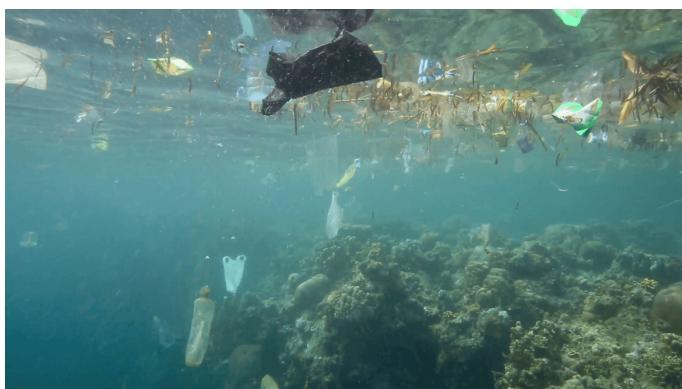


Overall Vision Of The game

The game that I propose will be centered around an issue that I and lots of people care a lot about, marine life conservation and pollution. The game will be an adventure game where the player will take up the role of a diver exploring various different ocean biomes. In these different biomes the player will come across an area that is almost devoid of all life except for a few animals and plants here and there, however they will be very unhealthy and clearly in distress. The biome will be full of different kinds of pollutants such as plastic waste, oil drums, etc. The player will swim around the environment and collect the pollutants and once they have cleared the area of pollution a scene will play out where all the marine animals and plants will return to their full beauty allowing players to swim amongst the various animals before continuing on to the next biome.

Before



After



Project Outcomes and Goals

The main goal of this serious game is to raise awareness of the increasingly growing threat that pollution poses to our planet's marine life and ecosystems. My hope is to create an experience that will actively engage the player and cause them to think deeply about this issue as I feel that if a player is actively participating and interacting with the game they will feel a deeper connection to the message that is being presented to them more than if they were just seeing pictures or watching a documentary. I want the player to walk away from this game with a better understanding of this issue and think about what it is they can do to help solve the problem of pollution in our oceans.

Another goal I have for this game that isn't as serious is that I want to create an experience that when all the pollutants are collected from each biome I want to

really show off the beauty of the ocean and its marine life. The player will have a chance to see and appreciate the work that they have done and just explore the area. This should help reinforce the main goal of raising awareness and hopefully causing players to take action in the real world.

