

No mining is currently taking place on the 3,480 acre parcel proposed for release to the State. The 3,480 acre area added to the lease will serve as an ore reserve for mining on a larger scale. Increased production of trona is dependent on the construction of an expanded processing plant. This proposed expansion, if determined to be feasible after further economic studies, will be the subject of an EIR prepared by Inyo County acting as the CEQA Lead Agency. It must be noted, however, that Lake Minerals' right under the present lease to mine the lands it is releasing to the State would be transferred to the northern parcel proposed to be added to the leased area.

As previously indicated, the lands removed from the current lease will be used in an ongoing dust remediation project within the eastern portion of the lake bed. The expansion of the bioremediation efforts will also be the subject of subsequent environmental documentation, with the State Lands Commission acting as the CEQA Lead Agency.

Project Impacts and Mitigations

The proposed project, the exchange of acreage from the east side to the north and west areas of the current lease, and the extension of the lease term, will not have any significant impacts on the environment. The land in the east area of the current lease is currently being held in reserve by Lake Minerals Corporation, and the land which is to be added to the northern area will also be held in reserve for future operations. The environmental impacts of any proposed plant expansion will be dealt with in a Environmental Impact Report if that project is deemed feasible. There will be no change in the current operations or production levels of the existing lease. Any impacts associated with the anticipated bioremediation of wind blown dust will also be covered in a separate environmental document.

Since there are no impacts from the proposed project, no mitigation measures are required, and no monitoring plan is necessary.

Environmental Setting

The proposed project area is on the dry lake bed of Owens Lake. Owens Lake is an alkaline dry lake, or playa, in the southern end of Inyo County, on the eastern side of the Sierra Nevada mountain range (Figure B). The elevation of the lake bed is approximately 3,600 feet above sea level. The lake bed extends about 17 miles north and south and 10 miles east and west and covers an area of approximately 108,000 acres. The current lake bed surface consists of a playa topped by a thin layer of clay and wind blown sand, covered by an alkali crust. The crust is made up of sodium chloride, sodium carbonate (trona) and sodium sulfates. Minor amounts of borates, nitrates, potassium, lithium and other

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minerals occur within the crust as well.

Owens Lake formed in a closed basin at the end of the Owens Valley during a period of cooler climate and higher precipitation during the late Pleistocene Epoch, about 70,000 years ago. The valley itself is a 100 mile long trench lying between the Sierra Nevada and Inyo Mountain ranges. With the more recent hotter, dryer climate, runoff from the Sierra and Inyo mountains was reduced, and the lake began shrinking and becoming alkaline. When visited by "Fortieth Parallel Survey" in 1876, the lake covered about 110 square miles and had a maximum depth of 50 feet. The waters were described as "salty, alkaline, bitter and undrinkable".

There was considerable agriculture in the Owens Valley, but the lake was originally a focus for mining interests. Silver mines on the east shore led to steam navigation on the lake, and attempts to recover valuable salts from the lake itself began in 1884. Trona mining began to provide a major raw material for glass manufacturing.

In 1917, the City of Los Angeles completed a fresh water aqueduct system that diverted the water of the Owens River south to the City. With its primary water supply gone, Owens Lake was virtually gone by 1925.

Air Quality

Owens Valley, on the east side of the Sierra Nevada mountain range, is in an area of near pristine air quality. Far from the urban centers of the south state and screened by the mountains from the inland agricultural valleys, the area is in attainment for almost all pollutants. The one exception is fugitive dust which originates from the dry lake bed itself. Winds, often of high velocity, associated with strong weather systems produce blowing sand and dust, particularly during the Spring and Summer. The primary purpose of the proposed reconfiguration of the leased lands is to free up the parcel on the east side of the project to allow potential bioremediation measures to control the fugitive dust problem to be tested. The monitoring and regulation of air quality at the project site is under the jurisdiction of the Great Basin Unified Air Pollution Control District, one of the participants in the pilot remediation project.

Geology

Owens Valley is a fault-bounded basin, between the upraised blocks of the Sierra Nevada and Inyo Mountains. The lake bed itself is made up of Holocene alluvium and lacustrine deposits. The project area is within a seismically active region, with significant earthquakes being recorded from 1872 up to the present day. Historic earthquakes have had epicenters on the Owens Lake

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Fault, the Sierra Nevada Fault, and several unnamed faults on the east side of the Lake bed. Estimates of intensity range from 4.0 to 6.5 on the Richter scale. The lake deposits may liquify under strong seismic shaking.

