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Blog Post

The roots of my main goal of the Chalker Beach Adaptation Management Plan principally began with a conversation while getting my oil changed. I began talking to an older gentleman who was also waiting for his car to get done. We went through the whole motions in a conversation, "What's your name? You from around here? What do you do? Do you go to school?" The conversation took a turn when he asked what I majored in. When I responded with Environmental Science, he thought I was wasting my time, "You're going to college...for trees?" Of course before this conversation I had a passion for preserving nature and human well being within the environment, however, this was a pivotal moment in how I thought about marketing environmental science to the general public.

As we continue to see the consequences of global climate change, it is very important to find avenues in which will get people who aren't so environmentally conscious to participate in climate based resilience efforts. As I look out into the world today there is only one avenue that seems very apparent to me. It isn't expressing the potential that your house might be drowned, or that the local crops are suffering from constant unprecedented drought; the only avenue that seems to be effective can be summed up in one word - MONEY. Obviously the main goal of any adaptation/mitigation project is to ultimately - well adapt and mitigate. However, with social tensions increasing day in and day out, my personal goal in the environmental realm is to highlight the economic viability of environmental resilience to all. I truly believe there isn't any adaptation scenario that cannot also involve cash in your pocket.

Chalker Beach is a coastal community in Old Saybrook, Connecticut. As global temperatures rise, the sea level is noticeably rising due to the thermal expansion of the water.

With economic viability in mind, the goal was to gather several flood mitigation techniques and weigh them in importance based on their general effectiveness with an emphasis on how economically viable they are. There are two categories in which we can separate adaptations: at the local government level as well as what an individual property owner can do. The government level adaptations are seemingly not as economically viable as individual ones, however, they do typically weigh higher in efficacy as they are larger scale projects. Specifically, these include converting impervious surfaces such as roads and sidewalks, and replacing them with pervious pavements. Individual adaptations are smaller scale but can commonly be found to add monetary value through landscaping aesthetics, lowering the cost of other utilities, and of course damage prevention. These adaptations also involve the reduction of impervious surfaces via rain gardens and a recent trend of “green” roofs.

When it comes down to Chalker Beach and other communities facing the consequences of our climate crisis, we must abandon thinking traditionally and begin to think out of the box in order to preserve and guarantee a sustainable future. An example of an out of the box approach would be to research ways in which we can construct a basement that can handle/is meant to be flooded. Far too long have we thought about preventing water from penetrating homes when with research and development, we can fashion coastal homes that can truly handle a flood if it comes down to it. In China, engineers are working towards designing entire cities that are meant to retain water similar to a sponge. This water, instead of getting routed out and away from the city, would be collected and provide a meaningful role in irrigation and replenishing drained aquifers. This sort of out-of-the-box thinking is the only way I see that we make it out of this climate crisis on top and with some money in our pockets.