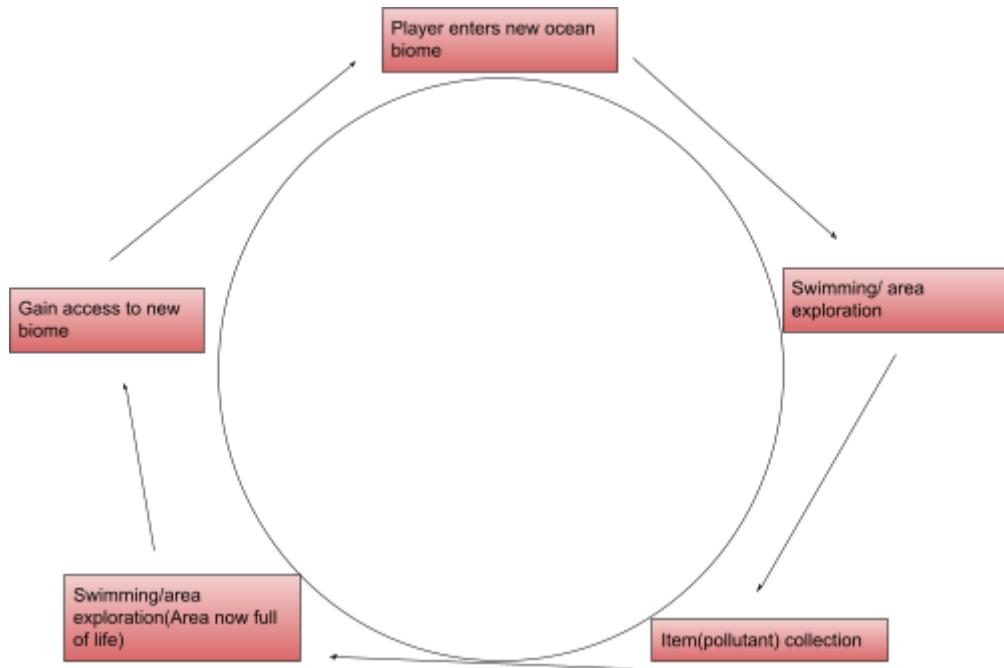
Assessment

The assessment piece for this game will be built into the game itself. Throughout the game it will track how many pounds of garbage the player has cleaned out of an area as well as the different kinds of pollutants they collected. It will track different pollutants like plastics, oil, metal, etc. These two metrics will be displayed to the players at the end of each level when they finish cleaning up an area and then at the end of the game it will show the player the overall metrics from all the different biomes combined. Another metric the game will track is a log of different plants and animals that the player discovers on their adventure through the various ocean biomes. This log can be accessed anytime by the player through the pause or main menu.

Core Gameplay

- **Core Mechanics:** The core game mechanics of this game are swimming, exploration, item collection, and data logging.
- **Core Gameplay loop:** When the game starts the player will spawn in an ocean biome that is devoid of most life and is contaminated with pollutants. The player will then swim around and explore the area in search of pollutants and wildlife. When they swim through a patch of pollution they will collect it and the kind of pollutant as well as how much was collected will be recorded. If the player comes across an animal or plant in the biome they can look at them and hold down E to collect its data in their log. Once the player collects all the pollution in the biome all the animals and plants that inhabit the area will return. This will then allow the player to continue to explore the biome to collect more data for the log or

continue onwards to the next biome.



- **Number of Players:** This game will be a single player experience
- **Win and Lose conditions:** The “win” condition for this game is quite simple. Once the player has collected all the pollutants in all 5 biomes restoring them to their former beautiful state the game will end and show the player the final metrics for how much they collected throughout their playthrough. After this the players will be able to go back and explore all the different biomes in their fully restored forms to continue to fill out their logs, or they can start all over again. In terms of a lose condition there won’t really be one. This kind of game is more about exploration and adventure so it doesn’t really make sense to have something that will cause you to lose. The closest thing to a lose condition would be the fact that the player cannot advance to the next biome without collecting all the pollution in the current biome.
- **Components:** In this game there will be friendly AI such as various fish species, turtles, marine mammals etc. The player will be able to interact with them by either holding down the E key to collect

their data or if they swim up them and hold down the space bar they will be locked into sync and swim along with them. There will be interactive pieces of the environment as well. For example, in the kelp forest biome of the game players can swim through the groups of kelp and it will realistically be pushed and flow out of the way of the player. Of course the collectable items in the game will take the form of pollutants like plastics, scrap metal, and oil patches all of which will be interacted with by the player simply swimming near or through them and they will be automatically collected.



- **Context:** The context in which this game is being designed for is for the general public or gamers to play. I want the game to have a serious topic and goals while having it be fun and enjoyable by the

average everyday gamer. So overall the game will not be designed like something of a classroom learning tool but more as an interactive experience.

Goals

- **Goals:** The main goal of the player is to restore all 5 ocean biomes within the game to their natural beauty. The player does this by exploring each biome and collecting various pollutants in the water. The difficulty of this will come from the fact that not every piece of garbage will be easily found. Some things such as metal or a car battery are heavy and will have sunk down to the deeper and less obvious parts of the biome. There will also be some pollutants that are stuck on animals themselves and the player will have to catch up with them to remove and collect it. There is no real way to fail at the task as the game simply doesn't allow you to progress to the next area until you collect all the pollutants from a biome.
- **Rewards, Punishment, and Feedback:** As the player progresses towards their goal they will be informed of how much pollution they have collected and how much more they must collect in order to fully clean up the biome. When the goal of cleaning up the biome is complete the player will be rewarded with a little cinematic showing the environment and animals returning to their natural state as well as the path to the next biome opening up for the player to continue on their adventure. Afterwards they will be able to freely explore the newly beautified biome for however long they want before continuing onwards. There will also be achievements for various milestones throughout the game such as collecting 1000lbs of garbage or by logging 20 different marine animal species. Punishment for failing to achieve the goals of this game will not be very severe as failing to collect all the pollution in a biome will bar you access to the next area.

