4.4 MINERAL, ENERGY, AND TIMBER RESOURCES

4.4.1 Introduction and Background

The following analysis assesses the extent to which the implementation of the proposed Plan and its alternatives would potentially impede the productive development and use of timber, mineral, and energy resources in the Plan Area. Energy resources occurring within the Plan Area that would potentially be affected by the proposed Plan are limited to wind energy conversions systems (turbines). The discussion does not address the potential adverse impacts of wind turbine noise, which are discussed below in Section 4.12. Mineral resources that may be affected by the proposed Plan are limited to sand and gravel. Mineral and energy resources are also discussed in Section 3.185 of this document.

The boundaries of the Plan Area extend into and include portions of the surrounding San Jacinto, Santa Rosa, San Bernardino, and Little San Bernardino Mountains, which include private lands but are primarily comprised of large tracts of public land (State Parks, BLM, USFS, etc.). The mountainous areas of the Plan Area occur within the Santa Rosa and San Jacinto Mountains National Monument. The Monument includes a total of 150,800 acres of Federal land, of which 86,400 acres are BLM land and 64,400 acres are National Forest land.

Also included within the Monument boundary, but not affected by the Federal designation, are 31,400 acres of Agua Caliente Band of Cahuilla Indians land, 8,500 acres of California Department of Parks and Recreation land, 34,500 acres of other state lands (University of California, California Department of Fish and Game, Coachella Valley Mountains Conservancy), and 55,200 acres of private land. The BLM lands are classified as Class "L," Limited, in the CDCA Plan. None of the subject private and public lands constitute permitted existing or planned timber harvesting areas. There are no existing or planned timber harvesting areas in the Plan Area.

4.4.2 Thresholds of Significance/Criteria for Determining Significance for CEQA Analysis

The proposed Plan and the Alternatives would have a significant effect on mineral and energy resources if they would:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local General Plan, specific plan or other land use plan.

c. Result in the loss of availability of a known energy resource that would be of value to the region and the residents of the State.

d. Result in potential adverse effects to existing and planned timber harvesting areas within, adjacent, to or near Conservation Areas.

4.4.3 Project Impacts on Timber, Mineral, and Energy Resources

Proposed Action/Preferred Alternative

Mineral Resources

Under the Proposed Action/Preferred Alternative, impacts to mineral resources would be less than significant. First, the Conservation Areas were designed to minimize inclusion of mining operations thus allowing continued mineral extractions. Second, these existing operations, although not Covered Activities, would not be adversely affected by the Plan. Finally, land conserved under the proposed Plan does not physically affect the mineral resource.

Mineral extraction in the Coachella Valley is limited to sand and gravel. In the Plan Area, there are 17,527 acres that have been designated as Mineral Resource Zone 2 (MRZ-2). The MRZ-2 designation refers to areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. Of this acreage, 10,007 acres are included in the Conservation Areas.

Of the MRZ-2 acres in the Conservation Areas, 1,983 acres are on Federal land, and 921 acres are on non-Federal Existing Conservation Land, leaving a balance of 7,103 acres. Of this acreage, approximately 1,051 acres are currently approved for mining, and Take Authorization for these lands in the Indio Quarry mining area would be provided for mineral extraction on these acres under the proposed MSHCP. That leaves a balance of 6,052 acres of MRZ-2 lands that could be directly affected by the proposed Plan.

Because Development would be limited in Conservation Areas, it is a foreseeable impact of the proposed Plan that the majority of these acres would not be Developed under the MSHCP. The actual impact of the proposed Plan on the availability of the sand and gravel resource, however, would not be significant because the volume of material which is already permitted for mineral extraction in the Plan Area is sufficient to meet demand for approximately 130 years at current rates of consumption, and land conserved under the proposed Plan does not physically affect the mineral resource. The California Department of Conservation's regulations state that recreational

open space uses are compatible with mining and, thus, do not threaten future potential to extract mineral resources (California Code of Regulations, Title 14, section 3675).

