

**MINUTE ITEM**  
This Calendar Item No. C31  
was approved as Minute Item  
No. C31 by the State Lands  
Commission by a vote of 3  
to 0 at its 6/11/90  
meeting.

CALENDAR ITEM

A 34

**C 31**

06/11/90  
W 24500 PRC 7409  
Fong

S 25

PUBLIC AGENCY PERMIT

APPLICANT: Great Basin Unified Air Pollution  
Control District  
157 Short Street, Suite #6  
Bishop, California 93514

AREA, TYPE LAND AND LOCATION:  
Approximately 689 acres of sovereign land  
consisting of two sites and access roads and  
water pipeline routes on the bed of Owens Lake  
in Inyo County.

LAND USE: Pilot dust-control test project with two  
sprinkler test sites, water supply corridors,  
well sites, and electrical power.

TERMS OF PROPOSED PERMIT:  
Initial period: Two years beginning July 1,  
1990.

CONSIDERATION: The public health and safety; with the State  
reserving the right at any time to set a  
monetary rental if the Commission finds such  
action to be in the State's best interest.

BASIS FOR CONSIDERATION:  
Pursuant to 2 Cal. Code Regs. 2003.

PREREQUISITE CONDITIONS, FEES AND EXPENSES:  
Filing fees and processing costs have been  
received.

CALENDAR ITEM NO. C 3 1 (CONT'D)

STATUTORY AND OTHER REFERENCES:

- A. P.R.C.: Div. 6, Parts 1 and 2; Div. 13.
- B. Cal. Code Regs.: Title 2, Div. 3;  
Title 14, Div. 6.

AB 884:

N/A.

OTHER PERTINENT INFORMATION:

1. The Great Basin Unified Air Pollution Control District (GBUAPCD) prepared a State Implementation Plan for Owens Valley PM-10 Planning Area, (December 1988). As part of that plan, mandated by the U.S. Environmental Protection Agency, the State of California and the Department of Water and Power have jointly funded a pilot project using local groundwater to sprinkle portions of Owens Dry Lake, prior to wind episodes, for dust control. The pilot project consists of two phases, a hydrologic study and a pilot sprinkler study. The hydrologic study, which is nearing completion, was designed to determine the nature and extent of the aquifers underlying Owens Dry Lake. On August 30, 1989, the Commission approved a geologic information-gathering permit for the wells located on State lands. Two producing and one monitoring well are located at the River Well Site on State lands. The monitoring well at the Keeler/Swansea Site and the producing and monitoring wells at the Mill Site are on LADWP lands. Sufficient aquifer waters have been identified during the hydrologic study to warrant the second phase, the proposed pilot sprinkler study.
3. A Negative Declaration was prepared and adopted for this project by the Great Basin Unified Air Pollution Control District. The State Lands Commission's staff has reviewed such document.

EXHIBITS:

- A. Land Description.
- B. Location Map.
- C. Negative Declaration.
- D. Notice of Determination.

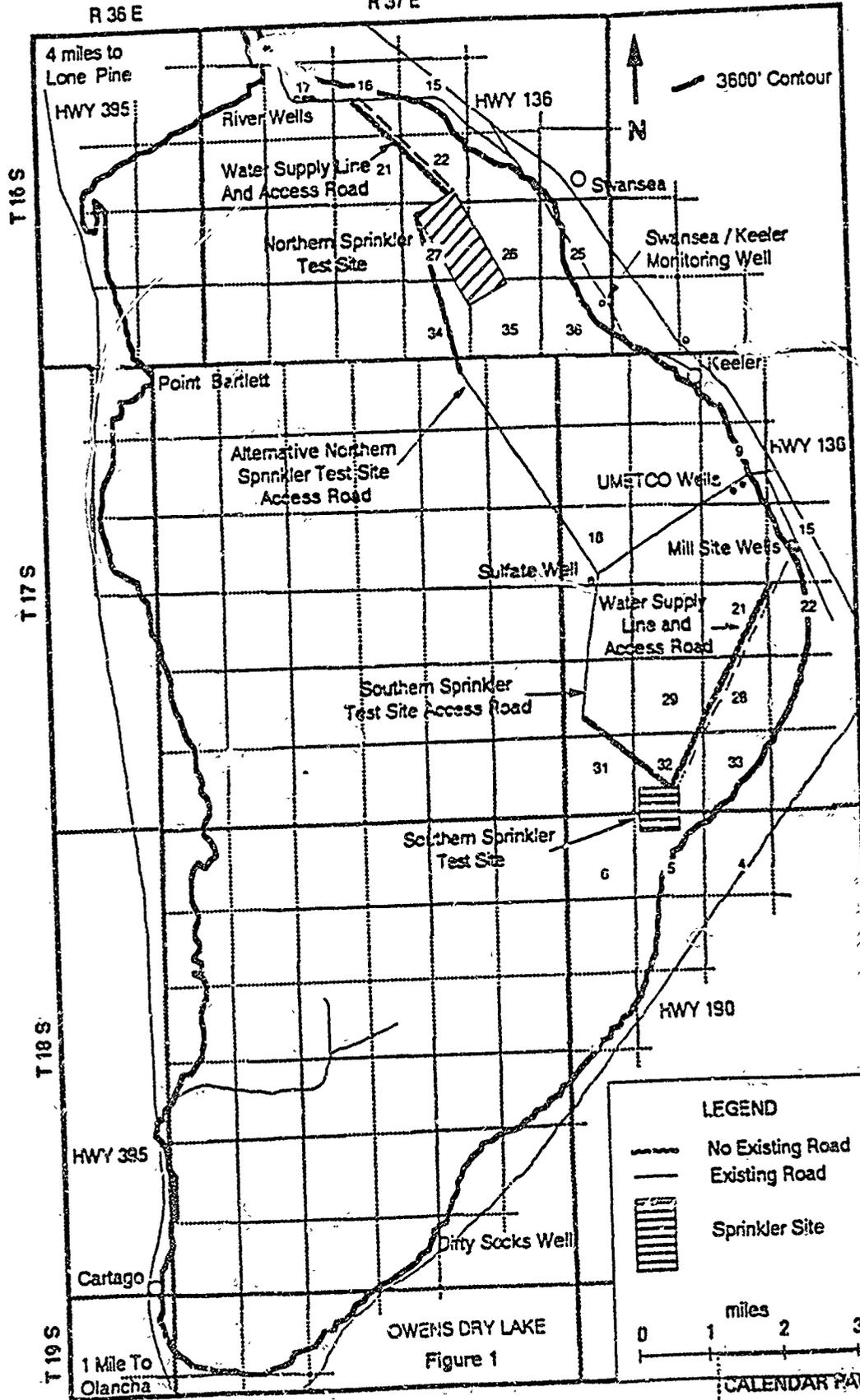
CALENDAR ITEM NO. C 31 (CONT'D)

IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT A NEGATIVE DECLARATION WAS PREPARED AND ADOPTED FOR THIS PROJECT BY GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT (GBUAPCD) AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.
2. DETERMINE THAT THE PROJECT, AS APPROVED, WILL HAVE NO SIGNIFICANT EFFECT ON THE ENVIRONMENT.
3. AUTHORIZE, PENDING THE COMPLETION OF ALL WILDLIFE SURVEYS SPECIFIED IN THE NEGATIVE DECLARATION COMPLETED BY THE GBUAPCD (EXHIBIT "C"), THE ISSUANCE TO GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT OF A TWO-YEAR PUBLIC AGENCY PERMIT, BEGINNING JULY 1, 1990; SAID PERMIT SHALL INCORPORATE, AS CONDITIONS, ALL MITIGATION MEASURES SPECIFIED IN APPENDIX "B" OF THE NEGATIVE DECLARATION (EXHIBIT "C"); IN CONSIDERATION OF THE PUBLIC HEALTH AND SAFETY, WITH THE STATE RESERVING THE RIGHT AT ANY TIME TO SET A MONETARY RENTAL IF THE COMMISSION FINDS SUCH ACTION TO BE IN THE STATE'S BEST INTEREST, FOR A DUST-CONTROL TEST PROJECT AS DESCRIBED IN EXHIBIT "C", ON THE LAND DESCRIBED ON EXHIBIT "A" AND BY REFERENCE MADE A PART HEREOF.

EXHIBIT "A"  
LAND DESCRIPTION  
R 37 E

W 24500  
R 38 E



PREPARED MARCH 26, 1990 BY SAS.