Narrative

The narrative of the game is rather simple. The player will play the part of an unnamed diver dropped off a boat in the shallows of an ocean. While all the environments and animals and environments are clearly Earth it is never explicitly said where exactly you are as the flow of the biomes is not exactly natural. The player starts out in the shallows collecting pollutants and helping heal the environment. After fully cleaning the shallows the player will continue onwards into a kelp forest with large Grouper and Sea Otters. After the kelp forest is healed the player will travel through a small cave system and emerge into a large coral reef. After the reef the player will approach the drop off at the edge of the reef and plunge into icy depths of the ocean. Unfortunately the pollution of the oceans can even make its way this deep and the player must clean up the mess. After the restoration of the depths the player will grab hold of the flipper of a large Sperm Whale and return to the light of day and will emerge under the ice of an arctic tundra. Once they complete this area the player will be approached and nuzzled by a friendly seal and will watch as it swims off and leaps up through a hole in the ice. This will prompt the player to follow and once they emerge from the hole in the ice it will fade to a credits screen.

Aesthetic

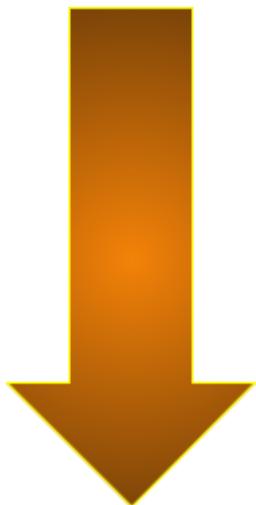
Visual Aesthetic

The art style that I want to go with for this game will be a more stylized or low poly version of real life environments. I want to take the look and feel of real life ocean environments and make them look simpler with a simple more blocky art style with vibrant colors that really pop out. Any UI elements and indicators should be bright and glowy to clearly convey information to the player and also stick with the more artistic and stylized art style. The HUD will be kept to a minimum as I hate it when





games just fill your screen with a ton of “hud goo” and information that covers up the view of the game world. The most this game will have is a simple compass on the top of the screen with and simple waypoints that appear over collectable items when you get close to them.



Audio Aesthetic

With this game despite the art style being stylized and more low poly the sound design will be very realistic. I love the approach that studios like 343 Industries take for their sound design with lots of real world sounds and live audio captures. I approach my games in a similar way and like to use as much real world audio as possible and I think that would work perfectly with this game. One of the best parts of ocean games is being able to immerse the player in the experience and one of the best ways to do that is sound. Things like the water rushing past as the player swims along or just the ambient noise of the ocean are very important things to have. Mixing together different sounds is also a great approach to create a desired sound. For example I want a sound in my game for when sand gets disturbed from the diver's flippers so I can mix together sounds of falling sand with water rushing and make it sound like the sand is moving around underwater. With non diegetic sounds like things tied to UI and item collection I would want something like a high ping that fades out into a lower tone as to not be too harsh on the ears and not sound too much like a stereotypical video game pick up sound.

References/Examples:

- <https://youtube.com/shorts/525h7vAkYj8?feature=share>
- [Stunning audiovisual recording of humpback whales singing - YouTube](#)
- [SELECT Button Sound Effect - YouTube](#)
- [Splash Sound Effects, Small and Heavy Splashes, Water Drops and Impacts, Sample Library - YouTube](#)
- [Previously unheard fish sounds from restored coral reef: 'Whoops, purrs and grunts' - YouTube](#)
- [Sand Pour Sound Effect - Dust and Debris Falling HQ Audio - YouTube](#)

- [30 Minutes Of Cold Water Magic In A Monterey Bay Kelp Forest](#)
[| Relax, Chill, Ocean Therapy - YouTube](#)