

Changing Perceptions: How We See the Salton Sea, and Why it Matters

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Abstract

The Salton Sea is a large, man-made body of water in Southern California. It was formed completely by accident between 1905 and 1907 by a combination of poor irrigation engineering and massive winter flooding of the Colorado River. Though the sea had formed and disappeared several times before this, and was part of the local Cahuilla Indian oral tradition, initially its presence was believed to be temporary. Beginning in the early 1940s, as it became apparent that the sea was not going to disappear, real estate developers and agricultural industry began to exploit the sea and its surrounding land for economic gain. Beginning in the late 1960s, the booming tourism and resort communities that formed around the sea began to crumble, due to continued poor management and several environmental disasters that resulted in the shrinking of the sea and massive die-offs of fish and birds. Today, news media see the Salton Sea as an abandoned wasteland, while scientists and ecologists consider it a vital ecological landscape. The surrounding communities of Salton City and Bombay Beach are still inhabited, although the populations are small and the quality of housing is poor. Though there continue to be occasional die-offs, the sea still functions as a stopover for migratory birds. The Salton Sea was formed as the result of human error, greed, and ecological misunderstanding. Continuing intervention, rather than fixing or solving anything, has only exacerbated the environmental and human problems surrounding the sea. This thesis will show how misperceptions of the sea led to ineffective interventions and exploitation of resources, both of which resulted in the current devastation facing the sea today.

Introduction

In the 1950s through the 1960s, the Salton Sea was poised to take over Palm Springs as the most glamorous vacation destination in California. Celebrities including the Beach Boys and Dezi Arnez flocked to the sea's swinging beach parties, boat races, and abundant fishing opportunities. Salton City, one of many small communities that sprang up around the sea, named its streets after Brazil, Maui, and other exotic destinations. Developers promised potential investors movie-star glamour and luxurious living at everyman prices. Marinas, shops, and golf courses were either under construction or planned in the future, and for those drawn into the proposed beach resort community, the possibilities for future development seemed endless. What began as a combination of engineering and natural disasters turned into blossoming real estate and recreation opportunities. To developers and residents alike, the seemingly magical reappearance of the sea in the middle of Imperial Valley felt like a gift.

Unfortunately, the dream of Salton City did not last. Within twenty years of its initial development, most of the homes were abandoned, if they were ever built at all. Many of the plans for the city never came to fruition, and those that did quickly fell to the wayside as investors bailed out of the projects. The Salton Sea, the enormous inland lake around which the entire dream of Salton City was conceived, was not equipped for the influx of people that came with the developing city, nor was it equipped to handle the wildlife introduced. The story of the Salton Sea and the communities that surround it is one of human error, unexpected acts of nature, and continuous environmental catastrophes.

Before the formation of the Salton Sea, the area was called the Salton Trough, and was known primarily for its salt deposits.¹ The sea was formed in the early 1900s, as the result of mismanaged irrigation projects and a series of floods that raised the levels of the Colorado River for two straight years. Initially, people living near the sea thought that it would go away on its own. Cahuilla Indians, a native people that lived in the area surrounding the Salton trough, told stories of a sea that appeared mysteriously in the middle of the desert only to disappear just as suddenly. Residents of Imperial Valley believed that the sea would evaporate, returning the trough to its previous use as a salt mine. The sea did not evaporate, and continues to this day to rely on irrigation runoff and occasional rainfall to keep it from doing so. When it became apparent that the sea was a permanent fixture, it became a destination for various recreational activities, such as boat races and fishing. Over time, interest in the sea grew, and real estate developers soon tried to turn the sea into a resort community, known as Salton City, or the Salton Riviera.² Poor management and continued environmental issues contributed to the breakdown of that plan, leaving behind a damaged sea and failing communities. Continuing through the 1990s into the 2000s, multiple die-offs of birds and fish, algae blooms, and receding wetlands led to an increasing environmental catastrophe. The sea is now primarily known for its environmental problems, with residents, scientists, and environmentalists all struggling to find solutions to these problems.

This thesis will focus on explaining the evolution of perceptions of the Salton Sea, and how these perceptions have influenced how people reacted to the sea. From its initial formation until right before the disintegration of the Salton City dream, reaction to the sea was

¹William de Buys and Joan Myers, *Salt Dreams: Land and Water in Low-Down California* (Albuquerque: University of New Mexico Press, 1999), 65.

² Ibid, 205-206.

overwhelmingly positive. It served as a tourist destination, boaters and anglers loved it, and investors saw it as an opportunity to live well for less money, and maybe even make money with real estate investments. The real estate potential of the sea was grossly over exaggerated by developers, which shifted the opinion of the sea dramatically. As the realization that the area was not as welcoming or comfortable as previously understood hit investors, the sea's environmental instability became more apparent. After the Salton City development collapsed in the 1960s, the environmental problems of fish and bird die-offs dominated press coverage of the sea. Instead of evoking sympathy, these reports only fed into the already negative opinions of the sea. This negative view continues today, although writers like William de Buys and Kim Stringfellow, and filmmakers like Alma Har'el, are attempting to portray the sea and its communities in a more sympathetic light. The continued misunderstanding of the sea negatively impacted not only public perception but policy decisions regarding the sea, which is something that must be overcome in order to help the inhabitants, both animal and human.

Historiography

The earliest book describing the formation of the Salton Sea is *The Salton Sea: An Account of Harriman's Fight With the Colorado River*. Published in 1917 and written by George Kennan, this text has a very detailed account of the engineering missteps which led to the formation of the Salton Sea. Written ten years after the initial flooding of the Colorado River and irrigation damage that led to the formation of the sea, this work focuses on E.H. "Ned" Harriman, who was the president of the Southern Pacific Railroad at the time of the disasters. Harriman and his cohorts come across as heroic, as they battle back the wild Colorado River floods and save Imperial Valley. This work contains reprints of written communication between the engineers, Harriman, and even Theodore Roosevelt regarding the flooding and the damage. This book

serves as a mini-biography of Ned Harriman's involvement in fixing the broken levees and stopping the floods caused by both nature and engineering mishaps.

Three books that are more specifically focused on the Salton Sea's history, composition, and effect on its surrounding environment help us form an understanding of not only the environmental effects of the sea, but the impact on humans. Two of these works, *Salt Dreams: Land and Water in Low-Down California* (1999) by William de Buys and Joan Myers and *Greetings From the Salton Sea: Folly and Intervention in the Southern California Landscape, 1905-2005* (2011) by Kim Stringfellow, use photography to document the environmental devastation in the Salton Sea and the surrounding area. *Salt Dreams* uses black and white photography to show the desolate environment of the Salton Sea and Imperial Valley, as well as reinforce de Buys' argument that human dreams have also died over time in this low-down area of California. In stark contrast, Stringfellow's *Greetings From the Salton Sea* uses bright and vividly colorful photographs of animal death and destruction of real estate to illustrate that the Salton Sea and its human population are very much alive, even though they are surrounded by decay.³

Possibly the most thorough work on the topic is *The Salton Sea: Geology, History, Potential Problems, Politics, and Possible Futures of an Unnatural Desert Salt Lake* (2005) by Larry C. Oglesby. Written by a member of the Department of Biology at Pomona College in Claremont, California, this work is written from a vastly different professional perspective than the works listed above. This text was published as part of the Memoirs of the Southern California Academy of Sciences series, and is clearly written for an academic or scientific audience. This

³ For additional stories of existential crises in Imperial Valley, see also: Phillip H. Round, *The Impossible Land: Story and Place in California's Imperial Valley* (Albuquerque: University of New Mexico Press, 2008).

book, along with the Redland Institute's *Salton Sea Atlas*, gives insight into the chemical composition of the sea, as well as its ecology. Both works are products of years of research at the Salton Sea.

