

THE GLOBAL WATER CRISIS A SPECIAL REPORT 4TH ANNUAL ENVIRONMENTAL ISSUE

SEE THE WORLD IN A NEW WAY

blue

THE WATER ISSUE

TODAY, MORE THAN ONE BILLION PEOPLE ON EARTH LACK ACCESS TO FRESH DRINKING WATER. IF PRESENT CONSUMPTION PATTERNS CONTINUE, 2 OUT OF EVERY 3 PEOPLE ON EARTH WILL LIVE IN WATER-STRESSED CONDITIONS BY THE YEAR 2025.

> UNITED NATIONS

PLUS:

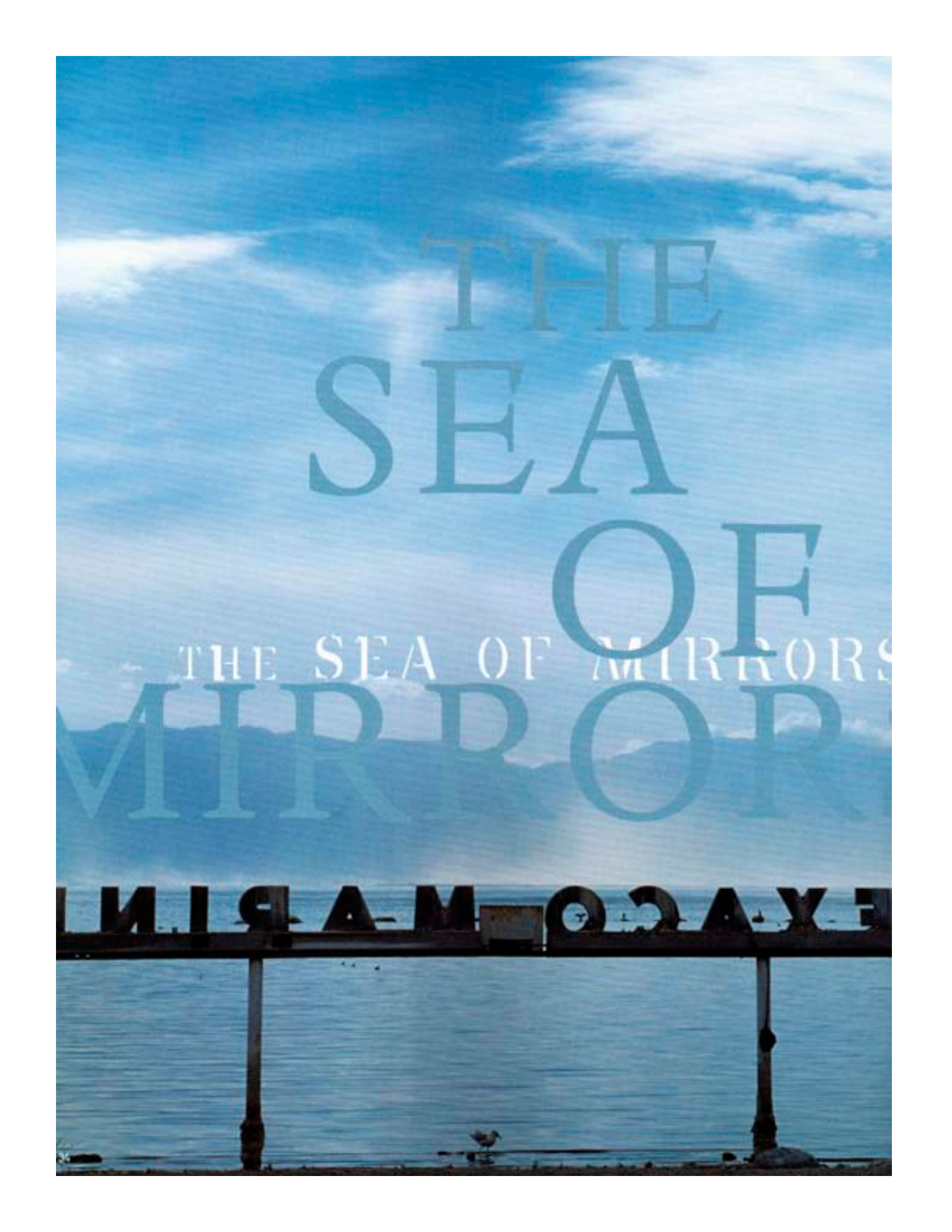
WHAT'S IN OUR TAP WATER AND HOW YOU CAN FILTER YOURS
4 ADVENTURE TRIPS YOU CAN TAKE TO HELP SAVE WATERS
RATINGS OF 9 WATER FILTERS + THE 5 BEST HYDRATION PACKS