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0.2086

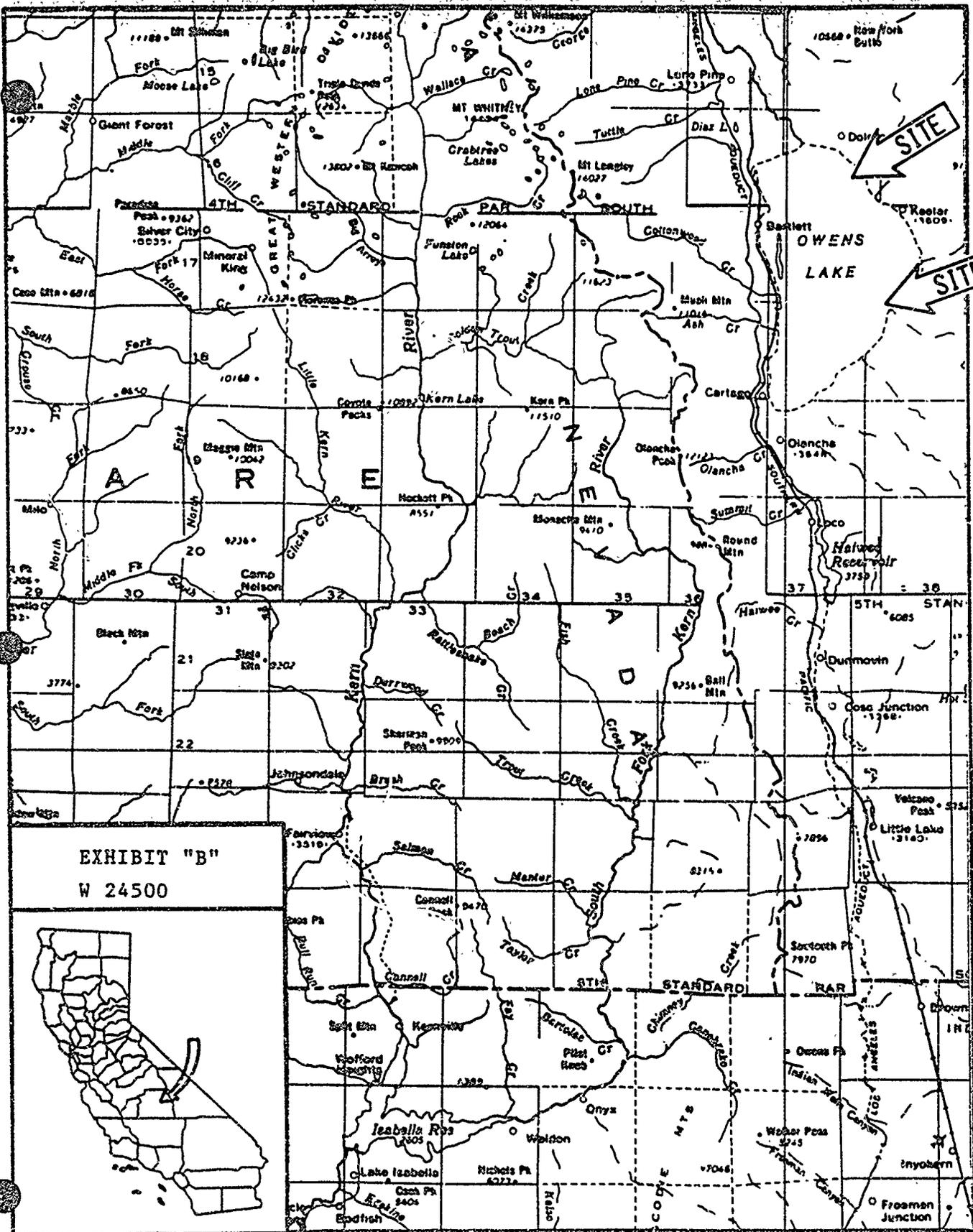


EXHIBIT "B"  
W 24500

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GREAT BASIN UNIFIED  
AIR POLLUTION CONTROL DISTRICT

NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act of 1970 (CEQA) (Public Resources Code, Section 21000, et seq) and the State Guidelines (Title 14, Division 6, California Administrative Code, as amended), Great Basin Unified Air Pollution Control District has made an Initial Study of possible environmental impacts of the following project:

Applicant: Great Basin Air Pollution Control District  
157 Short Street, Bishop, California 93514

Common Name of Project: Owens Lake Phase III Demonstration Project -  
Sprinkler Test

Location: Owens Lake near Keeler, California, R37E and R38E -  
T175 (See Initial Study)

Description of Proposed Project:  
See Attached Initial Study

Proposed Mitigation Measures included in the proposed project to  
avoid potentially significant effects:  
See Attached Initial Study

Agency Consultation Required:

State Clearinghouse Number:

Initial Study Prepared By:  
Raymond R. Prittie, Los Angeles Department of  
Water and Power

Findings: The proposal should be issued a Negative  
Declaration because all issues identified in the  
Initial Study can be mitigated with the recommended  
measures, and therefore, the project will not have  
a significant negative impact on the environment.

Any person may object to dispensing with preparation  
of an EIR on the proposed project, or may respond  
to the findings contained in the Initial Study.  
Information related to the project is on file at  
Great Basin Unified Air Pollution Control District  
at 157 Short Street, Suite 6, Bishop, California  
93514, (619) 872-8211. Any person wishing to  
examine or obtain a copy of that information or  
this document may do so by inquiring at the  
District office during regular business hours.  
Contact Ellen Hardebeck for information.

SIGNED:

GREAT BASIN UNIFIED A.P.C.D.

DATE: CALENDAR PAGE 184  
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OWENS LAKE PHASE III DEMONSTRATION PROJECT  
SPRINKLER TEST

INITIAL STUDY  
AND  
ENVIRONMENTAL CHECKLIST

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OWENS LAKE PHASE III  
DEMONSTRATION PROJECT - SPRINKLER TEST

INITIAL STUDY

INTRODUCTION

Normally, air quality in the Owens Valley is excellent. However, the region does experience periods of strong winds that result in blowing dust. Such dust episodes contribute to visibility degradation and an overall reduction in air quality from suspended particulate matter within the region.

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated revisions to the National Ambient Air Quality Standards (NAAQS) for suspended particulate matter less than 10 microns in diameter (PM<sub>10</sub>). As part of these revisions, PM<sub>10</sub> replaced Total Suspended Particulates (TSP) as the parameter to be measured when assessing air quality degradation. The new PM<sub>10</sub> NAAQS is intended to measure only that size fraction of TSP which may reasonably be anticipated to endanger public health. The EPA also promulgated rules and regulations by which it intends to implement the PM<sub>10</sub> NAAQS.

In 1987, EPA identified the southern Owens Valley as one of the many areas in the nation which, based on air quality monitoring, would likely exceed the PM<sub>10</sub> NAAQS. As a result, the EPA has required the State of California to prepare a State Implementation Plan (SIP) to bring the southern Owens Valley into compliance with the PM<sub>10</sub> NAAQS. In response, the Great Basin Unified Air Pollution Control District (GBUAPCD) has prepared a SIP identifying Owens (Dry) Lake as the major contributor to violations of the PM<sub>10</sub> NAAQS in the southern Owens Valley. The SIP sets forth recommended control measures. The California Air Resources Board (CARB) approved the SIP on September 7, 1989, and forwarded it to the EPA.

The SIP presents a plan for controlling dust emissions from the lakebed beginning with small scale testing of promising control measures. The Owens Lake Phase III Demonstration Project Sprinkler Test is the first of the test projects to be carried out under the mitigation plan outlined in the SIP.

PROJECT DESCRIPTION

Soils on the Owens (Dry) Lake bed are moist within one to six inches of the surface throughout the year. Salt crusts develop on the lake bed surface in varying thicknesses and textures from season to season. When wind speeds exceed the soil erosion threshold, dust emissions rise from the dried and damaged surface soils. Saltation, the abrasion of the salt crust by blowing sand, and direct soil erosion produce PM<sub>10</sub> emissions down wind of the source area.

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Wetting the soil surface can inhibit the erosion of soils during high wind events. It is believed that on Owens Lake, if the upper one inch of dry soil can be kept moist during a high wind event, PM<sub>10</sub> dust emissions can be controlled. The sprinkler test project was developed to evaluate this hypothesis. During the test, water will be applied to the lake bed prior to predicted high wind events and maintained throughout the wind event.

Figure 1 (Appendix A) illustrates the proposed locations for the sprinkler test facilities to be installed in the summer of 1990 for evaluation of dust control effectiveness. It is envisioned at this time that there will be two sprinkler sites, one on the north eastern portion of the lake bed and the other on the south eastern portion of the lake. Water will be supplied to the northern sprinkler test site from the River Well Site. The Mill Site Well will supply water to the southern sprinkler test site.

Electric power will be supplied to the two production well locations by above ground power transmission lines supported by standard wooden poles or by portable generators. Holes for the poles will be dug with a truck mounted auger drill. Vehicles required for transmission line construction will travel overland adjacent to the new pole line without requiring grading or the installation of road improvements.

At the River Well Site the power will be dropped from an existing transmission line that runs from west to east approximately 500 feet south of the wells.

At the Mill Site Well power will be run from an existing transmission line running from north to south parallel with Highway 136. A transmission line will be constructed in a straight line from this existing transmission line to the Mill Site Well. This new line will be approximately 1/3 mile long with supporting poles spaced every 500 to 700 feet.

Water will be conveyed from the production wells to the sprinkler installations in above ground pipelines which will be installed by hand. Disturbance across wetlands will be kept to a minimum by avoiding sensitive areas and prohibiting vehicle access to wetland areas. The sections of pipe line that must be set across the wetlands at the Mill Site will be completed within seven working days prior to September 1 to avoid impacts to migrating birds. Diked surface water storage areas may be required at some location on the lakebed adjacent to each supply line. The need for surface storage will be dependent on the production capabilities of the wells. Water will be pumped only on demand as necessary for operation of the sprinkler installation.

Sprinkler installations at each site will probably be of solid set design (non-mobile) above ground and will be left in place throughout the testing period. The testing period will be

one year. Sprinklers will be installed in parallel rows with varying spacing. The varying spacing will be used to determine the optimum spacing for dust control. Rows of sprinkler sets will probably be 1,320 to 2,640 feet long.

The sprinklers will be operated as needed 24 to 48 hours prior to predicted high wind events (winds greater than 15 mph average). Frontal systems moving from the Pacific Ocean across the Owens Valley produce most of the wind conditions necessary to erode dust from the lake bed. Such winds predicted during the sprinkler test period will be used as one of the triggering factors for operation of the sprinkler system. The other factor necessary for triggering operation of the sprinklers will be surface soil conditions at the test site. If the surface is wet or heavily crusted, dust will not erode from the surface and there will be no need for water application.

Meteorological data collected around Owens Lake indicates minor wind events occur approximately 100 days per year and major wind events occur approximately 50 days per year. However, dust storms do not necessarily occur during every wind event. Moisture content and crustal conditions of the soil protect the surface from wind erosion during different periods of the year. A comparison of  $PM_{10}$  data and wind events indicates that the probable maximum need for operation of the sprinkler systems will be 50 days per year.

Soil moisture is generally found one inch below the surface at the test sites throughout the year. Therefore only enough water to wet the surface to a one inch depth is thought to be necessary for control of dust. The application rate necessary to wet the soils to a one inch depth is dependent on soil type and duration of application, among other factors. Sandier soils require less time and less water to penetrate to a one inch depth than clay soils. Therefore, the application rates will be different for the two sites because the northern site is dominated by sand and the southern site by clay.

For an average sandy loam soil, assuming soil moisture totally depleted, it is estimated that a gross application of approximately .14 inches of water will be required to wet to a depth of one-inch. For a sprinkler application at 60 percent efficiency over a one-half square mile (320 acres), 3.8 acre feet of water will be required. Between twenty and fifty applications will be made per year for two sites which will require a total of 250 to 630 acre-feet of water per year. However, this may over estimate the total water requirement because soil moisture on the lake bed remains very close to the surface throughout the year, crusting of the surface inhibits the evaporation of moisture from the soil, and the actual size of the test plots may be less than 1/2 square mile. The actual water requirement will be determined during the operation of the test project. Since the project will

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be designed to only apply the water necessary to wet the first one inch of soil no leaching or water runoff is expected to take place during the test.

