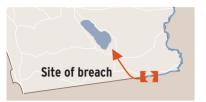
Focus | ENVIRONMENT SEA OF CHANGE

Dead fish at the Salton Sea in September 2014. The massive die-off of fish and shrinkage of the sea are major factors in creating terrible-smelling health hazards known as "big stinks."

FORMATION

The sea was formed when floodwater from the Colorado River broke through irrigation canals and flowed into the Salton Sink (-265 feet below sea level) for 16 months from 1905 to 1907.





Imperial County population, 2011: 174,529 Mexicali, Mexico, population, 2011: 996,826 Farming acres: 830 square miles

Lake Tahoe 22 miles long

12 miles wide

The vast majority of water going into the

fields that flows from the New River and

lake is from agricultural runoff full of fertilizer and chemicals from hundreds of

Alamo River on the south shore.

The 2003 Quantification Settlement

Agreement has kept current water levels

from rapidly destabilizing. But on Dec. 31,

2017, the water allowed to flow into the

As the salinity of the sea has increased,

three species of fish have died off. The sea

more than 400 species of birds in the area

is still filled with tilapia that some of the

feed on. The sea is a major stop for

sea will be siphoned off and used

otherwise.

Wildlife

migrating birds.

Salton Sea

35 miles long

15 miles wide

Size comparison



PHOTOS COURTESY OF THE SALTON SEA HISTORY MUSEUM



In the 1950s and '60s, the Salton Sea was a major tourist attraction with more visitors each year than Yosemite. Celebrities such as Frank Sinatra, pictured above, frequented the sea's marinas. The 35-milelong sea with high salinity became a favorite of boat racers, and many speedboat records were set in races.

The Salton Sea is the largest lake in California and could become one of the state's biggest environmental disasters.

By KURT SNIBBE/ STAFF

A bad situation is getting worse at the Salton Sea. The rapid shrinking of the lake exposes acres of dry, chemical-laden land that gets swept up in dust storms and is a health hazard that grows bigger by the day. Nearly 600,000 people are in close proximity to the lake, but wind has carried the stench from the sea as far as 150 miles to Los Angeles.

Just about everyone who lives near the sea – as well as state officials, academics, water districts and air quality managers – wants the situation resolved, but how much and at what cost has yet to be determined.

If a cleanup is launched now, conservative estimates for mitigating the potential health hazards to residents start at about \$4 billion over the next 20 years. The costs could be more than \$40 billion if things continue as they are, according to a

recent study by the Pacific Institute.

Tim Bradley, a professor at UC Irvine and director of the Salton Sea Ecological Initiative, said, "The Salton Sea is a huge public health threat for the state as well as an environmental threat."

A ticking time bomb

To make matters worse, the shrinking sea still has water flowing into it from the Colorado River – but not for long.

A water rights agreement from 2003 - the Quantification Settlement Agreement - will divert at least 40 percent of the water flowing into the sea to residents in San Diego, and the sea will decline faster.

Will El Niño help? "I think rain this winter will have little effect, and will certainly be outweighed by water diversions starting in 2017," Bradley said.

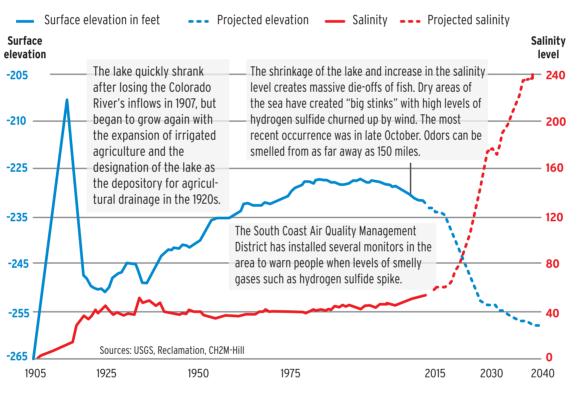
2015

2020

2030

RISE AND FALI

The sea has been steadily shrinking for 10 years and is expected to rapidly decline when inflow waters are diverted in 2017.



2017 7,184 2020 17,068 2027 44,232 2023 29,890 2030 50,797 Asthma Hospitalizations Ages 0-17 (rate per 10,000)

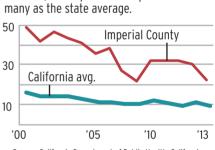
Dry acres

Imperial Irrigation

District projections

of exposed land

Overall, asthma hospitalizations have declined, but Imperial County has twice as many as the state average.



Source: California Department of Public Health; California Office of Statewide Health Planning and Development; Calfirnoa Department of Finance

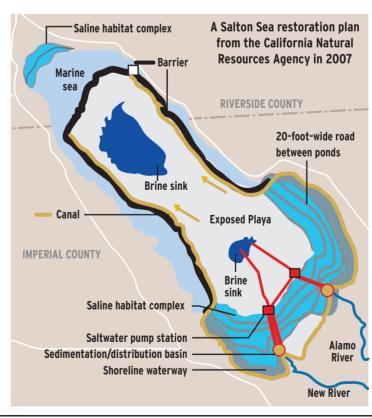
POSSIBLE SOLUTIONS

Small steps toward restoration

The Little Hoover Commission studied many plans offered over the years and recommended one from 2007, detailed on the right.

The proposal recommends using berms around the lake to create several types of pools for fish and wildlife, as well as restored recreational areas along the shoreline. One of the obstacles for establishing berms at the Salton Sea is that the terrain is too muddy for heavy equipment to traverse. Another option under review is the use of geotubes, but no official plans for their use are in place to date.

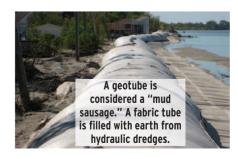
Sources: Tim Bradley, UCI; Salton Sea Ecosystem Restoration Program; Imperial Irrigation District; South Coast Air Quality Management District; Little Hoover Report 2015; U.S. Geological Survey



Why little has been done:

The Little Hoover Commission submitted a report to Gov. Jerry Brown in September. Among its findings: "The Quantification Settlement Agreement, signed after the recall election of Gov. Gray Davis but before Gov. Arnold Schwarzenegger was inaugurated, put California on the hook for a blank check for the Salton Sea by an administration that would never be held accountable for it. The result was inaction."

Bradley said, "The Salton Sea is in an isolated area with little political power, and the issue was ignored during the state's budget troubles in the last recession."



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