Quality Certification EIR.

Sincerely,

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