In summary, there will be two test sites with multiple rows of solid set sprinkler sets whose activation will be based on wind prediction. It is expected that the test sites will be operated for a one year period. The water application rate will be too small to initiate any net water movement downward through the soil or across the surface as runoff. Water will be supplied to the test areas from wells located near the lake's historic shore line and transported by surface pipeline. Existing roads will be utilized to provide access to the lake bed. Once on the lakebed most sites are accessible by driving or walking directly on the lakebed surface. No earth work will be required except for minor improvements to existing dirt roads. It may be necessary to construct low dikes on the lakebed surface for water storage if the wells cannot meet the rate of demand. Shallow furrows may be cut with an agricultural discing machine across the test sites if a leaching test is performed. Runoff from the leaching test would be short term and contained by a proposed ditch at the lower edge of the test site.

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**ENVIRONMENTAL CHECKLIST FORM**  
(To Be Completed By Lead Agency)

**I. Background**

1. Name of Proponent Great Basin Air Pollution Control District
2. Address and Phone Number of Proponent 157 Short Street, Bishop, CA 93514  
619-872-8211
3. Date of Checklist Submitted \_\_\_\_\_
4. Agency Requiring Checklist \_\_\_\_\_
5. Name of Proposal, if applicable Owens Lake Phase III Demonstration Project

**II. Environmental Impacts**

(Explanations of all "yes" and "maybe" answers are required on attached sheets.)

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
1. Earth. Will the proposal result in:			
a. Unstable earth conditions or in changes in geologic substructures?	___	___	<u>X</u>
b. Disruptions, displacements, compaction or overcovering of the soil?	<u>X</u>	___	___
c. Change in topography or ground surface relief features?	___	___	<u>X</u>
d. The destruction, covering or modification of any unique geologic or physical features?	___	___	<u>X</u>
e. Any increase in wind or water erosion of soils, either on or off the site?	___	<u>X</u>	___
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	___	___	<u>X</u>
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	___	___	<u>X</u>

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1245

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
2. Air. Will the proposal result in:			
a. Substantial air emissions or deterioration of ambient air quality?	---	---	<u>X</u>
b. The creation of objectionable odors?	---	---	<u>X</u>
c. Alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally?	---	---	<u>X</u>
3. Water. Will the proposal result in:			
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?	---	---	<u>X</u>
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	---	<u>X</u>	---
c. Alterations to the course or low of flood waters?	---	---	<u>X</u>
d. Change in the amount of surface water in any water body?	---	<u>X</u>	---
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	---	---	<u>X</u>
f. Alteration of the direction or rate of flow of ground waters?	---	<u>X</u>	---
g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	<u>X</u>	---	---
h. Substantial reduction in the amount of water otherwise available for public water supplies?	---	---	<u>X</u>
i. Exposure of people or property to water related hazards such as flooding or tidal waves?	---	---	<u>X</u>
4. Plant Life. Will the proposal result in:			
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	---	---	<u>X</u>

- |  | <u>Yes</u> | <u>Maybe</u> | <u>No</u> |
|--|------------|--------------|-----------|
| b. Reduction of the numbers of any unique, rare or endangered species of plants?   | ---        | ---          | <u>X</u>  |
| c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?  | ---        | ---          | <u>X</u>  |
| d. Reduction in acreage of any agricultural crop?  | ---        | ---          | <u>X</u>  |
| 5. Animal Life. Will the proposal result in:   |            |              |           |
| a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?                    | ---        | ---          | <u>X</u>  |
| b. Reduction of the numbers of any unique, rare or endangered species of animals?  | ---        | ---          | <u>X</u>  |
| c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?  | ---        | ---          | <u>X</u>  |
| d. Deterioration to existing fish or wildlife habitat?   | ---        | ---          | <u>X</u>  |
| 6. Noise. Will the proposal result in:   |            |              |           |
| a. Increases in existing noise levels?   | ---        | <u>X</u>     | ---       |
| b. Exposure of people to severe noise levels?  | ---        | ---          | <u>X</u>  |
| 7. Light and Glare. Will the proposal produce new light or glare?  |            |              |           |
|  | ---        | ---          | <u>X</u>  |
| 8. Land Use. Will the proposal result in a substantial alteration of the present or planned land use of an area?   |            |              |           |
|  | ---        | ---          | <u>X</u>  |
| 9. Natural Resources. Will the proposal result in:   |            |              |           |
| a. Increase in the rate of use of any natural resources?   | <u>X</u>   | ---          | ---       |
| 10. Risk of Upset. Will the proposal involve:  |            |              |           |
| a. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions? | ---        | ---          | <u>X</u>  |

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
b. Possible interference with an emergency response plan or an emergency evacuation plan?	---	---	<u>X</u>
11. Population. Will the proposal alter the location, distribution, density, or growth rate of the human population of an area?	---	---	<u>X</u>
12. Housing. Will the proposal affect existing housing, or create a demand for additional housing?	---	---	<u>X</u>
13. Transportation/Circulation. Will the proposal result in:			
a. Generation of substantial additional vehicular movement?	---	---	<u>X</u>
b. Effects on existing parking facilities, or demand for new parking?	---	---	<u>X</u>
c. Substantial impact upon existing transportation systems?	---	---	<u>X</u>
d. Alterations to present patterns of circulation or movement of people and/or goods?	---	---	<u>X</u>
e. Alterations to waterborne, rail or air traffic?	---	---	<u>X</u>
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	---	---	<u>X</u>
14. Public Services. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:			
a. Fire protection?	---	---	<u>X</u>
b. Police protection?	---	---	<u>X</u>
c. Schools?	---	---	<u>X</u>
d. Parks or other recreational facilities?	---	---	<u>X</u>
e. Maintenance of public facilities, including roads?	---	---	<u>X</u>
f. Other governmental services?	---	---	<u>X</u>
15. Energy. Will the proposal result in:			
a. Use of substantial amounts of fuel or energy?	---	---	<u>X</u>

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	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
b. Substantial increase in demand upon existing sources or energy, or require the development of new sources of energy?	—	—	<u>X</u>
16. Utilities. Will the proposal result in a need for new systems, or substantial alterations to the following utilities: Power or natural gas	<u>X</u>	—	—
17. Human Health. Will the proposal result in:			
a. Creation of any health hazard or potential health hazard (excluding mental health)?	—	—	<u>X</u>
b. Exposure of people to potential health hazards?	—	—	<u>X</u>
18. Aesthetics. Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?	—	<u>X</u>	—
19. Recreation. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?	—	—	<u>X</u>
20. Cultural Resources.			
a. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archaeological site?	—	—	<u>X</u>
b. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?	—	—	<u>X</u>
c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?	—	—	<u>X</u>
d. Will the proposal restrict existing religious or sacred uses within the potential impact area?	—	—	<u>X</u>
21. Mandatory Findings of Significance.			
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate			

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	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
important examples of the major periods of California history or prehistory?	_____	_____	<u>X</u>
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	_____	_____	<u>X</u>
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)	_____	_____	<u>X</u>
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	_____	_____	<u>X</u>

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ATTACHMENT TO INITIAL STUDY CHECKLIST  
ENVIRONMENTAL IMPACT EXPLANATIONS

OWENS LAKE PHASE III DEMONSTRATION PROJECT  
SPRINKLER TEST

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## ENVIRONMENTAL IMPACT EXPLANATIONS

### Environmental Scoping

Prior to preparation of this initial study, the GBUAPCD consulted with appropriate responsible and trustee agencies for fish and wildlife, and cultural resources to discuss the proposed project and obtain their comments (see Organizations and Persons Consulted, Page 23). The comments and concerns of these agencies have been given due consideration in the preparation of this Initial Study.

### EARTH

Unstable earth conditions will not be created by the proposed project. The only displacements of soil will be from the placement of power poles, limited improvements to existing roads, and construction of water storage areas on the lakebed if necessary. Some local and limited water erosion of the test area may occur during sprinkler tests. No significant adverse environmental impacts to earth are anticipated as a result of this project.

### AIR

The proposed project will not result in the deterioration of ambient air quality, creation of objectionable odors, climate change, or expose residents to severe air pollution conditions. During the construction of the project, construction equipment will emit small amounts of pollutants that will have negligible effect on the overall ambient air quality. If successful, this project may lead to the eventual improvement of overall ambient air quality of the region. No significant adverse environmental impacts to air are expected as a result of this project.

### WATER

Operation of the proposed project will require water which will be pumped from existing groundwater aquifers. Preliminary information obtained during pump tests conducted at both well locations has indicated that the only change to groundwater levels will be local drawdown near wells. The water table and spring flow in nearby wetlands are not expected to be affected during the sprinkler test; nor is the water supply for the town of Keeler. During the testing of the sprinkler systems, the water levels of both the aquifers and the nearby wetland areas will be monitored. Minor changes in absorption rates, direction of water movements, runoff, and drainage patterns may occur near the sprinkler test plots. No significant environmental impacts to water are anticipated as a result of this project.

## PLANT LIFE

The sprinkler test areas are generally void of plant life. This is also generally true of the pipeline routes especially the route from the river well site to the northerly test site (See Figure 3, Appendix A). The proposed power transmission line route from the existing power supply to the Mill Site Well and a portion of the pipeline route from the Mill Site Well to the southerly test area traverse areas of considerable plant growth. Plant surveys will be conducted along these routes prior to construction activities to determine the presence of any rare or endangered plant species (See Plant Survey, Appendix B). If any such species are encountered the alignment of the transmission and pipeline routes will be modified to avoid disturbing the plants and the sensitive areas will be clearly marked to avoid damage from construction activities. No significant adverse impacts to plant life are anticipated as a result of this project.

