

# **APPENDIX J**

Description of Biological Resources  
By Paul Kielhold, September 2008

**DESCRIPTION OF BIOLOGICAL RESOURCES**  
**SUPER CREEK QUARRY – PROPOSED SW OVERBURDEN AREA**  
**DESERT HOT SPRINGS, RIVERSIDE COUNTY, CALIFORNIA**

**Prepared For:**

**WEBBER AND WEBBER MINING CONSULTANTS, INC.**  
**101 EAST REDLANDS BOULEVARD, SUITE 240**  
**REDLANDS, CALIFORNIA 92373**

**Prepared by:**

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**33562 YUCAIPA BOULEVARD, #4-231**  
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**September 2008**

## Introduction

This description of biological resources was prepared at the request of Mr. George Webber of Webber and Webber Mining Consultants, Inc. for a portion of the Whitewater Rock and Supply Company's Super Creek Quarry. The Super Creek Quarry is approximately 2½ miles north of Interstate Highway 10 at Whitewater, California. The area described herein is in the southwest portion of the site and is proposed for the placement of overburden generated from the quarry expansion which was the subject of a previous report titled, "*Baseline Biological Survey for the Proposed Whitewater Rock & Supply Company's Super Creek, 12.3 acre Quarry Expansion, Desert Hot Springs, Riverside County, California*", prepared by Biological Resource Specialists, 2005.

## Location

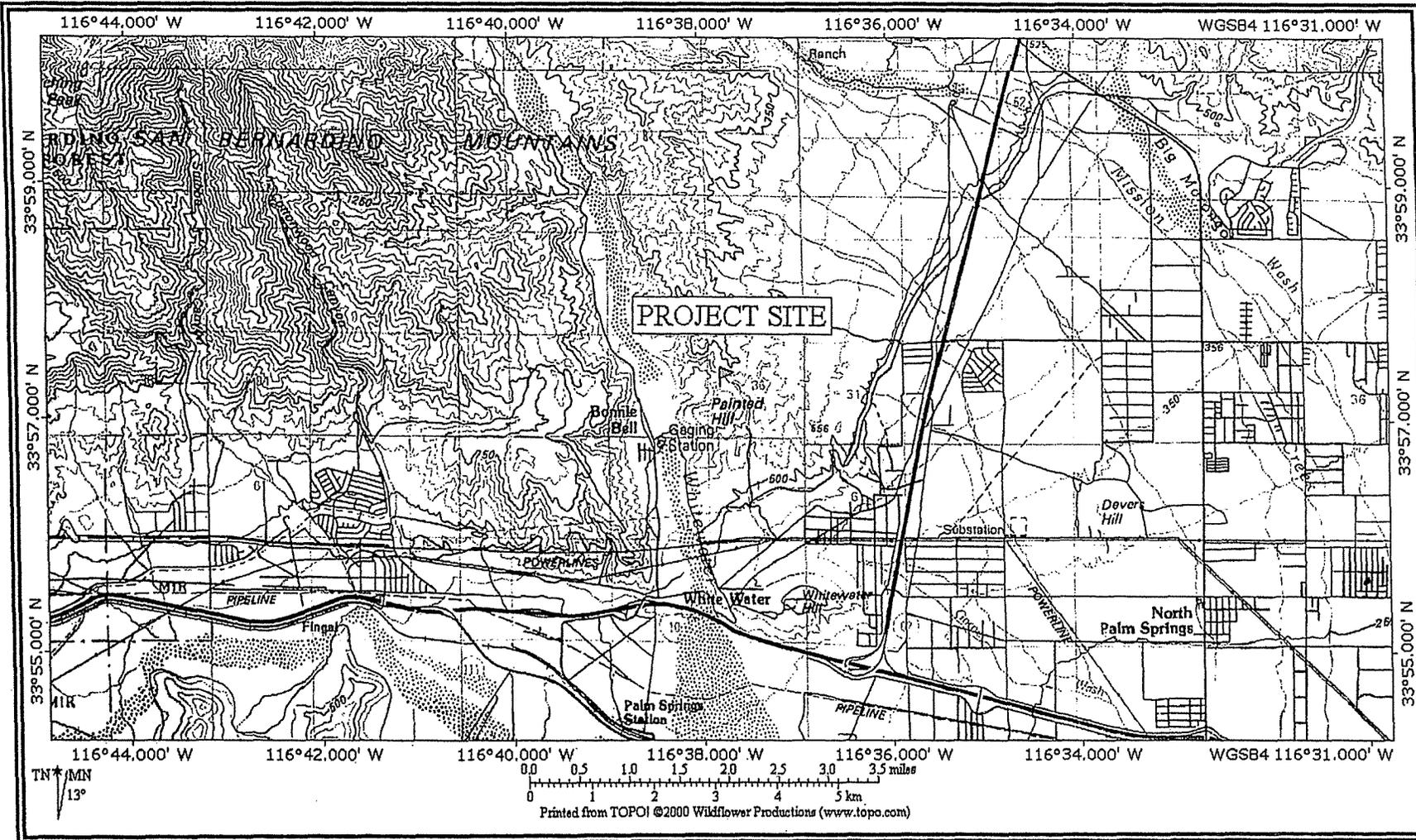
The site is at the east end of the San Gorgonio pass, which separates the San Bernardino Mountains from the San Jacinto Mountains, at the western edge of the Sonoran desert region, Figure 1. The area surveyed is approximately 16½ acres, located within the west ½ of the southwest ¼ of Section 36, Township 2 South, Range 3 East, San Bernardino Base and Meridian and is shown on the *White Water, California*, U. S. Geological Survey, 7½ minute quadrangle map. The proposed overburden area is generally situated between the Painted Hill Quarry (inactive) to the west and the Super Creek Quarry, Figure 2.