Existing extraction and processing operations are subject to discretionary permit approval, including surface mining permits and reclamation plans found to be consistent with local, State and Federal regulations. Existing extraction and processing operations in the Conservation Areas are not affected by the proposed Plan. Future expansion of these operations that would likely involve Take of a Listed species would require Take Authorization and would be subject to the proposed MSHCP.

Existing permitted sand and gravel operations located within proposed Conservation Areas include the following:

Lower San Gorgonio River Quarry: Mined resources from this quarry are located within the San Bernardino Production-Consumption Region. The quarry occupies a portion of the San Gorgonio River streambed and is located within the Cabazon Conservation Area. The aggregate deposits extend about eight miles to where the streambed joins the Whitewater River. These high quality deposits are inferred to extend to a depth of over 100 feet. Currently permitted operation and maintenance activities are not impacted by the proposed Plan.

Whitewater River Quarry: Located in or adjacent to the Stubbe/Cottonwood Canyons and the Whitewater Floodplain Conservation Areas, two operations are located in the largest resource sector in the Coachella Valley, encompassing 8,013 acres and with resources up to 100 feet in depth. Operations have historically been at the mouth of the Whitewater Wash (active) and on the south side of Garnet Hill immediately east of Indian Avenue (inactive). These permitted areas yield a wide range of product, including boulders for landscaping and heavy construction, and PCC-grade aggregate. Neither mining area appears to be significantly constrained by the planned Conservation Area boundaries.

Super Creek Quarry: This quarry is located in the northwestern portion of the Painted Hills area, immediately east of Whitewater Canyon and west of Highway 62, within the Upper Mission Creek/Big Morongo Canyon Conservation Area. Super Creek is a primary source of decomposed granite used for landscape areas. This operation and its permits are unaffected by the implementation of the proposed Plan.

Little Morongo Canyon Wash (inactive): This aggregate deposit extends one mile upstream of the mouth of the wash, with approximately one-half of the northern most deposit being located within the Upper Mission Creek/Big Morongo Canyon Conservation Area. Started in the early 1950s and operated until 1972, the property is not currently permitted for mineral extraction.

Thousand Palms Area: These permitted operations are located on the alluvial wash of a small unnamed drainage north of the community of Thousand Palms and at the foot of the Indio Hills. These deposits are located in the Thousand Palm Conservation Area, east of Rio del Sol and north of Visa Chino. The deposit is uplifted and eroded alluvium derived originally from the Little San Bernardino Mountains to the north. On-going extraction operations are not affected by the implementation of the proposed Plan.

Berdoo Canyon Fan: This area is a coalescing of alluvial fans formed at the mouths of the West Berdoo and Berdoo Canyons, along both sides of Dillon Road between the Little San Bernardino Mountains and the Indio Hills. While portions of the resource area are located within the Desert Tortoise and Linkage Conservation Area, much of the resource area lies outside proposed Conservation Areas. Actively permitted operations are not affected by the proposed Plan.

Fargo Canyon Fan: This resource area encompasses about 3,295 acres of the large alluvial fan at the mouth of Fargo Canyon, on the east side of Dillon Road. Two or more mining operations currently extract this lesser quality deposit, including an intermittent public borrow area on the southern portion of the fan, on BLM lands. Actively permitted operations are not affected by the proposed Plan.

Indio Quarry/Indio Hills Fan: Sand and gravel is the mineral commodity excavated from the project site. The subject resource area consists of a moderate sized deposit that is located within 750 acres of an alluvial fan adjacent to and immediately south of the Indio Hills. It is located in the Indio Hills Palms Conservation Area. The deposit contains approximately 73 million tons of aggregate resource to an average depth of approximately 200 feet. The deposit includes aggregate meeting the specifications for making Portland cement concrete-grade aggregate. The Indio quarry is the largest producer of PCC-grade aggregate material in the Palm Springs P-C Region. Mining has been on going at this site since the late 1940s. Currently permitted operation and maintenance activities are not impacted by the proposed Plan.