## ANIMAL LIFE

To avoid potential changes in diversity of species, numbers of species or deterioration of existing wildlife habitat, the following studies will be conducted to survey existing animal concentrations and whereabouts:

1. A survey of Snowy Plover nesting sites will be conducted prior to disturbing any area on or near the lakebed during the period April 5 through August 31 (See Plover Survey, Appendix B). This survey shall be conducted on foot by trained personnel and will cover an area extending 50 feet either side of any area of proposed disturbance no more than one week prior to the beginning of any construction activity. In the event that nesting plovers are discovered, steps shall be taken to reroute lines, reposition facilities, and alter foot and vehicular traffic to avoid the nesting sites.
2. A small mammal survey will be conducted in the vicinity of the Mill Site well (See Small Mammal Survey, Appendix B). This area has been identified as having adjacent habitat suitable for rodents. The surveys will be conducted over two 5-day trapping periods with one week separations between trappings. Trappings will take place in late April to early June. These trappings will be conducted by trained personnel who will specifically check for the presence of the Mojave ground squirrel and the Owens Valley vole.
3. An aquatic wildlife survey of the wetland areas near the Mill Site will be conducted beginning July 1, 1990 (See Aquatic Wildlife Survey, Appendix B). The survey shall log types and amounts of fish, snails, and other aquatic

life if any. Specifically, the survey will check for the presence of the Owens Valley pupfish, the Owens tui chub, and endemic snails. A snorkeling canvas of the pools, as well as netting with seine apparatus in open areas combined with trapping in marshy areas will be conducted to measure the numbers and type of any aquatic life present. Results of a fish survey conducted in December 1989 showed no fish present in any of the pools. Further, results of a springsnail survey of the region published in March of 1989 showed no snails present in the wetland pool areas near the Mill site. A ninety day pump test will be conducted at the two well sites to determine if pumping will affect local hydrology including that of wetlands and small pools. During the pump tests and subsequent sprinkler tests, these areas will be monitored to determine if water levels are lowered and if any impacts from lowered ground water levels are occurring. If such impacts are noted, and if any sensitive species which might be affected by such impacts were found in these areas during the later surveys, pumping will be immediately discontinued at the affected well site.

#### NOISE

Construction of the powerlines, waterlines, and sprinkler systems will cause an insignificant temporary increase in the ambient noise levels in the area. Well operation and watering will not significantly increase ambient noise levels. No significant impacts from noise are expected as a result of this project.

#### LIGHT AND GLARE

No significant adverse impacts associated with light and glare are anticipated as a result of this project.

#### LAND USE

No significant adverse impacts associated with land use are expected as a result of this project.

#### NATURAL RESOURCES

Groundwater used during the test is expected to be replenished from natural runoff and rainfall. A hydrology study, being performed during the test project, is expected to confirm this. No significant adverse impacts to natural resources are expected as a result of this project.

### RISK OF UPSET

No hazardous substances shall be involved in this project. No significant adverse impacts associated with risk of upset are anticipated as a result of this project.

### POPULATION

No people will be relocated or displaced by the proposed project. The project will not affect the distribution, density, or growth rate of the human population of the area. The closest human residences to any test facilities is 3-4 miles away in the town of Keeler. No significant adverse impacts associated with population are anticipated as a result of this project.

### HOUSING

No existing housing is present in the test area, and no demand exists to build within the test area. Thus, no significant adverse impacts are anticipated as a result of this project.

### TRANSPORTATION/CIRCULATION

There will be a temporary minor increase in the amount of traffic in the area from construction vehicles. Due to the relatively remote location of the project the increase will not affect parking, transportation systems, or circulation in general. No adverse impacts to transportation/circulation are expected as a result of this project.

### PUBLIC SERVICES

Because the land use required for this test project does not require public services other than those provided as part of the project, no significant adverse impacts associated with public services are anticipated as a result of this project.

### ENERGY

An existing power grid will provide power to the proposed pumping operations. No exceptional amount of energy will be used during the test. No significant adverse impacts associated with public services are expected as a result of this project.

### UTILITIES

Two new powerlines, the River Well Site 500 feet long and the Mill Site 1/3 mile long, will be run from existing power lines to the well sites. The addition of these powerlines and subsequent energy use shall not place significant burdens on existing utilities. No significant adverse impacts to utilities are expected as a result of this project.

## HUMAN HEALTH

The project is not anticipated to create any health hazards or expose people to any health hazards. No significant adverse impacts to human health are anticipated as a result of this project.

## AESTHETICS

The addition of water lines and sprinklers above ground will not significantly obstruct scenic views. Construction of short lengths of elevated powerline next to existing powerlines are not expected to be aesthetically offensive. No significant adverse impacts to aesthetics are expected as a result of this project.

## RECREATION

No significant amounts of recreational activities are known to take place at the project site, nor are there any known plans for such activities. No significant adverse impacts to recreation are expected as a result of this project.

## CULTURAL RESOURCES

A cultural resources survey will be conducted by a qualified archaeologist along the transmission line route from Highway 136 to the Mill Site Well. This survey will also include the old dump site west of Highway 136 and north of the transmission line route near the well site. If any culturally significant sites are found, they will be fenced off or clearly marked so as to prevent human disturbance, and facilities will be repositioned or rerouted to avoid interference with these areas if necessary. No significant adverse impacts to cultural resources are anticipated as a result of this project.

## MANDATORY FINDINGS OF SIGNIFICANCE

This initial study contains no mandatory findings of significance. The project will not:

- a. Degrade the quality of the environment;
- b. Substantially reduce the habitat of a fish or wildlife species;
- c. Cause a fish or wildlife population to drop below self sustaining levels;
- d. Threaten to eliminate a plant or animal community;
- e. Reduce the number or restrict the range of a rare or endangered plant or animal;

- f. Eliminate important examples of the major periods of California history or pre-history;
- g. Cause substantial adverse effects on human beings directly or indirectly; or
- h. Achieve short-term to the disadvantage of long-term environmental goals.

The project will not have cumulative impacts because it is only a test of one of a number of potential dust control measures whose technical and economic feasibility are currently being evaluated.

#### CONCLUSION

Based on this initial study, it has been determined that there will be no significant adverse environmental impacts associated with the Owens Lake Phase III Demonstration Project Sprinkler Test. A Negative Declaration is the appropriate environmental documentation for this project according to the California CEQA guidelines.

#### ENVIRONMENTAL REVIEW PROCESS

After a negative declaration has been filed with the Inyo County Clerk's Office and the State Office of Planning and Research, interested parties will have 30 days to review the document and provide any comments to the Great Basin Unified Air Pollution Control District (GBUAPCD). After this 30-day review period, the GBUAPCD will respond to the comments received. Following certification of the Negative Declaration, a Notice of Determination will be filed with the offices of the Inyo County Clerk and the State Office of Planning and Research.

SEF/RRP:jmp

ORGANIZATIONS CONSULTED

UNITED STATES

Bureau of Land Management Fish and Wildlife Service  
Department of Defense - China Lake Naval Weapons Center

STATE OF CALIFORNIA

Department of Fish and Game Great Basin Unified Air Pollution  
Control District California State Lands Commission

LOS ANGELES CITY

Department of Water and Power

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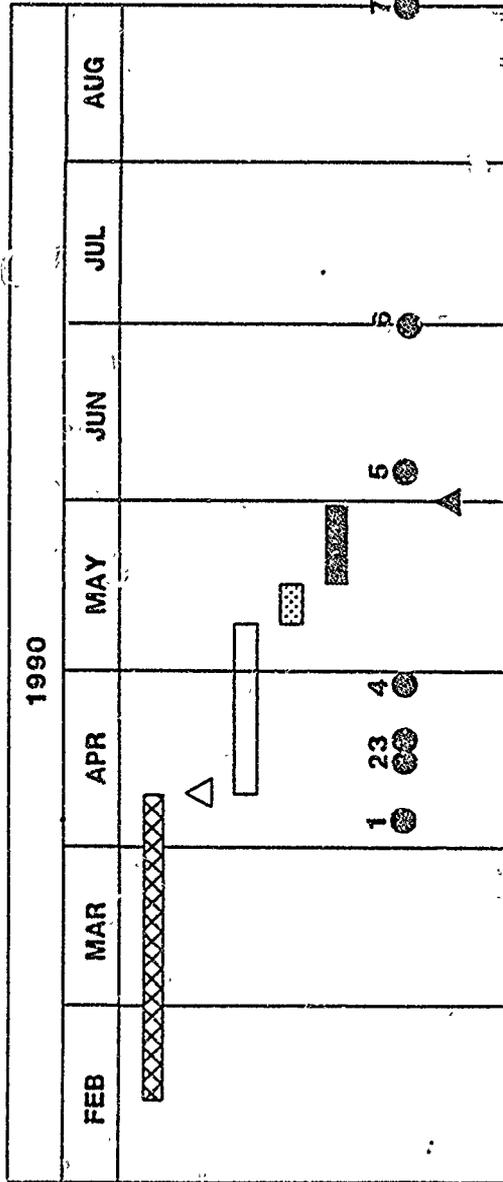
1258

