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Geog 310
Term Paper

Chesapeake Bay

Television commercials, print ads, and billboards in the Washington, DC, area are asking residents to connect two things many might find unrelated: lawn care and seafood. In one commercial, a man stuffs a big plateful of grass in his mouth after a voice-over says, "Spring rains carry excess lawn fertilizers through our sewers and rivers and into the Chesapeake Bay, where the blue crab harvest has been extremely low. So skip the fertilizer until fall, because once they're gone, what's left to enjoy?" (Environment, p. 7)

This ad is directed to many people in the Chesapeake Bay region because there are tons of pollution each year that are destroying the nation's largest estuary, or part of a body of water where the fresh and salt water mix, and are also killing the Bay's crabs, oysters, and fish, which is a huge industry in the area and also something the state of Maryland is known nationally for (Environment, p. 8). Pollution is destroying the Chesapeake Bay every single day, however now people are taking steps in the right direction to fix this problem but many people fear that time has run out.

The amazing part about the steps being taken to try to save the Chesapeake Bay is how much scientists and people who carry out legislation in the local and state governments are working together to try and create policies on businesses and people to

cut back on the problems in the Bay. Scientists have given an unthinkable amount of attention to the Bay of the past several years and researchers from countless numbers of agencies and institutions have dove deep into the issues and studying every nook and cranny to create answers to every politicians' questions. The biggest concern with the Bay, and the most concentrated effort to restore and improve the bay all deals with the water quality (Powledge, p. 1033). The declining water quality is the start of all the problems that must be solved. When work began to improve the Chesapeake Bay they needed to find the culprits of the bad water quality then get rid of them.

Scientists and researchers began giving a large volume of effort and look into the extremely complex problems that face the Chesapeake Bay. When research for the improving and saving of the Bay's overall health began it seemed very simple and there were only a couple of problems. The problems included nutrients from agricultural runoff; these nutrients were phosphorus and nitrogen. The combination of the nutrients in the Bay caused a large volume of algae that choked some of the marine life. While bringing in algae the nutrients also killed grasses on the seafloor. These seafloor bed grasses that once covered more than half of the Chesapeake Bay's floor now only covered a tenth of their original area. Though the estuary was having problems it did not receive the terrible pollution from industries that many large rivers and lakes do in other urban areas (Brown, p. 397).

Needless to say, it does not mean that the Bay was out of trouble by only having to deal with the problems of the nutrients runoff. The nitrogen and phosphorus is more than enough to handle the Chesapeake Bay. By the year 1987 the Chesapeake Bay was taking in 184,000 metric tons of nitrogen 74,000 metric tons of phosphorus a year from

such variable as animal and human wastes and agricultural fertilizers. More than fifty-percent of its wetlands had been destroyed plus another forty-percent of the watersheds forests (Population Reports, p. 26).

The Baltimore-Washington D.C. area is considered a wonderful area by most and is also visited by millions every year. The ever-growing area always attracts new residents every year from all over the world. The capitol city of the United States and tons of tourist's attractions are popular all year around. Tourist attractions that include presidential monuments, several war memorials, the inner harbor, and fascinating museums are an unemployed tour guide's paradise. Do not tell that to the scientists trying to save a great American and geographic body of water. With the skyrocketing population in an area that has new jobs daily and an even more traffic too brings in a great deal of sewage. Also adding to the destruction of the Chesapeake Bay is the higher volume of lawn chemicals, and impermeable pavements (Brown, p. 397). These land, air, and water toxins and fatal quantities of the nutrients and sediments are speeding up the clock on a national treasure. The problem of nutrients is still in the works of being solved and more problems arrive daily in the Bay.

With the water quality at an all-time low in the Chesapeake Bay, a "D" was given from the Chesapeake Bay Foundation in its annual report, the wildlife is and marine life in the area are being greatly affected which is not good for industry. In an area known for the great fish, oysters and blue crab, these marine animals are slowing dieing off and the ones that harvested are not always healthy to eat.

Residents of the watershed are more likely to get their crabmeat and oysters at supermarkets than at the dock. The fish in the bay and its

tributaries are so stuffed with PCBs (polychlorinated biphenyls), mercury, and other contaminants that the states advise eating only fish in small amounts and at infrequent intervals (Brown, p. 397)

This cannot be safe for the locals in the area who enjoy their fare share of fish caught right out of their own Chesapeake Bay and the nationally known blue crabs. Millions of dollars has been spent and progress to save the Chesapeake Bay is not being made.

