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Policy Trials and Tribulations of the Salton Sea

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Prologue

The Salton Sea from afar is a magnificent beautiful back drop. A large body of water sits in a valley surrounded by mountains on all sides. The drive from San Diego to the Salton Sea is stunning, driving through mountains and valleys, finally hitting desert. Then this large body of water, right smack in the middle of the desert, appears out of nowhere. After a long journey to the Salton Sea, a bathroom break is needed. Pulling into a campground—the beauty, the calm waters, the smell—the sea spans miles around. The smell doesn't hit at first, but the dessert dry wind picks up and the smells of the sea hit like an 18-wheeler. Dead decaying fish and birds lay all over the lakeside. Rotting eggs does not even begin to explain the smell. It is more of a putrid, decaying flesh smell that has been sitting in 100-degree weather for days, weeks, months, or even years. That rotting smell is mixed with the smells of local farms dumping their waste into the sea—a horrific act that has been occurring for over 90 years. The sea—once a magnificent, picturesque backdrop—becomes something far less beautiful and more repulsive in nature. Though the people who live in the surrounding communities do not seem to mind the smell. If you are not right on the ocean, the smell isn't horrible. The community of Bombay Beach, which lays on the east side of the lake is filled with peace, calm, and hope. Bombay Beach was once a thriving little village, but now attracts a slower moving lifestyle. People move to Bombay Beach to escape the busy life of the city, to relax with a beautiful view. But community members of the little area and surrounding areas have realized in the past ten years or so that their safe haven is becoming a less and less safe place to live.

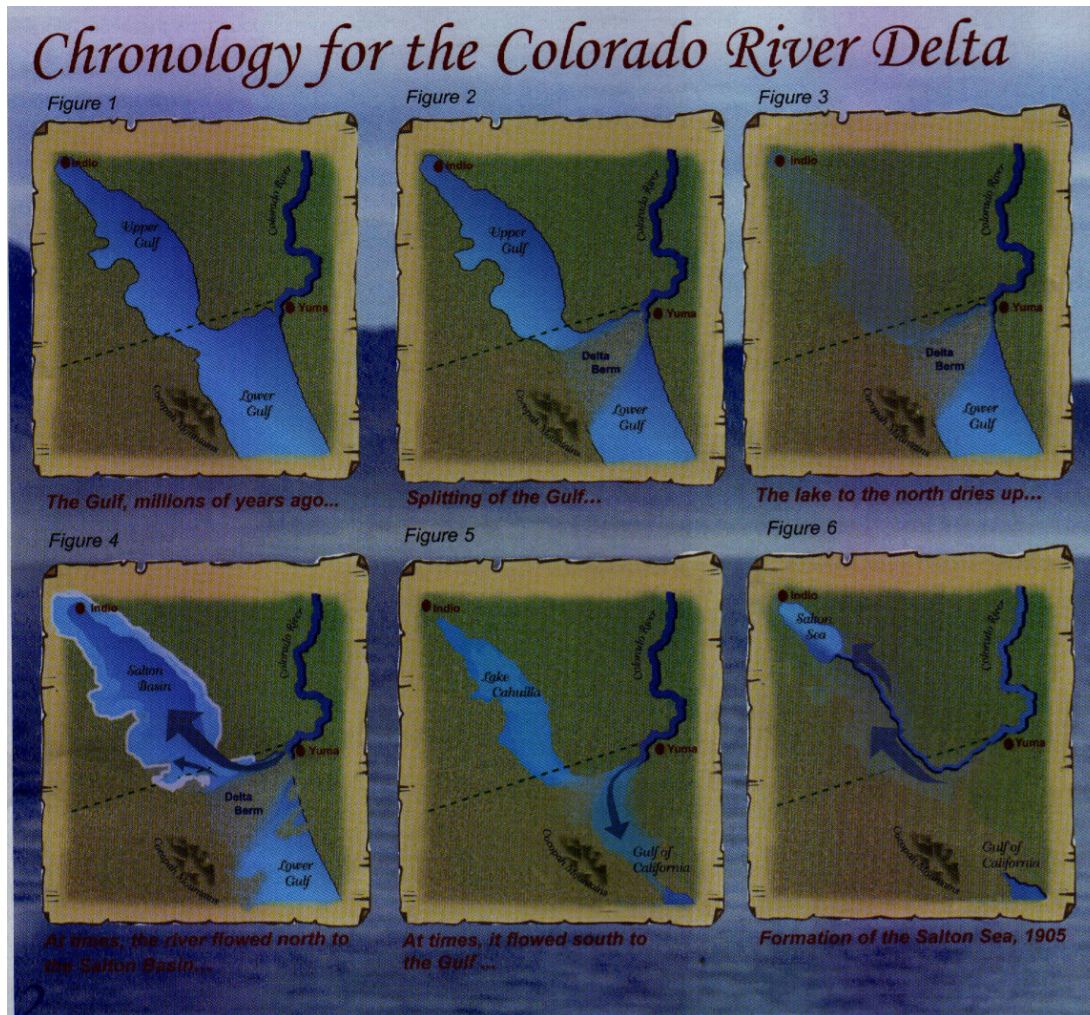
Introduction

A small, isolated desert community in an economically destitute area sits on the edge of an evaporating terminal lake, which only still exists because of a mass flooding accident. Bombay Beach and other beach villages struggle to survive in the hot southern California sun. Climate change and a recent drop to almost no water input has put the sea in a desperate state. Is it rational to even save this shriveling lake? Why would anyone want to live in a place like this? How has it become this devastating? This study focusses on the people of the surrounding communities. Gathering a better understanding of the sea itself and having an appreciation for these community members, this paper will give an in depth look at the creation and boom and bust of the Salton Sea surrounding communities, the science behind the sea, and why it is still being studied after 40 years. In addition, this paper will touch upon the distressed hopes of policies and the future of the sea. Will the sea be another Owens Lake situation? The hope is after reading this paper, the reader will be equipped with the information and admiration needed to tell friends, families, and colleagues about the Salton Sea.

Formation of the Salton Sea

The Salton Sea has been a large body of water on and off again for about 4 million years. It overflows and evaporates repeatedly over a long period of time (Cohen et al., 1999). Why now are people trying to save the sea that is supposed to dry up naturally? Long story short, human beings interfered with mother nature, and now if the lake dries up, humans will suffer. But 30 million years ago, before humans came in and ruined so much of our planet, what we now know as the Salton Sea was the northernmost extension of the Gulf of California (Salton Sea, 2017). Over the millennia, the Colorado River carried over a trillion tons of sediment from the Grand Canyon to the delta boundary point. Over time, the sediment began to form a natural berm. This berm eventually separated the Salton basin and formed the prehistoric lake called Cahuilla. Lake Cahuilla was much bigger than the Salton Sea today. The lake spanned around 2200 square miles, dipping down into Northern Mexico (Salton Sea, 2017). The lake was created at the point of convergence between the Gulf of California and the San Andreas tectonic system. Because of its location at the time of the lake's existence, there were many earthquakes (Carpelan, 1961). With the help of these earthquakes and time in general, the Colorado River shifted once again, and Lake Cahuilla evaporated. After its evaporation, the lake bed was left with over nine billion tons of salt (Carpelan, 1961).