APPENDIX A

NO. OF PAGES 204  
SERIAL NO. 1259

# OWENS LAKE SPRINKLER EVALUATION PROGRAM

## OWENS LAKE PHASE III



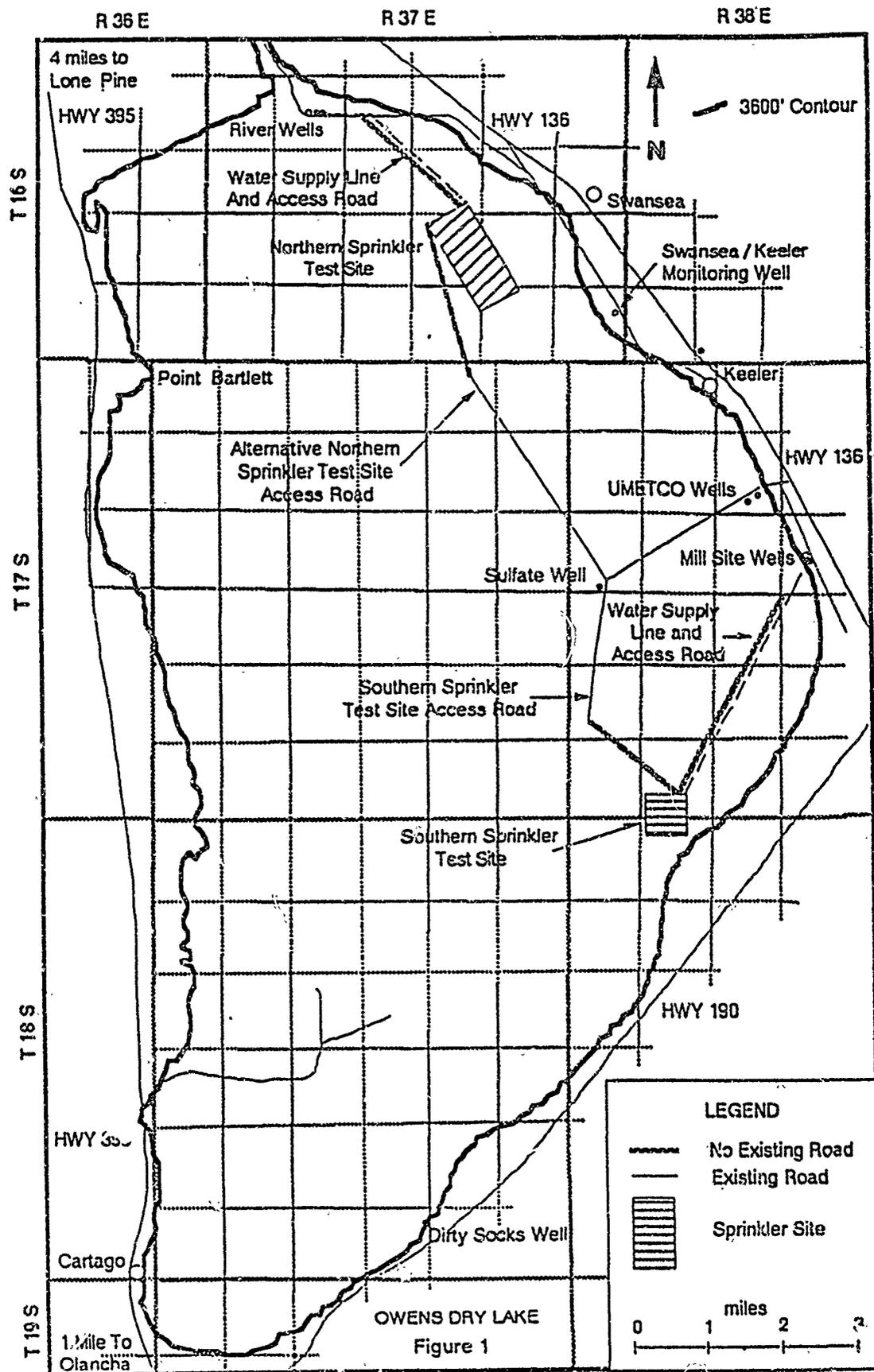
- INITIAL STUDY
- FILE NEGATIVE DECLARATION
- PUBLIC REVIEW PERIOD
- RECEIVE COMMENT
- PREPARE RESPONSE
- PERFORM STUDIES
- CERTIFY NEGATIVE DECLARATION

**INDEX:**

- ☒ Duration Feb. 14th Thru Apr. 11th (CEQA Documentation)
- △ Action Begins Apr. 11th
- ☐ Duration Apr. 11th Thru May 10th
- ▨ Duration May 10th Thru May 17th
- ▩ Duration May 17th Thru May 31st
- 1 Archaeological Study Begin Apr. 4th
  - To Be Performed By China Lake Naval Weapons Center
  - Using Staff Archaeologist
- 2 Snowy Plover Survey To Begin By Apr. 16th
  - Surveys Before All Construction Activities
  - To Be Performed By DWP
- 3 Rare Plant Survey Begin Apr. 23rd
  - To Be Performed By DWP
- 4 1st Animal Trapping Begin April 30th Thru May 31st
  - To Be Performed By GBUAPCD
- 5 2nd Animal Trapping To Begin In May or June
  - To Be Performed By GBUAPCD
- 6 Fish/Snell/Aquatic Life Survey Begin July 1st 1990
  - To Be Performed By DWP
- 7 Snowy Plover Survey Complete By Aug. 31st

- △ Certify Negative Declaration By May 31st
- NOTES:
  - Initial Study To Be Performed By The DWP
  - Noticing To Be Handled By The GBUAPCD
  - Hydrology Information To Be Supplied By DRI
  - With Previously Negotiated Phase III Funds
- By: DWP-SEF

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4 miles to Lone Pine

HWY 395

River Wells

Water Supply Line And Access Road

Northern Sprinkler Test Site

HWY 136

Swansea

Swansea / Keeler Monitoring Well

Point Bartlett

Alternative Northern Sprinkler Test Site Access Road

Keeler

HWY 136

UMETCO Wells

Mill Site Wells

Sulfate Well

Water Supply Line and Access Road

17.5 Miles To Dan

Southern Sprinkler Test Site Access Road

Southern Sprinkler Test Site

HWY 190

HWY 330

Cartago

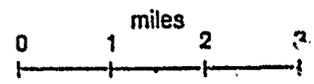
Dirty Socks Well

OWENS DRY LAKE

1.1 Mile To Olancha

**LEGEND**

-  No Existing Road
-  Existing Road
-  Sprinkler Site



MINUTE PAGE

Figure 1

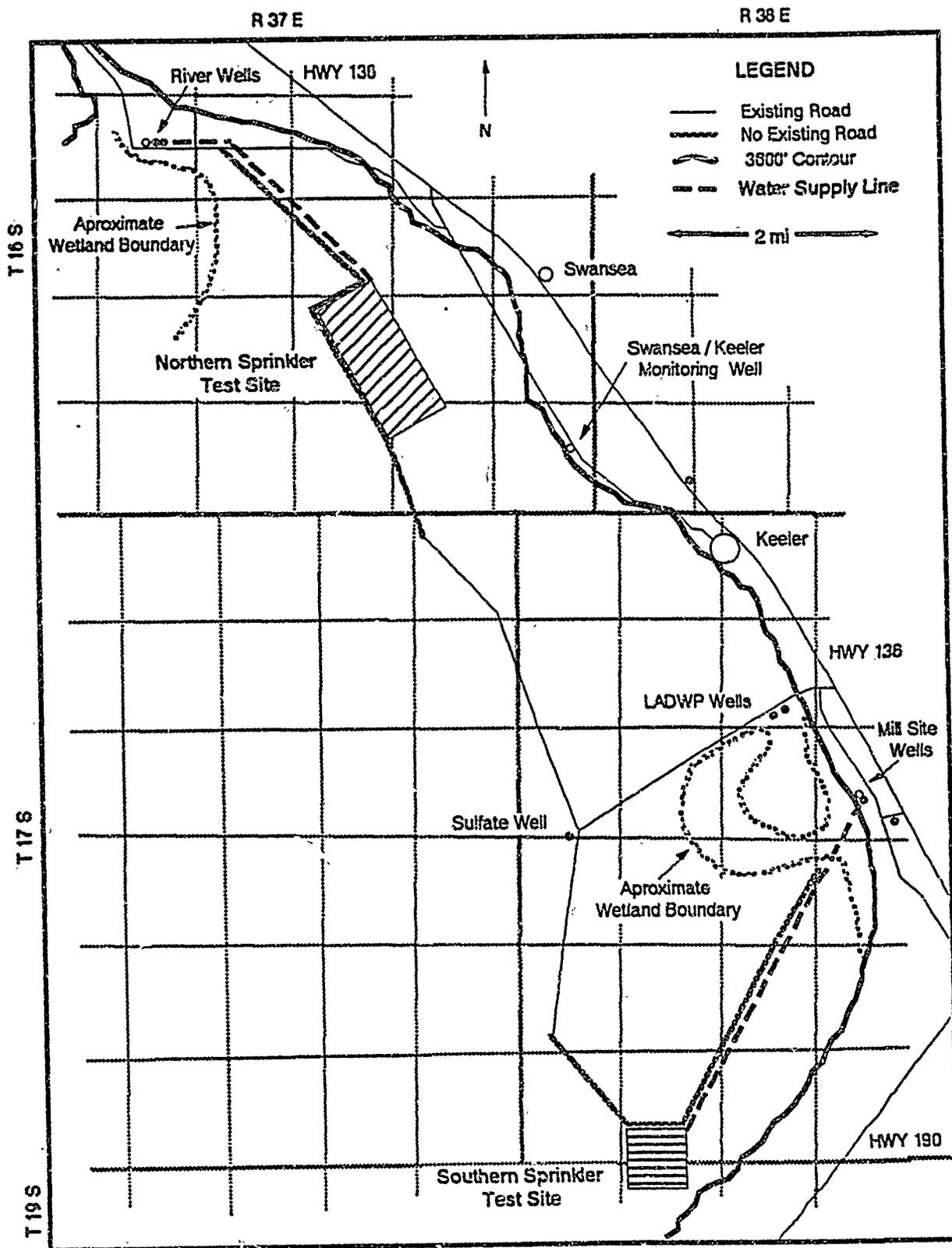


Figure 2

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APPENDIX B

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## PLANT SURVEY

On February 1, 1990, representatives from the Bureau of Land Management (BLM), the California Department of Fish and Game (CDFG), the Great Basin Unified Air Pollution Control District (GBUAPCD), and California State Lands Commission (CSLC), and the Los Angeles Department of Water and Power (Department) held an environmental scoping session at Owens Lake for the Owens Lake Phase III Demonstration Sprinkler Project.

It was determined that a "rare plant" survey is needed for the pipeline and powerline corridors for the Southern Sprinkler Test Site. Potential habitat exists for both the Owens Valley checker mallow (*Sidalcea covillei*) and the alkali Mariposa lily (*Calochortus excavatus*) near the Mill Site well on Department land.

BLM has also requested a survey on BLM land where the new transmission line will be installed. It was decided that Patti Novak (a Department botanist) is qualified to conduct the survey.

### Methodology

The California Native Plant Society (CNPS) and CDFG have adopted guidelines for rare plant surveys. These guidelines will be followed for the Owens Lake survey and consist of:

1. Literature search: Collect data on rare and endangered plants suspected to occur in the region or reported in similar habitat. Sources include California Natural Diversity Data Base, local checklists, and flora.
2. Conduct survey at the proper time--when rare and endangered plants are both evident and identifiable (March through May).
3. Floristic in nature: Every species noted in the field will be identified to the extent necessary to ensure it is neither rare nor endangered.
4. Conduct survey in such a manner consistent with conservation ethics. Collection of specimens will not be necessary for this survey.
5. Use systematic field techniques to ensure thorough coverage of potential habitat. A random meander pattern will be used.
6. Document if population is found; boundaries will be mapped and a CNPS field survey form will be completed.

