

SALTON SEA TASK 2 – DATA GAPS

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Executive Summary

This Administrative Draft technical memorandum includes the following elements:

1. A summary of available data
2. A listing of gaps in the data needed to establish baseline air quality conditions in the Salton Sea watershed
3. A data collection plan
4. Recommendations on short- and long-term air monitoring in the Salton Sea watershed

The analysis is based on efforts through December 2004, and feedback received from the Salton Sea Air Quality Working Group (SSAQWG) Workshop held on November 18, 2004.

Where possible, the data needed to evaluate potential future air quality conditions are also indicated. Baseline and future air quality conditions will be evaluated for the no-project alternative, a variety of action alternatives, and accounting for cumulative impacts in the Salton Sea Ecosystem Management Plan (EMP) Programmatic Environmental Impact Report (PEIR). Concurrent with efforts to fill all or part of the identified data gaps, the air quality baseline and impacts sections of the Draft PEIR will be developed and refined. This Administrative Draft technical memorandum is a working document, prepared for review and input from the SSAQWG. Integrating comments from reviewers, a data needs list and a data collection plan will be finalized over the next few months.

Ambient air monitoring data are needed to establish existing levels and trends of criteria and toxic air pollutants. These baseline concentrations will be used in the PEIR to determine the impacts of the alternatives. The meteorological data will be used to not only describe the existing setting, but also in dispersion modeling, to help determine where potential impacts may occur, and to evaluate the severity of potential impacts.

Two purposes of this data gaps task were to fill data gaps to the extent possible with reasonably available data, and to research other useful information that might become available during the study time frame. For example, an air quality monitoring and meteorological database is being developed for use in refining the air quality baseline assessment, and for eventual inclusion in the Existing Setting section of the Draft PEIR.

This technical memorandum presents a detailed list of available data as a basis for identifying unmet needs, prioritizing issues, and investigating and filling data gaps. Input from the first SSAQWG Workshop, held on October 7, 2004, is also included or responded to in this memorandum.

This technical memorandum also contains recommendations for additional meteorological and air quality (aerometric) monitoring stations to meet both short-term requirements of the PEIR and longer term requirements to quantify impacts of alternatives and their corresponding mitigation.

For the PEIR, these recommendations include:

- Install 10-meter meteorological towers at three existing CIMIS stations; Salton Sea East, Salton Sea West and Mecca. These stations will collect wind speed and wind direction data to supplement other meteorological data available for the project area.
- Utilize data from existing PM₁₀ and PM_{2.5} monitoring locations to meet the needs of the PEIR.

For long-term impacts, additional aerometric monitoring stations will be needed to track potential future air quality impacts associated with changing conditions in the Salton Sea watershed, and with implementation of projects associated with the PEIR. Suitable locations for long-term monitoring stations will be determined after alternatives have been identified and analyzed.

This memo also contains the outline of a data collection and management plan. DWR is compiling an ACCESS database to facilitate use of available data for preparation of work products associated with the PEIR.

As described in the Final Salton Sea Air Quality Work Outline¹, gaps exist in available data for ambient air quality and meteorological conditions, potential air emission sources, applicable air quality significance criteria, emissions estimation tools, impact analysis methods, and suitable mitigation approaches and effectiveness. Emissions sources, significance criteria, and analytical tools and methods have been addressed in greater depth in technical memoranda prepared for Tasks 3 and 4 of CH2M HILL's current task order (DWR Task Order Number SS0405-3575-8). Potential mitigation approaches will be evaluated in future tasks, as project alternatives are identified.

