

# TNC's Exempted Fishing Permit Application

# LINGCOD POT GEAR TESTING

## PROJECT GOAL

To test the efficacy of modified gear to selectively harvest lingcod while avoiding catch of rebuilding and limiting stocks - particularly yelloweye rockfish and Pacific halibut.

## EFP EXEMPTION NEEDED

Permission to conduct fishing of modified pot gear in the non-trawl Rockfish Conservation Area offshore of Washington and Oregon.



The Nature Conservancy (Conservancy) is interested in increasing the supply of sustainably harvested fish on the West Coast of the United States.

Even as overfished stocks continue to rebuild, and even with the individual fishing quota program for the trawl sector, fishermen will continue to be constrained because they lack gear that is selective enough to catch certain target stocks, such as lingcod, without incurring substantial bycatch of rebuilding stocks, such as yelloweye rockfish.

In 2013, the Conservancy launched a collaborative effort to design and test an innovative fish pot that could help solve this problem. In 2014, we tested pot designs seaward of the non-trawl Rockfish Conservation Area (RCA), and refined the design. Our next step is to test the gear in areas with higher densities of lingcod - i.e., within the non-trawl RCA.

The aim of this effort is to show, through collaborative research, that the modified pot gear can safely target lingcod without catching rebuilding rockfish stocks and Pacific halibut, while still being an economically viable alternative for fishermen.

# EFP overview

## Why Lingcod?

- Only 21% of its 2.5 million pound allocation north of 40°10'N was caught in 2014.
- Pot-caught lingcod have a higher value, due to the freshness and quality of the fish. In 2014, price-per-pound for pot-caught lingcod was 79% higher than trawl-caught lingcod.
- Even if fishermen had access to fish in the RCAs, they may avoid targeting lingcod with trawl or longline gear because of the risk of catching yelloweye rockfish and Pacific halibut that co-occur with lingcod.

## Modified Pots

- Collapsible-wings with tunnel entrances (indicated by arrows in picture below)
- Escape rings on top for rockfish, undersized lingcod (not shown)
- Halibut excluders (not shown)



## Test Fishing

- 4 boats fishing off of Washington and Oregon in 2017 and 2018.
- Test the gear in areas with historically high catches of lingcod to evaluate efficacy of pots.
- Quota, research, and observer costs will be covered by the Conservancy and EFP participants.
- Conservancy and EFP participants will collect data including: set/haul position of pot string, depth; length & weight of all catch; subsample of lingcod stomach contents.

## broader effort

In addition to **Pot Design and Testing**, the Conservancy is collaborating with the University of Washington's (UW) School of Aquatic & Fishery Sciences faculty to research how the gear and a fishery for lingcod could affect the fleet and the ecosystem. Elements of the research include:

**Adoptability.** Given the gear's performance and condition of the catch, UW faculty and students are modeling the likelihood that fishermen will adopt the gear and displace use of other gears given their participation in other fisheries.

**Food Web Modeling.** An increase in lingcod harvest also may have the benefit of reducing pressure on rockfish stocks, as lingcod are a voracious predator on several species of rockfish. UW faculty and students are modeling potential population level impacts to rockfish from lower predation pressure from lingcod.

Conservancy staff is also engaged in **Market Analysis and Strategic Planning** to understand how an increased supply of sustainably caught lingcod can be matched to the demand of urban consumers. Over the next 2 years, we are developing a strategic plan and solidifying necessary partnerships for advancing a distribution system and market pipelines for these lingcod and possibly other species.