Biology

Because of the extreme alkalinity of the surface and subsurface deposits on the lake bed itself, there is no plant or animal life at the project site. Some birds transit the site, but due to the lack of water such transit times are of short duration. Birds seen over the lake include several species of ducks (Mallards, Pintail, Cinnamon and Green Wing Teal and Ruddy Duck), shorebirds, grebes and White Pelicans.

On the west side of the current mining operations, several springs feed habitat useful for waterfowl and shorebirds. A survey by the Department of Fish and Game established that this is valuable habitat in the otherwise dry and forbidding landscape. Lake Minerals has agreed to hold free from mining operations this habitat, both in a part of the exchange parcel, and in part of their existing leasehold, for a total of 580 acres, as shown in Figure A.

Water

There is no surface water at the project site. The subsurface water is bound up in old lake muds and the alkaline crust, and is highly alkaline, with pH's up to 10 and beyond. Some intermittent streams and the bed of the Owens River approach the old lake shore but do not reach the project site.

Noise and Visual Resources

Unbroken vistas and silence, except for the wind, are the natural conditions of the site. The lake bed is almost perfectly flat, and the only visual relief is provided by the existing trona recovery operation and its associated equipment. The mining operation is also the only source of noise. The potential receptors, however, are the small town of Keeler, approximately 10 miles across the lake bed to the northeast, and highway 395, approximately 3 miles to the west.

Light and Glare

The sources of light near the project are natural. None come from the mining operations as they are not conducted at night.

Risk of Upset

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Because of the simplicity of the current mining operation and the nature of the materials being mined, there is no real risk of upset. Shallow excavations of trona are stacked and dried, and then removed. If an excavation collapses, or drying material is lost from the site, the affected area would simply return to its natural state.

Land Use

The current mining operation is the only use of the lake bed now and in the foreseeable future. The nature of the lake bed surface will prevent agricultural or developmental uses.

Recreation

Other than the open space, there are no recreational uses put to the lake bed.

Public Services/Utilities

The current mining operation does not use any public utilities except for the telephone. This project does not result in any changes to the operation's requirements.

Cultural Resources

There are no historic or prehistoric resources on the lake bed surface. Native Americans and early settlers did use the lake shore before the lake dried up, but throughout the late prehistoric period and the historic period, the lake was too alkaline for any use by man.

Environmental Impact Assessment Checklist Discussion of Environmental Evaluation

A. Earth

- A1. The project will not result in any unstable earth conditions or changes in geologic substructures. The current and continuing mining operation involves scraping very shallow deposits into drying areas, and does not involve major excavations or creating slopes.
- A2. The proposed project will not result in any changes to the current mining operation. The crust that provides the crude trona is not a "soil" under any classification.
- A3. While the mining operation does scrape off the topmost layer of trona, it does not significantly alter any

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topography or relief. The surface of the lake bed has less than 30 feet of relief over the entire lake bed.

- A4. While the lake bed itself is a unique geologic feature, the proposed project will not result in any significant changes to the overall surface. The scale of the operation, which will not change due to this project, is very small in comparison to the whole lake surface. Lake Minerals has an approved reclamation plan on file to restore the Lake bed when the mining operations are complete.
- A5. The project will ensure the availability of land to test various methods of controlling wind erosion of the lake bed surface and subsequently the existing dust problem.
- A6. No beach or river sands or channels exist in the project area.
- A7. The project is taking place in a seismically active area; however, this project will not expose any additional personnel or equipment to geologic hazards beyond existing levels.

B. Air Quality

- B1. This project will not result in any additional air emissions. Changes in the mining operations, if feasible, will be analyzed in an EIR to be prepared for the consideration of new facilities. While the current mining activity does not contribute to the natural fugitive dust problem, and is operating in conformance with the authorization of the Great Basin United Air Pollution Control District. The proposed project may contribute to the implementation of a control strategy for the fugitive dust problem by providing a test area as previously described.
- B2. The project will not release any odors.
- B3. The project will not alter any air movement or climate patterns because it is simply an exchange of properties, with no change to existing levels of operation. The current mining operations do not affect air movement patterns.

C. Water

- C1. There are no surface waters on or near the project site.

- C2. The current mining operation covers far too small a proportion of the total lake surface to affect the absorption of surface runoff. Only very rarely is there enough moisture at the project site to leave any standing water on the lake bed. As previously stated, the proposed project will not create any changes to this operation.
- C3. See C2, above.
- C4. The project will not use any surface water nor result in any discharge into any body of fresh water.
- C5. See C4, above.
- C6. The proposed project will not alter the rates or direction of flow of any surface waters.
- C7. No groundwater sources will be effected. The current mining operation processes lake crust material that has water bound up in it and air dries it (evaporation), but does not use or discharge any surface or ground water.
- C8. No public water supplies will be used or effected in any way.
- C9. The proposed project will not expose personnel or facilities to flooding because of the lack of surface waters in the project area.
- C10. No known thermal springs will be effected by the project.

