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COVER PHOTO—Shuzo Yoshihara

PHOTOS COURTESY OF—Dr. Milt Friend, Dr. Tim Krantz, Ted Schade, Shuzo Yoshihara, Bob Sporrang, Coachella Valley Historical Society, Salton Sea National Wildlife Refuge, Salton Sea State Park

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SALTON SEA

California's Everglades



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THE SALTON SEA may be likened to California's "Everglades." As a birdwatcher, this is the only place in California where one can see such variety and abundance of herons, egrets, ibises and woodstorks—species also characterizing Florida's Everglades, but the Salton Sea offers even greater species diversity! More than two thirds of all species of birds in the continental United States have been recorded here! With the loss of over 90% of wetlands in the state, the Salton Sea is a critical stopover for millions of migrating birds. For many species, sustaining the Sea is a matter of life or death. The Sea supports 45 % of the entire U.S. population of the threatened Yuma clapper rail, 80% of the American white pelican, and 90% of the continental population of the eared grebe. With an estimated standing crop of over 200 million fish, the Salton Sea also supports one of the most productive sport fisheries in the world, and is renowned for its unrivaled catch rates.

California's largest lake at 367 square miles, the Salton Sea is located in southeastern California just 30 miles north of the U.S.-Mexico border. The Salton Sea offers many recreational opportunities including fishing, bird watching, boating, skiing, camping, hiking, and photography. These resources are imminently threatened by rising salinity, excessive nutrient run-off from agriculture, and proposed water transfers. Economic solutions exist for controlling salinity and nutrient loading, but these alternatives will not work if inflows to the Sea are greatly reduced. Among the immediate concerns, rising salinity, if continued unchecked, will ultimately make the Sea unable to support its fishery and, therefore, fish-eating birds. Without a plentiful food supply at the Salton Sea, many species such as eared grebes may not be able to make their return migrations across the desert. In the context of massive habitat loss elsewhere, and the continuing escalation in demand for water resources, the future of the Salton Sea is of vital importance for both wildlife and growing human populations.

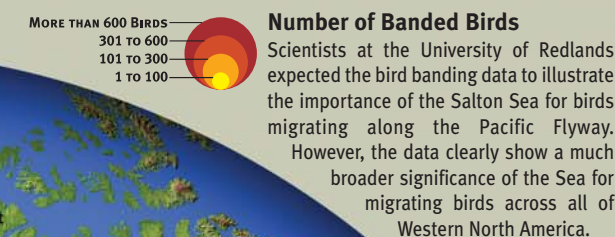


More than 400 species of birds found at the Sea

The Sea supports millions of birds during migration—two-thirds of all species in continental United States

SALTON SEA INTERNATIONAL AVIAN AIRPORT

The data on the globe represents 20,000 leg bands of birds banded at the sea and recovered across North and South America. Many birds apparently migrate to breeding grounds on the northern Great Plains, then fly to the Gulf of Mexico or back during the next season. Waterfowl and snow geese fly to the North Slope and Arctic Islands—with 85 recoveries from Nunavut in northern Canada, 175 bands from Alaska, and 22 from northern Russia! Thirty bands were returned from Mexico and Central America, one from Peru, five from the Caribbean, and three from wayward birds in Hawaii!



ANCIENT GULF AND LAKE CAHUILLA

The Lower Colorado River has changed its course many times in the past. Mud and sand cut from the Grand Canyon over several million years filled the lower reaches of the Colorado River. At the end of its journey to the Gulf of California, the river fanned out and deposited sediment, building a massive delta. Continued sediment deposits established a natural dam—or berm—across the Gulf, isolating the arm of the sea to the north as a new lake, ancient Lake Cahuilla. The isolated lake took more than 50 years to evaporate in the arid desert climate, leaving a barren depression 278 feet below sea level—the Salton Basin. For several million years, the Colorado River changed course, driven by sediment deposits and periodic floods, sometimes flowing south to the Gulf, and sometimes to the north, filling the Salton Basin to its brim before spilling back to the Gulf of California forty miles south of the border in Mexico.

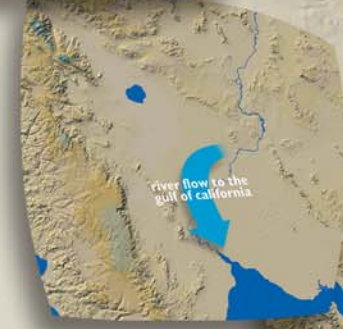
The Ancient Gulf
Millions of years ago, the Gulf of California extended past present day Indio.



Formation of the Delta
The waters of the Colorado slowed as it entered the Gulf, depositing millions of tons of sediment collected during its journey, creating a massive delta.



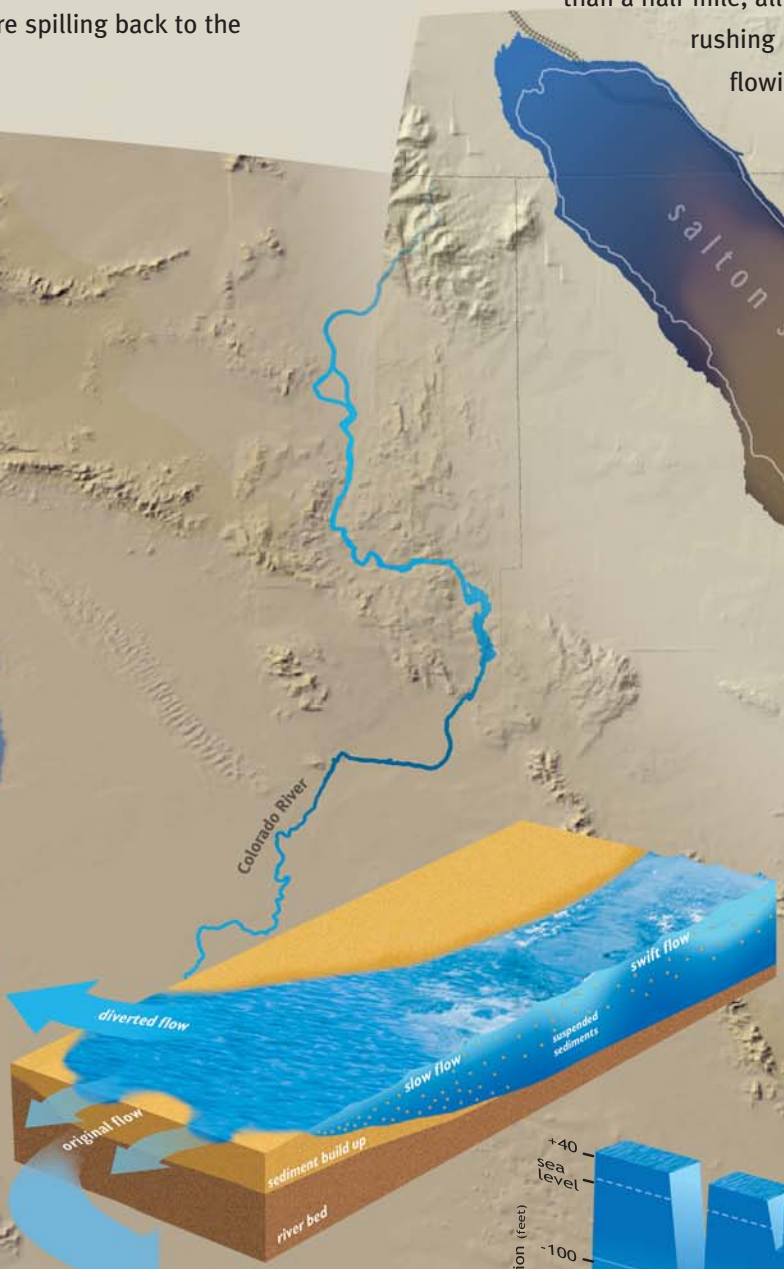
Gulf Flow
Now separated from the Gulf, the fickle flows of the Colorado River occasionally drained directly into the Gulf, drying the Salton Basin.



Periodic Inundation
Depending on sediment deposits and flooding, the river would change course, filling the basin to the north.