Since the evaporation of Lake Cahuilla, the area known as the Salton Sink has periodically had small floods, creating much smaller lakes than Lake Cahuilla. The Salton Sink has filled seven times over the years, including 1840, 1842, 1852, 1859, 1862, and 1867 (Sykes, 1914). The last major flood that once again filled the sink was in 1891, when a lake formed with the surface area about half that of the Salton Sea today (Carpelan, 1961). The combination of the last flood and the accident of 1905 is the formation of what the Salton Sea looks like today. Below is a chronological map of the changing of the Colorado River Delta. This provides a great visual of how the Salton Sea has changed over the millions of years.



Early Settlement of the Salton Sea

With the formation of these large lakes came settlers. Every time the lake was filled, Native Americans from the surrounding Colorado River areas would set up establishment on the shores of the newly created lake. The large body of water provided these Native American tribes with different types of fish, including but not limited to “species of freshwater mollusk, migratory waterfowl, cattail, reeds, and other marsh vegetation” (Skyles, 1914, p. 27). There has been reporting of stone traps found 30 feet below where the lakebed is today. Tribes of the Cahuilla and Kumeyaay Native Americans were the dominant population before the European settlers took over the land in the 1500’s (Cohen et al., 1999).

In 1539, Francisco de Ulloa sailed up the Gulf of California to the mouth of the Colorado River. Ulloa sent three ships up the river and only two made it through. He made it as far as his boats would let him and he was forced to stop on the eastern shore of the current Salton Sea

(Wagner, 1929). Though he was forced to travel back down the river, he was able to prove that Baja California was not an island and was in fact a peninsula. He traveled about 130 miles of what is the current California-Mexico border. Though he was unable to settle, he set the groundings for future establishments of the Salton Sea.

The Gold Rush of 1849 brought around 10,000 new settlers to the edge of the southern part of the sea. Though at this time the Salton Sea was not a sea, it was dry lakebed. As gold explorers traveled across southern California, they ran into the Salton Sink. A “vast salt plain with a briny march in its center” (Laflin, 1995, p. 65). It simply served as a barrier to those gold explorers to pick which way they would continue traveling. William Blake was one of the first to infer that the soil deposits surrounding the Salton Sink in the great valley were suitable for producing crops if there was water to support the crops (Cohen et al., 1999). Years later, John Wesley Powell also recognized the fertility of the sediments left behind, along with his prediction that in the future man would control the Colorado River (Cohen et al., 1999). This seems to be the start of the agricultural rush of Imperial and Coachella Valleys. This was the moment that human control took over Mother Nature’s power. At the time, people did not realize the potentially harmful repercussions of this dynamic. The Salton Sink would soon become the Salton Sea, and serve as a game changer of sorts for California’s economy.

Creation of the Salton Sea

Irrigation of what is today Imperial and Coachella Valleys started in 1901 when George Chaffey invested \$150,000 in the California Development Company (CDC). The CDC started by building irrigation channels from the Colorado River to the Salton Sink area (Cohen et al., 1999). George Chaffey renamed the Salton Sink to Imperial Valley in order to attract more investors to the area (Cohen et al., 1999). In its inaugural year, the CDC supplied thousands of settlers with water, and this in turn served as the beginning of the agricultural irrigation of the Imperial Valley basin. This new irrigation attracted people to the Salton Sink, as they had money on the brain, knowing the potential for tourist attractions. In 1905, over 10,000 people had moved there because of the farming possibilities. There was over 120,000 acres of farm land that had started to be irrigated and used (Salton Sink, 2017). But the CDC made some sizeable errors that ultimately came back to haunt them. They failed to make improvements to their irrigation lines. The lines, over time, clogged because of all of the sediments from the Colorado River. The silt eventually clogged the irrigation lines and they were redirected. In the fall of 1904, the southbound irrigation lines were officially rerouted, going through an old channel of the Alamo River (Schaefer, 1994). The CDC once again gambled with their timing, as recent records had showed that there was flooding during these particular seasons. The CDC’s choice to keep those newly rerouted lines ended up being a poor decision. In the winter of 1904-1905, the Colorado River flooded three times (Schaefer, 1994). This was a huge mistake that created a beautiful opportunity, or so they thought.

The flooding of the Colorado River lasted many months. It took about 18 months for the Southern Pacific Railroad Company to restructure the Colorado River (Schaefer, 1994). Once the

flooding had stopped, the water covered over 400 square miles. The U.S. Geological Survey reports predicted that the Salton Sea, just like in the past, would evaporate and be gone around the 1920s unless there was action taken to save the large body of water (Salton Sea, 2107). Though no efforts were made as suggested, the sea nevertheless remained as it was. The CDC soon became bankrupt because of this colossal mistake. In 1911, The Imperial Irrigation District was formed, and they took over all water rights of the Salton Sea (Cohen et al., 1999). By 1918, over 350,000 acres were being irrigated and farming of the Imperial Valley skyrocketed (Cohen et al., 1999).

Early Boom of Salton Sea

In the 1920's, after the shock of the creation of the sea, farming took off as investors started to realize the potential for an area that featured a large and beautiful lake in the middle of the hot desert. In 1927, Gus Eilers opened the first resort for the Salton Sea. He promoted speed boat races and recreational fishing to the wealthy families of southern California (Salton Sea, 2017). The Salton Sea life took off with the boom and became a place for people to escape from city life. 1929 was a big year for the recreational side of the Salton Sea. The California State Department of Fish and Game also realized the recreational opportunity that was accessible by the sea (Laflin, 1995). They started introducing different types of fish into the sea, but the same thing happened to all of the species. First, they introduced striped bass from two different areas of the Pacific Ocean, none of which were recovered from the sea (Laflin, 1995). Then, in 1930, they introduced pile worms and mudsuckers from the San Diego Bay to provide food for the bass; these species did survive. But in 1934, 15,000 silver salmon fingerlings were stocked in Salton Sea, and just like the striped bass they all disappeared (Laflin, 1995).

Before the recreational fishing started, the boat races began, pulling in huge crowds from neighboring cities. The first Salton Sea Boat Race was held on December 14th, 1929 (Laflin, 1995). It was a great turn out that was particularly noteworthy because other boat races on surrounding lakes were a bust that year. The Prizes included the \$450 Mackay Circuit Trophy, the \$400 trophies awarded by Richfield Oil Co., and the \$500 Warren S. Ripple prize, offered for the first boat to reach speeds of 50 miles per hour (Laflin, 1995). The stakes were high, and the racing conditions couldn't have been better. That weekend was a monumental moment for the Salton Sea recreational economy. Racers saw that boats were able to go at high speeds because of the higher salinity of the water, making the boats more buoyant. That year, the stock market crashed, and new investor Gus Eilers transported in two of the Olympic Village cottages from Los Angeles to build the appeal of the cheap oasis in the dessert. Later on, Eilers built a 200-foot pier, where motorboats could be docked and kept all year round. Date Palm Beach, Eilers beach, was the place where the official electric timing clock for boat racing was first used (Laflin, 1995). Thanks to recreational fishing and boating, the Salton Sea became among the most sought-after tourist destinations west of the Colorado River.