Thermal Area: In the Thermal area are deposits on an alluvial fan and wash near the mouth of an unnamed canyon about three miles east of the community of Thermal. The area is located adjacent to the Mecca Hills/Orocopia Mountains Conservation Area. PCC-grade aggregate is produced in the upper and lower portions of this deposit. These lesser-quality deposits have a relative high (65%) ratio of sand to gravels. The deposit is crossed by the Coachella Branch of the All-American Canal and the southwesterly deposit is now inactive. Actively permitted operations are not affected by the proposed Plan.

Thermal Area: Another approved and active quarry in this area encompasses 120± acres and is a source of PCC-grade aggregate and clay deposits occurring on adjoining alluvium. Permitted in

1995-96, this site is located within the Mecca Hills/Orocopia Mountains Conservation Area and is east of the Coachella Branch Canal and the mining area described immediately above. This quarry is not affected by the Plan, however, any proposed expansion of this quarry would have to demonstrate consistency with the Conservation Area's Goals and Objectives.

As noted above, current (2001) permitted reserves in the Valley were estimated at 236.8 million tons (based on Riverside County and BLM permit files) on both public and private land. Significant expansion of an existing mine in the Indio Hills also near Indio (private land),[1] and permitting of a number of smaller operations in Thousand Palms and west Berdoo Canyon (private and public land) have expanded permitted reserves to approximately 272 million tons. Total aggregate production during 2001 in the Coachella Valley was approximately 2 million tons, of which approximately 661,000 tons were mined on BLM land. Based upon permitted reserves, at current rates of consumption these permitted reserves could last approximately 130 years.

Energy Resources

Under the Proposed Action/Preferred Alternative, impacts to energy resources would be less than significant. Over the past 20 years, the most economically developable wind resources in the Plan Area have been developed. Transmission facilities owned by SCE and IID are an important resource in the delivery of electric power. The operation and maintenance of certain IID's transmission facilities are Covered Activities under the Plan. The discussion in Section 3.5 further describes these resources and their Development. Wind energy conversion systems (WECS or windfarms) can and have been developed in a manner that limits on-site impacts to wildlife and their habitat.

Given the substantial windfarm development that has already occurred and the continuing retrofit of turbines on existing sites, as well as the continued relatively low impact of windfarm Development, existing and future Development of regional wind resources are not significantly in conflict with or constrained by adoption and implementation of the proposed Plan. No large-scale solar or thermal energy resources have been developed in the Plan area at this time, nor is the Plan expected to constrain or inhibit such development, which typically occurs in conjunction with buildings and similar structures.

The Plan provides Take Authorization for ground disturbance associated with windfarm Development in Conservation Areas that is consistent with applicable Conservation Goals and Objectives. Ground disturbances include roads and staging areas, foundation pads and storage

[1] "Final Subsequent Environmental Impact report for Riverside County Surface Mining Permit No. 176, Amd. No. 1." Permit approved and SEIR certified March 2002. Prepared by Terra Nova Planning & Research, Inc. March 2002. This approval expanded mining to increase permitted aggregate extraction by approximately 46.8 million tons beyond levels identified in 1985.

areas, with further disturbance limited once constructed. The retrofitting of wind turbines is a proposed Covered Activity only with respect to impacts from ground disturbance.

Permitted Development would continue at least during the life of each windfarm permit. Modifications and installation of replacement technology would be ongoing, with the expectation that fewer wind turbines (and associated disturbance) would replace current numbers on already developed sites. Existing and future Development in the wind resource areas would occur in portions of the following Conservation Areas: Cabazon, Highway 111, Whitewater Canyon, Upper Mission Creek/Big Morongo Canyon, Snow Creek/Windy Point, Whitewater Floodplain, Willow Hole and Edom Hill.

Exhibit 4-3 shows wind energy potential in Coachella Valley.