D. Plant Life

- D1. The project will not effect plant life. Surveys show that there is no plant life on the project site. Neither the eastern or northern parcels supports plant life.
- D2. No unique, rare or endangered plant species exist in the project area.
- D3. No new species will be introduced into the area by the project. No planting is planned as part of the project.
- D4. No agricultural areas are included in the project area.

E. Animal Life

- E1. The project will not effect any animal community, as none exists on the project site.
- E2. No unique, rare or endangered animal species are known to

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exist in the project area.

- E3. No new species will be introduced into the area.
- E4. The majority of the habitat provided by the project site is hostile to all animal life, a circumstance which will not be changed by the project. However, a small portion of the site, in Section 7, does contain habitat valuable for waterfowl and shorebirds. This tract of habitat will be protected by Lake Minerals from mining operations. In addition, the habitat which is adjacent to this tract but outside of the proposed exchange area will also be reserved from mining operations. A total of approximately 580 acres will be excluded from mining activities, shown on exhibit A. This will be included as a condition of the lease with State Lands Commission. (See Project Description).

F. Noise

- F1. This project will not generate any new or additional noise. The current operation is a source of intermittent heavy equipment noise during the daylight hours, but the nearest receptors are too far away (3-10 miles), for the effect to be noticeable.
- F2. The project will not subject anyone offsite to severe noise levels. The current operation only generates noise by the intermittent operation of diesel powered equipment.

G. Light and Glare

- G1. The proposed project will not result in nighttime lighting in the area. The current mining does not operate at night, and the implementation of the project will not change the hours of operations.

H. Land Use

- H1. No alteration of land use is proposed by or will result from this project.

I. Natural Resources

- I1. The project will not increase the rate of natural resource use since it is only an exchange of one unused land parcel for another and does not propose to increase production of trona above the existing level.
- I2. The project will not deplete any nonrenewable resources.

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J. Risk of Upset

- J1. Neither the transfer of land parcels nor the current mining operation poses any risk of upset. The existing operation, which will not be altered by the proposed project, has operated for over fifty years without a hazardous upset of any type.
- J2. The project will not interfere with any emergency response plan as none exists due to the fact that the area is without population or facilities subject to such a plan.

K. Population

- K1. The project will not effect the area's population characteristics since it does not propose or would result in any changes to the existing trona mining operations or the personnel involved in such current operations.

L. Housing

- L1. The project will not bring any new, permanent residents into the area, and will not generate any demand for temporary housing (See K1, above).

M. Transportation

- M1. No additional traffic will be generated by this project.
- M2. The project will not generate any additional parking demand over the current levels.
- M3. See M1.
- M4. No transportation patterns now in existence will be altered by this project because existing mining operations will not be affected.
- M5. See M4, above.
- M6. The project will not increase any traffic hazards to ground transportation modes since no changes in traffic will result.

N. Public Services

- N1. The project will not effect fire services since it takes place on the dry lake bed, which is devoid of flammable materials. The equipment used in the mining operation

has its own fire extinguisher attached.

- N2. The project will not effect police services above present levels since the existing trona mining operations would continue unaffected.
- N3. The project will not have additional effects on schools since it will not add any personnel to the area.
- N4. The project will not require any changes in recreational facilities beyond existing levels because no new personnel will result from the proposed project.
- N5. No additional maintenance for public facilities will be required due to the project.
- N6. The project will not effect any governmental services.

O. Energy

- O1. This project will not use any additional fuel or energy. The current mining operation uses small amounts of diesel fuel for the on-site equipment, and no changes in the scale of operations are proposed.
- O2. The project will not require any new sources of fuel, or make any new demands on existing sources.

P. Utilities

- P1. The project will not use electric power or natural gas from utilities at all.
- P2. Normal radio and telephone communications systems, presently in use, will continue at existing levels.
- P3. The project will not use any public water systems.
- P4. The project will not use public sewer systems. Portable toilets are used for the mining personnel.
- P5. The project takes place on a dry lake bed and storm waters are typically absorbed into the bed.
- P6. The project will not generate any solid waste above existing levels.

Q. Human Health

- Q1. The project will not create or expose any personnel to health hazards.

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- Q2. The project will not expose anyone to any additional health hazards other than those currently existing due to the use of heavy equipment.