The Second Boom

The crowds grew even more during the time of World War II. Gus Eilers targeted hard-working soldiers, stating that “all soldiers could have free swims and [the sea] had as many as 500 men a day, with a total of about 150,000 taking advantage of [the] offer” (Laflin, 1995, p. 67). This was the point when the sea got the attention of Hollywood. Numerous movies were filmed there including, “Five Graves to Cairo,” parts of “They Were Expendable,” and at least two Abbot and Costello pictures. Gus Eilers entertained many Hollywood film stars; some of them included Al Jolson, Brian Ahern, and Ronald Coleman.

In 1947, Roy Hunter bought Date Palm Beach and renamed it Desert Beach, the name it still holds today. It was there that he created the well-known Desert Beach Yacht Club, which attracted the wealthy (Sapozhnikova et al., 2004). Things were looking great for the Salton Sea economy. Soon enough, it was snatched up and the development began. A combination of waste water run-off from the local farms, and heavy storms leading to flash flooding, caused the sea to begin rising in 1948 (Sapozhnikova et al., 2004). By 1950, Dessert Beach was a foot higher, damaging most of Hunter’s hard work.

New developers Trav Rogers and Ray Ryan bought large amounts of land on the north shores of the sea in 1958. They created the town North Shore and started selling plots of land in the early 1960s. They soon built the North Shore Motel and North Shore Beach and Yacht Club, attracting people near and far (Laflin, 1995). It became a hot spot for famous people, like the Beach Boys, Jerry Lewis and many others. Due to big boat races, parties and dances, organizations from across the Coachella valley came for meetings and parties (Laflin, 1995). North Shore was the place to be. But just like Desert Beach, there was severe flooding, causing the boat launch to disappear and removing any way for boats to enter the sea (Laflin, 1995). This took a huge hit on the real estate of North Shore.

At the same time North Shore emerged, another “city” did as well. Salton City was created in the early 1950’s by a man named Penn Phillips (Salton Sea, 2017). The city got its fame from a blast by a local news article stating that “\$20,000,000 had already been spent establishing a vast network of roads, sewer lines, power lines and water mains” (Salton Sea, 2017, p. 2). Already, there were around 15,000 people that owned property in this new city according to the Holly Corporation, which took over the project in 1961 (Salton Sea, 2017). The construction of a new golf course came next, attracting golfers from all over. The nearest competition for golfing was Palm Springs, but this had a lake offering a lovely breeze, making it much more appealing to people. Tons and tons of lots were sold, but due to the ever-going flooding of the sea, there were very few actual houses bought. The height of the lake was constantly rising and falling, and people were afraid that their houses would be washed away as well. But in the early 1960s, for unknown reasons, Phillips abandoned his project and left the Salton Sea in the dust. What was left were empty plots, lonely roads, and a few street signs (Salton Sea, 2017). The place did not even get a chance to blossom. As the town still boomed for the tourist communities, the residents of the Salton Sea were about to experience real devastation. The table below shows the boom of the desert counties in California. Clearly

showing the influence of the agricultural boom and the influence of the Salton Sea had with helping to establish that area.

Table 2
Population Growth in the Salton Basin

Year	Total	Coachella Valley	Imperial Valley	City of Mexicali
1940	116,000	12,000	59,740	44,399
1950	214,000	27,000	62,975	124,362
1960	408,000	54,600	72,105	281,333
1970	558,000	87,600	74,400	396,324
1980	739,000	135,900	92,500	510,664
1990	932,000	220,000	110,400	601,938
1995	1,119,000	282,000	141,500	695,805

Sources: Ganster 1996; DWR Bulletin 132 series and Bulletin 108 in Tostrud 1997.

Boom to Bust

In Between 1976 and 1977, two large tropical storms hit the Gulf of California and were carried to the Salton Sea. They destroyed everything, from houses to resorts, marinas and businesses, and left the sea with nothing but water (Sapozhnikova et al., 2004). The once famous bar, The Waterfront, was completely washed away in the flood waters. The homes of the Salton City were covered with water. The flooding also nearly destroyed the North Shore Beach and Yacht Club. The waters destroyed the club's jetty, making it nearly impossible for any boat to enter the waters of the sea (Gunther, 1977). These storms not only destroyed property but were also the start of the destruction of the Salton Sea's economy. The first storm to hit was Hurricane Kathleen. The storm changed from a hurricane to a tropical depression on September 7th, 1976 over Baja California Peninsula (Gunther, 1977). It moved up the Gulf of California hitting the shore of California on the 9th of September. On this date, "Hurricane Kathleen dropped a foot of water on Mt. Laguna and sent a wall of water 10 feet high and 40 feet high through the town of Ocotillo in neighboring Imperial Valley," (Gunther, 1977, p. 13). It hit the Salton Sea like a ton of bricks, making the sea rise eight inches in several hours. The area of Bombay Beach was destroyed and completely underwater (Gunther, 1977).

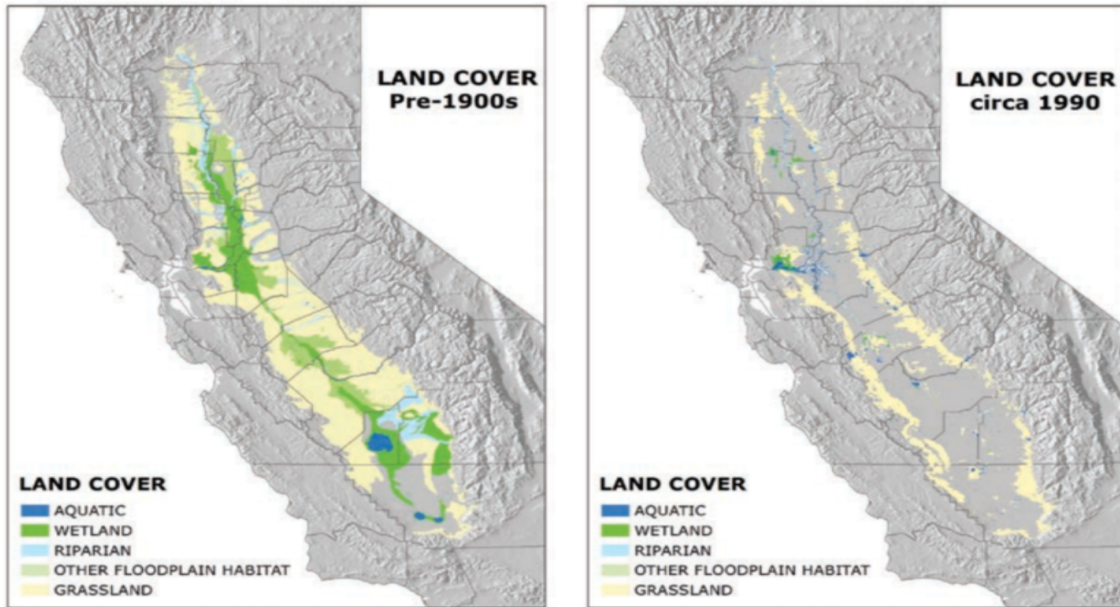
A little less than a year later, another hurricane hit the Gulf of California. Hurricane Doreen hit on August 13th, 1977. When Doreen made land fall two days later, it was a category 1 storm (Gunther, 1977). There were flash flood warnings, when it hit Imperial County, for the

Colorado River. The highway that circles the Salton Sea, Highway 111, was underwater in several places (Gunther, 1977). Both of these storms produced horrific damage to the Salton Sea, making it the real bust for the sea. The economy of these coastal communities really started to plummet after these storms hit the Imperial Valley due to lack of interest coming to the sea and loss of business.

