

## Impacts of Climate Change: Fisheries Collapse Regina Hong, Andrew Kret, Liam Vienneau, & Thomas Wun CPSG101 Science & Global Change First Year Colloquium II April 24, 2018

## Introduction

Our group was tasked with researching how climate change will eventually lead to the collapse of fisheries worldwide. Our findings are troublesome; almost unanimously scientists agree that many marine creatures will become extinct in the coming years.



Graphic showing the absolute flow of energy between trophic levels (line diagram) and the percent of energy transfer efficiency (bar graph). C - current

- acidification

**T** - temperature increase

OAT - combination of both

A reduction in energy transfer would lead to fishery collapse as the entire ecosystem becomes unbalanced. (1)



## **Bibliography:**

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Fisheries surrounding countries that emit a greater amount of carbon per capita are more vulnerable to decline, showing a correlation between climate change and fisheries collapse. (2)



Reconstructed catches for all countries in the world, plus High Seas, by large-scale (industrial) and small-scale sectors (artisanal, subsistence, recreational), with discards presented separately. (3)









Figure 5: The collapse of Gulf of Thailand fishery

(a) Globally averaged combined land and ocean surface temperature anomaly



The above three graphs shows different species of fish and global CO2 emissions. (4) (5) (6)