Chapter 1

History, Pre-Salton Sea

As Larry Oglesby describes in *The Salton Sea: Geology, History, Potential Problems, Politics, and Possible Futures of an Unnatural Desert Salt Lake*, before there was a Salton Sea, there was a Salton Trough. Depending on the source, the area was also known as Salton Sink, or Salton Basin; Oglesby uses the term Salton Trough, which is the term I use, but all three terms refer to the same concept.⁴ For over two hundred years, this trough has repeatedly filled with water, either through the New River or Alamo River channels, only to evaporate away and leave behind a playa, or dry lake. The Salton Trough playa was unique, in that it was “covered with a thick layer of salt.” In the early 1800s, members of the Cahuilla Indian tribe convinced Spanish colonists to mine salt from the trough, rather than importing it from Mexico, by insisting that the quality of the salt was better and that the process took less time. This practice continued off and on, and eventually the New Liverpool Salt Company took over operations of the mining. The company set up a railroad and small support community, which they called Salton, and continued mining until the flooding of 1905.⁵

The formation of the Salton Sea is usually dated between 1905 and 1907. However, as far back as 1891 there are reports in several national newspapers describing the Salton Sea, or Salton

⁴ Larry C. Oglesby, *The Salton Sea: Geology, History, Potential Problems, Politics, and Possible Futures of an Unnatural Desert Salt Lake* (Claremont, CA: Southern California Academy of Sciences, 2005), 3.

⁵ Oglesby, *The Salton Sea*, 19-20.

Lake, as it was sometimes called. The sea was perceived as a minor curiosity, or even as a blessing to the dry, thirsty desert. The concept of reclamation is discussed later in this paper, but it is a concept that is important to understand when thinking about early perceptions of the Salton Trough and its occasional lakes. Reclamation was a movement associated with the westward expansion that took place in the late 1800s to early 1900s, which promulgated the idea that it was necessary to save nature by returning it to an “idealized state” in which agriculture flourished and water was readily available, even in the driest of desert landscapes.⁶ With this ideology thriving in the subconscious of many American minds, it is easy to understand the popular opinions formed around the earliest sightings of water in the Salton Trough. Newspapers from across the country during this time help us to understand not only the earliest perceptions of the sea, but the early opinions of the California desert.

According to a *Tacoma Daily News* report out of Los Angeles, dated October 10, 1891, "it [was] estimated that nine-tenths of the Colorado River [was] flowing into the Salton sea." The story's source thought that winter flooding had the potential to increase the sea's size to much larger than its current dimensions, predicting a "lake 300 hundred [sic] feet in depth and 150 miles long."⁷ (By comparison, Kim Stringfellow describes the sea today as covering 360-370 square miles in surface area, with an average depth of just below 30 feet.)⁸ In addition to these large dimensions, the newspaper's source, Dr. P.G. Cotter of Yuma, Arizona, thought that the sea would eventually connect with the Gulf of California. Dr. Cotter, presumably representing the opinions of the general desert population, felt that the sea and its potential as a port of entry for

⁶ de Buys, *Salt Dreams*, 11.

⁷ "The Salton Sea. it Has Evidently Came to California to Stay for Good," *Tacoma Daily News*, October 10, 1891, 1, America's Historical Newspapers, (110FDCFD7047CD60).

⁸ Kim Stringfellow, *Greetings From the Salton Sea: Folly and Intervention in the Southern California Landscape, 1905-2005* (Chicago: University of Chicago Press, 2011), 6.

transportation would be a great improvement to the area. Dr. Cotter's views reflect a common theme of the late 1800s in America; the West was fine, except for how *dry* it was. The sudden appearance of a large body of water was preferable to the expanse of desert to which the inhabitants of the American west had grown accustomed.⁹

In 1891, news from San Diego also predicted that the sea was a permanent fixture.¹⁰ Men working the salt mines tended to agree. In an interview with Howard J. Cone, an agent for the Southern Pacific Railway Company in the Salton area, a reporter for the *Idaho Daily Statesman* learned of the completely submerged salt deposits and the ruining of an industry. During this early interview, Cone mentions again the belief that one day the sea and the Gulf of California would connect, with the Salton Sea serving as a midpoint between the Colorado River and the Gulf. In an unintentional bit of foreshadowing, Cone was careful to mention that the Southern Pacific tracks were well out of the reach of the sea.¹¹ The Southern Pacific Railroad had established itself in the Colorado Desert in 1877, the New Liverpool Salt Company, followed shortly after that.¹² The salt mine's laborers, which consisted primarily of Cahuilla Indians, took the formation of the sea more seriously. Their oral tradition warned of the "sudden and dangerous appearance of a lake in the desert," and when the earliest signs of water accumulation began to appear in the basin, the Cahuilla fled to higher ground.¹³

⁹ "The Salton Sea. it Has Evidently..."

¹⁰ "More Water. the Gulf of California Contributes to the Salton Sea," *Tacoma Daily News*, August 21, 1891, 1, America's Historical Newspapers (110FDC933B796720).

¹¹ "That New Salt Lake," *Idaho Daily Statesman*, October 14, 1891, 6, America's Historical Newspapers (11C1A0EE389601F8).

¹² de Buys, *Salt Dreams*, 65.

¹³ *Ibid.*

Many early reports also mention wildlife in the area. A report to Yuma in 1892 mentions the appearance of various water fowl, including ducks, cranes, and egrets.¹⁴ An 1893 opinion piece from the *Idaho Daily Statesman* declared “[i]t could certainly do no harm to have a great inland sea created there, though the railroad company might be put to some expense; and if this flow could be assisted without great cost it would be well to do so. The land is worthless now and it would be better to have it covered with water, while some desirable climatic changes might be brought about.”¹⁵

These newspaper articles help illustrate the attitude of the time right before the formation of the sea. The further settlers forged west, the greater the concern grew that there would not be enough water to sustain them. As shown above, many people felt that the solution to the desert landscape of California was to find a source of water, and to this end, the early lake seemed to be godsend. Many of the people writing these articles and opinion pieces also seem to predict a massive shift in the ecology of the surrounding area, if the sea were to become a permanent fixture. Although there was, obviously, no way that anyone could have predicted the outcome of actually creating a permanent body of water in the Salton Trough, the dream of doing so gave hope to many looking to settle the California desert.

Reclamation and Irrigation

William de Buys describes the history of water in California as “the dream of reclamation.” He describes the principle of reclamation as an “evangelical” take on the environment, in which the desert is a “fallen land, requiring redemption.” Rather than accepting

¹⁴ “The Desert Blossoms. Wonderful Transformation Wrought by the Water Which Runs to Salton Sea,” *Tombstone Epitaph*, June 12, 1892, 6, America’s Historical Newspapers (110CBF2EE91E36F0).

¹⁵ “[Salton Sea; Southern California; Colorado],” *Idaho Daily Statesman*, July 1, 1893, 4, America’s Historical Newspapers (114D724F5B31E618).

that perhaps the large portions of the American South and West were not intended to produce the same types of vegetation and living conditions as the East Coast, the concept of reclamation proposed that the deserts had the potential to burst with vegetation. A continuation of Manifest Destiny, reclamation aimed to return the desert to its perceived previous glory. Yet, as de Buys points out, “[t]he prior state to which it was to be *restored* or *reclaimed* was not a state in which it had ever existed; it was an idealized state that existed in *principle*.”¹⁶ As with many other ideologies that formed alongside Manifest Destiny, the dream of reclamation was based on idealized perceptions of what American settlers thought the West should be, rather than a reflection of what it actually was.¹⁷

In addition to dreams of reclaiming the West for agriculture, reclamation sought to secure the future of not only those who wanted to settle in the West, but the country as a whole. As de Buys points out, in the late 1800s and early 1900s Americans grew increasingly concerned about waste, especially that of scarce natural resources. By appealing to this fear, the reclamation movement worked in tandem with the growing fields of technology, science, and engineering to solve the problem of aridity in the West. The engineer, specifically, “embodied practical know-how,” De Buys argues, and was “charg[ed]...with the construction and operation of complex dams and waterworks.”¹⁸ This charge, to bring water to places where water did not usually flow, and to create fertile growth where desert landscape remained dominant, replaced lust for gold as the focus of Westward expansion.

¹⁶ de Buys, *Salt Dreams*, 11.

¹⁷ For additional information on water use in California, see:

Marc Reisner, *Cadillac Desert: The American West and Its Disappearing Water* (New York: Penguin, 1993).