Environmental Importance

Many crises of the sea are environment-related. Loss of habitat in local ecosystems, the loss of fish from the changing chemistry of the sea, the endangerment of the bird migration, the evaporation of the sea, and the exposed dirt or playa of the lakebed are all major concerns to which policy makers and investors must pay attention. Since the only input of water into the sea comes from the intensive agricultural runoff of Imperial and Coachella Valley, ecosystems of the sea are struggling to stay alive. The leaching of all of the salt and sediments coming from the Colorado River delta are coming into the Salton Sea. The water mixes with fertilizers and pesticides from the surrounding farms running to the lowest point around the Salton Sea. The habitats of the Salton Sea are tremendously important. The loss of wetlands of the Sea simply cannot happen for several reasons.

Climate change has a lot to do with the need for the Salton Sea wetlands. In the past century, California's wetlands have decreased by 90% (Roth, 2017). In the Central Valley of California, the aquatic plants that used to be submerged in water are trying to suck up any water left in the ground that is now dry (Roth, 2017). As these wetlands all over the desert of California are diminishing, birds that use these areas to nest and rest are dying because these areas are no longer available for them to use. These wetlands are shrinking because of the catastrophic drought California has been experiencing for years. Though technically California is out of the drought—as in 2017 Governor Brown announced this (Water Board, 2018)—climate change clearly hasn't disappeared. Temperatures continue to increase in the valleys, and this consequently creates more evaporation. The Salton Sea is one of the last wetlands that still exists in the California valleys. Below is a map that displays how much the wetlands have diminished since the 1900s.



Disappearance of Central Valley wetlands © Central Valley Historic Mapping Project, California State University, Chico, Geographic Information Center, 2003

Since the Salton Sea is one of the last wetlands, it is very important to migratory birds. The sea provides food, most notably fish and invertebrates, for all sorts of migratory birds. In addition, with the relative lack of human traffic, there is less disturbance, making it more attractive to those birds (Roth, 2017). There are over 400 species of birds that stop at the Salton Sea during their migration (Laflin, 1995). There are approximately 28,000 shorebirds that use the Salton Sea during their migration. But because this is one of the only wetlands left, the number of birds has increased. This huge increase of birds is causing harm for the birds migrating. Think about it in this way: if a large group of people were stuck inside when it is the peak of cold and flu season, everybody is going to get sick. Diseases like Avian Botulism, Avian Influenza, and Salmonellosis are some of the several diseases that are infecting and killing the birds (Cohen, 1999). On top of these diseases killing the birds, the fish that a lot of the birds are consuming are sick as well. The fish are either dying or somehow adapting to all the agricultural drainage that is being pumped into the sea. If the birds aren't dying because of the many diseases, they are dying because the fish they are eating are toxic.

The fish are rapidly dying. If anyone goes and visits the sea, one is able to see the hundreds of dead fish lining the shores of the sea. Because the sea is a terminal lake, the agricultural runoff has been accumulating for decades. Also, with the ongoing evaporation of the lake water, the salinity of the sea is increasing (Cohen, 1999). Thus, these fish are dying because the water is becoming too toxic for them to survive. Usually there is a dense layer of salty water that protects the toxins from rising after they sink to the bottom (Laflin, 1995). But if there are any sort of strong winds, that layer can easily be mixed with the polluted water underneath. When there are too many nitrates in the water from the runoff, this can create areas of oxygen

depletion (Laflin, 1995). When there isn't oxygen in the water, the fish cannot survive: therefore, mass amounts of fish are dying.

Another concern is the sea is rapidly drying up for two major reasons. The first reason is climate change. Unfortunately, the sea is located in the heart of the desert. The desert gets very hot and as climate change gets more harmful there will be more days that are hot and dry. Having over 100 days of the year that are over the temperature of 100 degrees Fahrenheit according to the CDC, this makes it that much easier for the sea to quickly evaporate. Climate change is a big problem for the sea. The other reason why the sea is drying up faster than normal is the lack of water that is being brought into the sea. A 2003 policy took the water flowing in from the Salton Sea and transferred it to San Diego County. Although, by law, California had to provide mitigation water to make up for that loss of water, mitigation water stopped at the end of 2017 and there is now only a very small amount of water being put into the sea (QSA, 2003). Not having that inflow of water makes the sea even more vulnerable to evaporation.

All of these are huge environmental concerns. All of them are addressed in the latest policy that was released in March of 2017. The policy is passed and being implemented but the problem, like so many problems, is lack of funding. District 7 of the California Water Resource Control Board is hoping they are able to find funding for this huge environmental problem. Environmental problems of the sea are so important. But as the sea dries up, there is more playa exposed and that creates a whole slew of other problems, many of them human health-related.

Health and Human Hazards

As more and more lakebed is exposed, this means that those pollutants that sit on the bottom of the sea are now uncovered. Wind blows over that exposed lakebed and those toxins become airborne and can move fast and far. People in Los Angeles and San Diego have complained on several occasions of a horrible smell in the air (James, 2017). That horrible smell is also harmful as it carries toxins with it. Wind speeds can be as little as 5 mph to pick up this dust because it is so fine and so dry (Sapozhnikova et. Al., 2004). These dust storms are very unsafe for all that are affected. Researchers at University of Southern California and University of Iowa have teamed up to study the chemical make-up of what is exactly in that dust and how it is affecting the people it contacts (Roth, 2017). The team of researchers state that "preliminary results suggest that playa dust may lead to adverse changes in the movement of immune cells into the lung immediately following exposure," (Roth, p2, 2017). This dust is already causing a problem in children living in Imperial Valley.

Families who live downwind of the sea are learning the hard way, with over 23,000 cases of asthma in Imperial County between children and adults (Pike, 2017). The air quality of the Salton Sea Air Basin, which all of Imperial County lays in, does not meet the federal or state

standards for particulate matter that is less than 10 microns in diameter, PM10 (Pike, 2017). The effects of higher PM10 concentrations include a decrease in growth and development of lung function in school aged children (Cohen, 1999). These elevated concentrations can even lead to higher risks of cardiac disease, heart attacks, and even death (Cohen, 1999). The threat of the dust is much worse than people realize. With more exposed lakebed as the sea dries up faster, the dust will travel further. This could affect places like LA County and San Diego County (Pike, 2017).

Richard Pimentel, a principle at a local high school that sits 30 miles west of the Salton Sea, tells the story of the dust in the clouds. He talks about how many of his students are suffering from asthma. He takes the reporter into the school and into the nurse's office of West Shores High where there is a cabinet filled with plastic bags containing medicine for asthma. There are more than 40 bags that sit in that cabinet and every single one is for a student suffering from asthma (Pike, 2017). Last year, the number of emergency room visits that were related to asthma were over 10,000; that is almost twice as much as the state average (Pike, 2017). Asthma in Imperial County is a major problem and getting worse by the day. The Pacific Institute has estimated that these dust storms causing human health risks could cost up to \$37 billion by 2047, if policy does not act fast (Roth, 2017).

