Assessing the GHG reduction/sequestration potential and "fishery friendliness" of available climate solutions can help illuminate a path to attaining climate goals as quickly ad affordably as possible while minimizing impacts to fishery ecosystems, resources, and economies. This is a complex balancing act that necessitates optimization along multiple axes. Below, we present some figures and analogies to illustrate a conceptual framework for guiding "fishery friendly climate action."

Figure 1 presents a matrix for evaluating climate-impacting activities and solutions along two dimensions: their impacts on atmospheric GHG concentrations and their impacts on fisheries (see "Defining fishery friendliness<sup>1</sup>"). Activities with positive GHG emissions are those that make climate change worse, while activities with zero emissions can be substitutes for such emitting activities or can reduce the amount of energy required to power our daily lives. Activities with negative GHG emissions are those that play a net-positive role in solving climate change by sequestering carbon dioxide from the atmosphere. Activities in both of the latter categories are considered "climate solutions" in our analysis. Moving to the columns of the matrix, activities can have a range of possible impacts on fisheries, and for the purposes of this exercise we consider activities with neutral or positive effects on fisheries and fishery ecosystems to be "fishery friendly." "Fishery friendly climate solutions" are actions that fall within the four bold-outlined boxes to the lower right of the table.

Figure 1 is useful for classifying climate-impacting activities and solutions categorically, but it does not say anything about the size of relevant impacts or the scale or scalability of each action/solution. Unfortunately, our analysis faces a shortage of comprehensive information in this regard. Project Drawdown modeled the GHG reduction/sequestration potential of 82 different climate solutions globally by the year 2050,<sup>2</sup> but we lack a corresponding analysis of GHG reduction/sequestration potential of a spectrum of solutions at the U.S. level, where our analysis is focused. Where U.S.-level information on GHG reduction/sequestration potential is available, we have included it in our climate solutions fact sheets.

Figure 2 utilizes a metaphor of linked buckets to depict a strategy for deploying and scaling climate solutions according to their fishery friendliness. The colors of the buckets correspond to the colors in the matrix in Figure 1. A fishery-friendly approach to solving climate change would give top preference to actions that remove carbon dioxide from the atmosphere while providing positive co-benefits for fisheries. We know that these actions will only get us so far towards solving climate change; once this bucket is filled, there will still be a lot more molecules of GHGs to reduce/sequester. Therefore, we move next to the bucket that includes actions with zero GHG emissions that have benefits to fisheries and actions with negative GHG emissions that are neutral to fisheries. Following this, we would fill the bucket representing actions that

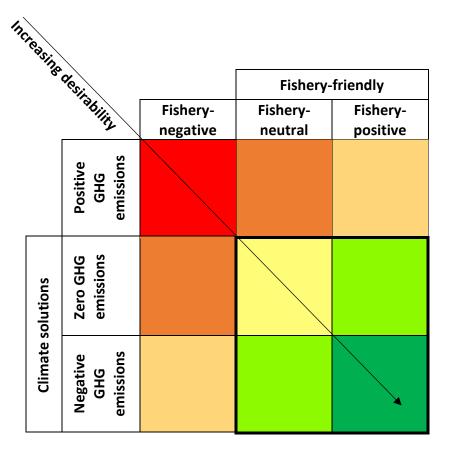
<sup>&</sup>lt;sup>1</sup> https://fisheryfriendlyclimateaction.org/solutions

<sup>&</sup>lt;sup>2</sup> https://drawdown.org/solutions/table-of-solutions

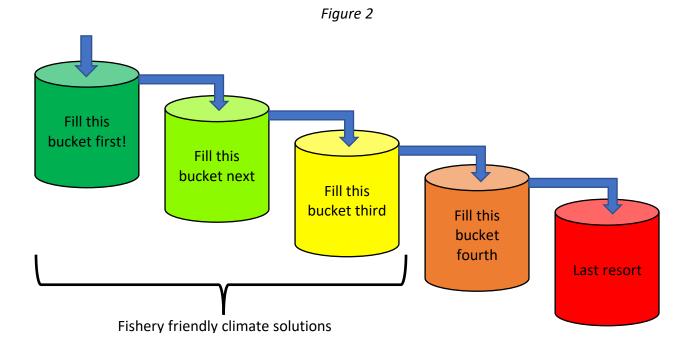
have zero GHG emissions and no impacts to fisheries. Once all fishery friendly options have been exhausted, only then would we fill the remaining buckets.

It is important to note that Figure 2 is not drawn to scale; we lack information on the amount of GHG reduction/sequestration capacity within each bucket, but it is likely to vary considerably from bucket to bucket. It is also important to note that the buckets represent a prioritization scheme, not a chronological ordering of actions. It is about "weighting," not "waiting"; given the urgency of climate change, all preferred actions should be implemented as soon as possible.

As this exercise indicates, a fishery-friendly approach to climate action will likely not *eliminate* the need for fishery-unfriendly solutions altogether. Although we lack specific numbers, it seems quite likely that we will ultimately need to use *all* buckets. Instead, the intended effect of a fishery friendly planning approach is to weight solutions that are fishery friendly more heavily than those that are not, with the end goal of deploying a mix of climate actions that are, in the aggregate, more beneficial and less detrimental to fisheries than they would be in the absence of such an approach. This difference is illustrated in the hypothetical scenarios represented in Figures 3 and 4.









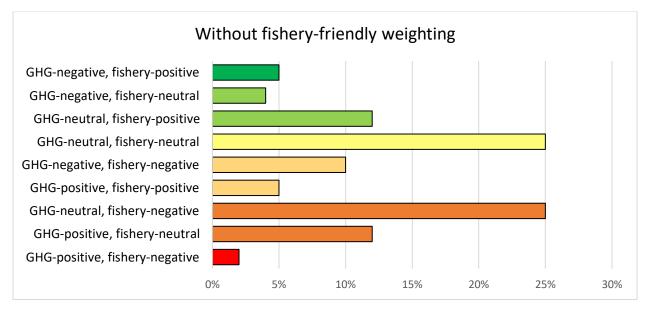
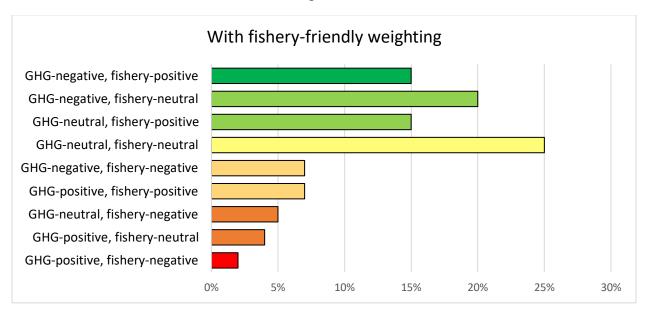


Figure 4



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