

July 7, 2023
Mr. Eric Sklar, President
California Fish and Game Commission
P.O. Box 944209
Sacramento, CA 94244-2090

RE: Marine Resource Committee Agenda Item 3: Set Gillnet Bycatch Evaluation

Dear President Sklar and Members of the Commission,

We the undersigned scientists see a strong need to address and minimize bycatch in state managed fisheries. Effectively assessing and minimizing bycatch is a fundamental cornerstone of sustainable, ecosystem-based fishery management (Pew Oceans Commission). The unintended catch and discarding of marine life – known as bycatch – is widely considered among the top ecological impacts of fisheries (Hall et al. 2000, Davies et al. 2009, Donaldson et al. 2011). Fisheries bycatch can have ecosystem-level effects by changing the abundance of non-target species, alter biodiversity by removing predator and prey species at unsustainable levels, and becomes a particularly visible conservation concern when it involves threatened groups (e.g. sharks, seabirds, marine mammals) (Hall et al. 2000, Cook 2001, Gilman et al. 2008). Biodiversity is a key component in stable ecosystems which are facing unprecedented stressors from warming ocean temperatures, habitat loss, and other anthropogenic impacts (Worm et al. 2006, Heip et al 2009).

Bycatch in gillnets has long been recognized as a global conservation concern. The low selectivity and high mortality rates of bycatch in gillnets has been implicated in regional and population level declines of many vulnerable species in marine ecosystems globally (Forney et al. 2001, Read 2006, Pondella and Allen 2008, Zyldeis et al. 2009, Rodríguez-Quiroz et al. 2012, Regular et al. 2013, Reeves et al. 2013, Wallace et al. 2013, Lewison et al. 2014, Herrera et al. 2017). Relative to other fisheries, bottom set gillnets continue to pose some of the greatest management and conservation challenges, particularly when mortality and species impacts are not monitored (Berrow 1994, Alverson et al. 1994, Cook 2003, Forney et al. 2001, Dunn et al. 2009, Shester and Micheli 2011, Micheli et al. 2014).

Non-selective gear types such as bottom gillnets that are fished in diverse ecosystems like the Southern California Bight have the potential to significantly impact the diversity, function, and resilience of the ecosystem if not thoughtfully managed. The California set gillnet fishery has high rates of bycatch and discard mortality, and impacts over 125 species including marine mammals, sharks, rays, skates, and other fish, many of which have unassessed populations and vulnerable life histories that make them susceptible to depletion. A key principle of ecosystem-based fisheries management is the need to protect ecosystems and populations by applying the precautionary principle (Dayton 1998, Chuenpagdee et al. 2003). California fisheries must forge the path towards ecosystem-based and sustainable management of fish and wildlife stocks, target and non-target species. A growing body of scientific research shows us the fragile nature of the oceans, and the defaunation processes that currently threaten marine ecosystems (Pauly et al. 2002, Myers et al. 2007, McCauley et al. 2015). In this context, it is imperative to consider the ecological impacts of fisheries that have disproportionate impacts on wildlife and fish stocks. There is a strong need to consider all ecosystem stressors and impacts when considering fisheries management in the 21st century. Precautionary and adaptive management approaches are warranted. We urge to California Fish and Game Commission to

thoughtfully consider the impacts of this fishery in the context of an ecosystem-based approach, and take further management actions to minimize harmful bycatch.

Sincerely,

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Francine Kershaw, Ph.D., Senior Scientist, Natural Resource Defense Council

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