[→ BLUE.CO](http://BLUE.CO)



3% OF THE REVENUES OF THIS ISSUE ARE DONATED TO WATER CONSERVATION EFFORTS THROUGH





THE
SEA
OF

THE SEA OF MIRRORS

MIRROR

WILIAMOCCAYE

MIRROR OF SEA THE

35

TEXT +
PHOTOGRAPHY
WILLIAM HENRY

WILDLIFE SANCTUARY OR TOXIC WASTE DUMP?

RÉFLECTIONS ON THE SALTON SEA—CALIFORNIA'S FORGOTTEN SEASIDE RESORT

THE SEA'S SURFACE IS LIKE A MIRROR. IT PERFECTLY REFLECTS THE PALE BLUE SKY ABOVE, AND CONTRASTS SHARPLY THE PARCHED, SANDY LANDSCAPE AROUND IT. HERE, IN THE MIDDLE OF ONE OF THE WORLD'S MOST HOSTILE DESERT ENVIRONMENTS, THE SEA SEEMS LIKE A MIRAGE, AND FOR ALL PRACTICAL PURPOSES IT SHOULD BE. AT 35 MILES LONG AND OVER 10 MILES WIDE, IT IS CALIFORNIA'S LARGEST INLAND BODY OF WATER. BUT ALL THIS WATER IN THE MIDDLE OF NOWHERE SEEMS WHOLLY UNNATURAL.

And it is. The Salton Sea wouldn't be here if it weren't for human beings' tendency to meddle with nature. The Sea was created by accident, and continues to exist because we have robbed one of the West's greatest rivers of its water, the Colorado. The Salton Sea is a living example of the consequences of large-scale water development, for it embodies many of the problems that we now face, after decades of damming our rivers and spreading our water thinly across the continents. The Salton Sea seems to remind us of our mistakes: we cannot continue to alter the natural world to our purposes without suffering dire consequences in the future.

Nearing the shore of the vast desert lake I drive along blanched and broken asphalt, passing a few abandoned motor homes, their faded facades peppered with shotgun fire. They stand like wounded sentinels, victims of target practice from errant hunters, mementos of a golden age that has long since faded and died. Across the valley the Chocolate Mountains reflect off the water, and the whole scene shimmers in the morning heat, which soars above 90 degrees Fahrenheit. I park in front of a vacant motel with shattered windows, alongside a row of dead palm trees, their stumps dried-up and sad looking. I exit the car and the heat accosts me. A short walk takes me to the beach. The bone-white sand crunches strangely under my feet. As I approach the water the air thickens with a rancid stench reminiscent of swamp gas. Dried to petrification, thousands of dead fish, their mouths agape and cartoon-like, lie at the water's edge. They line the shore like soap rings around stagnant bathwater, stretching off as far as I can see in either direction.

The scene is a strange one. I feel as though I am witness to a disaster of epic proportions, some form of ecological holocaust. But to know the history of this forgotten body of water is to ponder one of the most puzzling environmental paradoxes known to man. At the heart of the matter lies one of the most vicious and silent battles in the history of Western expansion, a battle driven by people's greed and a desire to conquer nature, a battle fought over the desert's most precious resource: water.



A little history. One hundred years ago, the Salton Sea did not exist. Instead, a vast, dry lakebed, encrusted with salt and minerals, known as the Salton Sink was the lowest elevation in the United States at almost 300 feet below sea level. Less than fifty miles away flowed an unrestrained body of moving water so immense and treacherous that scores of early explorers had perished trying to cross it—the Colorado River. The river was named “colorado,” or colored, because of the mountainous quantities of silt it carried to the Pacific Ocean. According to lore of the Cahulla Indian tribe, which has occupied the basin for eons, the nearby Salton Sink was known to fill on occasion when the Colorado River would spill its banks. The Cahullias remember a time long ago when the valley was filled with water and the sea teemed with fish. The legend describes how over time the lake slowly dried up in the desert heat. For hundreds of years, the Salton Sink had remained dry. Until, of course, European settlers came.