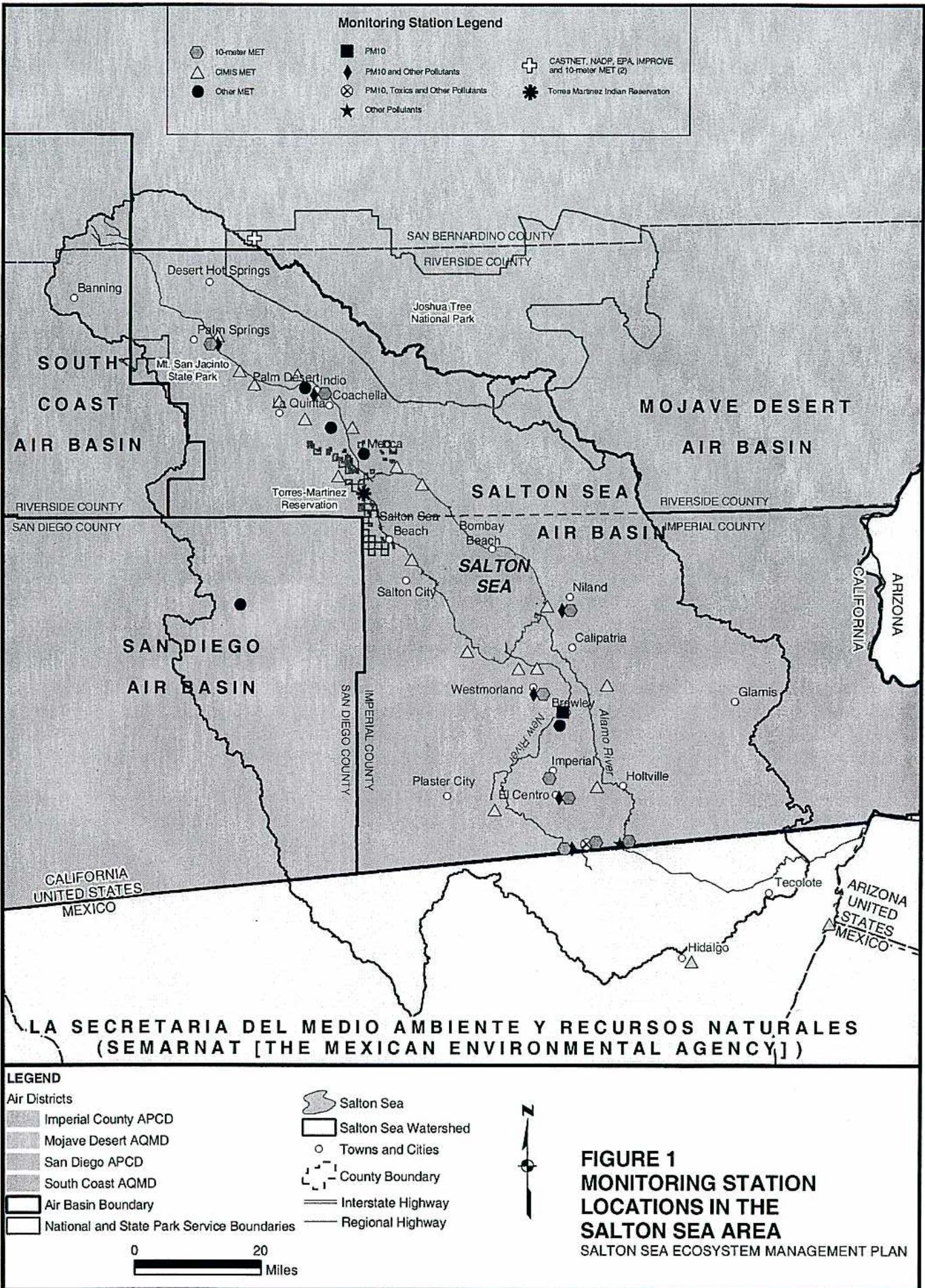
DWR has identified data gaps in previous documents, such as the draft air quality baseline assessment, *Salton Sea Ecosystem Management Plan, Initial Draft Report for Existing Baseline Conditions (EMP)*, August 27, 2004. In this document, several items were identified that warrant further evaluation to more completely describe the existing baseline condition, including the following:

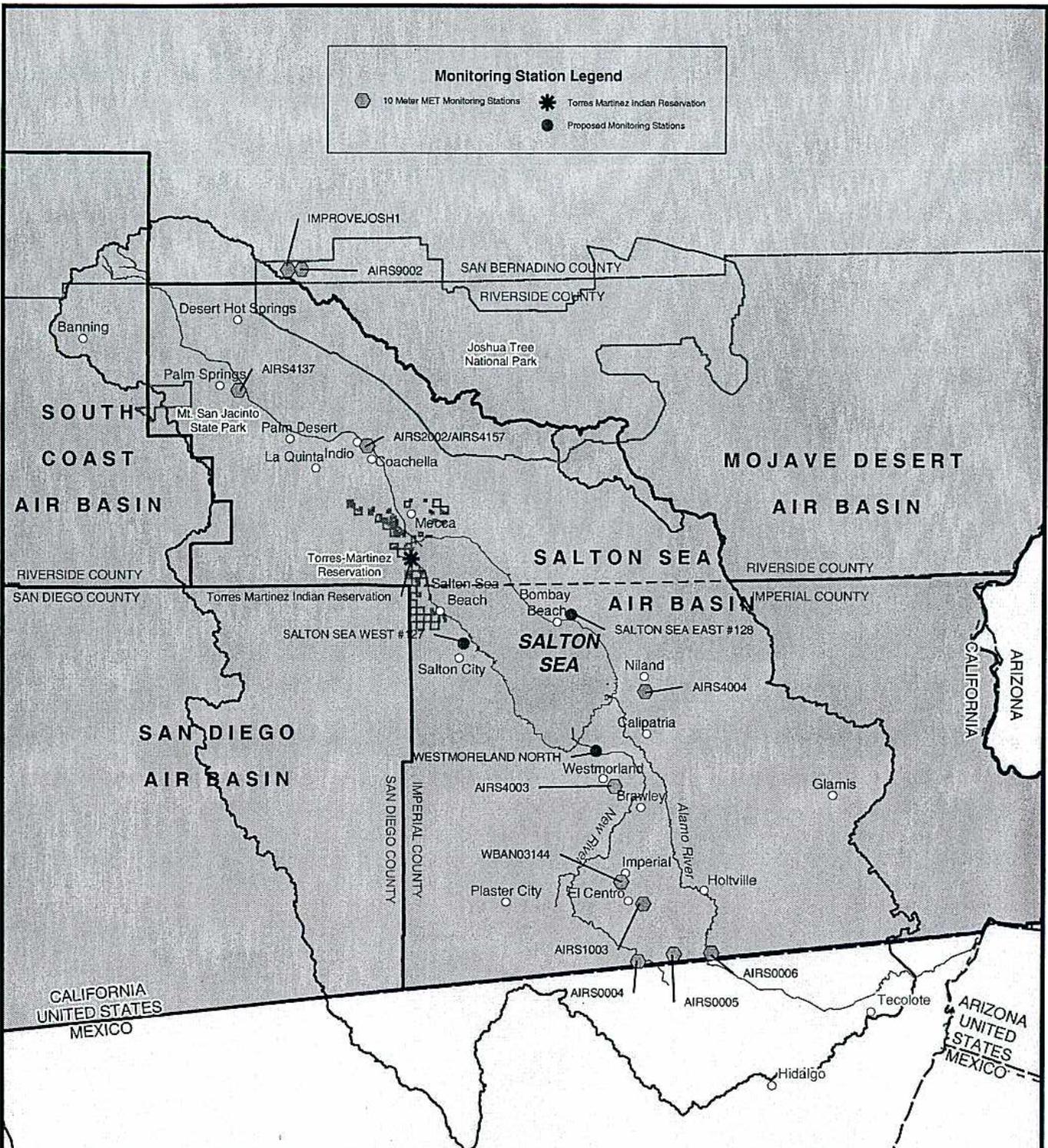
- Information on Mexico, including the regulatory framework, attainment status (or the functional equivalent), meteorological data/climate summary, and monitoring data
- Information for other air districts that may have adopted California Environmental Quality Act (CEQA) air quality guidelines
- Recent information on Imperial County non-attainment status for PM₁₀, emissions inventories, and attainment plans
- Confirmation that all of the highest PM₁₀ concentrations in San Diego County were measured at the Otay Mesa monitoring station, and that all of the highest PM₁₀ concentrations in Imperial County were measured at the three monitoring stations in Calexico
- Confirmation of available ambient air monitoring data and identification of any pollutant trends in the watershed
- Confirmation of available meteorological and climate information for the Salton Sea watershed
- Development of a map showing locations of existing air monitoring stations and California Irrigation Management Information System (CIMIS) stations

¹ October 15, 2004

- Development of information on pollutants monitored and a summary of available data for each monitoring station

This technical memorandum presents a reasonably detailed list of available data so that data needs can be identified, issues prioritized, and data gaps can be investigated and filled. A data collection plan is also presented for comment and review.





Monitoring Station Legend

- 10 Meter MET Monitoring Stations
- Torres Martinez Indian Reservation
- Proposed Monitoring Stations