¹⁸ de Buys, *Salt Dreams*, 12.

Engineers Charles Rockwood and George Chaffey of the California Development Company (CDC) were the men who secured the irrigation projects that ultimately led to the formation of the Salton Sea. During the early 1900s, Rockwood and Chaffey sought to “undermine the land laws of the United States” by “staking their claim of ownership on water, which they did not have to buy, only distribute.”¹⁹ While Rockwood and Chaffey’s plan “depend[ed] entirely on private capital,” the men’s plan ensured that by selling water rather than owning the land, they could manipulate the sales to ensure either payment from the settlers or “reversion of [their] land to them.”²⁰

The men’s plan was to purchase rights to divert from the Colorado River, sending the water into Mexico. The men asserted that once the water crossed into Mexico, it became property of that country, even upon its reentry into the United States. This transfer of ownership exempted the water from regulation, both at the state and federal level. Working with the men, the Mexican government would sell the water “to a baker’s dozen of mutual water companies that CDC organized to distribute water within the Imperial Valley.”²¹ These companies would then turn around and resell the water to settlers, through a complicated process that involved filing a claim “under the Desert Land Act... or Homestead Act,” with the settlers paying the companies large prices for both “water stock” and actual water.²² The plan was convoluted, exploited settlers, and violated the intentions of both the Desert Land and Homestead Acts. The men were not breaking the law for the fun of it; rather, they were so eager to make money that

¹⁹ Ibid, 80.

²⁰ Ibid, 76-80.

²¹ Ibid, 80.

²² Ibid, 81.

“[w]hen it suited them, they operated under the letter of law; when it did not, they sidestepped it.”²³

Chaffey resigned from the CDC before the formation of the Salton Sea, and Anthony Heber replaced him. With his new partner, Rockwood continued irrigation of the Colorado River. The men’s actions were “characterized by bungling, negligence, and greed,” and contributed heavily to water mismanagement in Imperial Valley.²⁴ In 1905, after a combination of hastily produced headgates, poorly placed canals, inability to control siltation in the irrigation water, and underestimating the spring and winter rainfall in Imperial Valley, the water levels of the Colorado rose to levels that overwhelmed the CDC.

In the spring of 1905, flooding of the Colorado River breached many of the headgates and canals that were put in place to prevent flooding. The Colorado River, which normally flowed south into the Gulf of California, began flowing entirely west and north. This filled both the Alamo and New Rivers, which then flooded the Salton Trough. During the first year, the water levels in the trough reached as high as 17.5 centimeters each day, which “submerged the New Liverpool salt works as well as roads and other buildings adjacent to the playa.”²⁵ During the first year, the CDC made several attempts at repair, only to have these attempts completely washed away by new floods. The seventh, and final attempt, was completed in spring of 1907.²⁶

The two years and seven tries to stop the flooding were due in part to the large amount of rainfall, but the poor construction of the headgates and canals was also to blame. It is important to remember that the men involved in this irrigation project were essentially looking to make as

²³ Ibid.

²⁴ Oglesby, *The Salton Sea*, 22.

²⁵ Ibid, 24.

²⁶ Ibid.

much money as possible by exerting the minimum amount of effort. This meant that the irrigation project was put together hastily, without concern for the potential for flooding later. Their bungled attempts to prevent flooding only made the situation worse. As we will see in the next chapter, it eventually took outside help to stop the flooding.

Understanding reclamation, water use, and the early perceptions of California's deserts helps us to understand why engineers like Chaffey and Rockwood saw an opportunity to make money, without thinking through the negative impact it had on the surrounding area. Chaffey and Rockwood did not intend to create the mess that they did. Instead, their lack of planning and preparation for the potential of winter flooding showed a shortsightedness that was common to the money making schemes of western expansion. Their understanding of the desert, which is mirrored in the opinions of the writers of the newspaper articles discussed above, was that it was useless as long as it was dry. Just add water to the arid zone, though, and it had the potential to provide abundantly. Men like Chaffey and Rockwood looked at that potential, as well as the opportunity to make large amounts of money, and devised the easiest and most profitable irrigation plan they could. Unfortunately, this shoddiness in both workmanship and long-term planning led to a disaster which is still affecting the area, in ways no one could have foreseen.

Chapter 2

Harriman's Help, and an End to the Floods

In his 1917 book, *The Salton Sea: An Account of Harriman's Fight with the Colorado River*, George Kennan describes how Edward Henry Harriman, the president of Southern Pacific Railroad Company, shouldered much of the responsibility and cost for stopping the floods that created the Salton Sea. After continued bungled efforts by the CDC, Harriman and his company

stepped in and worked with engineers from the United States Reclamation Service to close the break at the Mexican Cut, and restore the levees that had broken during the two years of flooding. While Kennan's description of events is certainly skewed in favor of Harriman, Harriman is nonetheless an integral player in the saga of the Salton Sea. In Kennan's telling, he was the first person to become involved with the sea who had no dreams or belief that he would make any money off of it.²⁷

Harriman's intentions were not completely altruistic. He controlled both Union Pacific and Southern Pacific Railroads, the second of which had tracks running through the Salton Trough. If the CDC was unable to control the flooding, Southern Pacific would be forced to move those tracks to higher ground, an incredibly expensive process. Harriman weighed his options and determined that it was less expensive to fund the CDC's repair efforts.²⁸ According to Kennan, over the course of closing the breaks and fixing the levees, Harriman spent upwards of two million dollars of Southern Pacific money, "mainly for the benefit of the Imperial Valley and the nation, without any assurance of reimbursement or compensation, and without any certainty of success."²⁹ While part of this spending was in the form of loans to the CDC to help them correct the flooding problems themselves, a majority entailed the railroad spending its own resources and labor working to stop the floods. Harriman's efforts were finally successful, and after the flooding ceased, his engineers restored irrigation to working order and put the railroads back in place. He engaged in a lengthy legal battle with the United States government to receive

²⁷ George Kennan, *The Salton Sea: An Account of Harriman's Fight with the Colorado River* (New York: The Macmillan Company, 1917), 79.

²⁸ de Buys, *Salt Dreams*, 103.

²⁹ Kennan, *The Salton Sea*, 79.

recompense for his time and money. He was finally awarded \$773,000 in January of 1911, which was less than he had put into the project, yet more than the federal government wanted to pay.³⁰

After the Floods

By 1919, the sea was viewed by many as a non-issue. Flooding had stopped over a decade earlier, and tourism had started to pick up in the area surrounding the sea. With the submersion of the salt deposits, it seemed that industry had left the sea. This did not last long as fish canneries, date farming, and real estate would all soon enter the inundate land.³¹ Though hints of some of the sea's compositional peculiarities became apparent during this time, its quirks only sparked more tourism interest in the area.

A *Pueblo Chieftain* article from the winter of that year describes the sea as "constantly shrinking." The article also describes the sea as a "natural wonder of the west" due to its sudden appearance in the earlier part of the century and its history of disappearing and reappearing. Citing unnamed geologists, the article suggests that the sea had performed this feat over fifty times, the earliest being in "pre-historic times." "Mud volcanos," which were said to emit steam, mud, and sulphur at a roaring volume, and "bubbling 'paintpots'" were considered to be "of especial interest to the tourist." Even when explaining these bizarre phenomena as an opportunity for sightseeing and exploration, the article is unable to avoid describing the less appealing sights and smells for which the Salton Sea would later become famous. The mud volcanos and "paintpots" are reminiscent of the sulfur smell and irrigation runoff that would later plague the sea, giving it a reputation for decay and unpleasantness. For the time, these sights and smells

³⁰ Ibid, 103.

³¹ "SALTON SEA FISHERIES.: Carp to Be Prepared for Chicken and Hog Food--Plant Being Prepared," Los Angeles Times, February 28, 1915, IV14, ProQuest Historical Newspapers (160092260).

served only to intrigue visitors, the bubbling mud volcanoes were less obviously grotesque than the coming animal die-offs.