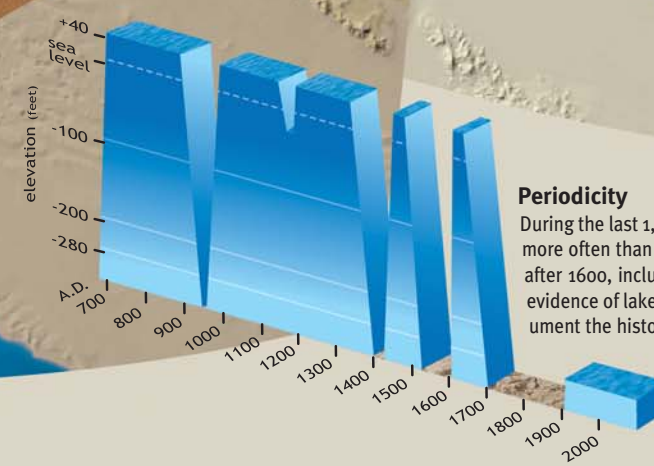
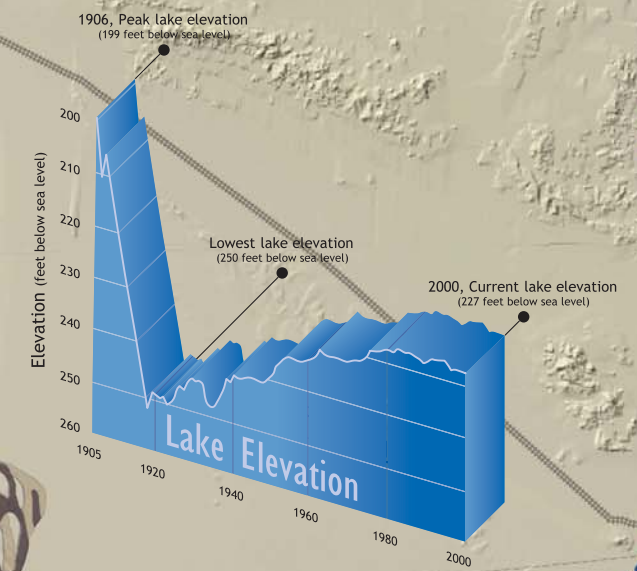
Over Flow
At times, the river would flow to the Gulf via the Salton Basin. This occurred when the lake filled to the height of the deltaic berm, overflowing into the Gulf.



FORMATION OF THE SALTON SEA

In the first few years of the 1900s, the Imperial Valley blossomed into fertile farmland courtesy of the Colorado River. But the Colorado proved a fickle benefactor, first filling the main canal feeding the valley with silt, then breaking through a new channel constructed to relieve the shortage. The flood of 1905 widened the channel to more than a half-mile, all that was necessary for the entire Colorado River to come rushing through, spreading over an area ten miles wide before flowing down into the basin and forming the Salton Sea. The floods in June of 1906 poured so much water into the basin that the Salton Sea rose as much as seven inches a day, covering upwards of 400 square miles. The breach was finally filled in 1907. Far from being an “accidental lake,” it was human intervention that prevented the next stand of Lake Cahuilla. Today, agricultural runoff largely maintains the Sea.

“Far from being an ‘accidental lake,’ it was human intervention...”

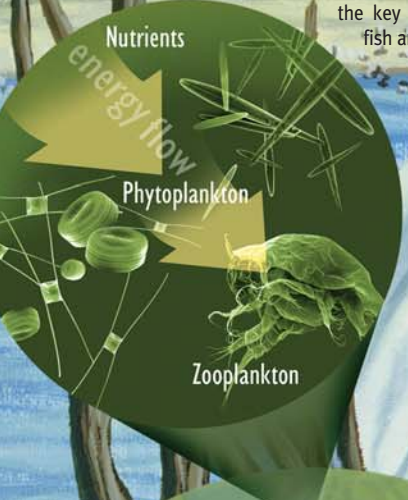


Periodicity
During the last 1,300 years, water filled the Salton Basin more often than not. A number of smaller lakes existed after 1600, including nine during the 1800's. Shoreline evidence of lake deposits and archaeological sites document the history of Lake Cahuilla.

THE NUTRIENT-RICH agricultural drainage that sustains the Salton Sea also supports an incredible diversity of life. More than 400 species of invertebrates, mostly plankton, have been identified in the Sea. These provide the food base supporting the Sea's productive fishery—with an estimated 200 million fish, one of the most productive fisheries in the world. The fish, in turn, are consumed by fish-eating birds. The Salton Sea supports over 80% of American white pelicans, the only North American inland breeding site for brown pelicans, and more than 90% of the North American population of eared grebes. From the subtropical climate of the Sea itself to the alpine summits of Mt. San Geronio and Mt. San Jacinto, the diversity of topography and life zones, together with a diversity of wetland habitats, conspire to make the Salton Sea one of the most diverse bird hot spots in the world. With more than 400 species—two-thirds of all birds in the continental United States, the Salton Sea supports one of the richest avifaunas in the world.

Critters

The Salton Sea is teeming with life. Plankton are plentiful and surprisingly diverse as well. Researchers have identified more than 400 species of microorganisms in the Salton Sea, several of them new to science. These microorganisms are eaten by tiny brine shrimp and in turn are eaten by pileworms, the key food source for fish and birds.



Fish

Diverse aquatic habitats at the Salton Sea support a thriving fish population. Carp and catfish use freshwater areas of the New and Alamo Rivers. Shoreline areas are important habitat for spawning tilapia and desert pupfish. The open waters provide habitat for tilapia, croaker, sargo, and orange-mouth corvina. Fishermen frequently catch corvina weighing over 20 pounds, and a day with over 100 tilapia is not unusual.

A Keystone Species: Pileworms

A keystone species, if removed from the ecosystem, would result in the collapse of many other species. The pileworm is the keystone species in the Salton Sea ecosystem, providing the critical link between the organic material that settles on the sea floor and the higher organisms, such as fish and birds.

Pupfish—Desert Survivors

The desert pupfish is the only native fish in the Sea. Thriving during Lake Cahuilla episodes, it retreated up slow-moving creeks in the Salton Basin during dry periods. Today the pupfish occur in shoreline pools and in the agricultural drains. They were listed as an endangered species in 1980 (State) and 1986 (Federal).

Agricultural Fields

Unfarmed fields, harvested and flooded fields provide habitat for numerous wintering birds, from northern harriers and short-eared owls to western meadowlarks. As many as 30,000 snow geese carpet the fields during winter months.

Subtropical Birds

Braving the summer heat, the Salton Sea is renowned among birdwatchers and ornithologists for its unusual subtropical species, such as magnificent frigatebirds, blue-footed boobies, yellow-footed gulls, and wood storks.

Mullet Island

Mullet Island provides refuge for thousands of ground-nesting birds. Separated from the shore by only seven feet of water, the island would be bridged to the mainland with only modest reductions of inflow to the Sea, exposing the nesting site to predators, such as cats and coyotes.

Shoreline Habitats

The shoreline varies from mudflats to barnacle beaches. Breakwaters, jetties, marinas, pilings, and embankments provide roosts and forage sites for pelicans, shorebirds, gulls, and terns, and nest sites for tern colonies. Hundreds of thousands of shorebirds of 44 different species use the Sea during migration.



IN THE 20TH CENTURY, life at the Salton Sea saw many changes. A booming agricultural industry, supported by Colorado River water and a transcontinental railhead, transformed the barren desert. The ancient lake, once a bountiful resource for the native peoples, was reborn as the Salton Sea, created by natural disaster and sustained by irrigation runoff. Today, the Sea is still a bountiful oasis, supporting a diverse ecology and one of the most productive fisheries in the world.

“...the Sea is still a bountiful oasis...”



AGRICULTURE

Winter Breadbasket of the United States

Today, Imperial Valley’s agricultural lands include over 572,286 acres; farmland in Coachella Valley covers about 56,600 acres. Control of the Colorado River and construction of the All-American and Coachella Canals made expansion of agricultural land possible, creating a billion-dollar industry in the Basin. A frost-free climate with temperate seasons and dry summers allows for year-round crops, making the Valleys farmlands some of the most productive in the world. While most farming in the Midwestern corn belt of the United States comes to a halt during the winter, the Salton Basin continues to supply the nation with plentiful fruits and vegetables.