## Site Description

The proposed southwest overburden area is rocky, highly dissected, steeply sloping and has a generally south facing aspect. The site is arid with an annual rainfall of 4 inches. Elevations range from 2300 feet above sea level at the north end to 2100 feet above sea level at the south end. The vegetation is dominated by creosote bush (*Larrea tridentata*), brittlebush (*Encelia farinosa*) and tansy mustard (*Descurainia pinnata*). Land use in the vicinity is dominated by wind driven turbines for power generation. Prevailing winds are west to east as evidenced by the wind swept form of the taller plant species.

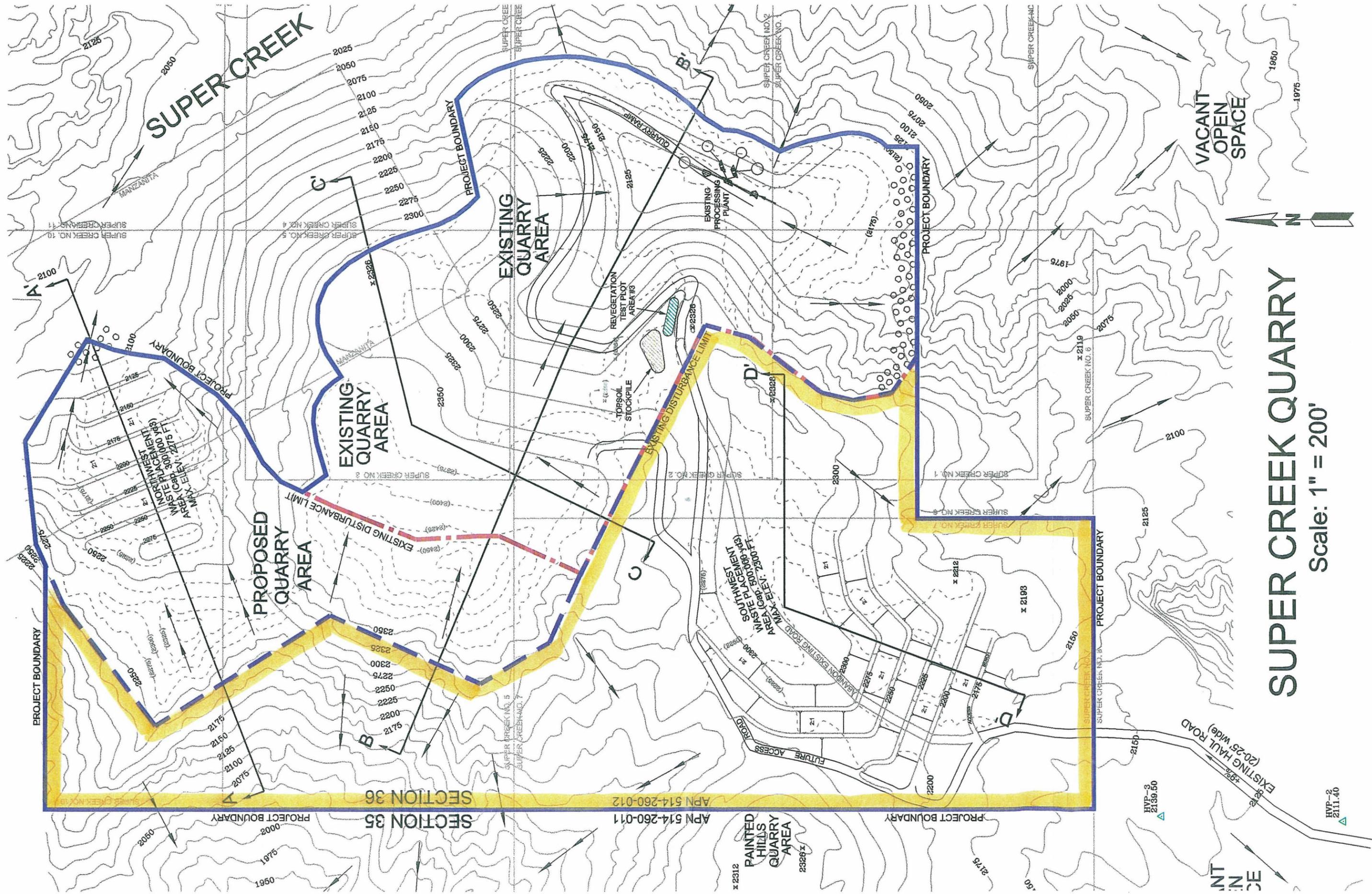
## Methodology

The survey was conducted on August 20, 2008 and therefore, is descriptive rather than exhaustive due to the possibility of not observing annual plants and animals avoiding the summer heat. The above-referenced report by Biological Resource Specialists (January 2005) should be consulted for a complete listing of species due to that survey being conducted during a more favorable time of year, (May 2004). The observations and conclusions made from the August survey of the southwest overburden area are consistent with but more limited than those of the earlier report. The survey was conducted on August 20, 2008, by Paul Kielhold between 0900 and 1200 PST. The sky was clear and wind was from the west, gusting to 25 miles per hour. The ambient air temperature was 87°F at 0900 and 103°F at 1200 PST. The survey was conducted by walking across the site in linear transects separated by 30 feet, less in areas of limited visibility.