Wildlife

Before the decay, life flourished in the Salton Sea. The original waters of the Colorado River introduced freshwater fish to the sea. Primarily consisting of cutthroat trout, mosquitofish, and humpback suckers, the freshwater species only lasted about twenty years in the sea.³² This was due to the rapid increase in the sea's salinity, although according to Oglesby, the sea was not immediately saline upon formation. In fact, for a period of time in 1926 the sea received such an increase in flow from irrigation wastewaters that it grew rapidly in both area and volume, but its salinity decreased.³³ The flow of water slowed within three years however, and by 1929 the salinity increased to a degree that the freshwater fish populations declined rapidly.³⁴

Interestingly, during this same time Captain Charles E. Davis, one of the first entrepreneurs in the Salton Sea area, tried unsuccessfully to introduce sea lions to the sea's ecosystem. According to Stringfellow, "[the sea lions] were unpopular with the local farmers, who blamed them for missing pigs and demanded that they be destroyed. Although the farmers did not hunt down the sea lions in the end, the unfortunate beasts did not survive long in the sea."³⁵ It is unclear if the farmers thought that the sea lions were coming onto the land, or if the pigs were wading into the sea.

Captain Davis not only made one of the first introductions of an outside species to the sea, but was the first in a line of newcomers that would attempt to exploit the area for

³² The Redlands Institute, *Salton Sea Atlas* (Redlands, CA: ESRI Press, 2002), 52-53.

³³ Oglesby, *The Salton Sea*, 28.

³⁴ The Redlands Institute, *Salton Sea Atlas*, 52-53.

³⁵ Stringfellow, *Greetings From the Salton Sea*, 12.

commercial gain. He set up a restaurant and dance hall, worked in local politics, served for a time as game warden, using his establishments to entertain visiting sportsmen.³⁶ Eventually Davis moved on, leaving behind the remains of his businesses and the legend of his ill-fated sea lions.

Turning back to fish, the next dramatic change in the fish population occurred in the 1950s. In an attempt to promote sport fishery, The California Department of Fish and Game stocked the sea with sargo, corvine, and croaker.³⁷ For decades after this initial introduction, the sea was a popular destination for anglers and fishing the most popular tourist activity. Throughout the 1950s, the sea became one of the most popular tourist destinations in southern California, and was established as a state park in 1951.³⁸ The revenue from fishing and bird watching during this time was over three million dollars, annually.

The most successful fish introduction, in terms of species reproduction and survival, was the tilapia. Originally from Lake Tanganyika in East Africa, tilapia were introduced to the sea's ecosystem in the 1940s "as a method of controlling vegetation in irrigation drains in Imperial Valley."³⁹ There are over 1,500 varieties of tilapia, but the tilapia in the Salton Sea are the only variety that breeds in salt water. For a species that is known for its resilience and adaptability, this particular characteristic is still extraordinary. The number of tilapia quickly grew "into the untold millions." During the heyday of sport fishing at the sea, anglers of all ages and experience levels was guaranteed to catch at least one tilapia. Those fisherman who hoped for a relaxing day

³⁶ Ibid, 12.

³⁷ The Redlands Institute, *Salton Sea Atlas*, 33.

³⁸ Ibid, 33.

³⁹ Ibid, 47.

without catching any fish had to leave bait and hooks off of their lines, as it seemed that the tilapia were willing to bite at anything.⁴⁰

Despite the species' initial success at the sea, the 1980s and 1990s saw huge numbers of tilapia die off. The die-offs of both fish and birds will be discussed in the third chapter of this paper, but it bears mentioning that the enormous amount of tilapia allowed for a substantial population to remain, even with the die-offs. One of the unfortunate effects of its adaptability is that there is no way to tell exactly which environmental conditions the tilapia can handle, which makes determining and maintaining appropriate salinity levels in the sea difficult.⁴¹

The most populous--and consistently popular--form of wildlife at the Salton Sea has always been the various birds that, at least temporarily, make the sea their home. As explained earlier, even before the sea's final formation in 1907, waterfowl flocked to the earlier lake that formed in the late 1800s. Even during the flooding, various ducks, geese, and cormorants flocked to the developing sea.⁴² The sea served, and continues to serve, as a stopping point for migratory birds on the Pacific flyway. According to the Redlands Institute, the sea "hosts over 400 species of birds," a fourth of which "breed nowhere else in North America."⁴³ Spring and fall are the busiest times for bird migrations, when warblers stop on their way north to Canada and again during the return flight to South America. During this time, tens of thousands of shorebirds crowd the refuge. During winter, geese, grebes, ducks, pelicans, and sandhill cranes rest near the sea, while summer brings subtropical species from the Gulf of California. Many of these species

⁴⁰ de Buys, *Salt Dreams*, 231.

⁴¹ The Redlands Institute, *Salton Sea Atlas*, 47.

⁴² de Buys, *Salt Dreams*, 135.

⁴³ The Redlands Institute, *Salton Sea Atlas*, 54.

attract Audubon Society chapters, who make a special trip to the sea to catch a glimpse of the wide variety of birds.

The story of successful species integration into the Salton Sea ecosystem started at the time of the sea's formation in 1907, and continued well into the 1960s. One of the most fascinating aspects of the sea's ecology is the wide range of locations from which its current inhabitants either migrated or were introduced. Its greatest success story, the tilapia, was imported from Africa to help clean vegetation. While it was never meant to be a game fish, its rapid increase in population and constant adaptability to the harsh environment of the sea has made it the most commonly caught fish in the sea's history. The birds, which flocked to the accidental sea almost immediately, come from all points on the Pacific flyway to breed, or just to rest on their journey. The Salton Sea's diverse habitats allow for such a large variety of birds, many of whom also make stops in other places along the Colorado River basin, but hundreds of others which are exclusive to the sea.⁴⁴

This rich diversity of wildlife, while initially exciting, came under duress starting in the late 1960s. The birds "only duplicated the movements of their ancestors, which by the hundreds of thousands had colonized the habitats created with every recurrence [of the sea]. If the immediate cause for creation of the Salton Sea was human blunder, the birds did not care, and if the sea's habitats have persisted since then thanks solely to irrigation runoff, the birds care still less."⁴⁵ While the birds flocked to visit the sea because of the Pacific flyway, the variety of fish introduced in the first fifty years of the sea's existence had to either adapt or die-off. It is no small miracle that tilapia have adapted, survived, and sometimes even thrived in the face of

⁴⁴ Ibid, 55.

⁴⁵ de Buys, *Salt Dreams*, 136.

environmental adversity, though their adaptation was not enough to prevent the multiple die-offs that plagued them later. In devastating numbers and effect, both fish and fowl came to suffer the consequences of the sea that wasn't meant to be.

Industry and Recreation

As the diversity of wildlife grew in the Salton Sea, the area surrounding the sea experienced enormous growth in agriculture. After recovering from the floods, there were over 300,000 acres covered in crops.⁴⁶ Initially, a majority of the valley's farms were planted in garden vegetables, grapes, and melons, followed by barley, alfalfa and Egyptian cotton. After experimentation with the climate and soil, additional crops included citrus, olives, figs, dates, and a variety of stone fruits.⁴⁷ Eventually, in 1934, construction began on the first of two canals. Once the second came on line in 1938, the flow of water to the Imperial Valley increased dramatically. The completion of the Coachella and All American Canals by 1948 led to an increase in the amount and value of agriculture acreage, which in turn increased the population and prosperity of Imperial Valley.⁴⁸

Beginning in the late 1920s into the 1930s, organized recreation brought Imperial Valley residents to the Salton Sea in increasing numbers. Before it became too crowded, the movie industry used the sea as a location for films like the 1939 film "Beau Geste," starring Gary Cooper.⁴⁹ During the 1930s, boat racing became immensely popular at the sea. As Imperial

⁴⁶ The Redlands Institute, *Salton Sea Atlas*, 32.

⁴⁷ Ibid, 32.

⁴⁸ Ibid. For additional information on early Salton Sea history, especially in regard to agriculture, see the following pamphlets, available in the Denver Public Library's Western History Collection:
de Stanley, Mildred, "The Salton Sea: Yesterday and Today," Los Angeles, 1966.
Shields Date Garden, ed. "Coachella Valley Desert Trails, The Salton Sea Saga, and The Romance and Sex Life of the Date," Indio, CA, 1957.