Corn Fields
Mild winter temperatures allow four-season crop production.



RECREATIONAL HOT SPOT

The Salton Sea is within a 90-minute drive of 20 million people in Southern and Baja California. In the past four years, visitation at the Salton Sea has increased to an average of 250,000 a year. New fishing jetties, a boat launch, harbor facilities, upgraded campgrounds, day use areas, more parking lots, expanded trails and visitor centers are planned. State Park visitor centers offer educational seminars, interpretive programs, kayak, and jet boat trips. The Sonny Bono National Wildlife Refuge offers another visitor center, trails, and some of the best birding opportunities at the Sea. Several private and public facilities are available for waterfowl hunting, including managed wetland habitats.

Recreational Facilities

The North Shore Yacht Club and other resorts were a popular get away for many famous guests, such as Frank Sinatra and Sonny Bono.



Salton Sea Santa

The "Santa Ski-In" was started by Helen Burns, a property owner at Salton Sea Beach, about 1960. Floyd Hollenger, seen here as 'Santa', has been entertaining children at the sea for over 20 years.



Geese
Agricultural fields provide habitat for geese, mountain plovers, white-faced ibis, and many other birds.



Birdwatching

Bird watching is an increasingly popular "sport" around the Sea, attracting thousands of visitors each year.



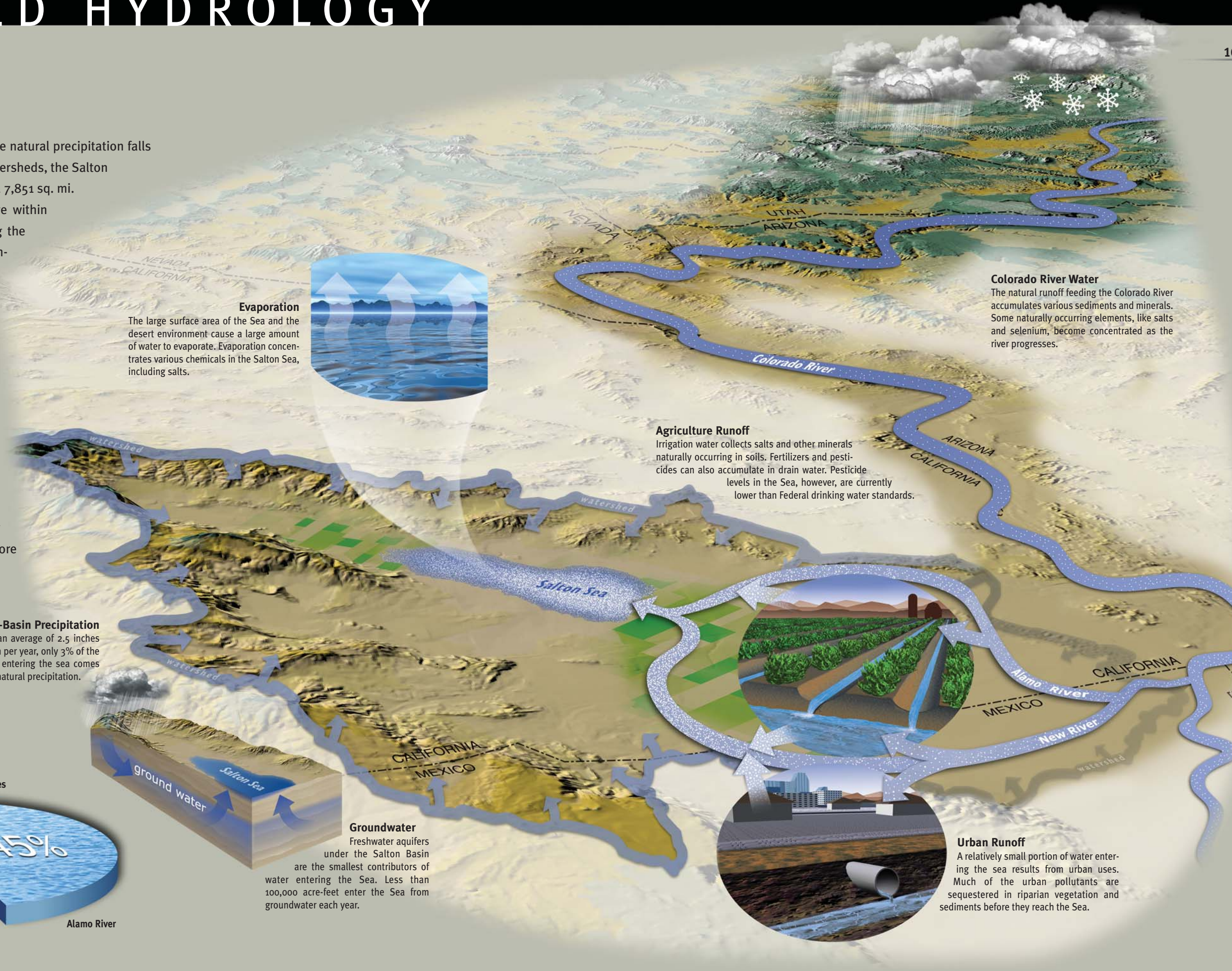
Boating

Because its salt content causes vessels to be more buoyant, boating on the Sea is known as the fastest in the nation—hosting many water speed records.



SALTON BASIN HYDROLOGY

All water bodies have a watershed—the area where natural precipitation falls before flowing to the lake or river. Unlike many watersheds, the Salton Basin has no outlet. The Sea lies at the bottom of a 7,851 sq. mi. (20,333 sq. km) watershed collecting all drainage within this closed basin. Over 90% of all water entering the Sea results from agricultural runoff, with the remaining coming from natural precipitation, ground water, or urban use. Once diverted to the Salton Basin, urban and agricultural practices concentrate salts and minerals already in the Colorado River water. Agriculture and urban uses in the watershed also add more nutrients, salts, and chemicals. Several million tons of salt are added to the Salton Sea every year. An enormous amount of water 1.36 million acre-feet, over 15% of the total volume of the Sea evaporates each year, leaving behind millions of tons of salts, minerals, and nutrients. Salinity has increased from the very low levels found in the Colorado River to 25% more than ocean water.



Evaporation

The large surface area of the Sea and the desert environment cause a large amount of water to evaporate. Evaporation concentrates various chemicals in the Salton Sea, including salts.



Colorado River Water

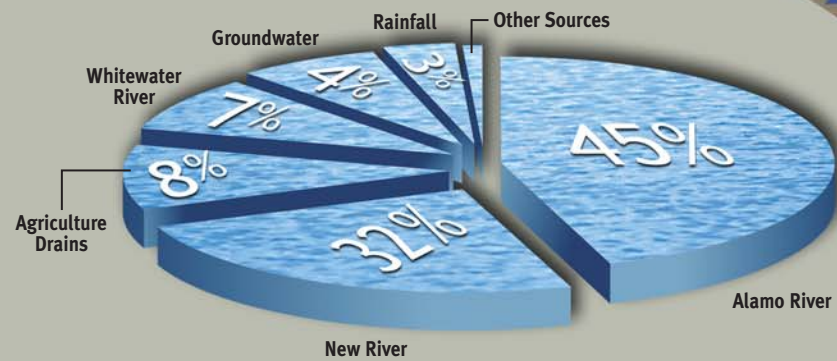
The natural runoff feeding the Colorado River accumulates various sediments and minerals. Some naturally occurring elements, like salts and selenium, become concentrated as the river progresses.

Agriculture Runoff

Irrigation water collects salts and other minerals naturally occurring in soils. Fertilizers and pesticides can also accumulate in drain water. Pesticide levels in the Sea, however, are currently lower than Federal drinking water standards.