R. Aesthetics

- R1. This project will not change any current views. Unused land to the east of the project site will be exchanged for unused land to the north of the project.

S. Recreation

- S1. The project takes place in an area, Owens Dry Lake, that is not used for recreational purposes.

T. Cultural Resources

- T1. No prehistoric or historic sites ever existed on lake bed itself.
- T2. The project will not effect any historic or prehistoric building, structure or object.
- T3. The project does not have any potential to cause physical changes that would effect any unique ethnic cultural values.
- T4. The project will not effect any religious or sacred use of the project area.

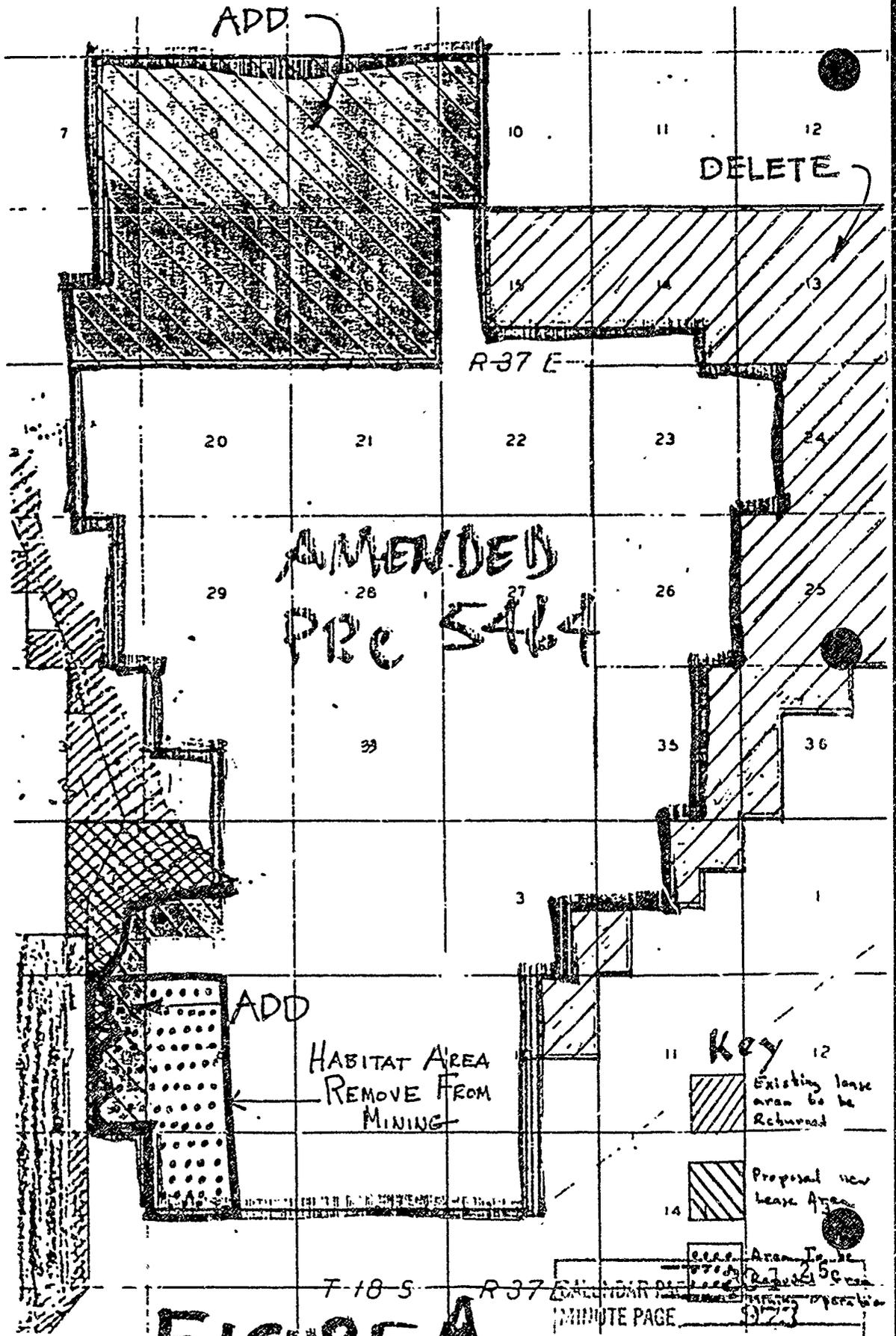
U. Mandatory Findings of Significance

- U1. The project will not degrade the environment in any significant way, due to the fact that it is a reconfiguration of an existing lease area through the transfer of one unused land parcel for another, without any change in the current location or level of trona mining operations. No plant or animal life will be stressed.
- U2. The project as defined, will not have any short- or long-term environmental effects.
- U3. There is a possibility of two other projects being undertaken within the relative time frame of the proposed project. These are a pilot bioremediation project which would be designed to reduce wind-blown sand and dust, and a proposal for the expansion of the mining operations themselves. The State Lands Commission will be the Lead Agency in preparing environmental documentation for the first project, and the County of Inyo will be the CEQA Lead Agency if the second project is ever undertaken.