⁴⁹ The Redlands Institute, *Salton Sea Atlas*, 32.

Valley's agricultural business thrived, people working in the valley looked for ways to entertain themselves, and the sea became a choice tourism spot. Starting in 1929, the Salton Sea became the site of numerous world record setting speed races. It quickly gained a reputation for being "the fastest boat-racing lake in the nation," not only because of the sea's high salt content, which adds buoyancy, but its low altitude (the sea is located 227 feet below sea level), which causes "higher atmospheric density [that] makes engine performance more powerful."⁵⁰ The first day of timed testing on March 3, 1940 saw five world records for speed set by racers hailing from as far away as Texas.⁵¹ In 1942, the Salton Sea became the sight of a yearly regatta where "boaters tested for horsepower and new racing techniques." Though the regatta was previously held at the Newport Marina in the Pacific beach town of Newport, during the 1940s that marina was overcrowded with wartime vessels, so the event was moved. In 1951, the newly named Salton Sea Regatta "set an unprecedented 21 world records."⁵² In addition to the boat racing, many visitors came for the novelty of playing on a beach in the middle of the desert, a phenomenon that drew the attention of the *Chicago Daily Tribune* in January of 1951.⁵³

The Salton Riviera

In the late 1950s, a man named M. Penn Phillips decided to turn the Salton Sea from a casual tourist destination into a luxury community. Phillips was an experienced real estate developer who was known for building cities from essentially nothing, and attaching himself to communities as diverse as Palm Springs and Compton by "boost[ing] their growth to new

⁵⁰ Ibid, 32-33.

⁵¹ Ruskau, Bob, "Five Records Broken on Salton Sea Course," *Los Angeles Times*, Mar 03, 1940, 20, ProQuest Historical Newspapers: Los Angeles Times (165035711).

⁵² Ibid.

⁵³ Hoyt McAfee, "Desert Beach is California Wonder Land," *Chicago Daily Tribune*, Jan 07, 1951, G7, ProQuest Historical Newspapers: Chicago Daily Tribune (178071551).

heights.” His goal was to create a community known as Salton City, which he hoped would become the “crown jewel” of the “Salton Riviera.” In addition to luxury homes, he promised investors “marinas for sailing, power boating, and water skiing, a country club, golf courses, a recreational complex, shopping centers, a private airstrip... resort hotels, and more.” In order to attain this goal, Phillips appealed to people of “ordinary means.” By promising Palm Springs-style luxury to middle-income Californians, Phillips attracted investors from various income brackets, all of whom wanted to feel like movie stars or royalty, but for a smaller price than what they would normally have to pay. Phillips himself paid five to ten dollars per acre for his initial purchase of 19,600 acres; he then sold off lots for \$3,500 per lot, each of which ranged in size from half an acre to an acre.⁵⁴

Initially, Phillips and The Phillips Company put enormous time and effort into marketing and selling land in Salton City. During the opening of Salton City on May 21, 1958, Phillips created a circus of sorts. Huge tents were set up to shield potential investors from the glaring sun, and although neither homes nor marinas had been completed, there were billboards erected, illustrating the future plans for the city. In Phillips’s vision for Salton City, every home would have a bright green lawn and a swimming pool. In keeping with his promises of movie star luxury, Phillips brought with him heavyweight champion Jack Dempsey and a variety of since forgotten “beach movie” actresses to opening day, mostly to stand next to him and lend credibility to his claims of Salton City’s glamour. Standing before a crowd of media and potential investors, Phillips gave the following speech:

Think about the picture you have in mind of the perfect place, and the ideal setting.
Wouldn’t it be much like this? A place ringed by snow-capped mountains and bathed in

⁵⁴ de Buys, *Salt Dreams*, 208.

warm sunshine winter and summer, and cooled by sea breezes. A place where you could go swimming in warm smooth salt water the year round. Or boating. Or water skiing. Or just loaf on the beach under the clearest of blue skies, breathing air so clean you can see for fifty miles. A place where you can ride horseback. Or hunt. Or just sip a tall, cool drink. There is such a place coming to life on the shores of our largest inland body of water: Salton Riviera on the Salton Sea. A place where you can buy now for enjoyment and hold for income and a share of the profits in what may become the most fabulous resort city in the world. I have never been able to stand on that rise of land above the Salton Sea without seeing a great resort city. Now our dream is coming to life.⁵⁵

The illusion of Salton City took less than ten years to dissolve. In 1960, without warning, M. Penn Phillips completely abandoned the project. He gave no explanation, and left all of the investors, builders, and salespeople in the lurch. Ownership of the city passed through several holding companies before finally being taken over by the Holly Corporation, a Dallas oil company. After the takeover, the Holly Corporation invested its money in rapid development, in an attempt to keep the city alive and salvage the millions of dollars in real-estate contracts started by Phillips. The Holly Corporation built a golf course, held boat races, and tried to continue selling lots for further development. Around 1963, Holly realized that Salton City was not working as a resort town. In an attempt to salvage its investment, the Holly Corporation invited the Atlas Plastics Corporation to build a plant in Salton City. Due to bad construction and machinery, the plant did not stay open very long. By 1968, Atlas Plastics, the only industry that Salton City successfully attracted, was gone. According to de Buys, by this point, “the Salton balloon had thoroughly deflated.”⁵⁶

After the floods that created the sea subsided, there was a brief moment when the Salton Sea was left to its own devices. During this time, the birds that would eventually come to depend upon the sea began using it as a stop during migration. Rising salinity never would have allowed

⁵⁵ Quoted in de Buys, *Salt Dreams*, 210.

⁵⁶ Ibid, 211-212.

the original freshwater fish inhabitants to survive, but there were some species that did well initially. Even the early introduction of tourism, mostly curious families who either worked in Imperial Valley or heard about the man-made sea in the newspaper and wanted a glimpse for themselves, did little to affect the sea. It wasn't until larger numbers of people began to view the sea as a prime spot for recreation that changes were introduced. The importation of fish, most notably tilapia, brought enormous changes to the composition of the sea, but many of these effects were not immediately apparent. The sea's salinity, which was first viewed as a benefit due to its positive affect on boat racing, would later bring about massive environmental problems for the creatures inhabiting the sea.

It is difficult to imagine how different the Salton Sea story might have turned out if not for the entrepreneurial intervention of M. Penn Phillips and his associates. To blame the creation and demise of an entire community on one man may seem unfair, but the reality is that no other person put as much time and effort into promoting the area around the Salton Sea as did Phillips. Of course, he had help, but many of his salespeople were "suckers," just like those to whom they pitched the dream of the Salton Riviera. With a lack of an explanation why he became so interested in the Salton Sea initially, and why he left so abruptly, it is difficult to understand why a man who was otherwise quite successful in his ventures was so wrong about the Salton Sea's potential as a resort town.⁵⁷ He certainly fits into the mold of the boosters discussed earlier, Chaffey, Rockwood, and even Captain Davis, who saw the area as an opportunity to make a large amount of money very quickly, without much concern for the long-term effects of their actions. Regardless of his motivations, by the time Phillips left the Salton Sea he set in motion the beginnings of continued environmental breakdown and human drama of the Salton Sea,

⁵⁷ Ibid, 211.

which began with enormous promise and hope, but would wind up being marked by poverty and isolation.

Chapter 3

It did not take long after the departure of Atlas Plastics for Salton City to disintegrate. According to de Buys, “[a]s many as 22,000 buyers had paid... more than \$80 million for Salton City real estate, but not more than 200 homes had been built on the 23,000 platted lots.” In addition to lack of housing, there were no schools for children to attend, no businesses open for the adults to work in, and no medical facilities for the struggling community to use. Sewage became a serious problem, with the pipes backing up due to lack of flow. The property values of those homes that had been completed plummeted to nothing, and soon the Salton Sea itself began to cause problems for the community. Despite this decline, as late as May of 1969, newspapers were still reporting on the “success” of the resort town. A New York Times report from that month praised the sea’s corvine fishing and campgrounds, while simultaneously warning of scientists’ assertions that the sea was heading for disaster. The article claims that the enthusiastic visitors and developers of the sea would find a way to maintain it.⁵⁸ This simply was not the case.