The health concerns are a huge policy problem. The lives of the people in Imperial County and the other surrounding areas are at an all-time risk. What will help keep down the dust is pitting mitigation water on that exposed lakebed. As little as a foot of water can be placed on these exposed areas (Cohen, 1999). This will help to control the dust storms and can help lower the risk for the dust getting into people's lungs.

Past Policies of the Salton Sea

Policies for the Salton Sea came, went, and quite frankly were forgotten by everyone except the people who were living and breathing in the Salton Sea daily. Residents are not happy about the lack of progress that has been made over the past 20 years. For example, the bartender of the only bar of the Salton Sea currently in operation, remarked that "all they do is test this damn place, nothing ever happens!" The lack of action is of huge concern. The bartender went on to say that "they have been testing this place for 23 years and have found nothing worthwhile." That may not be 100 percent true. But as someone who lives and breathes the Salton Sea, they are not seeing anything happen to their home. They have stopped going to the meetings held by Region 7 California Regional Water Control Board. One local of Bombay Beach sates that she "gets so damn angry and (there) ain't nothing (she) can do about it." Clearly it is hurting the people, but the policies aren't turning into action.

In September of 2003 the governor at the time, Gov. Gray Davis signed the first Salton Sea policy to have major claims to take action, the Salton Sea Restoration Act. The bill was introduced by Senator Duchene and the California State Assembly passed the bill on September 9th and the Senate passed it on September 11th, 2003. This act codified "intent of the Legislature that the State of California undertake the restoration of the Salton Sea ecosystem and the permanent protection of the wildlife dependent on that ecosystem" (SB-277, 2003). The bill also came with a fund of \$23 million, but the legislature soon realized that this budget was not nearly as much money as was needed. The Salton Sea Restoration Act was under Senate Bill 277, SB-277. The bill would launch the Salton Sea Restoration Fund. The fund would be managed by the California Department of Fish and Game (SB-277, 2003). The bill would authorize the Department of Water Resources to be the contractor connecting with water suppliers. These supplies would buy and sell water from the sea (SB-277, 2003).

This act was part of the Colorado River Quantification Settlement Agreement (QSA) which was a water transfer deal between Imperial Irrigation District (IID) and the San Diego County Water Authority. Governor Brown passed it in October of 2003, but there later some push back from the Imperial Irrigation District (California Water Board, 2017). In 2004, soon after the QSA was executed, there were several parties from Imperial County that filed litigation against the agreement. In late 2011, California's Third District Court of Appeal reversed a court ruling that overturned the water transfers because of the number of lawsuits from IID (California Water Board, 2017). Then, in 2013, there was a court ruling that validated the QSA, therefore rejecting all of the remaining legal challenges it brought with it (California Water Board, 2017). The QSA is still currently enacted as of today but went through a lot of challenges to complete the water transfer to San Diego County.

In 2010, Governor Arnold Schwarzenegger signed a new bill that created a new council specifically for the Salton Sea, the Salton Sea Restoration Council. The bill required the council to come up with a plan and new budget by June 30th, 2016 (California Water Board, 2017). But once Governor Arnold Schwarzenegger was out of office, the new governor, Governor Jerry Brown removed the council in 2012 (California Water Board, 2017), the reason being that the council never even held a meeting. But Governor Brown stated that he will take new actions toward the Salton Sea.

Still, there were no actual positive action steps being taken for the sea. So, in 2013, the California Senate got a wake-up call. California's State Auditor released a report scolding the senate for failing to fulfill their promise to restore the Salton Sea. Concurrent with this report, the Imperial Irrigation District continued to take the Colorado River water away from the Salton Sea and give it to the San Diego County (Roth, 2017). Not only is the California Senate not taking action on saving the Salton Sea, they are actively taking away much needed fresh water for the sea.

In 2015, Governor Brown proposed the establishment of the Salton Sea Task Force. His goal was to expedite the construction projects that are simply not being done. But, again, there was not any action being taken. Later that year, the Imperial Irrigation District created yet another

restoration plan, which focused on dust suppression because the sea was drying up and causing stronger dust storms (California Water Board, 2017). Finally, Governor Brown appointed someone in charge of the Salton Sea, the state's first Salton Sea czar, Bruce Wilcox (Roth, 2017). At the end of 2015, there were real steps being taken. The U.S. Fish and Wildlife Service broke ground in the first restoration project for the Salton Sea. The project plans to create 420 acres of exposed lakebed to help conquer the dust storms (Roth, 2017).

The Colorado River Quantification Settlement Agreement

In October of 2003, the Quantification Settlement Agreement for the Colorado River was completed. The major purpose of this settlement was an overall improvement to California's water intake. The main benefit to the QSA is it allows California to cut down its overdependence on the fresh water the Colorado River has historically provided. Many parties worked together on the QSA: San Diego Water Authority, Coachella Valley Water District, Metropolitan Water District of Southern California, State of California, and U.S. Department of Interior (Water Board, 2018). Accordingly, it is clear this project is very important to the state of California. It is a give and take process because the water that was once being pumped into the Salton Sea from the Colorado River is being diverted to San Diego County (Water Board, 2017). In turn, the QSA is obligated to undertake the restoration of the Salton Sea's surrounding ecosystems. Through the QSA, the Imperial Irrigation District must deliver "mitigation water" to the lake for the next 15 years (Metz, 2018).

Though shortly after the Quantification Settlement Agreement went into action, it quickly got backlash from Imperial Valley parties (Metz, 2018). The deal was that Imperial Valley was going to sell its water to San Diego County. But the way it all transpired, Imperial Valley felt attacked and felt as though their historical water rights were being taken away (Metz, 2018). Kevin Kelley, general manager of IID, discusses that it is a necessary evil; the Imperial Irrigation District had to put their issues behind them in order to get out what they really wanted, which was restoration of the Salton Sea (Cavanaugh, 2013). The "mitigation water" ended at the end of 2017. Currently, there is no fresh water being given to the Salton Sea, and the water it once received from the Colorado River is still being diverted to San Diego (Metz, 2018).

The idea of the water ending is that it would force the California Water Board to create and enact a restoration plan for the Salton Sea. There currently is the 10-year plan, but like previously stated above, there has not been real action towards this plan. Kelley states "it's much easier to talk about it compared to doing it," (Metz, 2018). But the Salton Sea shrinks everyday exposing more toxic playa.

Phase 1 of the 10-Year Plan

The newest policy action for the Salton Sea happened at the California Regional Water Control Board meeting in March of 2017. At this meeting, the organization released Phase 1 of a

10-year restoration plan. It focuses on restoring the sea and creating more wetlands to support the habitats (California Water Board, 2017). The plan was set with a budget of \$383 million, but there is currently only \$80 million in available funds which represents cause for concern. But as temperatures increase, the need for water in urban areas will increase the demand for water taken from the Colorado River. Projections state that there will be about 100 more acres of lakebed that will be exposed. This, in turn, means more and more dust storms that will carry those toxic runoff chemicals into the air and right into the lungs of citizens. There seems to be a lot of talk of taking action steps forward to help restore the Salton Sea. But sadly, it seems these discussions are not producing actionable solutions. Nevertheless, Bruce Wilcox has high hopes for this plan, stating that the “plan is a path forward to address air quality and habitat issues at the Salton Sea for the first time, it is a very important milestone.” But sadly, this plan is for right now, the much needed attention. Wilcox thinks that this plan taking action will help clear the way for future long-term strategies. Though, by then, the costs will have risen into the billions (California Water Board, 2017).