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## Snowy Plover Survey

### Background

Representatives of the Great Basin Unified Air Pollution Control District (GBUAPCD) and the Department of Water and Power (Department) took a field trip to Owens Lake Phase I areas with representatives from the California Department of Fish and Game (CDFG), the Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service, and the California State Commission (CSLC). It was jointly decided that potential snowy plover habitat exists within the project site. Presently, the snowy plover is a candidate for the Federal Endangered Species List. Because of this, CDFG has requested the project site be thoroughly surveyed to determine the extent of snowy plover activity. Brian Tillemans, a Department wildlife biologist, has been designated to conduct the snowy plover surveys (qualified by a B.S. in Wildlife Biology from U.C. Davis and 9 years experience as a field biologist with the Los Angeles Department of Water and Power).

### Method

Two surveys will be conducted to determine the presence of snowy plovers in the project area. The first survey will be initiated during peak nesting season, and the second survey will be conducted one week prior to construction of the sprinkler pipeline. Visual observations will be made using a spotting scope and binoculars.

The width of the survey area for the sprinkler pipeline will be 150 feet, allowing for 50 feet of disturbance due to construction activity, with an additional 50 feet added to each side. The entire sprinkler site will be surveyed to determine the presence of any nesting activity. Locations of any nests or snowy plover activity will be recorded. If snowy plovers are found to occupy areas within the project, mitigation measures will be taken to avoid impacts (specific mitigation details will be determined by CDFG).

DATE	210
TIME	1265

## SMALL MAMMAL SURVEY FOR THE PHASE I SPRINKLER TEST PROJECT

### BACKGROUND

On February 14th, 1990, Great Basin Unified Air Pollution Control District and the Los Angeles Dept. of Water and Power jointly agreed to prepare the environmental documentation in accordance with CEQA for the GBUAPCD Phase I Sprinkler Test Project (described elsewhere in this document). After consulting with California Dept of Fish and Game, the Bureau of Land Management, U.S. Fish and Wildlife Service and the California State Lands Commission it was agreed that the Initial Study should include a survey of sensitive small mammals near the project areas. CDFG requested that this survey should look for the possible presence of two rodent species: the Owens Valley vole (*Microtus californicus vallicola*), a federal 'candidate 2' species, and the Mohave ground squirrel (*Spermophilus mohavensis*), a state listed 'threatened' species and federal 'candidate 2' species.

GBUAPCD and LADWP staff took a field trip to Owens Lake Phase I areas along with staff from the four resource management agencies noted above. Of the two Phase I production well areas, it was noted that only the Mill Site has adjacent habitat for rodents that might be affected by the sprinkler lines and well pumping powerlines. The River Site sprinkler line will be run around any grassy areas, and its powerline will consist of a single pole "spur" from an existing pole line on the dry lakebed. GBUAPCD took responsibility for doing the small mammal survey in April and May 1990 in two areas near the Mill Site production well. It was further agreed to designate GBUAPCD staff member, Debra Lawhon, to perform the survey trapping (qualified by virtue of an M.S. in Ecology and Evolutionary Biology, with emphasis on desert rodent population dynamics from the University of California).

### FIELD METHODS

Sherman live-traps will be set for *S. mohavensis* along the powerline corridor leading from the pole line near Hwy 136 to the Mill Site well. The initial trapping period will consist of 5 consecutive days, followed by a week or more of no trapping. If none of the species of concern are captured there will be an additional sampling period of 5 more days. The bait, the number of traps, and trap placement will be in adherence with the current guidelines established by CDFG. Care will be taken to minimize heat stress for the diurnal species by utilizing vegetative cover or artificial shades, and frequent trap-checks. Standard scientific collecting data will be taken for each captured animal: species, sex, condition, age, & weight. *S. mohavensis* individuals will be marked to aid in determining species densities.

The potential presence of *M. c. vallicola* will be investigated by live-trapping the grassy areas on the lakebed to the west of the Mill Site well. The area will be inspected for *Microtus* runways, and traps will be placed in those areas that appear to be the best habitat. Information will be gathered as described above for *S. mohavensis*.

# SMALL MAMMAL SURVEY FOR THE PHASE I SPRINKLER TEST PROJECT

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## MITIGATION

In the event that either of the two above discussed species of concern are found to be present in the area surveyed, GBUAPCD can take measures to minimize impact to them. GBUAPCD will consult with CDFG, other resource management agencies, and with researchers who currently work with *S. mohavensis* and *M. c. vallicola* to develop the most appropriate course of mitigations. The types of potential impact to rodents include the following: (1) degradation to habitat by the construction activities of the powerline and sprinkler supply lines, (2) physical disturbance directly affecting rodent individuals or burrows, (3) water discharge from the wells (either planned or unplanned) that run over rodent habitat, and (4) the possibility of water draw-down from the well pumping that might adversely affect habitat vegetation.

While final mitigation measures should be agreed upon after the survey of species community composition and densities are performed, the following are possible measures that could reduce impacts to non-significance. For item 4, the confinement of the aquifer that will be used at the Mill Site and the short durations of the sprinkler tests make it unlikely that the water supplying the vegetation will be depleted. However, the monitoring well at this site will be watched carefully to warn of any such impending impacts and avoid them. For item 3, any excess water can be routed away from rodent habitat. Items 1 & 2 can be mitigated by the avoidance of rodent burrows, the best areas of the grassy habitat, and by hand laying the sprinkler supply lines.

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## AQUATIC WILD LIFE SURVEY

### PROPOSED SUMMER FISH SURVEY

Last December, no fish or evidence of fish were observed during a casual (surface) search for fish in areas of open water in the vicinity of test sites 2 through 4. A submerged search will be made in early summer, when fish are more active. Additionally, any waters in the vicinity of site #1 will be examined at this time.

The survey will consist of the collection of basic water quality information (dissolved oxygen, pH, salinity, temperature) and a snorkeling canvass at each site. The survey will be conducted at dawn, dusk, midday, and midnight. In addition, trapping and seining will be used to collect and log all fish. No soporifics or poisons (such as Rotenone) will be used in the survey. Moreover, SCUBA equipment will be available and used if water depths warrant.

### PROPOSED SNAIL SURVEY

A survey conducted by The Biological Society of Washington published on March 29th, 1989, found no evidence of Springsnails (Gastropoda: Hydrobiidae) at southern test site. See Appendix C figure 2 sampling #33, showing the negative results. To thoroughly analyze the test area, an additional survey will be conducted.

The new survey will use a sieve collection technique to survey amounts of Springsnail (Gastropoda: Hydrobiidae), and a vegetation pick to collect larger snail varieties, specifically of the genera Physa & Lymnaea. The California Department of Fish & Game -(Bishop) will be notified of findings, so that further analysis may be conducted if necessary.

### NOTES:

Survey will be conducted by Randal Orton, staff biologist LADWP. (PHD-Biology, UCLA/MS-Marine Biology, SFS/CPD-Environmental Science Engineering, UCLA/Member of ASIH & AFS.

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APPENDIX C

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SPRINGSNAILS (GASTROPODA: HYDROBIIDAE)  
OF OWENS AND AMARGOSA RIVER  
(EXCLUSIVE OF ASH MEADOWS) DRAINAGES,  
DEATH VALLEY SYSTEM, CALIFORNIA-NEVADA

Robert Hershler

*Abstract.*—Thirteen springsnail species (9 new) belonging to *Pyrgulopsis* Call & Pilsbry, 1886, and *Tryonia* Stimpson, 1865 are recorded from the region encompassing pluvial Owens and Amargosa River (exclusive of Ash Meadows) drainages in southeastern California and southwestern Nevada. Discriminatory analyses utilizing shell morphometric data confirmed distinctiveness of the nine new species described herein, as: *Pyrgulopsis aardahli*, *P. amargosae*, *P. owenensis*, *P. pertubata*, *P. wongi*, *Tryonia margae*, *T. robusta*, *T. rowlandsi*, and *T. salina*. Of the 22 springsnails known from Death Valley System, 17 have very localized distributions, with endemic fauna concentrated in Owens Valley, Death Valley, and Ash Meadows. A preliminary analysis showed only partial correlation between modern springsnail zoogeography and configuration of inter-connected Pleistocene lakes comprising the Death Valley System.

This constitutes the second part of a systematic treatment of springsnails from the Death Valley System, a large desert region in southeastern California and southwestern Nevada integrated by a series of lakes during Pleistocene times. An earlier paper (Hershler & Sada 1987) dealt with the Ash Meadows faunule, while this document provides descriptions of fauna collected during 1985-1987 survey of much of remaining portions of the System, including waters in Mono, Adobe, Long, Owens, Indian Wells, Panamint, and Death Valleys; Amargosa River drainage; and some areas adjacent to the above (Fig. 1). A brief discussion of springsnail zoogeography also is provided, although a more extensive treatment will be given following survey of remaining portions of Death Valley System (notably Mojave River drainage) and additional peripheral areas.

List of Recognized Taxa

- Pyrgulopsis aardahli*, new species.
- P. amargosae*, new species.
- P. micrococcus* (Pilsbry, 1893).
- P. owenensis*, new species.
- P. pertubata*, new species.
- P. cf. stearnsiana* (Pilsbry, 1899).
- P. wongi*, new species.
- Tryonia margae*, new species.
- T. protea* (Gould, 1855).
- T. robusta*, new species.
- T. rowlandsi*, new species.
- T. salina*, new species.
- T. variegata* Hershler & Sada, 1987.

Materials and Methods

Localities visited, consisting of low- to mid-elevation (<2500 m) springs and perennial streams, are shown in Figs. 2-7 and listed in the Appendix. Snails were found

SEE FIG. 2, P. 180 FOR RELEVANT SITE INFORMATION.