After the Demise: 1970s-1990s

Beginning in the 1970s, excessive rainfall caused the sea to rise, flooding what remained of the resort community and making it impossible to continue building. Salton City, having never finished developing and lacking centralized infrastructure, was unable to cope with the damage

⁵⁸ Jack Goodman, "California's Salton Sea: A Strange Success Story," New York Times, May 11, 1969, ProQuest Historical Newspapers: New York Times (118491850).

caused by the floods.⁵⁹ As if flooding were not enough, “foul-smelling algae blooms” and fish and bird die-offs worked their way into the press, which made the prospect of moving to the Salton Riviera less and less appealing to outsiders.⁶⁰ Though much of the negative coverage was either completely misinformed or somewhat exaggerated, there were definite environmental issues beginning by the 1970s. More damaging to the communities and their hopes of a beachfront resort town was the final realization that they had been “taken.” As de Buys explains, the development of Salton City was based on the “Theory of the Greater Fool,” in which the developers, salespeople, and investors were all fools. Phillips fooled his salespeople into thinking they could make money, and the salespeople convinced investors that the land was valuable, and that the city had potential to grow into a beautiful resort town. Each step of the process was based on “hype and promises,” but the reality was that the Salton Sea was not a good place to build a city, nor was it ever going to work as a resort town. The climate was too hot, the location was too isolated, and the sea’s ecology was too unstable.⁶¹

By the early 1980s, much of Salton City and the other resort communities were abandoned.⁶² Rather than trying to work as a resort community, those who remained simply tried to adjust their expectations to the reality of the situation. Many who stayed behind did so because they felt that, inevitably, the population of California would get so large that the Salton Sea would soon become a tourist destination again. Others stayed because they had no choice, as they had already put all of their money into the Salton City project. After the demise of the planned resort town, many of its remaining residents made peace with the way things turned out, and grew to enjoy the quiet isolation that living near the Salton Sea afforded them. Trailer parks

⁵⁹ Stringfellow, *Greetings from the Salton Sea*, 16-17.

⁶⁰ de Buys, *Salt Dreams*, 212.

⁶¹ Ibid, 213.

⁶² Stringfellow, *Greetings from the Salton Sea*, 17.

took over in locations where yacht clubs were originally planned, and business never took off after Atlas Plastics left.⁶³

At the same time that the communities surrounding the Salton Sea fell apart, there were enormous environmental shifts taking place. From the 1970s until the mid-1980s, the salinity levels at the Salton Sea increased yearly, finally reaching the point where the levels in the sea were 25% higher than in ocean water.⁶⁴ In 1970, the California Fish and Game Commission asked for federal financial assistance to study the rise in salinity, in an effort to understand and combat the problem.⁶⁵ The high levels of salinity began to take its toll on the sea's fish, with corvine especially hard hit. Tilapia seemed to fare better, for a while, but would eventually have their own problems in the 1990s. As mentioned earlier, tilapia are intensely resilient. In 1998, 7.6 million tilapia died from oxygen depletion, likely due to growth in the Salton Sea. Even with this die-off, scientific studies conducted at the sea determined that the sea still had one of the most productive fisheries in the world.⁶⁶

Fish die-offs offended the eyes and nose of many Salton Sea visitors, but the die-offs of grebes and pelicans proved more disturbing still. Starting in December of 1991, grebes began getting sick and dying in increasingly alarming numbers. The deaths initially only affected the Salton Sea National Wildlife Rescue, where workers doing routine patrols would stumble across the dead birds. The problem began with a few dead birds being sent to the National Wildlife Health Research Center in Madison, Wisconsin to check for avian cholera, "a common affliction

⁶³ de Buys, *Salt Dreams*, 217.

⁶⁴ Salton Sea Restoration Project, *Sea Facts*, Pamphlet from Salton Sea State Recreation Area Visitor Center.

⁶⁵ Lupi Saldana, "OUTDOORS," *Los Angeles Times*, Jan 20, 1970, C6, ProQuest Historic Newspapers: Los Angeles Times (156311769).

⁶⁶ Ibid.

of large, crowded populations.”⁶⁷ Surprisingly, the tests came back without finding any cause of death, avian cholera or otherwise. The refuge workers hoped that the initial die-offs were just an anomaly, but they were soon disappointed.

In January of 1992, nearly 200 “dead and dying grebes [were discovered] on the barnacle beach west of the refuge headquarters.” The living grebes were so ill that they were unable to fight off other birds that were attacking them, and many were so ill that refuge workers “picked them up and wrung their necks as a farmer might kill a chicken,” in an attempt to spare them from additional suffering. By February of the same year, “waves of thousands of dead grebes began to wash ashore, and not just at the refuge. Phones rang incessantly as birders called in with accounts of strange grebe behavior and residents of Salton City reported large numbers of carcasses windrowed on their beach.”⁶⁸ By the end of the 1992 die-off, researchers determined that over 150,000 grebes perished, making it one of the “largest recorded bird die-offs in North American history.”⁶⁹ Although researchers tested living, sick, and dead grebes during the 1992 die-off in an attempt to understand what was causing the birds’ illness, it was not until 1995 that a scientist from Ohio’s Wright State University made a crucial discovery. Though his theory has yet to be proven conclusively, he discovered “fatal amounts of a toxin produced by the misnamed blue-green algae” in the livers of many of the grebes. Blue-green algae is abundant in the Salton Sea, and the toxins produced by this has been linked to “die-offs of waterfowl on the Mississippi flyway,” as well as are “suspected of contributing to high rates of liver cancer in parts of China.”⁷⁰ Other microorganisms in the Salton Sea, including “selenium-saturated pile

⁶⁷ de Buys, *Salt Dreams*, 224.

⁶⁸ Ibid, 225-226.

⁶⁹ Ibid, 226.

⁷⁰ Ibid, 235-236.

worms, cyanobacteria, *Vibrio* bacteria, botulism spores, and gill parasites,” contributed to the deaths of thousands upon thousands of fish and birds.

The die-offs did not end until the early 2000s. The cost of these repeated emergencies left the wildlife refuge “severely over budget” and “unpopular” with the U.S. Fish and Wildlife Service in California.⁷¹ The toll on the bird population was enormous; one-eighth of the world’s grebe population died at the Salton Sea during the 1990s. In a 1996 article, William Claiborne of the *Washington Post* referred to the sea as the “Rest Stop of Death”; a 1998 article in the *New York Times* questioned the safety of the water in the sea, both for birds and humans.⁷² The attention, both from the scientific community and the press, may have given people outside of the Salton Sea area a glimpse into the devastation, but unfortunately it did not hold their interest beyond the initial shock and horror. As de Buys explains:

In the half dozen years following the great grebe die-off of 1992, the [U.S. Fish and Wildlife Service] initiated little meaningful research on the sea and its problems. People impatient with the lack of government action to remedy the ailments of the Salton Sea complain that the sea has “been studied to death,” that the time to act came long ago. Unfortunately, they miss a vital point. The Salton Sea has been the object of much speculation – you could say it has been “talked to death.” But it has still not received the serious, long-term study it needs and deserves.⁷³

Scientists like the late Larry Oglesby, and research institutes like the Redlands Institute devote themselves to researching and raising awareness for the Salton Sea. But with little outside funding it is difficult to put the results of this research to use in policy. Money, and the lack of it, is one of the biggest factors in the lack of action into problems at the Salton Sea.

⁷¹ Ibid, 242.

⁷² William Claiborne, “Biologists Strive to Save Birds from Lake’s Rest Stop of Death,” *The Washington Post*, September 15, 1996, A3, ProQuest Historical Newspapers: The Washington Post (1034075226).

Verne G. Kopytoff, “In Spring, Birds Return to the Salton Sea and Die in Drove,” *New York Times*, March 24, 1998, E4, Proquest Historic Newspapers: New York Times (109899108).

⁷³ Ibid, 229.

