

## **The Great Pacific Garbage Patch,**

To begin my presentation I would like to start with a quote from Captain Charles J Moore, an oceanographer who was the first to research the patch. He states “only we humans make waste that nature can't digest” this is an extremely impactful quote that highlights how mankind influences the natural world, and how we have to be the ones to acknowledge and fix our mistakes. Because as we all know the famous saying.

“if not now then when”

For those of you who are wondering what is the Great Pacific garbage patch, it is the largest accumulation of plastic in the ocean and is sometimes referred to as the “Garbage Island.” This name can cause confusion as the patch is not a walkable surface, rather it is an area in the pacific ocean that contains approximately 100,000 tonnes of garbage and plastic. It continues to accumulate and threatens the health of our oceans, ecosystems, animals and humans.

### **Explain image**

### **Why is it a Wicked Problem?**

A wicked problem is a problem that cannot be easily defined or solved. There are many phrases that outline the complexity of a wicked problem a few being that there is no stopping rule, there is no immediate solution, it is a symptom of other problems and the way one defines the problem determines how it can be solved (Rittel & Webber, 1973).

## **What scales are involved?**

Every concept, stakeholder, and environmental element on this map directly impacts and/or is impacted by the GPGP. This map highlights some key stakeholders, but only covers the surface of the very complex wicked problem that is the Great Pacific Garbage Patch.

## **Scale and Limitations**

The Great Pacific Garbage Patch is an extremely complex issues that has a multitude of local, regional and global stakeholders. This being said many bubbles included in this system map are generalized and simplified concepts and ideas that only begin to dive into the complexity of varying perspectives, positions and influences

Explain human bubble scale

An example to add clarity to this explanation can be seen in the "Humans" bubble. An individual may be negatively impacted by the GPGP through the unintentional consumption of micro plastic contaminated water or food. This action is local, impacting an individual or multiple individuals in a community. Whereas when this individual or the community uses single use plastics, the plastics than are thrown away or recycled. This waste is then collected and disposed of through varying practices, some of which results in plastics leaving their designated waste sites or being improperly disposed of. Following this the plastics may end up entering into the ocean through river bodies and storm runoff and eventually accumulating in the GPGP. The GPGP than being globally influenced by this occurrence in hundreds of different communities. And the GPGP once again being a global issue that affects and is affected by individuals and collectives.

## **Main Stakeholders (stakeholders with that are influenced and influence the GPGP the most)**

Fishing Industry: is one of the main contributors to the patch, primarily through lost and abandoned fishing gear

Improper waste management (and what it connects to)

Strom run of - discuss the feedback loops

Next steps: read section on webpage

**Conclude :** highlight the importance of our oceans and finding gaps and levers so that we may protect them.