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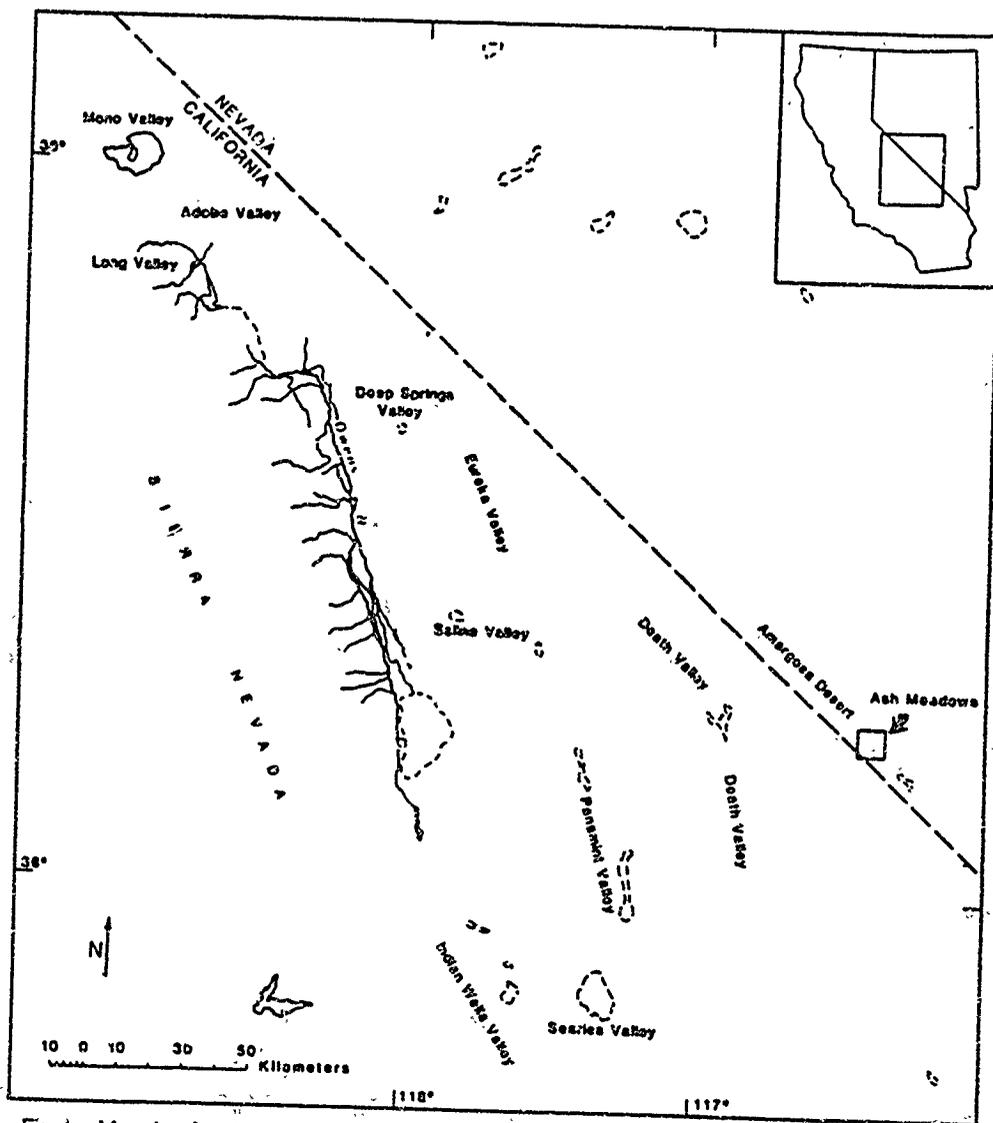


Fig. 1. Map showing desert basins of southeastern California and southwestern Nevada comprising study area. Stippled areas indicate mountain ranges.

in springs of varying sizes and appearance as well as low- to moderate-energy (spring-fed) streams. Photographs of representative sites are in Figs. 8 and 9.

Snails were relaxed in the field with menthol crystals, fixed in 4% buffered formalin and preserved in 70% ETOH. Material was collected by author unless otherwise indi-

cated. Water temperature and conductivity were measured with a temperature-compensated, HACH 16300 conductivity meter.

Methods of anatomical study and photography of shells and other morphologic features are routine (Hershler & Sada 1987). Generalized radular formulae are based on

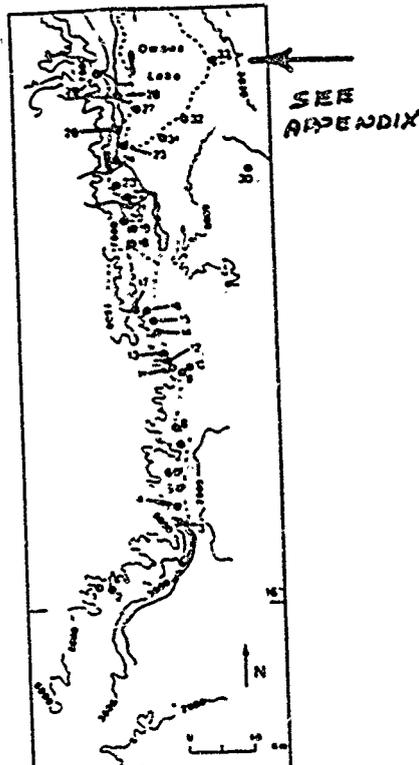


Fig. 2. Sampling localities in southern Owens Valley and western Indian Wells Valley. Solid lines indicate selected elevation contours (light) and modern drainage (dark; stipple indicates lakes); dashed lines indicate historic drainage, including dry lake beds.

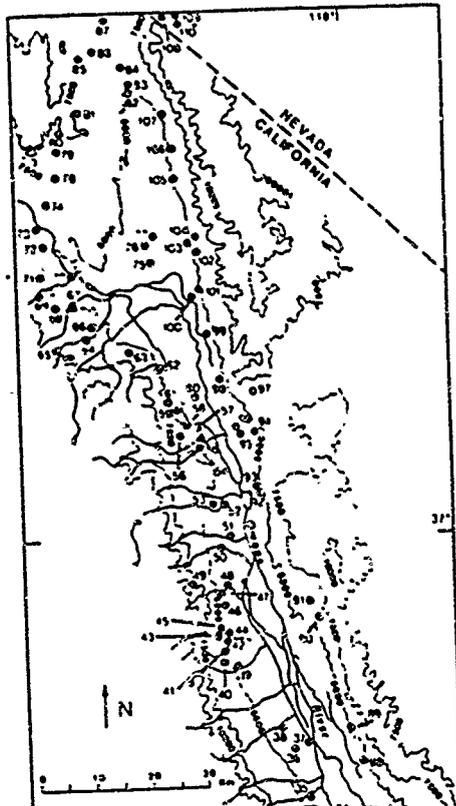


Fig. 3. Sampling localities in northern Owens Valley.

high, height/width, 140–170%. Whorls, 3.75–4.25, moderately convex, moderately shouldered. Body whorl inflated, height 76–82% of that of shell. Aperture ovate, apertural plane near-parallel to coiling axis (Fig. 10c). Inner lip thickened, slightly reflected, adnate to small portion of or slightly separated from body whorl. Outer lip straight, thin. Umbilicus moderately open.

Dark, grey-black epithelial (melanic) pigment on most of snout (to just posterior of cephalic tentacles), along anterior edge of foot, on operculigerous lobe (Fig. 11). Central portions of sides of head/foot lightly

dusted or unpigmented. Tentacles unpigmented except for dark ring along bases. Brown-black subepithelial pigment granules sometimes forming dark band along posterior edge of "neck."

Radular (Fig. 12) formula: 5–1–5/1–1, 2(3)–1–3, 22–24, 28–32 (from paratypes). Central tooth broadly trapezoidal; basal process moderately excavated. Penis (Fig. 13b–c) large (extending beyond mantle collar), thin, considerably longer than wide. Filament slender, moderate in length. Lobe reduced or absent, with blunt distal edge. Large, elongate glandular ridge borne on elongate swelling of ventral penial surface. Single, smaller ridges sometimes found on

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1272

321 in C. J. Hocutt and A. B. Leviton, eds., Late Cenozoic History of the Pacific Northwest. American Association for the Advancement of Science, San Francisco, California.  
Wilkinson, L. 1986. SYSTAT: The system for statistics. SYSTAT, Inc., Evanston, IL.

Department of Invertebrate Zoology,  
NHB STOP 118, National Museum of Natural History, Smithsonian Institution,  
Washington, D.C. 20560.

#### Appendix

Collection localities, numbered as in Figs. 2-7. Data include name of site, state, county, topographic sheet, township and range coordinates, site elevation, and date of visitation (for negative sites only). \*