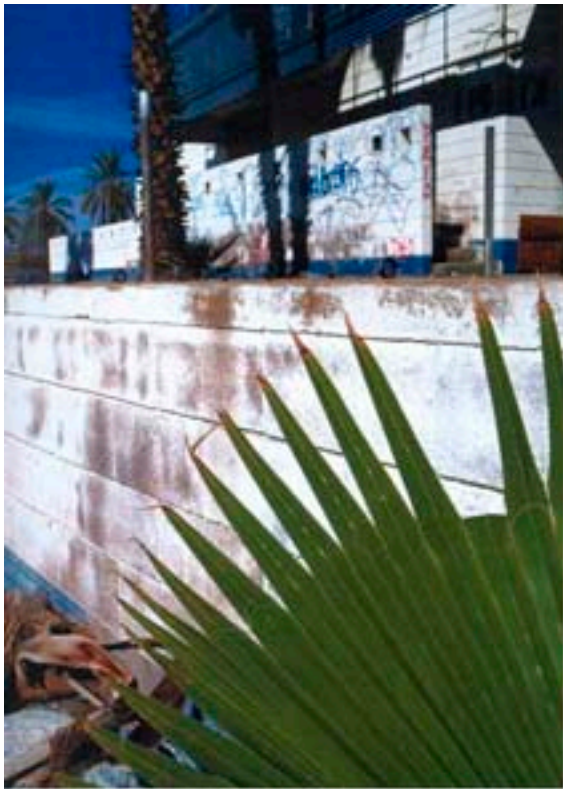
In the last part of the 19th century, a number of industrious men sought to tap the Colorado and turn the nearby deserts into farmland. They constructed numerous levees and canals, and the nation watched in awe as the desert wasteland transformed into a miracle of agriculture, the Imperial Valley. But the Colorado was not so easily tamed. Canals quickly filled with tons of silt that rendered them useless. During the wet season, the river would often flood the towns that had sprung up on its banks and wash away levees as though they were castles of sand. By 1904, the initial system of canals to the valley was completely deluged and the California Development Company, which owned the rights to the water and controlled its canal system, was nearly bankrupt, but it was still under contract to deliver water to the ever-thirsty Imperial Valley.

Under pressure, the company hastily dug a new channel to divert a portion of the river's flow. The Colorado waters were in flood and already dangerously high, but it had little choice. What the company didn't know was that the river had only just begun to rise. Fuelled by El Niño-like rains in the upper Colorado basin, the mighty river was set to flood like they had never seen before. And flood it did. The entire contents of the river jumped its banks and flowed down the freshly dug channel, heading northward towards the Salton Sink. Within weeks, a sea formed in the desert, and man, naturally, rejoiced.

For two years, the river thwarted all attempts at containment, and flowed unchallenged into the Sink. Representing one of the West's biggest rivers at flood stage, the volume of water that flowed into this dry desert valley was literally astounding. Finally, in early 1907, the federal government stepped in and stopped the flooding. Using huge equipment and backed by federal money, the

"I feel as though I am witness to a
disaster of **epic**
proportions, some
form of ecological holocaust"





“Paved streets with names like Paradise Lane and Oasis Boulevard zigzag across barren desert lots, on a journey to nowhere.”

river was muscled back on course. In the meantime, the Sea had grown to such a size that it drowned the main line of Southern Pacific railroad tracks, as well as numerous other structures and industries that once existed in the valley.

For many years the Colorado River had been proving a difficult and unpredictable adversary, and for the next several decades, the US government sought to tame the wild beast and rein in its awesome power. They did that, of course, by building dams. The early part of the 20th century is considered by many to be the era of dam-building, with Hoover Dam being the grandest behemoth of them all. Its construction helped to lift the country out of the Great Depression, and it provided electricity and water to burgeoning cities such as Los Angeles and Las Vegas. But the Hoover Dam also regulated the flow of the Colorado River; when it was completed in 1935, the river, once a raging lion, was officially as tame as a housecat. Downstream in the Imperial Valley, the farmers could now count on a steady flow of water, and farming continued to spread across great swaths of desert. The place that had once been referred to as the Valley of the Dead was now a miracle of agriculture.

Today, the lower Colorado River, as it approaches the Gulf of California, has been reduced to a mere trickle, a distant shadow of its former self. Nine-tenths of the Colorado's volume is robbed from the river before it reaches the Mexican border. Its water is being consumed daily by the thirsty multitudes living in the nearby deserts, and used to maintain vast swaths of agriculture in a region with little rainfall. The nearby Imperial Valley has become one of the nation's most important agricultural regions, producing over a third of the winter vegetables consumed in the United States.