Media Coverage into the 2000s

Following the die-offs of the 1990s, the media coverage of the Salton Sea took a decidedly different turn. Rather than focusing on the environmental issues, or trying to raise awareness for the wildlife refuge, attention shifted to the struggling communities surrounding the sea and nostalgia for the bygone era of resort tourism. In 2008, an independent film company released a DVD narrated by John Waters, called *Plagues and Pleasures on the Salton Sea*. The documentary features news footage from the heyday of Salton Sea tourism, interviews with current residents, and the kitschy music and snarky narration one would expect from a John Waters project. The same production crew put together a collection of found footage and videos produced for investors into a collection called *Past Pleasures at the Salton Sea*, which features the investor film titled “Birth of a City.”⁷⁴ Clips from “Birth of a City” play during *Plagues and Pleasures*, shown in stark contrast to the modern images of the Salton Sea as abandoned and decayed.

The interviews included in *Plagues and Pleasures* range from informational to bizarre to downright depressing. Different interviewees express views regarding the state of the sea today, many of which reflect the negative press that early resort residents railed against. Despite numerous reports that the sea is not toxic, many residents interviewed in the documentary express concerns that the sea is poisonous. The film also presents the rumor that the sea is infected with waste from Mexico, a bizarre story that many residents and outsiders alike believe. This belief stems from news reports in the 1980s, which claimed that water coming from Mexico

⁷⁴ Metzler, C. (Producer), & Springer, J (Director). (2008). *Past Pleasures at the Salton Sea* [Motion Picture]. United States: Tilapia Film.

via the New River had high levels of human and animal waste.⁷⁵ Despite the rumors, there are several real estate agents working in the Salton City area. The prices of land are incredibly low, and many residents interviewed continue to purchase lots in the hopes that tourism to Salton City will one day pick up again.⁷⁶

The community of Bombay Beach is shown in an entirely unflattering light in *Plagues and Pleasures*. The community is comprised of a strange combination of retirees and young people who moved to the area to escape big cities, and there is both economic and racial tension between various citizens of Bombay Beach. Several African-American residents were interviewed for the film, all with similar stories of fleeing inner-city violence and coming to the Salton Sea as a means of escape, either to raise children or just straighten out their own lives (desires and ambitions explored in greater detail by the documentary *Bombay Beach*, discussed below). The elderly citizens are primarily white, and many express discomfort with and distrust of the minority residents. Despite the town's general disarray and decline, several white residents interviewed express disdain for the "welfare people" that moved from Los Angeles and other larger cities. The parts of the city that aren't inhabited are completely in ruin, and many of the properties are abandoned.⁷⁷

Beyond awkward interviews with the residents, the film provides insight into some of the die-offs and other environmental traumas that occurred at the sea. During an interview with Clark Bloom, the same Salton Sea Refuge worker interviewed by William de Buys in *Salt Dreams*, the documentary plays news footage from the 1996 die-offs. The footage is tragic,

⁷⁵ Louis Sahagun, Staff Writer, "Salton Sea 'Anomalies' Raise Fears of Start of its Ecological Collapse." *Los Angeles Times*, April 03, 1989, ProQuest Historic Newspapers: Los Angeles Times (1150266929).

⁷⁶ Metzler, C. (Producer), & Springer, J (Director). (2006). *Plagues & Pleasures on the Salton Sea* [Motion Picture]. United States: Tilapia Film.

⁷⁷ Ibid.

comprised of images of sick and dying egrets, piles of dead birds of various species, and recording of workers tossing dead birds into an incinerator, in an attempt to stop the spread of disease. Bloom seems defeated by all the death, even ten years after the fact. The film concludes by showing several local business which go out of business, showing that there is little hope for a return to the glory days of the Salton Riviera.⁷⁸

Much less kitschy, and much more personal, is Alma Har'el's stylized documentary *Bombay Beach*, which follows three residents of Bombay Beach as they navigate personal struggles and overcome adversity. The first, a young child named Benny, is the son of two troubled residents who have spent time in prison due to charges stemming from suspicion of terrorism and weapons possession. The parents claim that the enormous amount of weapons they possessed had less to do with taking over the government and more to do with the boredom of living in Bombay Beach. Benny has numerous psychological issues, and while his parents both struggle to regain control of their lives after prison, they also struggle to understand and treat Benny's problems, which range from ADHD to bipolar disorder. While Benny is the focus of the family's drama, his mother's devotion to her children and determination to make a better life for them becomes its own story.

As discussed earlier, many residents of Bombay Beach are African-Americans, many of whom moved to the Bombay Beach area in an effort to escape negative living conditions in cities like Los Angeles. CeeJay, the second "character" in Har'el's film, falls into this category. His cousin was killed due to gang violence, which prompted his mother to move him out of the inner-city and into the small community of Bombay Beach. Thompson's struggles are to keep focused on his studies while trying to earn a football scholarship to get him out of California

⁷⁸ Ibid.

altogether. He also pursues a romantic relationship with a local white girl, and their interactions illustrate how normal the community of Bombay Beach can be, even with its isolation and lack of entertainment. Teenage drama and love still unfolds in the small community, and the documentary portrays its young subjects with kindness.

The final subject of the film is significantly older than the first two. Red, a grizzled old man who seems to live on a combination of whiskey and cigarettes, is shown as an outsider to the Bombay Beach community. He spends his days buying cheap cigarettes from a local reservation and reselling them to make a profit. An unabashed racist, he spends much of the film behaving as a stereotypical grumpy old man. He is divorced, no longer speaks to his children, and lives in a decrepit trailer park with several other unsavory residents. His story, due in part to the unpleasantness of his personality, is significantly less interesting than those the other residents portrayed in the film. After he suffers a stroke and is hospitalized, his small community of misfits pull together to support him and welcome him home upon his release.

The Salton Sea itself does not feature prominently in this documentary, but the toll the environment and economy took on the local communities is front and center. Several scenes are filmed on the beach, with various residents fishing or playing in abandoned buildings, which ground the stories in their specific location. The film opens by contrasting footage from a vintage advertising campaign for the resorts with gorgeously shot images of destroyed trailers, dead fish, and abandoned beachfront property.

The same year that Har'el released *Bombay Beach*, a television program titled *Forgotten Planet* aired an episode featuring the Salton Sea. In stark contrast to the above mentioned documentaries, this episode presented the area as entirely abandoned. The program, shot in the

style of a horror movie-meets reality show, documents various locations around the world that were once occupied but have recently fallen into abandonment. Other episodes feature disasters as varied as the economic downturn of Detroit, Michigan and the nuclear meltdown of Chernobyl in the Ukraine. Using terms such as “cursed,” and “forsaken,” the program attempts to explain the current state of the Salton Sea in terms of a series of unfortunate luck, rather than the result of human greed and error. While presenting the communities as abandoned, the program interviews current residents, making for an unintentional contradiction. Just as *Plagues and Pleasures* was over-the-top with its kitsch, *Forgotten Planet*’s episode on the Salton Sea is over-the-top with its doom and gloom.⁷⁹

The documentaries and films mentioned above vary in their style and tone, yet all of them maintain a sympathetic attitude toward the Salton Sea. In stark contrast, *VICE Magazine*’s online West Coast Editor wrote a short piece titled “I Went to California’s Post-Apocalyptic Beach Town.” Mostly comprised of pictures of water-logged buildings, dead fish, and abandoned property, the article gives a brief description of the sea’s history. In the vein of many *VICE* articles, the tone is sarcastic, judgmental, and it leaves the reader wondering if the author hoped to have a horrible time. The article coins the phrase “grief-documenters” to describe a majority of the visitors to Bombay Beach. Overwhelmingly, the article serves to perpetuate the notion that Bombay Beach and the Salton Sea are wastelands.⁸⁰

Without any major die-offs or new floods, the early 2000s were a time of relative calm for the Salton Sea and the surrounding area. Without emergencies, however, the media focus

⁷⁹ *Forgotten Planet*, “Salton Sea/Weston,” Directed by Douglas Cohen, Written by Savas Georgalis, Netflix (2011), Accessed January 15, 2015.