1. Stream in Sage Canyon. CA: Kern; Horse Canyon, CA (7.5). 7.0 km SW of NE corner of quadrangle. 1342 m.
2. Boulder Spring. CA: Kern; Horse Canyon, CA. 5.6 km S-SW of NE corner of quadrangle. 1251 m.
- 3-26-87. 3. Stream in Indian Wells Canyon. CA: Kern; Inyokern, CA, NW ¼ sec. 17, T 26S, R 38E. 1068 m.
- 3-26-87. 4. Spring in SW corner of Short Canyon. CA: Kern; Inyokern, CA, NW ¼ sec. 5, T 26S, R 38E. 1120 m.
- 3-26-87. 5. Stream in Grapevine Canyon. CA: Kern; Inyokern, CA, center of sec. 29, T 25S, R 38E. 946 m.
- 3-26-87. 6. Stream in Sand Canyon. CA: Kern; Little Lake, CA, center of sec. 7, T 25S, R 38E. 1068 m.
7. Stream in Noname Canyon. CA: Kern; Little Lake, CA. 10.0 km NE of SW corner of quadrangle. 976 m.
- 3-26-87. 8. Stream in Ninemile Canyon. CA: Inyo; Little Lake, CA. 12.2 km NE of SW corner of quadrangle. 976 m.
- 3-26-87. 9. Spring 0.8 km S of Little Lake, W of HW 395. CA: Inyo; Little Lake, CA, SE ¼ sec. 18, T 23S, R 38E. 946 m.
- 4-1-87. 10. Spring at Little Lake, E of HW 395. CA: Inyo; Little Lake, CA, NW ¼ sec. 17, T 23S, R 38E. 946 m.
11. Stream in Little Lake Canyon. CA: Inyo; Little Lake, CA, NE ¼ sec. 12, T 23S, R 37E. 1129 m.
- 4-1-87. 12. Springs ca. 1.0 km N of Little Lake Canyon. CA: Inyo; Little Lake, CA, SW ¼ sec. 1, T 23S, R 37E. 1159 m.
- 4-30-87. 13. Stream in canyon ca. 3.0 km N of Little Lake Canyon. CA: Inyo; Little Lake, CA. 4.4 km SE of NW corner of quadrangle. 1220 m.
- 4-30-87. 14. Stream in Portuguese Canyon. CA: Inyo; Haiwee Reservoir, CA. 2.19 km NE of SW corner of quadrangle. 1342 m.
- 4-1-87. 15. Springs on Portuguese Bench. CA: Inyo; Haiwee Reservoir, SW corners of secs. 3, 10, T 22S, R 37E. 1160-1220 m.
- 4-30-87. 16. Lower spring in Tunawee Canyon. CA: Inyo; Haiwee Reservoir, CA, SW ¼ sec. 33, T 21S, R 37E. 1373 m.
- 4-25-87. 17. Upper spring in Tunawee Canyon. CA: Inyo; Monache Mtn., CA. 7.0 km N-NW of SE corner of quadrangle. 1525 m.
- 4-30-87. 18. Haiwee Creek. CA: Inyo; Monache Mtn., CA. 12.6 km S-SW of NE corner of quadrangle. 1586 m.
- 4-30-87. 19. Springs in (2) unnamed canyons N of Haiwee Canyon. CA: Inyo; Monache Mtn., CA, NW corners secs. 30, 31, T 20S, R 37E. 1556 m.
- 4-30-87. 20. Hogback Creek. CA: Inyo; Monache Mtn., CA. 7.3 km SW of NE corner of quadrangle. 1586 m.
21. Summit Creek. CA: Inyo; Monache Mtn., CA, NE ¼ sec. 7, T 20S, R 37E. 1373 m.
22. Spring ca. 3.0 km N of Summit Creek. CA: Inyo; Monache Mtn., CA, center of sec. 6, T 20S, R 37E. 1281 m.
23. Walker Creek. CA: Inyo; Monache Mtn., CA, NE ¼ sec. 34, T 19S, R 37E. 1769 m.
- 4-16-87. 24. Cartago Creek. CA: Inyo; Olancha, CA, NE ¼ sec. 11, T 19S, R 37E. 1159 m.
- 4-16-87. 25. Spring at Cabin Bar Ranch. ca. 2.5 km N of Olancha. CA: Inyo; Olancha, CA, SW ¼ sec. 6, T 19S, R 37E. 1098 m.
26. Braley Creek and springs just to S. CA: Inyo; Olancha, CA. 10.0 km NW of SE corner of quadrangle. 1190 m.
- 4-16-87. 27. Springs on edge of Owens Lake at Permanente. CA: Inyo; Olancha, CA. 13.8 km N of SE corner of quadrangle. 1068 m.
- 2-9-85. 28. Ash Creek. CA: Inyo; Olancha, CA. 15.6 km NW of SE corner of quadrangle. 1068 m.
- 4-16-87. 29. Cottonwood Creek. CA: Inyo; Olancha, CA. 9.6 km SW of NE corner of quadrangle. 1037 m.
- 4-16-87. 30. Lower Centennial Spring. CA: Inyo; Keeler, CA. 2.3 km W of SE corner of quadrangle. 1769 m.
- 3-31-87. 31. Dirty Socks (Hot Spring). CA: Inyo; Keeler, CA, NE ¼ sec. 34, T 18S, R 37E. 1098 m.
- 2-9-85. 32. Springs at S end of Owens Lake. ca. 3.5 km NW of Dirty Socks. CA: Inyo; Keeler, CA, NW ¼ sec. 17, T 18S, R 38E. 1098 m.
- 2-9-85. 33. Springs on edge of Owens Lake. ca. 3.0 km S of Keeler. CA: Inyo; Keeler, CA, NW ¼ sec. 22, T 17S, R 38E. 1098 m.
- 4-25-87. 34. Lubkin Creek and spring feeding creek from south. CA: Inyo; Lone Pine, CA, SE ¼ sec. 16, T 16S, R 36E. 1220 m.
35. Spring along E side of Tuttle Creek. CA: Inyo; Lone Pine, CA, NE ¼ sec. 6, T 16S, R 36E. 1281 m.
36. Hogback Creek. CA: Inyo; Lone Pine, CA, NW ¼ sec. 2, T 15S, R 35E. 1159 m.
37. Spring at NE end of Alabama Hills. ca. 4.2 km N-NW of Lone Pine. CA: Inyo; Lone Pine, CA, NE ¼ sec. 31, T 14S, R 36E. 1159 m.
- 4-25-87. 38. George Creek. CA: Inyo; Lone Pine, CA, NE ¼ sec. 27, T 14S, R 35E. 1251 m.
- 4-25-87. 39. Independence Creek. CA: Inyo; Independence, CA, SE ¼ sec. 23, T 13S, R 34E. 1342 m.
- 4-17-87. 40. Boron Springs. CA: Inyo; Mt. Pinchot, CA, NW ¼ sec. 22, T 13S, R 34E. 1556 m.
41. Oak Creek, south fork. CA: Inyo; Mt. Pinchot, CA, SW ¼ sec. 10, T 13S, R 34E. 1525 m.
- 4-17-87. 42. Springs ca. 1.0 km W of Mt. Whitney Fish Hatchery. CA: Inyo; Mt. Pinchot, CA, SE ¼ sec. 3, T 13S, R 34E. 1342 m.
- 4-18-87. 43. Stream in Charlie Canyon. CA: Inyo; Mt. Pinchot, CA, SW ¼ sec. 3, T 13S, R 34E. 1617 m.
44. Springs feeding N fork Oak Creek. CA: Inyo; Mt. Pinchot, CA, SW ¼ sec. 3, T 13S, R 34E. 1586 m.
- 4-25-87. 45. Oak Creek, north fork. CA: Inyo; Mt. Pinchot, CA, center of sec. 3, T 13S, R 34E. 1525 m.
- 4-17-87. 46. Grover Anton Spring. CA: Inyo; Mt. Pinchot, CA, SW ¼ sec. 20, T

\* INDICATES NO SPRINGS/NAIIS FOUND. SEE FIG. 2, SITE 33,  
EAST SIDE OF OWENS LAKE.

Control Officer



# GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short St. Suite #6 - Bishop, CA 93514  
(818) 872-8211

June 11, 1990

# DRAFT

I HEREBY CERTIFY that at a meeting of the Great Basin Unified Air Pollution Control Board in the Mono County Board of Supervisors Chambers in the City of Bridgeport, California on June 11, 1990, an order was duly made and entered as follows:

### APPROVAL OF NEGATIVE DECLARATION FOR OWENS LAKE PHASE III DEMONSTRATION PROJECT SPRINKLER TEST

A motion was made by Supervisor \_\_\_\_\_, seconded by Supervisor \_\_\_\_\_ approving the Negative Declaration for Owens Lake Phase III Demonstration Project Sprinkler Test and authorizing Board Chair John Bennett to sign the same. Motion carried unanimously and so ordered.

WITNESS: BOARD ORDER #801190-01

ATTEST:

Donna Leavitt, Clerk of the Board

EXHIBIT "D"

CALENDAR PAGE 219  
MINUTE PAGE 1274

STATE OF CALIFORNIA—OFFICE OF THE GOVERNOR

GEORGE DEUKMEJIAN Governor

OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET  
SACRAMENTO, CA 95814



May 10, 1990

RECEIVED  
MAY 14 1990

GREAT BASIN

Ellen Hardebeck  
Great Basin APCD  
157 Short Street  
Bishop, CA 93514

Subject: Owens Lake Phase III Demonstration Project-Sprinkler Test  
SCH# 90020331

Dear Ms. Hardebeck:

The State Clearinghouse submitted the above named environmental documents to selected state agencies for review. The review period is closed and none of the state agencies have comments. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call Lynna Coughlin at (916) 443-0613 if you have any questions regarding the environmental review process. When contacting the Clearinghouse in this matter, please use the eight-digit State Clearinghouse number so that we may respond promptly.

Sincerely,

David C. Nunenkamp  
Deputy Director, Permit Assistance

220  
1275

ELLEN HARDEBECK  
CONTROL OFFICER



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 SHORT ST., SUITE #6 - BISHOP, CA 93314  
(616) 872-3211

TO:  Office of Planning and Research  
1400 Tenth Street, Room 121  
Sacramento, CA 95814

FROM: (Public Agency) \_\_\_\_\_  
Great Basin Unified Air  
Pollution Control District

County Clerk  
County of Inyo

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or  
21152 of the Public Resources Code.  
Owens Lake Phase III Demonstration Project - Sprinkler Test

Project Title \_\_\_\_\_  
25020331 \_\_\_\_\_ Ellen Hardebeck \_\_\_\_\_ 619/872-3211  
State Clearinghouse Number \_\_\_\_\_ Contact Person \_\_\_\_\_ Area Code/Number/Extension  
(If Submitted to Clearinghouse)  
Twp. 17S, Range 37E & 38E, Inyo County, CA

Project Location \_\_\_\_\_  
Determine the feasibility and effectiveness of sprinkling Owens Lake bed to control PM-10  
Project Description \_\_\_\_\_  
Includes pipelines, power lines, and up to one square mile of solid-set sprinklers.

This is to advise that the Great Basin Unified Air Pollution Control District  
(Lead Agency or Responsible Agency)  
has approved the above described project on 6/11/90 and has made the follow-  
(Date)

- ing determinations regarding the above described project:
1. The project     will,  will not have a significant effect on the environment.
  2.     An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.  
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
  3. Mitigation measures  were,     were not made a condition of the approval of the project.
  4. A statement of Overriding Considerations     was,  was not adopted for this project.

This is to certify that the final EIR with comments and responses and record of project approval is available to the General Public at:

Great Basin Air Pollution Control District, 157 Short Street, Bishop, CA 93314

Date Received for Filing and Posting at OPR \_\_\_\_\_

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MINUTE PAGE 1221