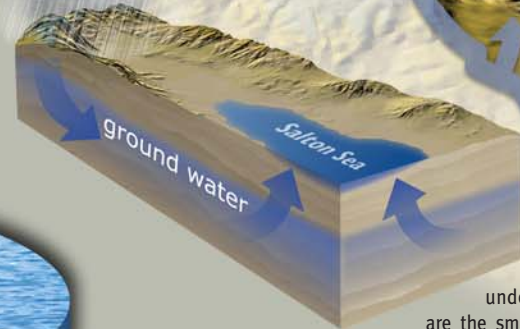
In-Basin Precipitation

With an average of 2.5 inches of rain per year, only 3% of the water entering the sea comes from natural precipitation.



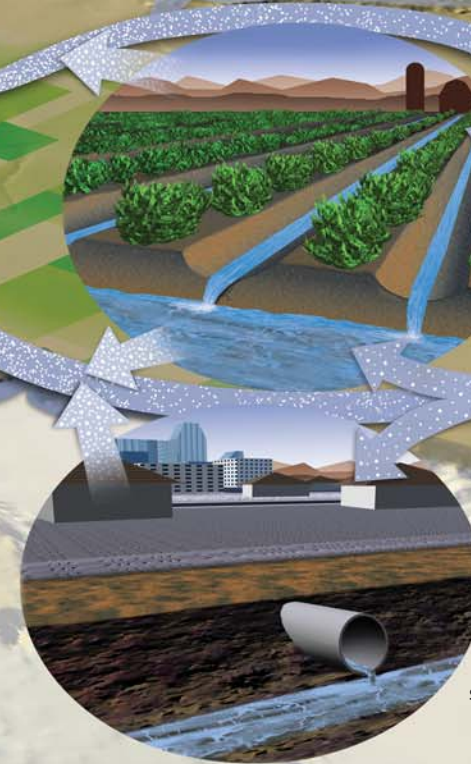
Groundwater

Freshwater aquifers under the Salton Basin are the smallest contributors of water entering the Sea. Less than 100,000 acre-feet enter the Sea from groundwater each year.



Urban Runoff

A relatively small portion of water entering the sea results from urban uses. Much of the urban pollutants are sequestered in riparian vegetation and sediments before they reach the Sea.



PROPOSED WATER transfers from the Imperial Irrigation District (IID) to San Diego may result in reductions of inflow to the Salton Sea. Presently, the proposed water transfer, together with other actions listed below, may result in reductions of inflow by as much as 500,000 acre-feet of water from the 1.36 million acre-feet (maf) that sustain the Sea today. The Salton Sea Database Program modeled these reductions and their resulting drawdowns using bathymetric data from the U.S. Bureau of Reclamation and inflow data from the IID. The results of reduced inflows from the transfer (300 kaf (thousand acre-feet)) and the cumulative reduction of 500 kaf from all causes were modeled.

Potential Causes of Reduced Inflow

Transfers (300 kaf)

Proposed transfer of agricultural water from Imperial Valley to San Diego and other urban use.

Mexicali wastewater reclamation (65 kaf)

Mexicali may build a treatment plant and reclaim some of their water.

Salinity control (110 kaf)

Salinity control measures, such as evaporation ponds, will take water from the sea.

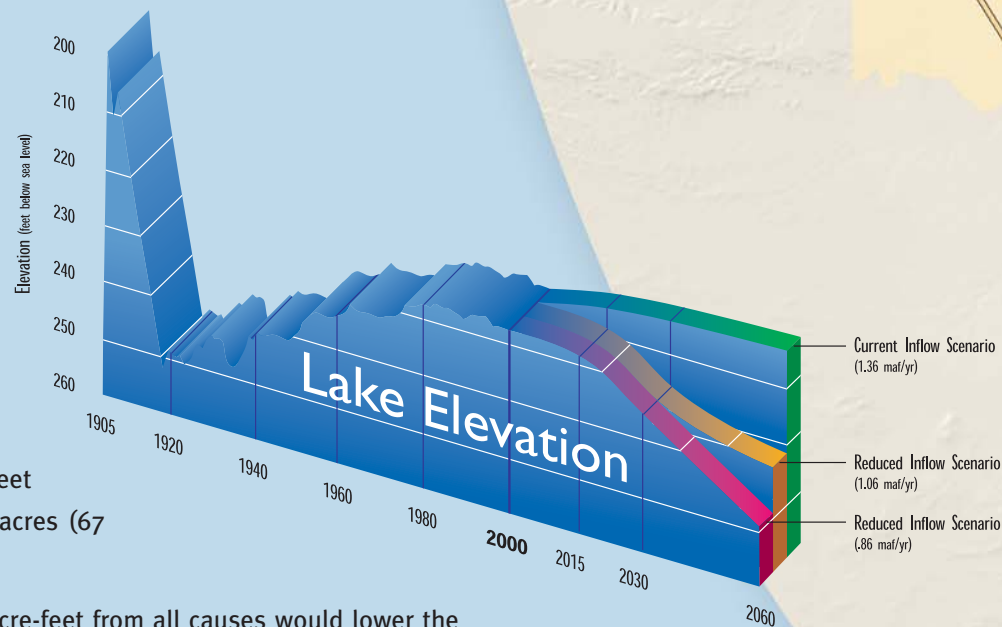
Canal lining (20 kaf)

Lining of Coachella and All-American canals will conserve water but reduce the amount going into ground water.

The Salton Sea With Reduced Inflows

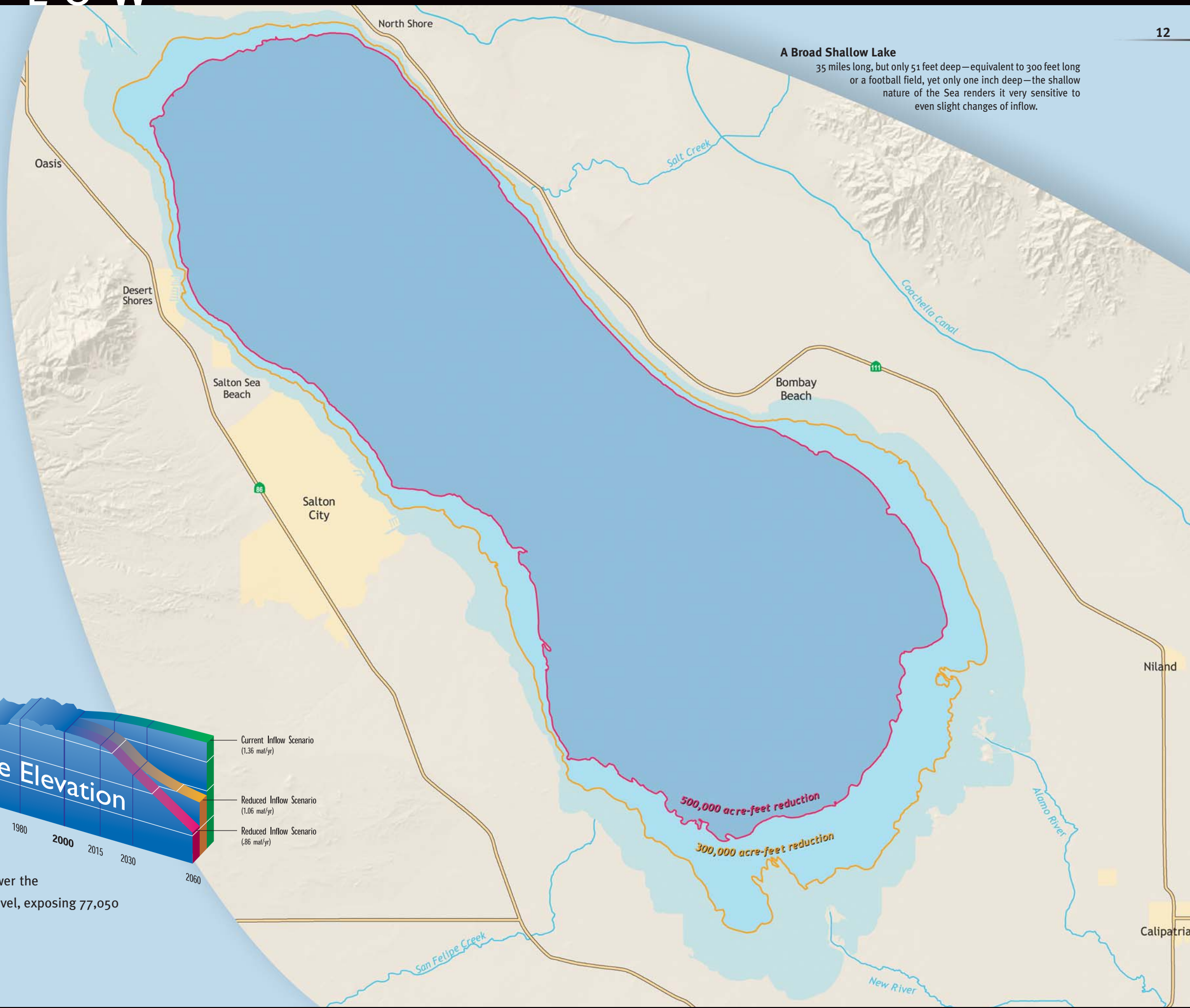
A reduction of inflow by 300,000 acre-feet as a result of proposed water transfers would lower the lake by 16 feet to 243 feet below sea level, exposing 42,633 acres (67 square miles) of land.