⁸⁰ Taete, Jamie Lee Curtis, “I Went to California’s Post-Apocalyptic Beach Town,” *VICE Media, LLC*, Published September 26, 2013, Accessed February 23, 2015, <http://www.vice.com/read/i-went-to-californias-post-apocalyptic-beach-town-salton-sea>.

shifted to the poverty of the communities that surround the sea. Though none of the above mentioned documentaries were enormous commercial successes, and the television program *Forgotten Planet* aired only on Netflix, they did bring some attention to the human drama unfolding in the aftermath of years of environmental catastrophes. Unfortunately, much of this attention was negative. Highlighting the more bizarre residents of Bombay Beach and Salton City, as *Plagues and Pleasures* did, does little to promote action to save the sea, or misrepresenting the sea and its communities as desolate wastelands, which gives the impression that any help for the sea is too little, too late. What the Salton Sea and surrounding area need, now more than ever, is more sympathetic publicity. It is difficult to convince anyone to contribute time or funds to an area that is condemned as a lost cause.

Conclusion

A visit to the Salton Sea today is a combination of experiences. There are many areas surrounding the sea, specifically on the northeast and southern coasts, which are lush with agriculture. Along parts of Highway 111, which runs along the east side of the sea, there are citrus and palm trees. On the southernmost tip of the sea, there is the Salton Sea National Wildlife Refuge, which is still in operation despite budget cuts and loss of usable land. A little north of the refuge is the Wister Waterfowl Management Area, where visitors can hike around, and observe over 400 species of birds that still reside at the Salton Sea. The beaches of the Salton Sea State Recreation Area are less inviting than other beaches; what look like white sand in many areas are actually crushed bones of the thousands of fish and birds lost in the die-offs of the 1990s and 2000s. Depending on what time of year you are there, the temperature can get as hot as 120 degrees Fahrenheit at the peak of the sun, with over 110 days annually seeing the

temperature exceed 100 degrees.⁸¹ The communities of Salton City, Desert Shores, and Bombay Beach are still there, though the areas' decaying buildings and small populations give the appearance that they are abandoned.

When the Salton Sea formed in the early 1900s, there was no way of foreseeing its inevitable breakdown. The people of California, and the nation as a whole, wanted to see water brought to the desert. The gospel of reclamation required that people view the desert as a "lost soul" in need of rescuing. Greedy men seized upon this almost evangelical fervor for irrigation projects by exploiting westerners' desires for water. Their unscrupulous quest for profits led to faulty irrigation plans, oversights which were exacerbated by abnormally wet weather, and led to the enormous floods and breakdowns in infrastructure that formed the Salton Sea.

Once the perception of the sea shifted from that of natural oddity to potential real estate hub, the sea faced a different kind of trouble. Both the sea and the land around it were exploited, both by the addition of imported fish and the rapid splitting up of the land into lots for sale. It did not take long before the perception shifted once again, as soon as investors and residents alike realized that the Salton Riviera dream was more illusory than originally thought. Abandoned homes, businesses, and boats lay where plans for luxury resort communities once existed. The combination of increased salinity and irrigation runoff changed the chemical makeup of the sea so drastically that tilapia, algae, and birds of all varieties began in the 1990s to struggle for survival.

Given the various levels of misunderstanding and misperception during each stage of the sea's development, it is worth asking both how the sea is perceived now, and what can be done

⁸¹ de Buys, *Salt Dreams*, 221.

to restore its economic and ecological vitality. According to the Salton Sea Restoration Project, which provides literature for the Salton Sea State Recreation Area, there are a number of myths still perpetuated about the sea. These include the previously mentioned myth that waste from Mexico somehow makes its way into the water of the Salton Sea, which is assumed to be the cause of its environmental problems. In addition to human waste, many believe that agriculture runoff turned the sea into a “toxic dump,” and that this influx of pesticides that caused the die-offs of the 1990s and 2000s. The earlier discussed theory of green-blue algae toxins is a far more likely explanation, especially considering that levels of pesticide contaminants in the Salton Sea are “much lower than found in the waters of San Diego.”⁸²

The most harmful misperception about the sea today is that it is in any way marginal, either ecologically or economically. The first accusation is easy enough to refute, given the fact that the Salton Sea provides a stopover for the Pacific flyway, and that flyway has lost “92% of the wetlands that provided habitat value” in other areas. For many birds on this flyway, the Salton Sea is their only place to rest.⁸³ Additionally, there are the 100 or so species that only breed at the Salton Sea to consider.⁸⁴ Unfortunately, the sea has received more negative press surrounding its bird population, namely the die-offs of grebes and Brown Pelicans in the 1990s. During one die-off in 1996, 1/3 of the California population of Brown Pelicans was “decimated,” causing the birds to be kept on the U.S. Fish and Wildlife’s Endangered Species List until 2009.⁸⁵ This tragedy made convincing Salton Sea critics that the sea is a necessary and safe haven for birds difficult. In a harsh 1997 write-up of a proposed restoration effort - which

⁸² Salton Sea Restoration Project, *Sea Facts*, Pamphlet from Salton Sea State Recreation Area Visitor Center.

⁸³ Ibid.

⁸⁴ The Redlands Institute, *Salton Sea Atlas*, 55.

⁸⁵ Salton Sea Restoration Project, *Sea Facts*, Pamphlet. For more information on endangered species in California, see Peter S. Alagona, *After the Grizzly: Endangered Species and the Politics of Place in California* (Berkeley: University of California Press, 2013).

involved pumping out the Salton Sea's overly saline water and pumping in water from the Gulf of California – described the sea as a place that not even the country's leading environmental advocates knew or cared about.⁸⁶ Although negative opinions are shifting as more time passes without any die-offs, the sea's reputation as toxic dump was difficult to shake.

One final perception that affects the understanding and treatment of the Salton Sea today is that, given the fact that the sea was created by man-made mistakes, it should simply be allowed to “dry up, and revert to its dusty and dry natural beginnings.”⁸⁷ Of course, this assumption is based on a misperception that the Salton Sea is a new body of water, and ignores the fact that the Salton Trough has gone through cycles of flooding and drying, usually without the massive intervention of people into its ecological makeup. What is crucial to the future of the sea, and changing the public's perception of it, is taking responsibility for what humans did to cause its current problems. While there is no telling what the Salton Sea's story would look like without the addition of tilapia, or without the introduction and breakdown of the communities of Bombay Beach or Salton City, all of those events happened and were direct human intervention.

Moving forward, it is crucial to learn from these past mistakes and avoid making similar ones. According to the Salton Sea Restoration Project, the sea's largest problems today include:

...its immensity and complexity. It is California's largest inland body of water and supports an ecosystem of introduced and endemic biota. Another is its location. Far from urban centers and the usually vigilant eye of environmental interest, the Sea has been largely ignored...

We do not know all that there is to know about the Sea. But we do know its problems include bird disease outbreaks, fluctuating surface levels, nutrient-rich water, algal blooms and fish kills. We are also certain of at least one factor that has and

⁸⁶ William Booth, "Plan may Pump Life into Sick Saltan [sic] Sea," *The Washington Post*, August 01, 1997, A1, ProQuest Historic Newspapers (1456804152)

⁸⁷ Salton Sea Restoration Project, *Sea Facts*, Pamphlet.

continues to contribute to the Sea's downward spiral of ecological and economic health: salinity... the hyper-saline environment is jeopardizing the survival of fish and will ultimately jeopardize the survival of much of the Sea's biological bounty.

And that is why we must act while there is still time to develop short term and ultimately long term solutions to restoring the Sea... The sea's immensity, complexity and remoteness may in the past have combined to create the sea's greatest threat: uncertainty leading to unease resulting in inaction.⁸⁸

This unease won't be easily undone. Given the sea's crucial role in the environment, changing public perception of the sea is necessary for the continued health of hundreds of birds and other creatures that call the sea home. If perceptions change for the better in regard to the environmental problems at the Salton Sea, that can only bring about positive change for the residents of the surrounding communities. A better understood Salton Sea, combined with sufficient funding and research projects, could benefit all people and animals involved.

⁸⁸ Ibid.

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