**REGIONAL LOCATION MAP  
SUPER CREEK QUARRY  
DESERT HOT SPRINGS, RIVERSIDE COUNTY, CALIFORNIA**

**FIGURE 1**



# SUPER CREEK QUARRY

Scale: 1" = 200'

NT  
:N  
:CE

## Results

There were twenty-nine (29) plant taxa identified during the survey all of which had been observed in the earlier survey which recorded thirty-nine taxa. In addition, there were six (6) species of vertebrates observed, four of which had been recorded in the earlier survey; side-blotched lizard, raven, rock wren and coyote and two which had not been observed; packrat (*Neotoma* spp.) and mule deer (*Odocoileus hemionus*). These species were identified by sign rather than direct observation (nests and tracks, respectively).

Vegetation on site is a mixture of Sonoran Creosote Bush Scrub, Riversidian Sage Scrub and Juniper Woodland; it is dominated by creosote bush, brittlebush and tansy mustard. It also contains California Juniper (*Juniperus californica*), Joshua tree (*Yucca brevifolia*), Mojave yucca (*Y. schidigera*), joint fir (*Ephedra* spp.), burrobrush (*Ambrosia dumosa*), goldenbush (*Ericameria* spp.), cheesebush (*Hymenoclea salsola*), beavertail cactus (*Opuntia basilaris*), pencil cholla (*O. ramosissima*), lycium (*Lycium cooperi*), krameria (*Krameria erecta*) and others. These species are common in the Sonoran desert although on this site, tansy mustard covers much of the ground between creosote and brittlebush plants as it commonly does throughout the San Gorgonio pass area.