Timber Resources

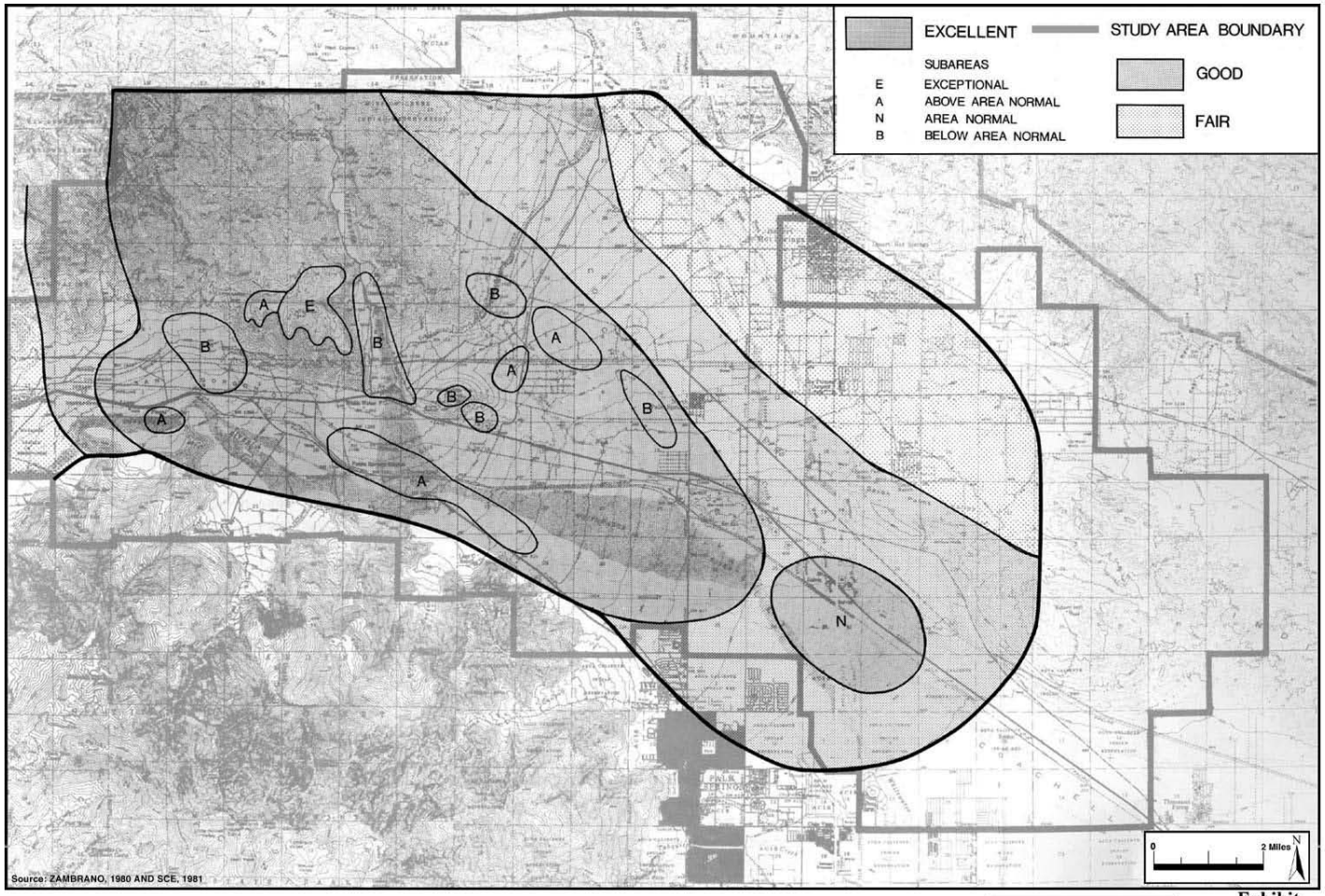
There are no existing or planned timber harvesting areas in the Plan area; thus there are no impacts. Additionally, the Plan would have no effect on any commercially viable timber resource in any area outside but adjacent to the Plan Area.

Public Lands Alternative

This alternative includes only existing public and private conservation lands. No private land would be acquired; hence, less land with mineral and energy resources would be affected by the Plan. New mineral extraction or energy resource development on public land is subject to existing land management plans adopted by the relevant agencies that would not be impacted by the Plan. Existing mineral extraction and windfarm permits, whether on public or private lands, would continue.