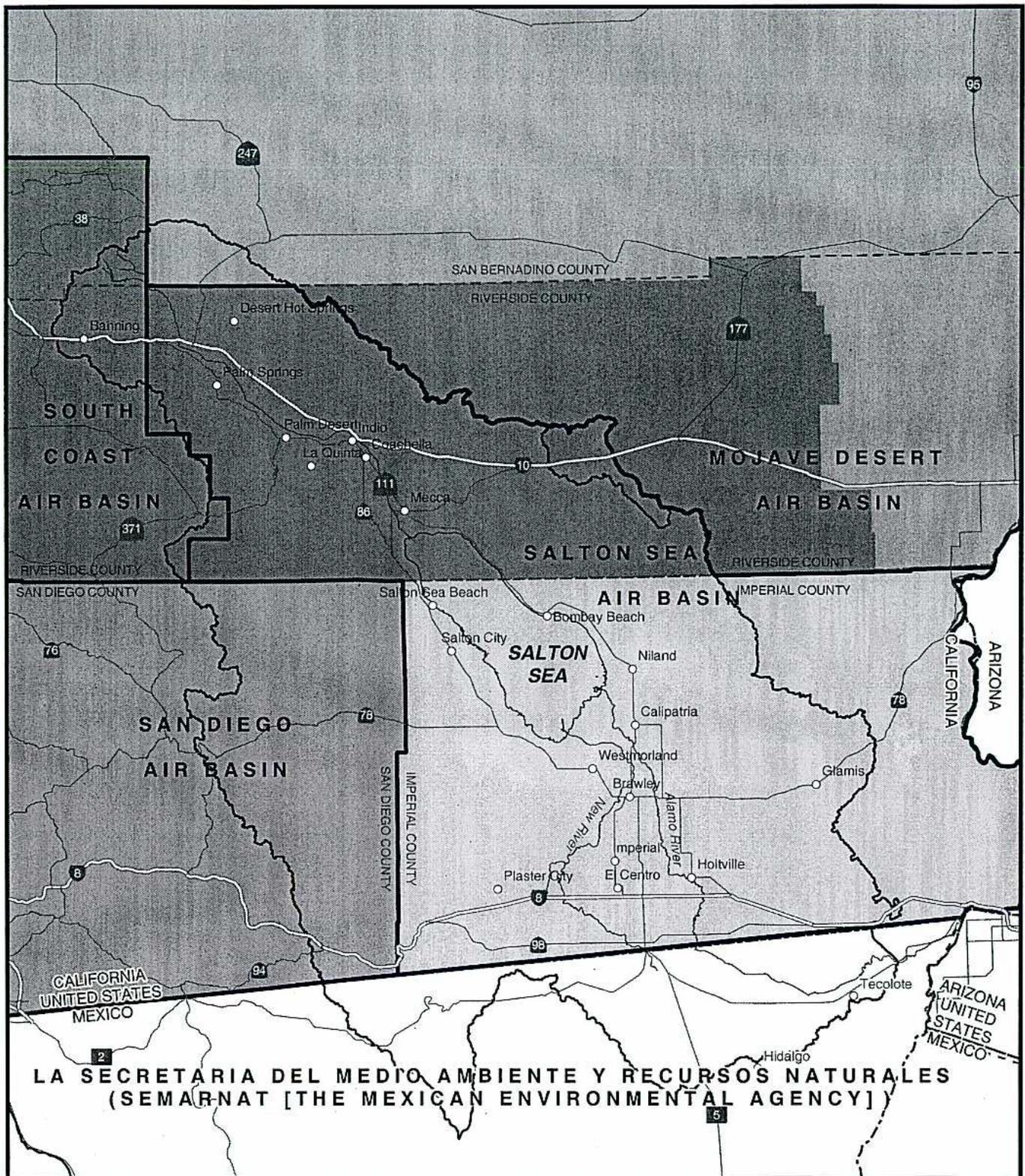
LA SECRETARIA DEL MEDIO AMBIENTE Y RECURSOS NATURALES
(SEMARNAT [THE MEXICAN ENVIRONMENTAL AGENCY])

LEGEND

Air Districts	Salton Sea
Imperial County APCD	Salton Sea Watershed
Mojave Desert AQMD	Towns and Cities
San Diego APCD	County Boundary
South Coast AQMD	Interstate Highway
Air Basin Boundary	Regional Highway
National and State Park Service Boundaries	

0 20
Miles

FIGURE 2
RECOMMENDED PEIR 10-METER
METEOROLOGICAL STATIONS
AND EXISTING 10-METER STATIONS
SALTON SEA ECOSYSTEM MANAGEMENT PLAN



LA SECRETARIA DEL MEDIO AMBIENTE Y RECURSOS NATURALES
 (SEMARNAT [THE MEXICAN ENVIRONMENTAL AGENCY])

LEGEND

Air Districts

- Imperial County APCD
- Mojave Desert AQMD
- San Diego APCD
- South Coast AQMD
- Air Basin Boundary

- Salton Sea
- Salton Sea Watershed
- Towns and Cities
- County Boundary
- Interstate Highway
- Regional Highway

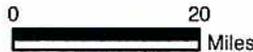


FIGURE XX
AIR BASIN BOUNDARIES AND
REGULATORY AGENCY
JURISDICTIONS IN THE
SALTON SEA AREA
 SALTON SEA RESTORATION STUDY