Ten (10) sensitive plant species were identified in the previous report as potentially occurring on the quarry site. Nine (9) species were found to be absent with the tenth species, triple-ribbed milkvetch occurring in a disturbed area along the quarry access road. The SW overburden area includes previously disturbed areas similar to the previously identified occurrence therefore this area should be surveyed during the flowering period for the milkvetch, March through May in most years. In addition, the SW overburden area includes areas which are less rocky than the previously surveyed quarry area and may provide habitat for additional sensitive plant species which were not observed in 2004. Their potential occurrence cannot be evaluated until the next flowering season, typically March to May.

Eleven (11) sensitive vertebrate species were identified in the previous report as potentially occurring on the quarry site. The quarry site was not found suitable for eight of the eleven species. Most of which are riparian species whose potential habitat would be in Whitewater canyon, west of the quarry. Desert tortoise, prairie falcon and golden eagle were reported to have potentially suitable habitat and this is also the case with the SW overburden site. Desert tortoises were not found during the survey nor were any sign of desert tortoise observed. The site appears to be above the elevation limit for desert tortoise, they have been reported from areas south of the site at lower elevations. Neither the prairie falcon or golden eagle was observed but it is likely that they would not be seen during a short observation period on a windy day. Rock outcrops were searched for sign (whitewash, nests) and none was observed. The site may provide foraging habitat for prairie falcon and golden eagle, evidence of perching and nesting was not observed.

## **Conclusions**

The proposed SW overburden area is dominated by a mix of Sonoran Creosote Bush Scrub, Riverside Sage Scrub and Juniper Woodland as was described in the report for the quarry expansion. The dominant species are creosote bush, brittlebush and tansy mustard. The survey of the SW overburden area was conducted in August, outside the flowering season for most plant species therefore, the survey is inconclusive regarding the presence/absence of sensitive plant species. A survey for sensitive plant species should be conducted in the flowering season, typically March to May.

## APPENDIX A

### Site Photographs

#### Page 1

##### **Upper left –**

View at the north end of the proposed overburden area, looking east. The access road to Super Creek Quarry is in the center of the photograph.

##### **Lower left-**

View from the north end of the proposed overburden area, looking southeast.

##### **Upper right –**

View from the southwest portion of the proposed overburden area, looking west.

##### **Lower right-**

View from the southwest portion of the proposed overburden area, looking north. Painted Hill is on the left and the Super Creek Quarry is behind the hill on the right.

#### Page 2

##### **Upper left-**

View from the west edge of the proposed overburden area, looking southeast.