But these changes brought with them great costs. One hundred miles south and across the Mexican border lies the Colorado River delta, a place once depended upon by millions of migratory birds, a place where cougars, jaguars and bobcats once hunted in thousands of acres of dense vegetation. Today it is gone. A parched desert stands in its place. The once great schools of shrimp in the Sea of Cortez that depended on the river's unbridled flow are also gone. The Colorado River, once one of the mightiest, wildest and most unpredictable rivers in the world, is a now a clear-flowing stream by comparison. Many of its most beautiful

and wildest sections are now lying dormant under the water of its vast reservoirs.

The Salton Sea, on the other hand, seemed at first to benefit from all of this change. During the 1950s and 60s, the Sea enjoyed a kind of heyday. Water skiers flocked to the desert lake to enjoy the warm wintertime water. Hollywood starlets basked in the desert sun at the Salton Sea Yacht Club, and sport fishermen bragged of huge catches of fish. Developers carved up the property around the Sea and began a mega blitz of selling, promising a resort to rival nearby Palm Springs. Plans for golf courses, gardens, parks and neat rows of upscale homes were drawn up and the land sold for high prices to unsuspecting buyers. No one gave a thought to what lay in the future for a salty inland sea with no natural outlet. No one imagined what a wasteland the sea would one day become.

The Salton Sea would have dried up some 70 years ago if it weren't for the immense quantities of water being poured on nearby desert farmland. So much water, in fact, is used in the fields that drain into the sea that its level has remained somewhat constant over the years, even overcoming what evaporates every day in the arid heat. Yet during extremely wet years, when the desert receives more rain than usual, the Sea has flooded its banks, devastating both nearby fields and beachfront property. Flooding, combined with cataclysmic die-offs of both fish and bird life, have turned the Salton Sea into a modern-day ghost town. A few people still live along its shores, but most structures are empty and vandalized, monuments to lost developers' dreams and plans gone awry. Paved streets with names like Paradise Lane and Oasis Boulevard zigzag across barren desert lots on a journey to nowhere. Motels are boarded up and swimming pools are empty. Deserted yacht clubs overlook silted marinas that are inhabited only by birds.

As I walk along the shore of the Sea, deftly avoiding crunching the carcasses surrounding my feet, I see a flock of white pelicans hunting in the shallow waters. [pull quote] Their splashes are the only sounds to be heard for miles around, and I am surprised to see that they are catching quite a few fish. I also see terns, avocets, great egrets, blue herons, and numerous other species of wild bird. I bend down at the water's edge, peer into the green murk and see a medium-sized fish swimming lazily through the algae-thickened scum, slow and seemingly drugged. Overhead, a large flock of snow geese passes

beneath the fierce sun, most likely on the way to the southern end of the Sea, where a huge wetland restoration project is under way.

The Sonny Bono National Wildlife Refuge is the latest government-funded remedy to the Sea's many problems. It is named after the man made famous on TV's *Sonny and Cher Show*, which aired in the 1970s, who later became a representative to Congress for his district of Palm Springs. Sonny died a few years back in a freak skiing accident, but his legacy of saving the Salton Sea carries on. A special congressional task force is now tackling the difficult undertaking of solving the Sea's myriad problems, a daunting task indeed.

On the one hand, the Sea is suffering from having too much of a good thing, namely, fish. A few decades back, two species of fish appeared in the Sea and proliferated madly. One, tilapia, is originally from Africa and Israel and most likely entered the Sea through the agricultural canals that feed it. The other, orange-mouth corvina from the Sea of Cortez, was introduced for sport fishing. Both are incredibly hardy—and need to be to withstand the water's high salinity, which runs about a third higher than that of the ocean. But even these great survivors haven't got much longer unless conditions improve. If the water's salinity continues to rise, there will be a lot more dead fish along the shore. During the summer, because the water, as it heats up in the 100-degree-plus temperatures, becomes depleted of oxygen, the fish die off in huge numbers. The water condition worsens from thick algae blooms which feed on nutrient-rich agricultural runoff. The end result is this: on certain days during the summer, upwards of 100,000 fish can perish in a single afternoon. The die-offs are inevitably followed by similar and particularly devastating epidemics in the wildfowl population, such as the brown pelican, currently on the endangered list. A single bad case of avian botulism could effectively destroy the entire species of this rare bird.