A reduction of inflow by 500,000 acre-feet from all causes would lower the lake by 26 feet (more than half of total depth) to 253 feet below sea level, exposing 77,050 acres (120 square miles) of land.



A Broad Shallow Lake

35 miles long, but only 51 feet deep—equivalent to 300 feet long or a football field, yet only one inch deep—the shallow nature of the Sea renders it very sensitive to even slight changes of inflow.



REDUCED INFLOW CAUSES RAPID INCREASE IN SALINITY

The contracting lake concentrates a century of collected salt already in the Sea, while more salts continue to enter the Sea through agricultural run-off.

Fish Health

Fish tolerances for salinity, temperature, and oxygen depletion vary greatly. The fish species living in the Sea are all adapted to high salinity, but no one knows what the limits of salt tolerance may be for any particular species. Salt is not a significant factor in the fish kills occurring at the Sea today - which result from other environmental stresses.

Fishery Collapse

Fish kills at the Sea today are the result of eutrophication—too many nutrients cause algae blooms, and when the algae decomposes, together with high summer temperatures, the dissolved oxygen in the water plummets. Fish actually suffocate for lack of oxygen, not from pollution. The prospect of two hundred million fish dying within a few years from salinity toxicosis would make these events today pale in comparison.



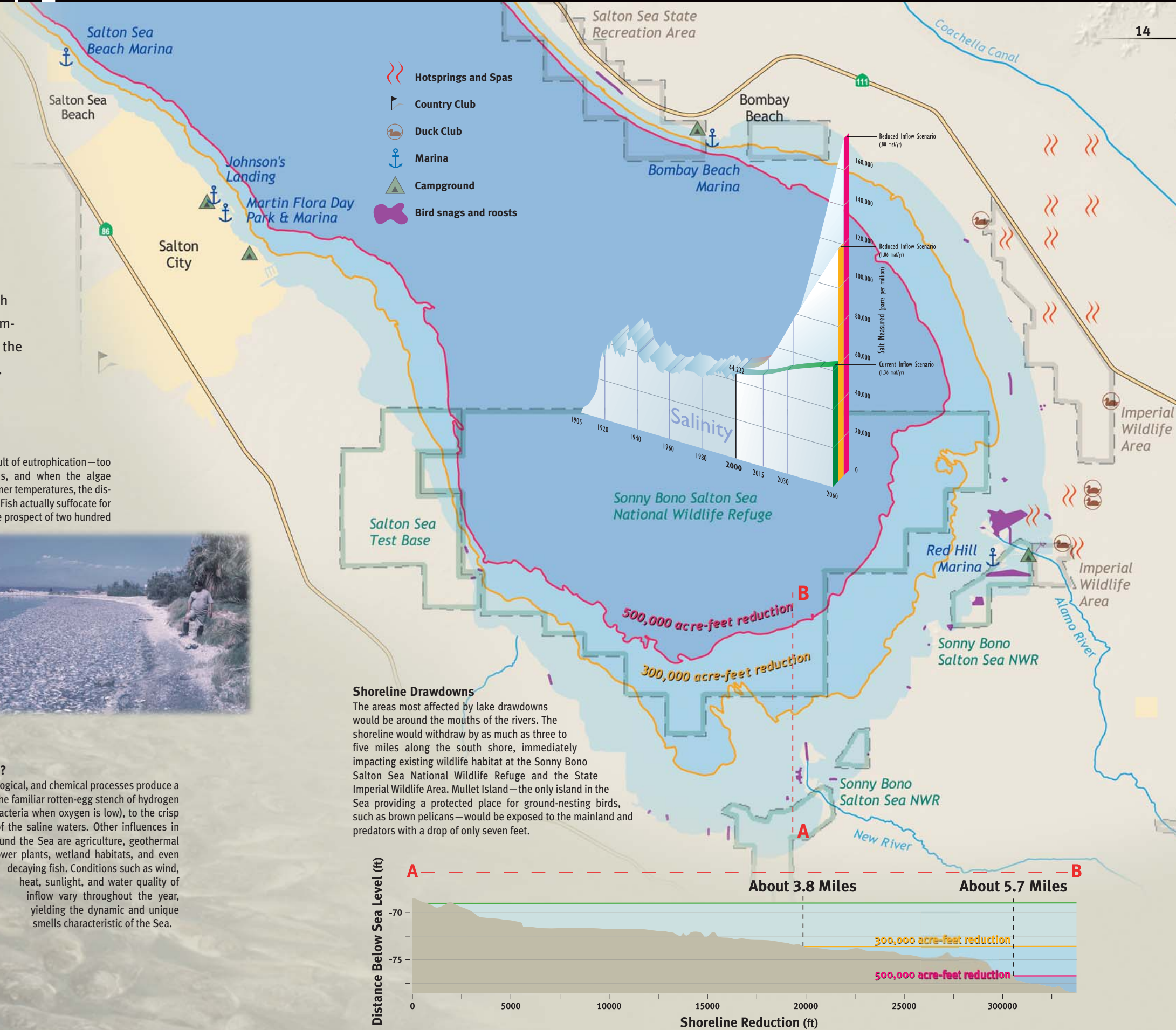
Disaster for Birds

The loss of the fishery would spell disaster for many populations of fish-eating birds. Unable to obtain sufficient food at their wintering grounds, many birds, such as eared grebes, white pelicans, and cormorants would perish.



What's That Smell?

Changing physical, biological, and chemical processes produce a variety of odors: from the familiar rotten-egg stench of hydrogen sulfide (produced by bacteria when oxygen is low), to the crisp sea-salt smell of the saline waters. Other influences in and around the Sea are agriculture, geothermal power plants, wetland habitats, and even decaying fish. Conditions such as wind, heat, sunlight, and water quality of inflow vary throughout the year, yielding the dynamic and unique smells characteristic of the Sea.



REDUCED LAKE ELEVATIONS AND A DEAD SEA WOULD IMPACT THE REGIONAL ECONOMY



Aral Sea
In central Asia, water transfers from the Aral Sea and its tributaries have created an environmental disaster that could be repeated at the Salton Sea.

Reduced Recreational Opportunities

Impacts on recreation-oriented businesses, such as boating, fishing, hunting and bird watching would be severe due to decline of facilities and loss of resources.

Water Transfers Mean Less Agriculture

For every gallon of water transferred out of the Salton Basin, there is less water available for

agriculture. Agricultural businesses can sustain themselves by conserving water through conversion to less water-consumptive crops, better on-farm water management, or fallowing; all of which mean less water flowing into the Sea.

Local Businesses Would Suffer

A Rose Institute study in 1999 estimated that a restored Sea would support a 6 billion dollar annual economy in the region. A dead Sea, however, would represent a 1.5 billion dollar loss to the region and to Southern California. The potential cost of 'environmental degradation, loss of habitat and bio-diversity, and decreases in the quality of life' is impossible to predict.



Agriculture Hazard
Prevailing winds are likely to deposit salt and sediments on prime agricultural lands in the Imperial Valley.



Barren Landscape
Much of the exposed lake bottom would remain as barren, saline mudflats, unable to support the current ecosystem.