There is a lack of evidence that the board will actually follow through with all phases of the 10-year plan. Kevin Kelley, the district’s general manager, looked at the plan before it was presented to the public. He thinks that it is lacking key details, like where the funding is coming from and the specific timing of each of these phases (James, 2017). Kelley continues to state that the plan’s only secure money is \$80 million. This seems great, but he sees the plan as more aggressive and expensive than do the creators of the plan. “And the acreage that they need to address each year in the next eight years is something like 3,000 to 5,000 acres a year, which is very aggressive, and it’s not going to be cheap,” Kelley told a local news reporter. The chart below provides a great illustration of the money that they actually have to complete the project. Clearly, all of the funding is not there. There are many questions to which the public will never know the answer. One of them is where this money is going to come from.

There are some positive aspects about the first phase. The first of the Salton Sea restoration projects has been completed on April 12 of this year. The funds were given by the California Natural Resources Agency and the Salton Sea Authority and the Torres Martinez Tribe joined forces to complete this first project (Water Resources Control Board, 2018). This phase entails creating a system of pumps, ponds, and types of solar arrays that are capable of pumping water into the areas of exposed lakebed (Water Resources Control Board, 2018). The area it covers is 46 acres of exposed dusty playa and it also is able to provide a habitat for migratory birds (Water Resources Control Board, 2018). The relatively fresh water that is provided for these ponds can help with the Salton Sea’s very salty water and help the sea as a whole rebuild some of the loss habitat (Water Resources Control Board, 2018). This project is a wonderful example of two groups partnering together to help the greater good. The president of the Salton Sea Authority, Patrick O’Dowd, is very proud of this completed project on tribal lands. The residents “must remain committed to build momentum so that we can create a

healthier and more prosperous future for the Salton Sea” (Water Resources Control Board, 2018).

The Hopeful Prospects of New Proposals

As the mitigation water came to a stop at the end of 2017 and the 10-year restoration plan still worked out its kinks, on December 8, 2017, Governor Brown sent out a Request for Information (RFI) for Salton Sea Water Importation Projects to all parties who were interested (California Natural Resources, 2018). The submission deadline was March 9th, 2018. The RFI’s intent was to assemble information for ideas and plans for a water import project that was able to meet the long-term goals of the Salton Sea Management Program (California Natural Resources, 2018). The deadline passed, and 11 companies submitted proposals; AECOM, Agess. Inc., CIM Group, Cordoba Corporation, GEI Consultants Inc, Michael Clinton Consulting, Geothermal Worldwide Inc., Quadrant II, Sea to Sea Development Team, Sephton Water Technology Inc., The Binational Water Group, and lastly Transform Water and Power were among the companies that submitted proposals. Each proposal has their similarities and differences (Water Board, 2018).

The first proposal is from AECOM, a California based company. AECOM states that they will be working side by side with Energia y Agua de Mexico. Their proposal discusses providing factors that the Salton Sea Management Plan does not provide. The proposal discusses including environmental engineering and extensive financial solutions for their budget. They include a pipeline that will pump water from the Gulf of California, also known as the Sea of Cortez.

The second proposal is from Agess Incorporated, who has a different proposal from using pipelines. Their proposal plans to widen and deepen the existing Coyote Canal in order to flood the current dried lake of Laguna Salada. This would bring the water a few miles from the Mexico-United States border. Half of the water would be given to the Salton Sea and the other half would be given to the local farms of Mexicali. The water would be transferred using open canals instead of closed pipelines.

The third proposal from the CIM Group was submitted. But it was not completed in time and therefore is not eligible for inclusion in the long-term plans for the Salton Sea restoration.

The fourth proposal is from Cordoba-Terrabrio, a joint company with offices in both California and Mexico. Their project is made up of two steps and three phases. Step one is pumping water from the Sea of Cortez continuously. The water would be pumped into a newly created lake that was right next to the Salton Sea. The reason being is to maintain the same elevation and the same salinity concentration. The second step would feature a pipeline from the center of the Salton Sea that would pump water back into the man-made lake. The phases would be simple; phase one is all the write-up and documentation, phase two is construction, and phase three is water importation, operation and management (Cordoba-Terrabrio, 2018). Working with a company that is both based in Mexico and California would help with any border conflict.

The fifth proposal is from GEI Consultants, Inc. and Michael Clinton Consulting. GEI is based in California and has worked on projects with the Colorado River and Michael Clinton Consulting or CEMEX, bringing in construction experience from Mexico. They propose that there will be water importation from the Gulf of California (Sea of Cortez) and that it is the State of California's responsibility. Their second phase is the desalination of a portion of the Salton Sea water using the desalination canals provided by the IID. They have also included a project for the Colorado River, calling it the Implementation of Colorado River Augmentation Program. Still, it involves taking water from the Colorado River and replacing it with the newly distilled water from the Salton Sea.

The sixth proposal is from Geothermal Worldwide Incorporated, which is a California based company. Their project proposal is a five-phase plan. Phase 1 is the connection of the Salton Sea to the Gulf of California through pipelines. Phase 2 is building two main dike systems; one in the north area of the Salton Sea and the other in the southern part, cutting down the amount of agricultural waste water coming into the sea. Phase 3 is to build a geothermal power plant in a certain area. Phase 4 would be to build two more geothermal plants. Phase 5 would be to continue to build geothermal plants using Geothermal Worldwide Incorporated technologies. Seeing as this company is a geothermal power company, they really have that end game in their mind. If they help save the Salton Sea, they can use that area to expend and gather that geothermal power.

The seventh proposal is from Quadrant II, and is the only proposal that is from an all Mexican company. They are located in Baja, California. Their project proposal is to deliver water from the Sea of Cortez to the Mexican-United States border. The water then would be piped to the Colorado River where it would be able to help restore ecosystems of the current part of the river that has dried up. They hope that this will help to address some of the negative factors of the QSA and help the health of the people of the "bi-nation region," seeing as the majority of the people who are affected by the dust and health hazards are Mexicans. The United States Census Bureau states that 83% of Imperial County is Hispanic or Latino (US Census Bureau, 2016). This project for Quadrant II is based around keeping their people and families safe and healthy.

The eighth proposal was from Sea to Sea and was by far the most in depth and length of all of the proposals, featuring many different phases. It has 20 different steps and phases. Starting with importing 2.0 MAF (Million Acre Feet) of seawater to the Salton Sea each year until the sea is full again, this includes a 135-mile canal that will bring the water to the Salton Sea from the Gulf of California. Their hope is to increase the level of the sea by 20 feet in five years after the construction is complete. They state that they propose they will be working with 17 different California suppliers and 12 suppliers from Mexico. The Sea to Sea plan's first two objectives are health and economic development of the Salton Sea area, bringing in money to those local communities who are struggling. Their third objective is the environment, helping to restore the lost habitats. Their plan is very extensive, and they have already helped with the Salton Sea restoration in the past.