##### **Lower left-**

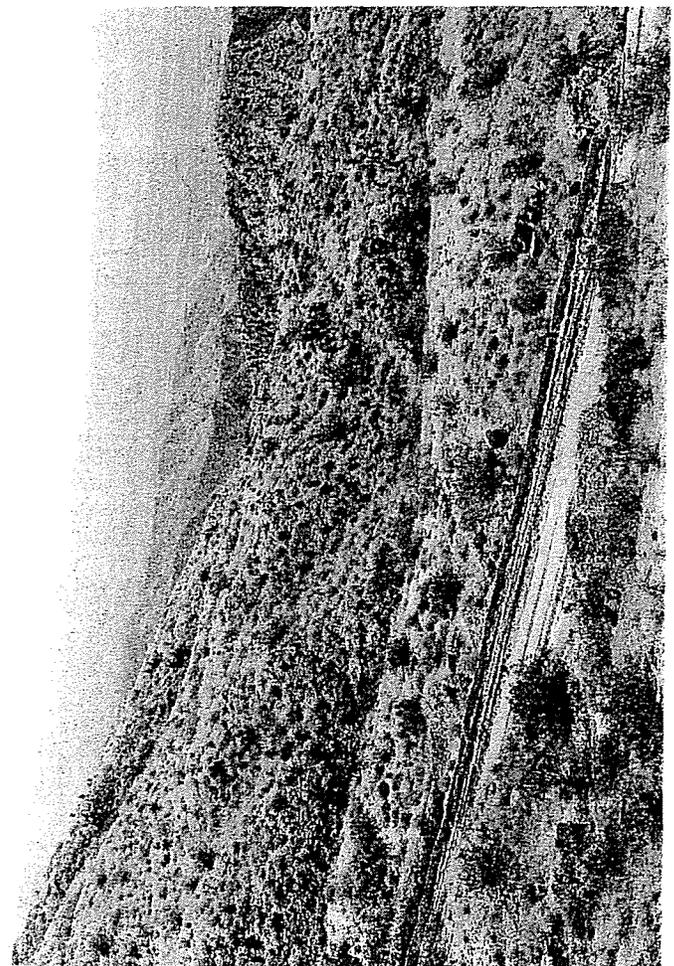
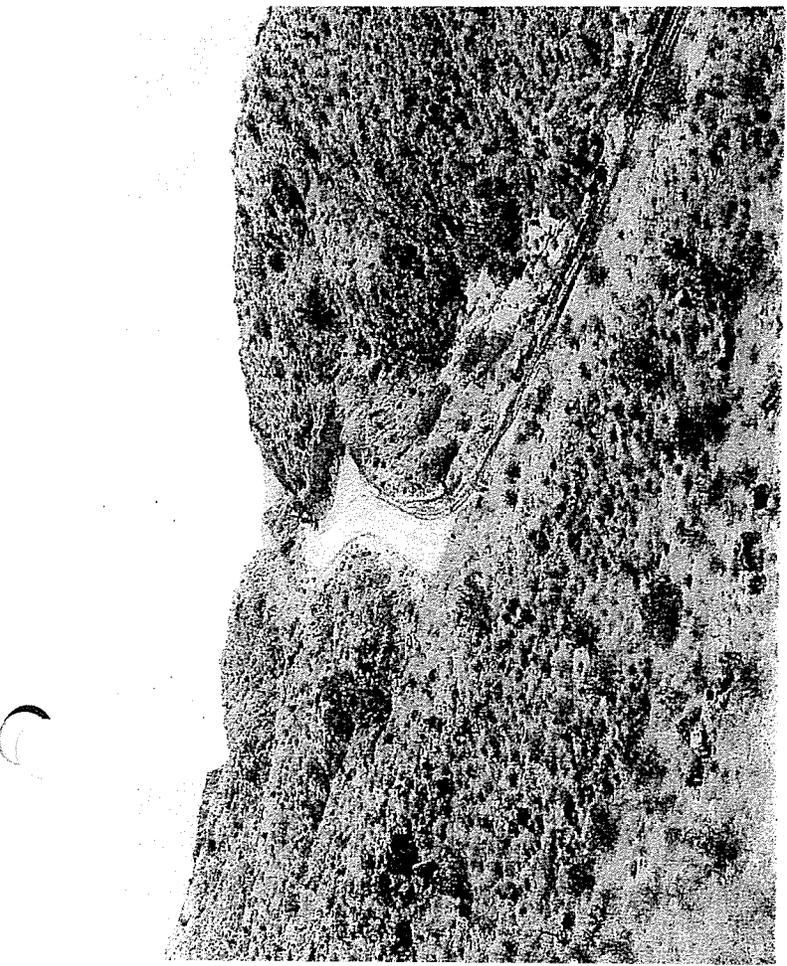
View at the north end of the proposed overburden area, looking north. The Super Creek Quarry is behind the hill in the center.