“The Chesapeake Bay is also one of America’s enduring cultural and historically treasure,” said Powledge (p. 1033). Over the years, in attempts to save this American icon millions of dollars has been poured into projects, research groups, and agencies trying to fix the problems with the Chesapeake Bay. When someone today speaks of a model, they are usually talking about an extremely scaled down version of an object or an abstract representation of an idea. One of the first attempts that were a chance to try to be hands on in finding solutions for pollution was in 1976. The United States Army Corps of Engineers built a nine-acre building on Maryland’s Eastern Shore large-scale physical representation of the Chesapeake Bay. The model could show many things about the Bay to help engineers and scientists but left too much in doubt and did not bring into affect many scenarios that take place in the Bay. The model, which was supposed to be an engineering marvel, was out of date by 1983 and soon after deserted (Powledge, p. 1035).

The large-scale model of the Chesapeake Bay has not been the only attempt at saving it. The Environmental Protection Agency put in place a \$27 million dollar study that would research the Bay’s environment. What resulted from the millions of dollars put into the system is the Chesapeake Bay Program. The Chesapeake Bay program has grown into today’s collaboration with the government. “...perhaps the largest, most

comprehensive, and most scientifically attuned undertaking of its kind. Out of it came the 1983 Chesapeake Bay Agreement, signed by the governors of Maryland, Virginia, and Pennsylvania, the mayor of the District of Columbia, and the EPA administration, (Powledge, p. 1036).” Even though the agreement did very little in its early stages it at least told the residents of the Chesapeake Bay states like Maryland that lawmakers understood there was a problem and it needed to be fixed. With the agreement being signed by important people of the area the number of people wanting to join grew quickly and it became the top-notch environment agency of the area.

By the late 1980’s the Chesapeake Bay Agreement had begun to give detailed information on what was going to be done to restore the beauty of the Bay. Years later it was realized that, even though science is improving daily and technology during the nineties and even today seems limitless, it was going to be next to an impossible talks to do the things that the agreement had set out to do, which included cutting down the amount of nutrients that entered the Bay by 40 percent (Powledge, p 1034). One of the major difficulties with their lofty goals were set in 1987 was the population growth to the surrounding area.

In 1997, the microorganism *Pfisteria piscidia* brought massive fish kills in several Bay tributaries and sickness to some watermen. Many observers suspected a connection between the organism and the vast quantities of manure that pour off factory chicken farms on the Eastern Shore.

Stated by Powledge, what this meant for lawmakers and scientist trying to improve the Chesapeake Bay is that time was running out. Just when they thought that had narrowed

down suspects for the destruction of the Bay a new culprit was brought to the forefront. The large volume of manure that deposited itself into the water was from the huge chicken farms off Maryland's Eastern Shore. These farms are owned by large, nationwide chicken distributors but the farms are operated by small growers who raise the chicken. These small growers, to save money, do not properly dispose of the manure and it is shipped away naturally to area rivers and streams (Environment, p. 21). After that it ends up in the Chesapeake Bay. Every time the agencies and committees seem to turn their back a new problem arises in the Chesapeake Bay is waiting for them.

“In 1999, the EPA classified the Bay as an “impaired water body,” said Powledge (p. 1034). The television commercial that was quoted earlier is a normal occurrence in the Chesapeake Bay area these days. With hopes of saving and restoring something that brought so much wealth to the area anything's trying to be done. Something that was so great to the state of Maryland is now beginning is now beginning to be called falling and dying or even harsh words such as a disgrace. The amount of money that has been brought into projects to restore the area is reaching unbelievable numbers. Powledge states (p. 1037), the issue of money, “Another obstacle to progress in bay restoration is cost. There have been various estimates about what a proper cleanup would cost from \$1 billion to \$30 billion, with most estimates hovering around \$15 billion.” That is a lot of money. To go as far as bumper stickers and billboards just might be too much for the public to handle though. The Chesapeake Bay's slogan of “Save the Bay” is on everything they produce. I would never call a body of water “dead” especially one that has been so instrumental to the development of this area. The Chesapeake Bay can still be restored and become a profitable, beautiful bay. I just thing time has already run out.

Reference

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