The ninth proposal is from the Sephton Water Technology Incorporation. This company is unlike any other of the companies. It is basically a one-man team trying to go up against the big guns. Their plans are similar to Sea to Sea. They call this the Water Import Salt Extraction Revenue concept which, in simple terms, means to import a large amount of water from the Sea of Cortez (Gulf of California) to help bring back up the elevation of the Salton Sea and cut the playa dust down. Their proposal includes a desalination plan and taking that purified salt to be sold to local industries. Also taking the newly distilled water and providing it to local communities and local habitats that need to be helped and reconstructed. They may be a small company, but they sure do have big ideas for this project.

The tenth proposal is from the Binational Water Group, which is also a California based company. Their plan is much like most of the plans, to supply pipelines to the Salton Sea from the Sea of Cortez (Gulf of California). In addition, they look to include desalination plants to cut the salinity of the sea down, and create another pipeline of brine water that is strictly used for the environment. But their plan does include something different, the use of ground water, 1,000,000 acres feet, to be pumped into the Salton Sea.

The last proposal is from Transform Water and Power. Their proposal is very different with the use of a Floating Solar and Water Generation System that will be used to capture the imbalance of the Salton Sea. The idea is to sit in the water of the Salton Sea and divert the sun into these floating solar systems and not the water. It's basically a solar panel of a flotation device. They are the only proposal that does not discuss a pipeline system and bringing new water into the sea from elsewhere. This may have been just a proposed partial plan for this pilot project of these solar floats.

Each proposal has its benefits and downfalls. Overall, the plans are pretty similar in the sense that they propose that water be brought up from the Gulf of California to the Salton Sea. They differ in how and where it will be brought through for each proposal. The idea of desalination of the water from the Salton Sea is also in most proposals, being that they are trying to cut down the already very salty sea water. But Bill Wilcox and his committee will have to put a lot of time and effort in to make the choice of which one is the best for the environment, the local communities, and the health of Southern California. It is a tough job, but one that needs to be done. This is a positive way to educate the public on the huge problem of the Salton Sea. Bill Wilcox tells a Desert Sun reporter that the idea of pumping water from the Gulf of California "might be a viable solution," Wilcox went on to say that "I think in the past we never even considered it. I think now we are."

Rapid Declines for the Sea

Each day the Salton Sea Management Program is put off, the price goes up and the sea gets smaller, exposing more and more playa and creating more dangers. The sea is projected to evaporate to two-thirds the size it is currently if no policies are enacted in about 30 years (James, 2017). Bruce Wilcox comes out and says to the public that the committee is short of funding.

Moreover, he states that they “know that [they are] looking at other funding sources [but] it is a pretty significant shortfall.” They are hoping and praying that they get some big investors that simply want to save the sea. Clearly the state and federal funding is not nearly enough, and Wilcox does not think they will ever give the Salton Sea Management Program the full amount they need. Having only \$80 million out of the \$383 million needed just for phase 1.

For people on the outside it may seem as though it is a place where nature should just take its course and we should let the sea dry up. But the residents who make up the few towns that are left are happy and love their ghost town of a city. A local woman states that she moved there from the central valley to get away. She said that she was reported missing because she went off the grid and turned her phone off. She enjoys the simplicity of the sea. “The people are laid back and there’s no one around to bother you if you don’t want to be bothered.” She explained that there were many more people like her, people who came to the sea for the peace and quiet. The rest of the country doesn’t see the sea like this though. Well, most of the country doesn’t know about the sea, let alone have any feelings about it. Getting people informed about the sea is important because the more people know about the sea the more they will care about what happens to the sea. Education about the sea to the public would be an ideal way to bring knowledge. The more positive press that the sea gets, the more people can understand and possibly pursue investments.

Owens Lake

Money seems to be the biggest problem for Salton Sea Management Plan. The phase 1 is already over the available funding. The inkling of not doing anything to the sea has crossed most people’s mind, whether a policy maker, or a local community member. It seems the sea would cause less issues if it wasn’t here. But in reality, it would be the opposite. If the Salton Sea dried up, it would cause even more problems and become much more expensive. This has already happened in California, when Owens Lake dried up in the mid-1920s (Armstrong, 2016).

Owens Lake is located about 200 miles above Los Angeles. The lake is terminal just like the Salton Sea, but its input use to be from Owens River rather than agricultural runoff (Armstrong, 2016). In the early 1900s the river was diverted from Owens Lake to a pipeline constructed to provide water to the fast-growing city of Los Angeles (Armstrong, 2016). It only took a few years for Owens Lake to dry up. This became very problematic for the surrounding areas as hundreds of square feet of lakebed were exposed to the dry hot California desert sun. The dried lakebed soon became a major source of air pollution because of the dust. Though that did not stop the Los Angeles to continue to use Owens River. Again, the Los Angeles Department of Water and Power announced they would be creating a second aqueduct from Owens Valley (Armstrong, 2016). Not until 1991 was any action taken on the dry lakebed of Owens Lake. In 1991 California Department of Fish and Game sued the Los Angeles Department of Water and Power and required a permanent flow to go into Owens Lake (Armstrong, 2016). The Los Angeles Department of Water and Power ended up shelling out around \$2 billion for the restoration of Owens Valley (Armstrong, 2016). Most of that money was used for dust control.

Owens Lake created the worst dust pollution in the United States (Armstrong, 2016). This is a prime example of letting things getting too far. Not taking action in time does horrible damage. The Salton Sea is much bigger than Owens Lake and is located in an area that already has lots of air pollution. Mixed with the pollutants that sits on the bottom of the Salton Sea. The damage would become much worse. Owens Lake is a perfect example of what would happen if the Salton Sea dries up. The California State Regional Water Resources Control Board think they have a budget issue now. If they don't take serious action now, not will only the budget will get so much worse, the conditions for humans and the environment will suffer greatly.

Possible Investments for Imperial Valley

About 6,000 feet below the Salton Sea's surface sits North America's largest deposits of Lithium (Goolsby, 2016). This is an element that is currently in high demand due to its role in producing electric car batteries, smart phones, etc. The process of getting this lithium out of the ground is not particularly safe. The waste water itself is very dangerous, containing high traces of lithium. The geothermal plant is right on the fault line, making it very close to the Salton Sea. Though according to Dr. Michael McKibben, a geologist at the University of California Riverside, the extraction process is not as environmentally harmful as people may tend to think (Goolsby, 2016). So, it may not be as bad of a thing for the people of the surrounding areas.

The geothermal extraction has been happening since 1968. It has been on the minds of the federal government for a very long time. The thought of putting the water through some type of waste water treatment plant to be put back into the Salton Sea has been another idea on the table for several years (Goolsby, 2016). It looks good on the surface, but as someone digs a little deeper, they start to find out that these companies creating the plants do not have the best interests of others in mind.