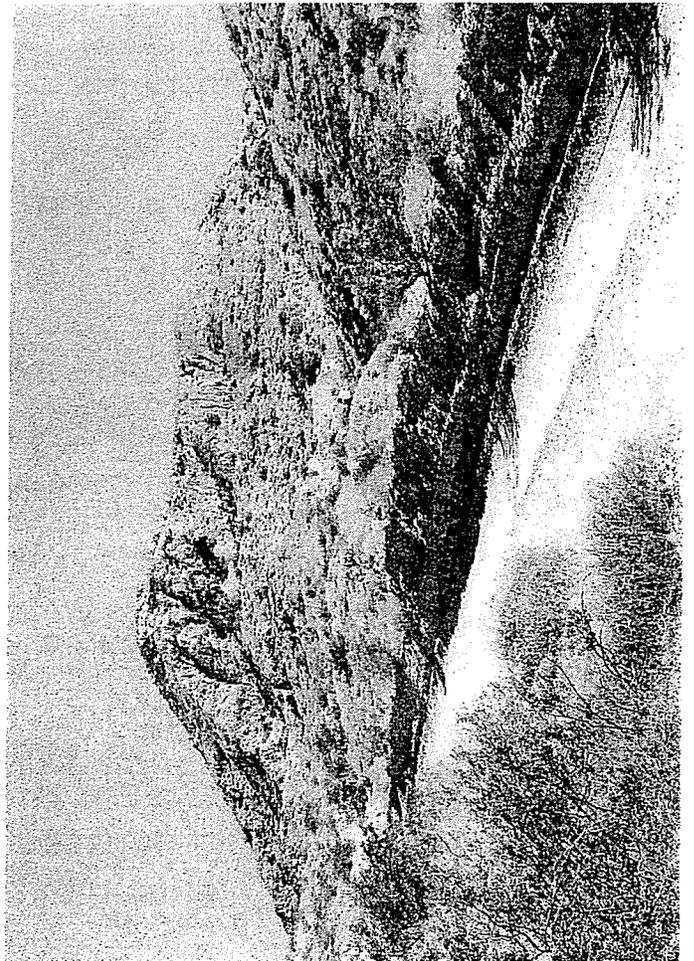
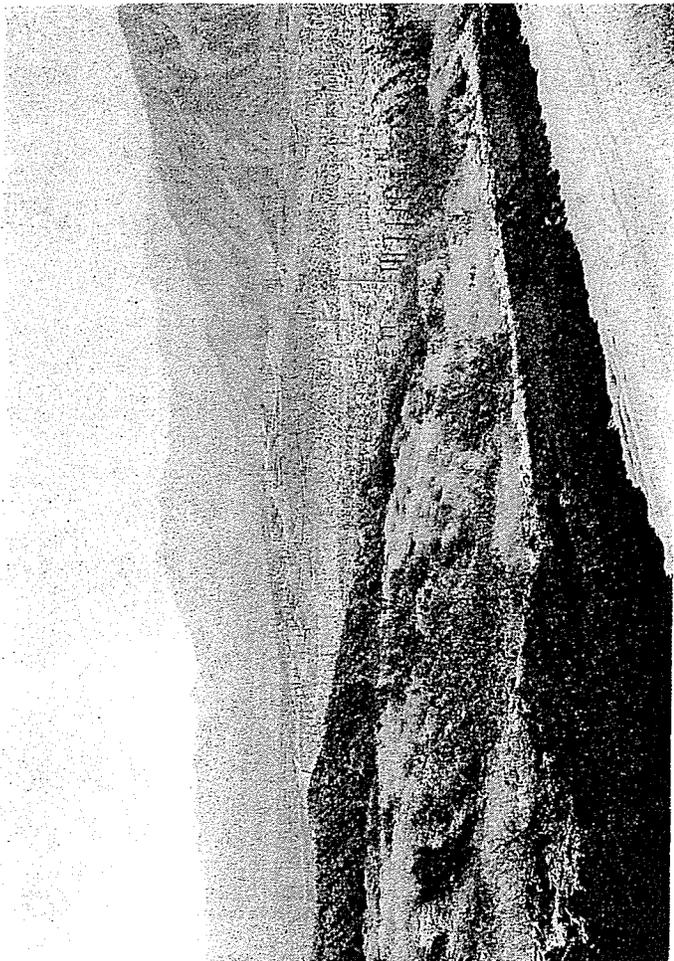
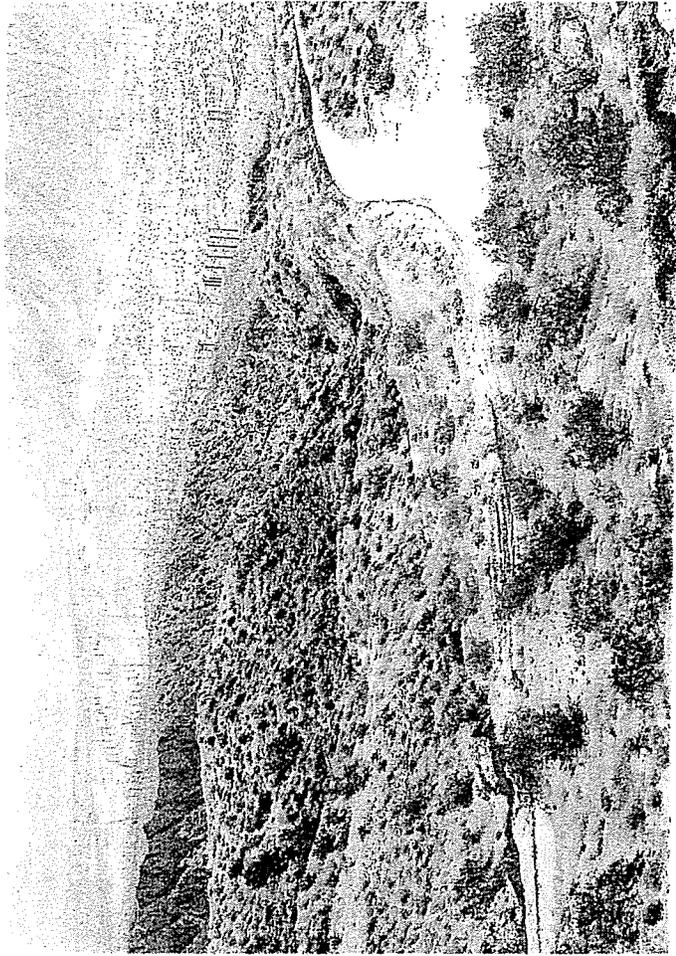
##### **Upper right-**