Agriculture
Deposition of saline dust on croplands may reduce agricultural productivity.



Very fine lake bottom sediments may become windborne, creating dust storms, impairing air quality, and impacting human health

WHAT IS PM10?

Very fine suspended sediments settle on the bottom of lakes. These particles are so small that more than 200,000 could fit into the space of a cube of sugar. Called PM10, for Particulate Matter less than 10 microns (10 millionths of a meter), it is one of the major causes of air pollution.

Microscopic Particles Penetrate Deep Into Lungs

- Increase the number and severity of asthma attacks
- Cause nose bleeds, aggravate bronchitis and lead to other lung diseases
- Reduce body's ability to fight infections

Owen's Valley Dry Lake

Owen's Valley—A Worst Case Scenario

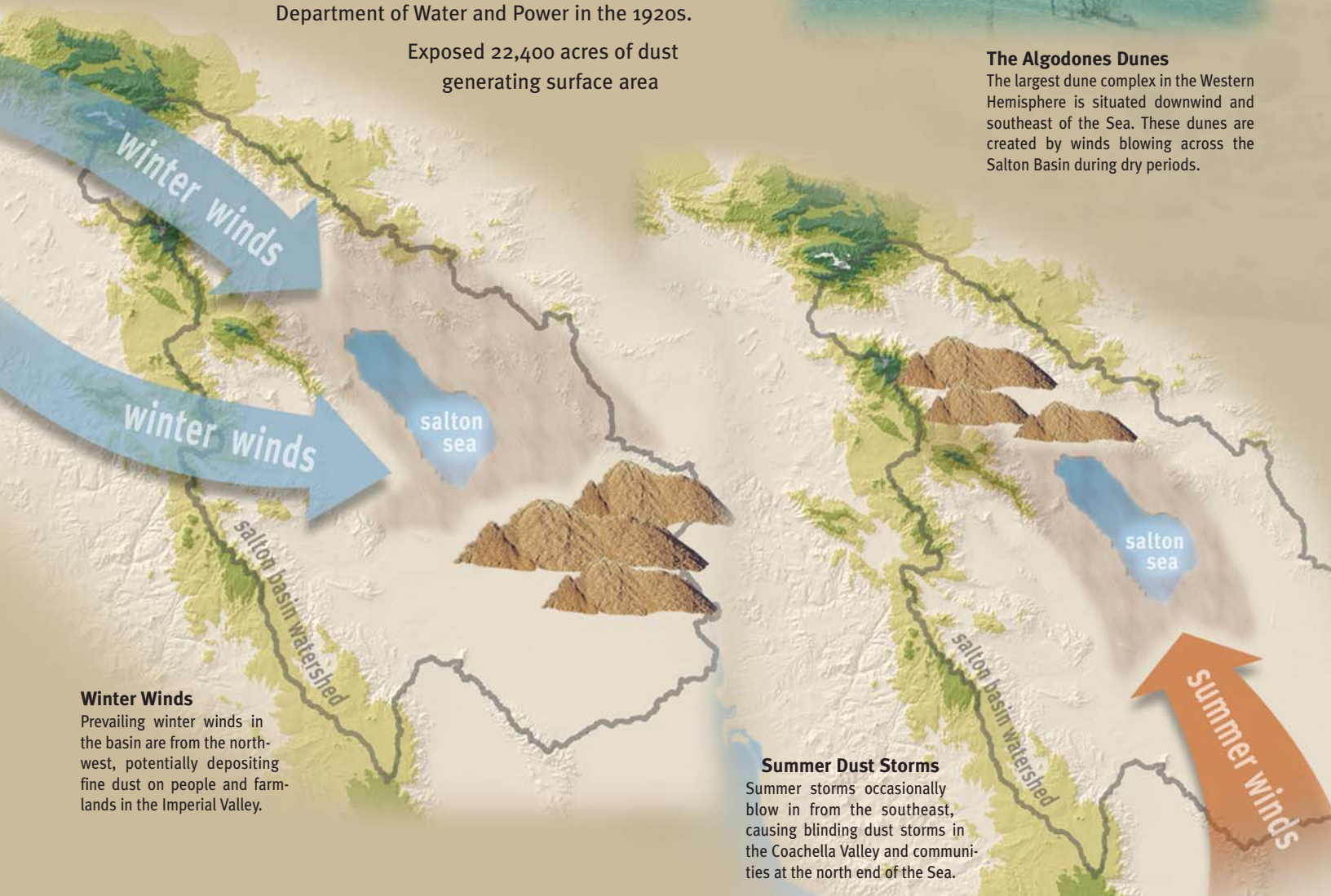
Situated in similar desert environment on the east side of Sierra Nevadas

Created by transfer of water from Owen's Lake by the L.A. Department of Water and Power in the 1920s.

Exposed 22,400 acres of dust generating surface area

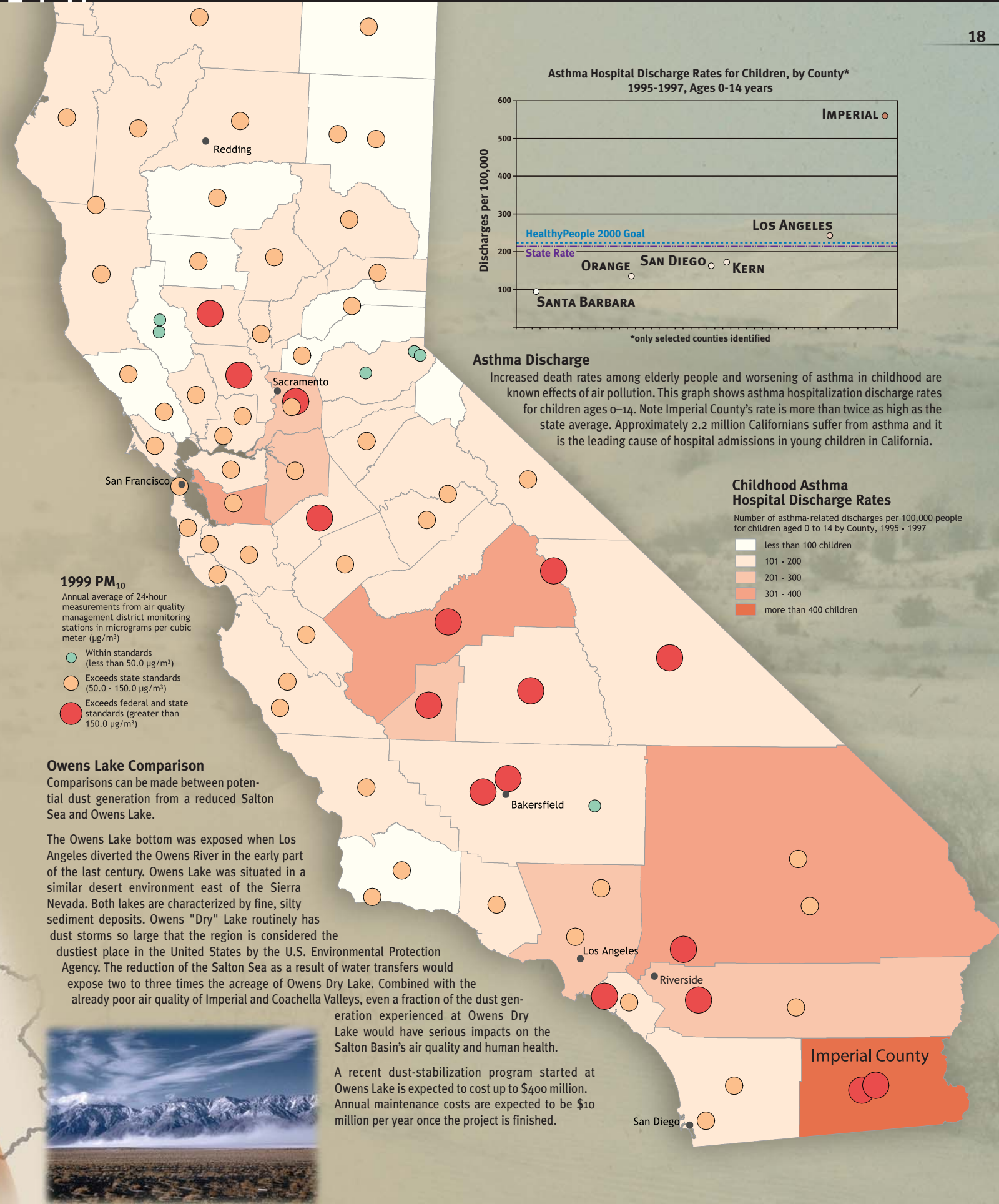


The Algodones Dunes
The largest dune complex in the Western Hemisphere is situated downwind and southeast of the Sea. These dunes are created by winds blowing across the Salton Basin during dry periods.