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U4. The proposed project will not have any environmental effects which will cause adverse effects on human beings, directly or indirectly as discussed in the preceding sections.³

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FIGURE A

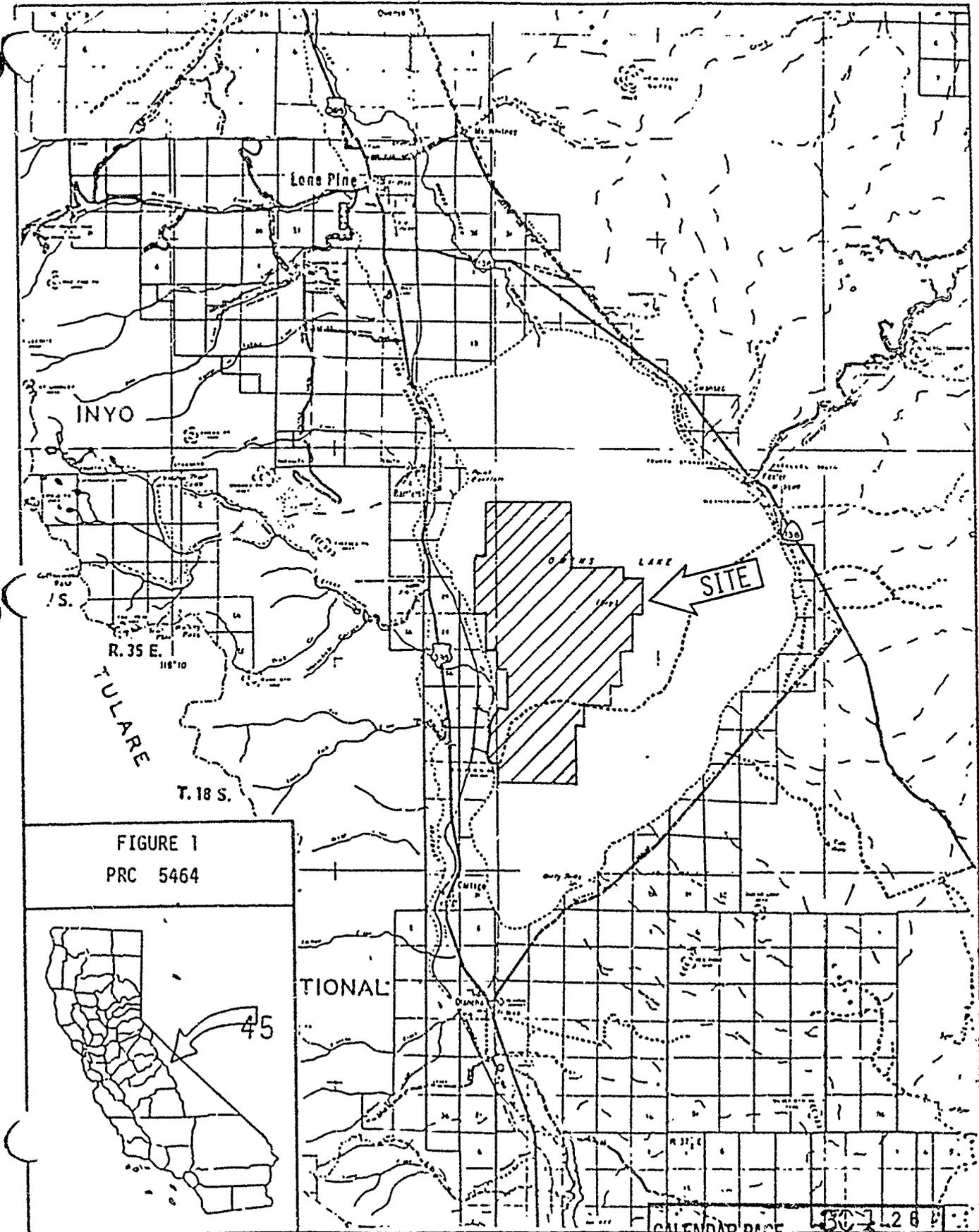


FIGURE 1
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