View from the west edge of the proposed overburden area, looking south.

##### **Lower right-**

View from the west edge of the proposed overburden area, looking west toward Whitewater Canyon.





**WHITEWATER ROCK AND SUPPLY COMPANY**  
**SUPER CREEK QUARRY – CA MINE ID # 91-33-0003**  
**REVEGETATION WORK PROGRAM - DEC. 2008 to MAR. 2009**

**Prepared for:**

**Whitewater Rock and Supply Company**  
**58645 Old Highway 60**  
**Whitewater, CA 92282**

**Prepared by:**

**Paul Kielhold**  
**33562 Yucaipa Blvd., #4-231**  
**Yucaipa, CA 92399**

**November 2008**

## **Introduction**

This work program is prepared for the use of Mr. Allan Bankus of Whitewater Rock and Supply Company for revegetation at the Super Creek Quarry. The Super Creek Quarry is approximately 2½ miles north of Interstate Highway 10 at Whitewater, California. The vegetation surrounding the existing quarry is described in a previous report titled, "*Baseline Biological Survey for the Proposed Whitewater Rock & Supply Company's Super Creek, 12.3 acre Quarry Expansion, Desert Hot Springs, Riverside County, California*", prepared by Biological Resource Specialists, 2005. This report is intended to implement the requirements of the *Revegetation Plan for Super Creek Quarry, City of Desert Hot Springs, Riverside County, California*, by LSA Associates, August 15, 2006 as guided by the results and recommendations contained in the annual SMARA report titled, "*Whitewater Rock and Supply Company Super Creek Quarry – CA Mine ID #91-33-0003 Revegetation and Monitoring Report – 2008*" by Paul Kielhold, September 2008. The format of this work program follows that of the monitoring report; it includes the items reported and includes the work intended for this winter, December 2008 – March 2009.

## **Location**

The Super Creek Quarry is located at the east end of the San Gorgonio pass, which is an east-west trending pass separating the San Bernardino Mountains on the north, from the San Jacinto Mountains on the south. It is located at the western edge of the Sonoran desert region. The Super Creek Quarry is generally located within the southwest ¼ of Section 36, Township 2 South, Range 3 East, San Bernardino Base and Meridian and is shown on the *White Water, California*, U. S. Geological Survey, 7½ minute quadrangle map.

## **Site Description**

The quarry area is rocky and steeply sloping with an annual rainfall of 4 inches. Elevations range from 1925 feet above sea level at the southeast corner to 2400 feet above sea level at the northwest corner. Vegetation onsite is a mix of Sonoran Creosote Bush Scrub, Riversidian Sage Scrub and Juniper Woodland. Land use in the vicinity is dominated by wind driven turbines for power generation. Prevailing winds are west to east as evidenced by the wind swept form of the taller plant species.

## **Revegetation Work Program: December 2008 – March 2009**

The following items are identified in the *Revegetation Plan for Super Creek Quarry, City of Desert Hot Springs, Riverside County, California* (page 14, LSA, 2006) and their status was reported in “*Whitewater Rock and Supply Company Super Creek Quarry – CA Mine ID #91-33-0003, Revegetation and Monitoring Report – 2008*” by Paul Kielhold, September 2008.

### **1. Preparation of Areas for Vegetation**

Excavation has not been completed in any new areas therefore there are no areas inside the active quarry to prepare for vegetation, however the materials along the eastern tailings slopes will be prepared for planting beginning in December 2008. These tailings slopes will be reclaimed per the approved 1993 Supplement to Reclamation Plan No. 108 to reduce erosion.