Winter Winds
Prevailing winter winds in the basin are from the northwest, potentially depositing fine dust on people and farmlands in the Imperial Valley.

Summer Dust Storms
Summer storms occasionally blow in from the southeast, causing blinding dust storms in the Coachella Valley and communities at the north end of the Sea.



Asthma Discharge
Increased death rates among elderly people and worsening of asthma in childhood are known effects of air pollution. This graph shows asthma hospitalization discharge rates for children ages 0–14. Note Imperial County's rate is more than twice as high as the state average. Approximately 2.2 million Californians suffer from asthma and it is the leading cause of hospital admissions in young children in California.

Owens Lake Comparison
Comparisons can be made between potential dust generation from a reduced Salton Sea and Owens Lake. The Owens Lake bottom was exposed when Los Angeles diverted the Owens River in the early part of the last century. Owens Lake was situated in a similar desert environment east of the Sierra Nevada. Both lakes are characterized by fine, silty sediment deposits. Owens "Dry" Lake routinely has dust storms so large that the region is considered the dustiest place in the United States by the U.S. Environmental Protection Agency. The reduction of the Salton Sea as a result of water transfers would expose two to three times the acreage of Owens Dry Lake. Combined with the already poor air quality of Imperial and Coachella Valleys, even a fraction of the dust generation experienced at Owens Dry Lake would have serious impacts on the Salton Basin's air quality and human health.



A recent dust-stabilization program started at Owens Lake is expected to cost up to \$400 million. Annual maintenance costs are expected to be \$10 million per year once the project is finished.

Childhood Asthma Hospital Discharge Rates
Number of asthma-related discharges per 100,000 people for children aged 0 to 14 by County, 1995 - 1997

THE GOALS OF THE RESTORATION PROJECT ARE TO

- Maintain the sea as a repository for agricultural drainage.
- Provide a safe environment for birds and endangered species.
- Restore recreational uses of the Sea.
- Maintain a viable sport fishery.
- Enhance the Sea to provide economic development.

PROPOSED ALTERNATIVES:

Solar Evaporation Ponds

People have been using solar evaporation ponds to concentrate salts since the dawn of civilization. Such ponds can be built in the Sea itself (displacing water and thereby allowing maintenance of higher lake elevations) or on land near the Sea.

Solar ponds function by removing concentrated salts from the Sea, relative to fresher inflows. Approximately 100,000 acre-feet of water must be moved to the ponds to remove the amount of salt that enters the sea each year.



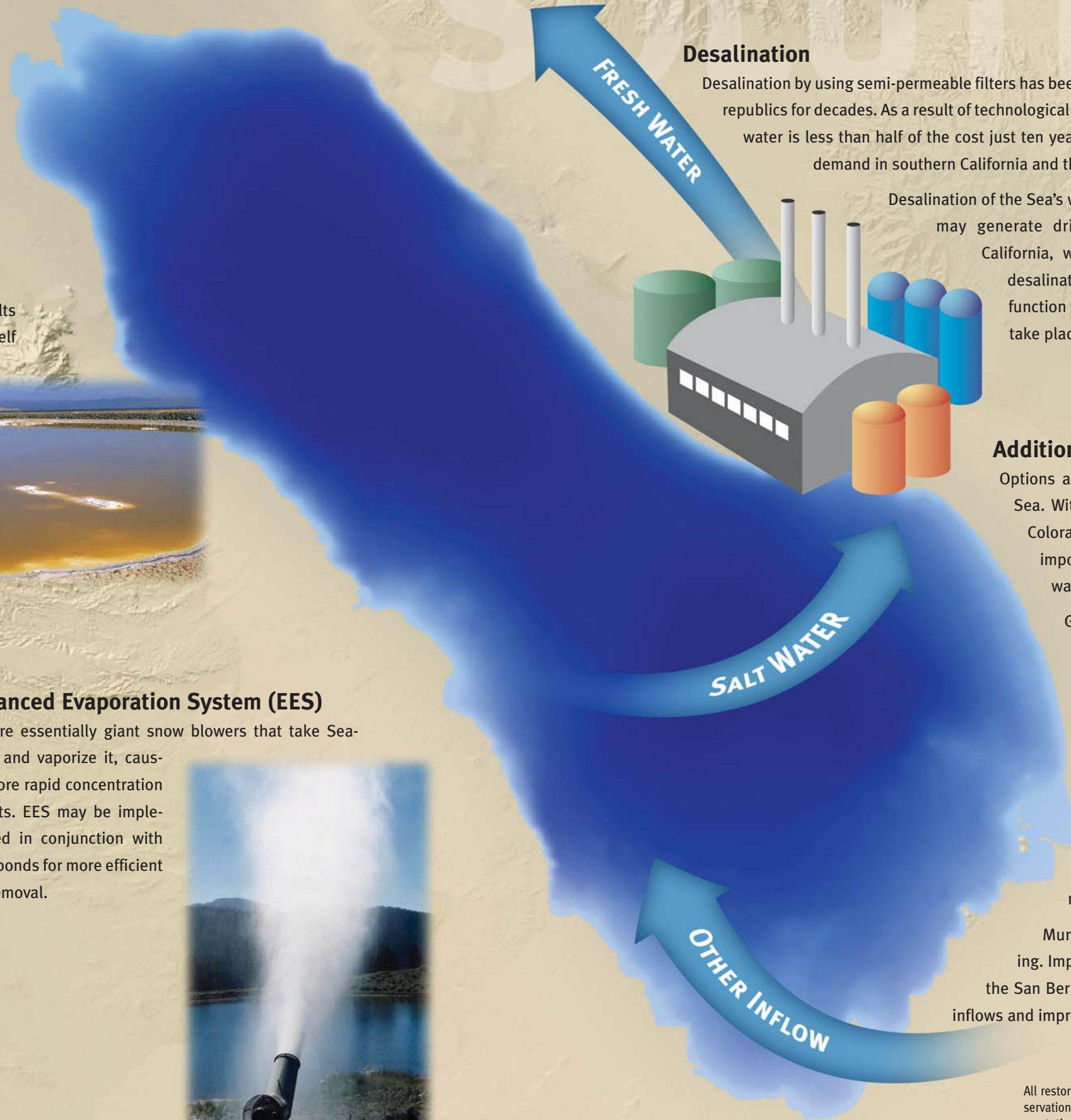
Paid Not to Farm

Farmers could be compensated for fallowing portions of their production acreage, allowing their allocation of water to go to the Sea. Fallowing could be rotated so as not to impact (or benefit) some farmers more than others.



Enhanced Evaporation System (EES)

EES are essentially giant snow blowers that take Sea-water and vaporize it, causing more rapid concentration of salts. EES may be implemented in conjunction with solar ponds for more efficient salt removal.



Desalination

Desalination by using semi-permeable filters has been used by Saudi Arabia and other Arab republics for decades. As a result of technological improvements, the cost of desalinated water is less than half of the cost just ten years ago, becoming cost competitive as demand in southern California and the Southwest increases.

Desalination of the Sea's water, in conjunction with solar ponds, may generate drinkable water for thirsty southern California, while rapidly removing salts. On-sea desalination may enable solar pond efforts to function more efficiently, even if water transfers take place.

Additional Inflows

Options are limited for providing additional inflows to the Sea. With California needing to reduce its draw from the Colorado River, only two other sources are available: import from the ocean, or import from municipal wastewater streams.

