**Reflection:**

1. This project was challenging, in the beginning I was confident that I would be able to easily understand the articles and essays that I used for source material, I was soundly mistaken.
2. In the beginning I knew the basics about my topic, but learning the details has changed my view on ocean health entirely. As I dug further into the research papers and essays I found that there were fish, Mediterranean Gobies, that had shown altered brains that were able to acclimate them to areas with prolonged exposure to high concentrations of CO2 in the water. This changed my thinking from hopelessness to being hopeful, this is because I was getting disheartened by all the negatives that I saw in the research. Then I found a couple articles showing that some species were showing promising signs of adaptation. I thought about this topic a lot over the course of the semester, and I spent a lot of it looking for any positive signs in the research, until I finally found them.
3. In an earlier reflection I know that I was pretty confident in my abilities as a writer, but this project has really tested my knowledge and skills. The one thing I have discovered about myself as a writer is that I need to focus more on the planning stages and gathering details early to build on them instead of trying to find them after writing the bulk of the paper. While this paper and project were a massive undertaking, I am happy with their final edits, they effectively convey my point and findings on the effects of high CO2 levels on fish.
4. Rising CO₂ is causing ocean acidification, which disrupts fish senses like hearing and smell, affects their growth, and changes migration patterns and ecosystem dynamics. Early research sounded very alarming, but recent studies show a more nuanced picture: while many species are vulnerable, some fish, like Mediterranean gobies, show promising signs of adaptation at genetic and behavioral levels.

A major lesson I learned while working on this was how complex and layered scientific research really is. I started this project feeling pretty confident, but as I dug into the studies, I realized how much uncertainty and discovery are part of science. Importantly, even in the face of worrying trends, I found hope—species are adapting in ways we’re only beginning to understand. Personally, I also learned that planning and gathering detailed information early is crucial for writing strong, well-supported work. Overall, this project deepened my understanding of marine biology and sharpened my skills as a researcher and writer