Core Habitat with Ecological Processes Alternative

This alternative's impacts would be slightly less than the Preferred Alternative because the Conservation Areas include fewer private lands with mineral resources. There are 529 fewer acres of MRZ-2 lands on federal lands in the Conservation Areas under this Alternative compared to the Preferred Alternative, and 2,743 fewer acres of private lands designated MRZ-2 under this Alternative compared to the Preferred Alternative.



TERRA NOVA®
Planning & Research, Inc.

Coachella Valley MSHCP
Wind Energy Potential
Coachella Valley

CVAG

Exhibit
4-3

There are also 793 fewer acres of active, permitted sand and gravel mining operations in the Conservation Areas under this Alternative compared to the Preferred Alternative. Existing mineral extraction and windfarm permits would continue in effect, and development of new aggregate mineral resources and retrofitting existing and constructing new windfarms would be less constrained that under the Preferred Alternative.

Enhanced Conservation Alternative

This alternative would result in an increase lands in Conservation Areas beyond that of any of the other alternatives and this Alternative, compared to the Preferred Alternative, could have greater impacts to mineral resources since it would further limit access to important mineral resources within the Indio Hills, Mecca Hills and portions of the San Gorgonio River. Even these additional impacts, however, do not constitute a significant adverse impact because material, which is already permitted for mineral extraction in the Plan Area is sufficient to meet demand for approximately 130 years at current rates of consumption, and land conserved under the Plan does not physically affect the mineral resource. This is explained in the following paragraphs. There are 683 more acres of MRZ-2 lands on federal lands in the Conservation Areas under this Alternative compared to the Preferred Alternative, and 1,610 more acres of private lands designated MRZ-2 under this Alternative compared to the Preferred Alternative. There are also 208 more acres of active, permitted sand and gravel mining operations in the Conservation Areas under this Alternative compared to the Preferred Alternative.

Given the substantial windfarm Development that has already occurred, the continuing retrofit of turbines on existing sites, and the continued relatively low impact of windfarm Development, existing and future Development of regional wind resources are not significantly in conflict with or constrained by adoption and implementation of this alternative. No solar or thermal energy resources have been developed in the Plan area at this time. The Plan provides Take Authorization for ground disturbance associated with existing wind turbines in Conservation Areas, and for the replacement of existing wind turbines with new ones where there is no net loss of habitat. The Plan also provides for limited Development, which could include wind turbines, and solar or thermal energy, in Conservation Areas, consistent with the Conservation Objectives.

No Action/No Project Alternative

The No Action/No Project Alternative would not result in any impacts to the development of mineral and energy resources because no Plan would be implemented. Because under this Alternative no Plan would be implemented and no Take Authorization provided, each future mineral or energy resource Development that would result in Take of a Listed species would have to obtain Take Authorization through another process. Project impacts and any required

mitigation measures would be determined through the environmental review and permitting process for each project.

Table 4-3 summarizes impacts by alternative.

TABLE 4-3
Summary of Impact by Alternative
Energy and Mineral Resources

Alternative	Potential Adverse Impacts to Energy/Mineral/Timber Resources
Proposed Action/Preferred Alternative	No
Public Lands Alternative	No
Core Habitat With Ecological Processes Alternative	No
Enhanced Conservation Alternative	No
No Project Alternative	No

4.4.4 Mitigation Measures

Proposed Action/Preferred Alternative

No significant impacts are expected to occur under this Alternative and thus no mitigation is required.

Public Lands and Core Habitat with Ecological Processes Alternatives

No significant impacts would occur under these Alternatives and thus, no mitigation is required.

Enhanced Conservation Alternative

No significant impacts are expected to occur under this Alternative and thus no mitigation is required.

No Project/No Action Alternative

No significant impacts are expected to occur under this Alternative and thus no mitigation is required.

4.4.5 Levels of Significance after Mitigation for CEQA Analysis

Impacts to timber, energy and mineral resources for each Alternative would be less than significant.