The local bar owner of the only bar on the Salton Sea tells the dirty truth of what is really happening with the Imperial Irrigation District. The IID is not as "here for the people" as they want the public to feel. One of the lead engineers at the Imperial Irrigation District, Bruce Townsend, states that the IID is in the process of building one of the largest battery storage systems in the western part of the United States. This facility will be able to help IID with fluctuating power from all of its renewables it has on the grid (Goolsby, 2016). Big companies have tried and tried again to get geothermal plants up and running. There are 11 around the Salton Sea and all of them except for one have been built since 2000. It is just plain expensive. The local officials see geothermal and see the money it can put into Imperial County, which is clearly very poor and has an unemployment rate of 18.6%, the second highest in the state (Roth, 2016). Companies have given locals hope by the prospect of new employment. Controlled Thermal Resources is the newest prospect for this geothermal dream. CEO Rod Colwell says that, during construction, this project can provide up to 280 employees (Roth, 2016). Great vision about which for locals to dream. But they are not having it.

Locals have heard the idea of the possibility of new employment many times before. They are tired of being lied to. Back in 2015, Simbol Materials filled the local's heads with hopes and dreams and they told them their project would employ over 400 people during the construction. But, as mentioned earlier, the company was too unstable and went bankrupt (Roth, 2016). Simbol was not the only company to come in hot and get out fast. But currently the geothermal energy power is still being worked out. IID just wants the money and does not care about employment rates increasing or the overall well-being of the county. On the outside, IID has the mentality that their company is here for the locals and they are their people. But the locals have something different to say about this. Wendell, the bartender of the Ski Inn, talks very poorly of IID, telling whomever will listen what they are doing. "Last year they bought up the trailer park across the sea. Bought it up and kicked out the people, just like that" Wendall says. "They just want money! They don't give a damn." The locals of the Salton Sea are tired of these broken promises over and over again. "I gave up trusting anybody that wasn't around here," Wendall says as he shuffles around the bar.

Environmental Justice for the Salton Sea Residence

The Salton Sea is clearly a huge environmental policy issue. Phase 1 of the 10-year plan mostly focuses on issues pertaining to the environment, including migratory birds, establishing new habitats, and covering the exposed lakebed. All of these issues are very important and must be addressed, but there isn't really any discussion on the people. Yes, health concerns are on the policy maker's radar; it kind of has to be without any strong backlash. But the people of the surrounding communities should have their voices heard.

Sadly, the media doesn't help portray these seaside community members in the best light. Though probably not their intention to look down on these people, they still do. One article describes the sights of the once thriving Salton City as "abandoned green motorboat tagged with graffiti, lifeless sedans, rotting camper shells, piles of used clothing, filthy couches, broken bottles, plastic garbage bags" (Butynski, 2008). That sentence alone could make anyone turn their noses up. The article continues to talk about being a place that no one wants to live (Butynski, 2008). But residents of the Salton Sea communities sometimes do not choose to live in these areas. It is very cheap to live and attracts families that may not have the resources to live anywhere else.

Many of the new proposals that were given to Bruce Wilcox and Governor Brown have requested the inclusion of sections that discuss those new opportunities, as mentioned above. Renewables may be the best thing for all parties. It creates a much-needed inflow of money for the Salton Sea Management Plan, brings jobs to the much-needed members of Imperial and Coachella Counties, and is very attractive for future investors.

Policy Recommendation

The fate of the Salton Sea lays in the hands of Bill Wilcox. Governor Brown has given the task to Wilcox. Though he has done quite a lot of work, creating phase 1 of the 10-year plan and requesting information about the input and output of water in the Salton Sea, it seems to be at a standstill. Every day action is not taken is another hard day for the Salton Sea. With climate change on the rise and increasing temperatures in Imperial Valley, the sea is in desperate need of attention. Not only is it a risk for humans, it is also a risk for other organisms, like birds and aquatic life. The Audubon Society of California describes it as “one of the most important places for birds in the Western United States” (Roth, 2016). The Salton Sea offers some of the most important habitats for birds in the country. As hundreds of species of birds fly to the coast of California, they need a place to stop, rest, and eat before reaching the Pacific, especially now that climate change and human activity has sucked away about 90 percent of its pre-developed wetlands (Roth, 2016). People may not think that the habitats and birds are important, and the main goal should be to help the communities. Nevertheless, the birds play an important role in the food chain and having them die off is not something we want.

There needs to be several specific steps taken for the Salton Sea to be saved. The biggest problem that there seems to be is lack of available funding. Governor Brown and Bruce Wilcox have the right idea by reaching out to private investors. Though this year, there has been a rarity in California’s budget; there has been a surplus in money of about \$19 million (Ashton, 2017). \$11 million of that surplus is going to be put into a rainy-day fund (Ashton, 2017). This money could be used to help the Salton Sea Management Plan, but instead it is going to be in a “rainy day fund.” But if that money is not going to be used to help the Salton Sea, the capitalization of renewables in Imperial Valley is a great way for an inflow of money. The huge potential attracts many private investors that could use that money to help restore the Salton Sea.

If money was not a problem, the biggest policy issue that needs to be addressed is the concern for human health. So, creating shallow mitigation ponds to cover up the exposed playa will be a much-needed action to cut down the amount of playa that is becoming airborne and getting into people’s lungs. The second recommendation would be to create a pipeline from the Gulf of California as input and outputs of water. The constant flow of new water being pumped into the sea will help decrease the salinity and the pollutants in the sea. One may be concerned with dumping that toxic water into the ocean. The third recommendation would be to cut down on the amount or the kinds of pesticides used in the hundreds of farms surrounding the sea. Though this is clearly hard to regulate, stricter laws might need to be enacted for this to happen. The fourth recommendation would be to place plants that eat nitrates at the mouth of the pipeline, to cut down even more of the possible pollutants being put into the ocean. The last recommendation is to create new habitat areas to create safe areas for migratory birds to stop and rest.

Conclusion

If there is one thing that needs to be taken away from this paper, it is the Salton Sea is in desperate need for help and positive attention. The people of Imperial and Coachella Counties are very important and should not be slighted in anyway. The constant promises of protection of the

sea has residents distraught. The community members of Bombay Beach, the small coastal community, are torn on saving the sea. Some of them, like the Ski Inn's owner, Wendall, would like to see his home not wither away. Though on the other hand there is a large part of the community who would rather have no attention at all. "Those people, the researchers, the politicians, don't get that we just want to be left alone," states one community member of Bombay Beach. Some people moved there to have piece and be able to not have to report to anyone and just live their life off the grid. But Wendall and many of his customers know that if nothing is done then that will hurt the people they love. For the past three years, there has been an art festival in Bombay Beach that was started by artists of the LA area. Locals says it gives a chance to show people how rough it is on the Sea. The hope is that this festival, occurring annually, will help put Bombay Beach and the Salton Sea back on the map again.

Today the sea is a ghost town. Conditions have gotten increasingly worse over the years. The few residents that are living there do so either because they have lived there their entire lives, or they simply cannot afford to live anywhere else. The people it attracts are avid bird watchers and curious out of towners searching for answers of this isolated area. The Salton Sea lays in the hands of the California Regional Water Control Board. If no action is taken on the sea soon, the increase in temperatures will suck up that sea and we will be faced with an even worse problem than we have now. Earth's ecosystems can no longer take its course and naturally dry up the sea. That is what is supposed to happen, but the human race messed that up a long time ago when they started dumping agricultural waste in the waters. Now humans are faced to fix their mistake and the price of their mistakes are increasing every day, hour, and minute that political action is failing. For the sake of our human race, Save the Sea!

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