Preparation of the eastern slopes (outside of the quarry) consists of cutting cross-slope terraces by hand, as the slopes are not accessible by equipment. Work will be conducted by hand crews via use of harness and ropes tied off at the top-of-slope.

Rills will be filled by hand and by use of off-spec rock from the quarry which may be dumped or lowered from the top-of-slope depending on the position of the rill on the slope.

Seed collected earlier this year will be planted along the cross-slope terraces. Additional seeds will be purchased as necessary. The terraces will be extended across the entire length of the fill slopes until they reach native material where they will terminate.

Terraces will initially be placed at 25-foot intervals, along the slope, beginning at the top-of-slopes. Their width will vary but generally they will be about two feet wide. As this type of work is not commonly done, the time required cannot yet be estimated, however, an estimate of completion will be made by monitoring work as it progresses.

### **2. Plant Salvage and Salvage Nurseries**

Mining has not been extended to any new areas therefore there have been no new areas from which to salvage plants and no such areas are expected to become available for salvage this winter.

### **3. Growth Media Salvage and Storage**

Mining has not been extended to any new areas therefore there have been no new areas from which to salvage growth media and no such areas are expected to become available for salvage this winter.

#### **4. Baseline Data Collection and Analysis**

Baseline data will be collected during this winter (2008-2009) after the perennial plant species 'green-up'. The forecast is for average precipitation this winter. The plants are currently experiencing a moisture deficit and live plants cannot be reliably differentiated from dead plants.

Measures will be made of ground cover by native perennial plant species as well as their density (# per unit area) and diversity (species richness). Data will be collected from areas undisturbed by mining surrounding the existing quarry and within the areas proposed for expansion. Data will be collected until it meets the statistical requirements of SMARA (80% confidence interval).

#### **5. Seed Collection and Storage**

Seed collection was initiated on July 1, 2008. Ten (10) pounds of creosote (*Larrea tridentata*) seed were collect along with four (4) ounces of brittlebush (*Encelia farinosa*) seed. Seed is stored at Mockingbird Nursery in Riverside, California. Seed collection will continue during the appropriate season of each the year for the dominant species onsite. Seed collected this year will be planted on the cross-slope terraces created in No. 1 above. Additional seed will be purchased as necessary.

#### **6. Plant Production**

Plant production will be evaluated during the appropriate season of the year for each species. Production will be measured by the occurrence of new plants recruited into the population regardless of source, natural or planted.

#### **7. Exotic Species Control**

The occurrence of *Salsola tragus* appears to coincide with a distinctive rock formation. Soil samples have been made of reference areas and waste rock areas. The occurrence of *S. tragus* may be due to high levels of calcium. Control methods will continue to be explored for this occurrence. Tamarisk will be removed from the erosion control basins at the base of the tailings slopes as necessary.

#### **8. Results of Reclamation Tests**

The results of the tests are recorded in an earlier report; one plot may be successful; the two other plots are not. New monitoring plots will be established this winter.

#### **9. Reclamation Success**

Plant cover, density and diversity will be compared to baseline data which will be available when item No. 4 above is completed.

**FROM:** S&S Seed:  
Fax (805) 684-2798

**FROM:** Paul Kielhold  
Fax (909) 790-4634

**DATE:** November 20, 2008

**SUBJECT:** Seed Lost, White Water, California.

Please provide the cost for the following mix for a site near White Water, 11/21/08  
in Riverside County, California.

Common Name	Species	Lbs./Ac. (bulk)	Cost \$/lb BULK	SOURCE	
ricegrass	<i>Achnatherum hymenoides</i>	5	21	COMMERCIAL	105
needle grass	<i>A. speciosum</i>	4	200	HESPERIA	800
rabbit brush	<i>Chrysothamnus nauseosus</i>	4	12	HUNGRY VLY	48
brittlebush	<i>Encelia farinosa</i>	4	15	MORENO VLY	60
joint fir	<i>Ephedra nevadensis</i>	5	48	PALMDALE	240
desiweed	<i>Lotus scoparius</i>	4	24	SAN BERNARDINO	96
	<b>TOTAL</b>	<b>26</b>			<b>1,349</b>

Thank you,  
  
Paul Kielhold  
Phone (909) 856-0754