So what does all this mean for the future of the Sea? Many scientists and environmentalists have put their heads together to try and come up with potential solutions, but all would have price tags in the billions of dollars. One involves setting up a number of desalination plants along the shore to combat the build-up of salt. Another plan calls for the construction a dual pipeline that would carry water both to and from the Sea of Cortez, over 100 miles away. Both are waterworks of a scale that this country has yet to see, and all for a body of water that very few people visit and practically no one has ever heard of. Yet if the Sea is left to its own devices, it will soon become too saline to support life, and the birds would lose one more wetland habitat in a part of the world where most of them have already disappeared. Wouldn't the best solution, from an

environmental perspective, be to restore the Colorado to its former glory—dismantle the dams, the levees, and the irrigation canals, and allow the river to flow again, unfettered, through its delta to the ocean—and leave the Salton Sea to its own devices? But in today's world, where every acre-foot of the over-allocated Colorado's water is fought over, where millions of people depend on its water and its energy-producing power plants, this idea is a pipe dream at best.

On this particular day, I intend to take a sea kayak out into the Sea for a closer look its diverse wildlife, and to give myself some time to ponder its dismal future. I unload the boat from atop my car and am soon gliding out across the shimmering surface. The water seems viscous under my paddles, and smells like dirty dishwasher. It is so shallow that my oars occasionally scrape bottom hundreds of yards from the shore. But the solitude, the tranquility, and the amount of birds are utterly astounding. I am no longer in the world of man; I am part of their world now. I paddle past old docks, forgotten and rotting, where herons perch while keeping a wary eye on my bright yellow craft. Three old telephone poles sit offshore, defunct and wireless. I glide past skeletal trees, their barren branches host to large nests made of woven sticks and mud. All in all, I relish the quiet and the overwhelming lack of other humans, knowing that I am a mere hour's drive from one of the world's largest population centers. After a few hours out on the water, I turn around and head back for the car. A group of white pelicans glides past me, their wingtips skimming mere inches above the sea's glassy surface.

These beautiful birds have found what little solace remains here at the Salton Sea. What will happen if the sea becomes too foul to support them? Where will they go? As I load the kayak back on top of my car, I can't help but worry about the future of these wild animals. As the sun sets over the distant mountains across the water and lights up the surface with brilliant red-orange hues, I ponder on this living example of all the mistakes we've made in tampering with Mother Nature. The Sea's surface is like a looking glass, and in it we see a grim reflection of ourselves. ■



HOW TO VISIT THE SALTON SEA

THE SALTON SEA LIES NEAR INTERSTATE 10 ABOUT ONE HOUR'S DRIVE SOUTHEAST OF PALM SPRINGS, CALIFORNIA. IF YOU FIND YOURSELF DRIVING BETWEEN ARIZONA AND THE GOLDEN STATE, STOP OFF FOR A GLIMPSE OF THIS BIZARRE DESERT HABITAT. TAKE HIGHWAY 111 SOUTH AND THE SEA WILL BECOME VISIBLE WITHIN TEN MINUTES. AT NORTH SHORE, STOP OFF FOR A STROLL ALONG THE BEACHES, AND POKE AROUND THE ABANDONED YACHT CLUB. DRIVE TO THE SOUTHERN END OF THE SEA AND VISIT THE SONNY BONO NATIONAL WILDLIFE REFUGE, WHERE YOU WILL SEE A VAST WETLANDS RESTORATION PROJECT UNDERWAY, AND CATCH A GLIMPSE OF THE MYRIAD BIRDS THAT FLOCK TO THIS UNNATURAL OASIS.

WHAT YOU CAN DO

THE SALTON SEA RESTORATION PROJECT (WWW.USBR.GOV/SALTONSEA/SSREST.HTML) IS A PARTNERSHIP BETWEEN THE SALTON SEA AUTHORITY AND THE US BUREAU OF RECLAMATION, AND HAS BEEN COMMISSIONED BY CONGRESS TO FIND SOLUTIONS TO THE SEA'S PROBLEMS. A GRASS-ROOTS ORGANIZATION, SAVE OUR SEA (WWW.SOSIL.COM), HAS BECOME INVOLVED AT THE COMMUNITY LEVEL. CONTACT EITHER FOR MORE INFORMATION ON HOW TO HELP.