Gulf of California—importation of Gulf waters would require a 100-mile pipeline, and only a 40-foot lift, but would require complex negotiations with Mexico. Discharge back to the Gulf would be even more difficult because of environmental sensitivities in the Upper Gulf, and the possibility of exportation of exotic species.

Pacific Ocean—importation from the open Pacific would require a lift of several thousand feet. It might make more sense to simply desalinate on the coast in lieu of water transfers.

Municipal wastewater streams are much more promising. Importation of tertiary treated wastewater from Yuma, the San Bernardino Valley, or Coachella Valley would augment inflows and improve water quality in the Sea.

All restoration alternatives could and should be combined with statewide conservation efforts. Enormous water savings could be painlessly realized by implementation of simple end-user water conservation methods.

GOOD NEWS

The Salton Sea is not 'polluted'

- Water quality and sediment studies indicate that there are no pesticides in the Salton Sea
- Studies have shown that selenium is naturally sequestered at depths away from the Sea's life zone

Thriving fishery

Recent studies indicate that the Salton Sea's natural sport fishery may be one of the most productive in the world.

Bird Numbers Are Up

- Christmas bird counts conducted annually at the Sea since 1969 indicate that overall species diversity and numbers of birds are up!
- Numbers of pelicans, cormorants, and other fish-eating birds are up from only a few thousand in the '70s to tens of thousands in the '90s.

Agriculture

- Agriculture, ranging from cattle to cotton, fruits, vegetables, and alfalfa, is the most important industry in the Imperial and Coachella valleys that adjoin the Salton Sea.

- The agricultural industry of the Imperial and Coachella Valleys is nearly \$1.5 billion annually.

- Employment in agriculture is 15% in Imperial County and 5% in Riverside County. In the Salton Sea area itself, about one half of all jobs are tied directly to agriculture.

Salinity Control is Feasible

Pilot projects to remove salt from the Sea are being successfully demonstrated. Solar evaporation ponds have proven to be technologically and economically feasible if inflows remain stable at or near their present volumes.

"...overall species diversity and numbers of birds are up"

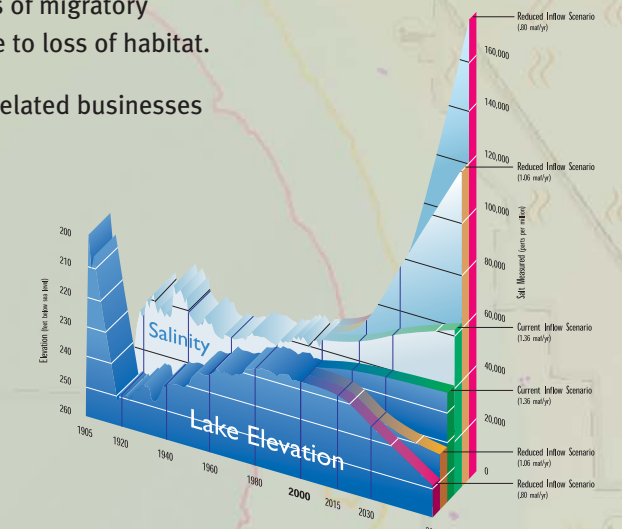
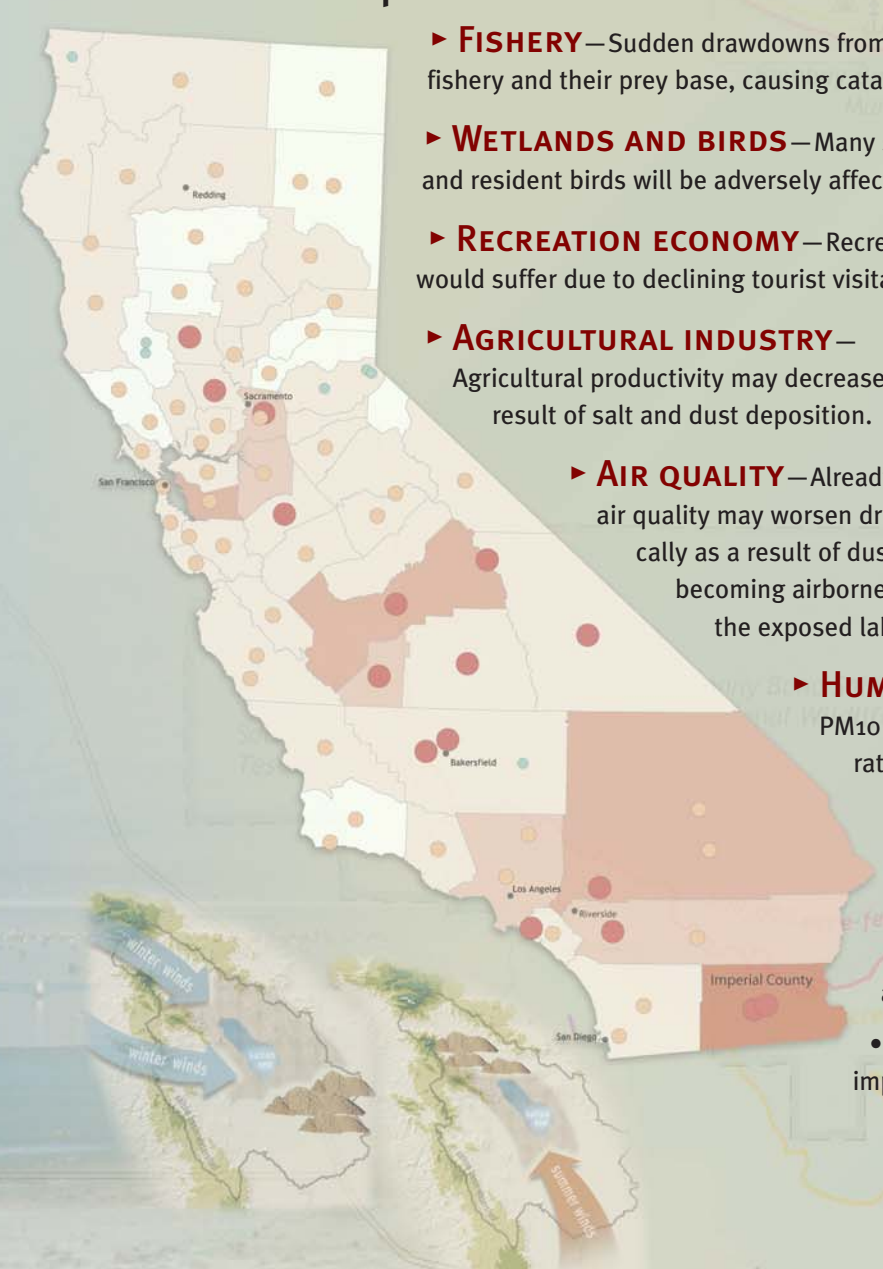
BAD NEWS

Inflow reductions to the Salton Sea will reduce the size of the lake, exposing 67 to 120 square miles of lake bottom sediment. Sediments will be exposed to desert winds, generating dust and reducing air quality.

Salinity will rise rapidly, as the contracting lake concentrates one hundred years of salt already in the Sea.

Reductions of Inflow Will Result in Significant Adverse Impacts to the Sea's Rich Resources

- ▶ **FISHERY**—Sudden drawdowns from water transfers may shock the fishery and their prey base, causing catastrophic ecological collapse.
- ▶ **WETLANDS AND BIRDS**—Many species of migratory and resident birds will be adversely affected due to loss of habitat.
- ▶ **RECREATION ECONOMY**—Recreation-related businesses would suffer due to declining tourist visitation.
- ▶ **AGRICULTURAL INDUSTRY**—Agricultural productivity may decrease as a result of salt and dust deposition.
- ▶ **AIR QUALITY**—Already poor air quality may worsen dramatically as a result of dust becoming airborne from the exposed lake bed.
- ▶ **HUMAN HEALTH**—Increased PM10 may result in higher incidence of respiratory disease.



Reduced Inflows May Render Salinity Controls Infeasible

- Cost estimates for solar evaporation ponds increase from \$500 million to \$1.5 billion, if salinity could be maintained at sub-lethal levels at all.
- Proposed water transfers may reduce the time needed for implementing salinity controls from 15-30 years, to 5-7 years.

