High Country News

FOR PEOPLE WHO CARE ABOUT THE WEST

Why keep the Salton Sea?

A history of the manmade — and now essential — inland ocean.

Patrick Stein | **Feb. 14, 2017** | *Web Exclusive*

In January, High Country News *hosted two students from Reed College to see the inner workings of a news magazine. Below is one of the stories they wrote about climate and water in California that will be running at hcn.org. Read the other story here (http://www.hcn.org/articles/the-land-of-rain).*

In 1905, an engineer gave California a lake. He didn't do it on purpose; the cuts he made in a canal a few miles into Mexico burst open, releasing the full force of a flooding Colorado River into the Imperial Valley. For two years it filled a pit known as the Salton Sink, in southeastern California, until the government managed to close the breach. At the time, observers expected the lake to dry up; but with the reestablishment of irrigation in Imperial County, the Salton Sink became the dump for agricultural runoff, which was just enough to replace what was lost to evaporation. Eventually it became clear that the water wasn't going anywhere, so the name was changed to the Salton Sea. People made their peace with the mistake, and started to plan their lives around their accidental sea, with its miles of fresh blue water, beautiful beaches and abundant fishing.

Today, that sea is saltier than the ocean. It's full of selenium, and periodically it blooms with algae that kills millions of fish. The U.S. Geological Survey describes the smell diplomatically as "unique." Beachfront villas are now rotting wrecks hundreds of feet from the shore. All of this has happened in just about 50 years , from the sea's heyday in the middle of the 20th century.In the past 15 years, the sea has lost thousands of acres of surface area. In another 50, it might be little more than a puddle.

The sea's demise stems from a 2003 deal known as the Quantification Standard Agreement, or QSA. This agreement, which takes full force on January 1, 2018, promises to send hundreds of thousands of acre-feet from Imperial County to San Diego, a balance which will be drawn from the agricultural runoff which sustains the Sea. When that day comes, the Salton Sea will start to shrink precipitously. By 2038, it will have lost 90 percent of its surface area and 40 percent of its volume. For many people in California, this doesn't seem so bad — after all, the Salton already has a reputation as a polluted eyesore. Why keep a sewer on life support when there are millions of people who need the water?

There are two key reasons to keep the Salton Sea from disappearing. The first is its newfound niche as a crucial link in the Pacific Flyway, the path taken by migrating birds from the Pacific Northwest to South America. In the 112 years since the Salton Sea was created, almost all of the wetlands in California have been destroyed. That means, for some species, the sea is the only stop left between San Francisco and the Colorado Delta. If it dries up, millions of birds could find themselves unable to make the migrations central to their lifecycles. Some of these birds, such as the brown pelican, are on the federal endangered species list, making it California's legal duty to preserve their habitats.

The other danger lies at the bottom of the sea, in the form of pollutants which have flowed into the sediment from Imperial irrigation runoff and Mexicali's degraded New River. Without the water keeping this sediment down, it threatens to blow up into storms of toxic dust, threatening the health of people in Imperial County and Baja California. Owens Lake, (http://www.hcn.org/issues/222/11102) in Inyo County, offers a grim precedent; after its waters were diverted to Los Angeles in 1913, it dried up completely, causing dust storms that elevated rates of asthma and heart attacks in east-central California into the 2000s.

By 2001, the water rights that fed the sea were under threat (http://www.hcn.org/issues/203/10516). The states of the Southwest forced California to scale back its use of water from the Colorado River, from which it had routinely drawn water in excess of 800,000 acre-feet per year over its allotment of 4.4 million. Most of that water was used for relatively inefficient agriculture in Imperial County, meaning that it was under special pressure to tighten its belt (http://www.hcn.org/blogs/issues/234/13367), and the 1.3 million acre-feet flowing to the economically useless Salton Sea seemed a promising source of water to send to the

thirsty cities of the coast. In 2003, the Imperial Irrigation District did just that (http://www.hcn.org/issues/261/14331), signing the Quantification Standard Agreement. Under the terms of this agreement, 200,000 acre-feet were to be sent to San Diego every year, paid for out of reductions in the agricultural runoff which feeds the Salton Sea. "Mitigation" water was to be reserved for the Sea to keep it from draining too quickly before 2018; after that, it was expected to go into free-fall.

Some of the consequences of the Sea's now-looming shrinkage came into focus: extinctions, hotter temperatures, clouds of toxic dust (http://www.hcn.org/articles/17071). By 2008, the sea had lost over a foot of depth and 3,500 acres of coverage. The effects of the earliest shrinking on the people living on the lakeshore, (http://www.hcn.org/issues/365/17542?b_start:int=2#body) many of whom still remember the Sea's brief time as the Imperial Riviera, started to come out. Government committees began to release comprehensive plans to rehabilitate the sea, not to stop the shrinkage, but to mitigate its worst effects on people and wildlife. For the most part these plans were extremely complex, prohibitively expensive, and backed by almost no one in power. To this day, none have been put in place, although pilot programs have been launched by the Torres-Martinez Cahuilla Tribe and by the Sonny Bono Salton Sea Wildlife Refuge.

With restoration efforts largely tabled, the last few years have seen increasing scrutiny of the water transfer itself. In 2013 there was a wave of interest in the Sea, as the Imperial Irrigation District's attempt to annul its obligations to San Diego was rejected in the courts (http://www.hcn.org/blogs/goat/massive-california-water-transfer-to-continue), while the South Nevada Water Authority attempted to sue the district (http://www.hcn.org/blogs/goat/colorado-river-drought-salton-sea) for using *any* water on the Salton Sea. It has become common to treat the sea itself as a lost cause; water transfers will "hasten the demise" of the water body, not kill it entirely. This is reflective of a larger change in the years since the QSA: rather than a purposeful draining of the Salton Sea, the changing water practices of Imperial County have made it doomed by default, and only intense human action can preserve what value remains. Accordingly, recent attention has tended to focus less on the threats of salinity and eutrophication to its suitability as a wildlife refuge, and more on whether the Sea will survive at all.

As the sea slowly morphs into a public health disaster, human voices crowd out the needs of animals. Even among the humans with a stake in the sea are divided amongst themselves: Imperial Valley farmers, coastal city-dwellers, the consumers across the country who demand that we use our water on lettuce rather than pelicans. The fact that cleanup of a devastated sea would likely cost far more than preserving it has proven insufficient in convincing anyone with the power to do so to deal with the issue sooner rather than later. This is what is most frustrating about the Salton Sea: even though the effects of its disappearance would be felt by millions, those effects are just far enough away, and just dispersed enough, that there is little hope that coordinated efforts to save it will ever come.

As we count down the days to 2018, when QSA goes into full effect, here's a timeline of the Salton Sea's complicated history.

Patrick Stein is a environmental studies-history student at Reed College.