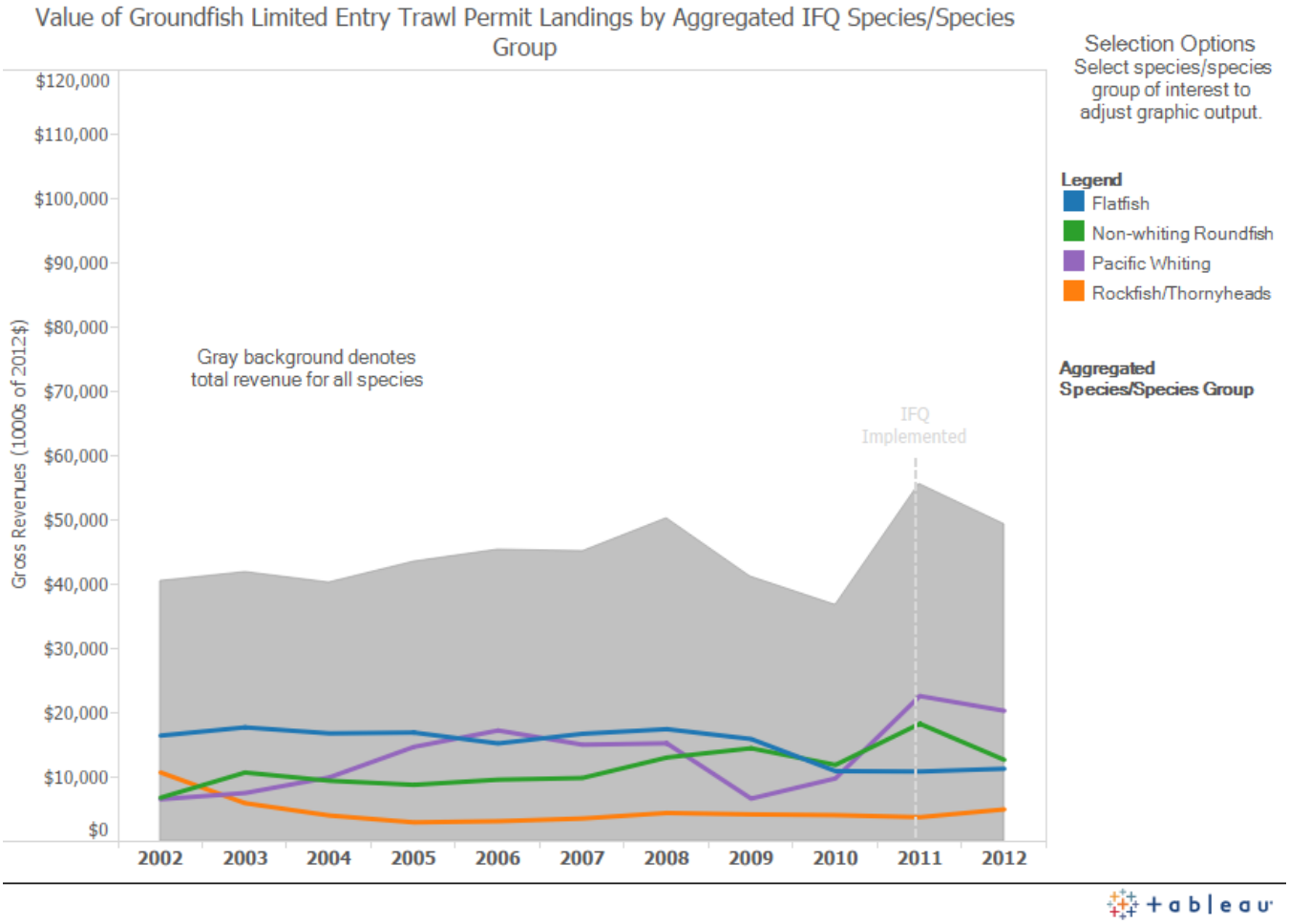
MEASURING the EFFECTS of CATCH SHARES

West Coast Groundfish Interim Findings: Economic Indicators

Version: September 2013

## Financial Viability of Active Vessels: Groundfish Revenues

This indicator measures changes in groundfish gross revenues, which affect the financial viability of fishing operations participating in the catch share fishery (Financial Viability of the Fishery: Introduction).




*Additional charts provided below. The images in this downloadable fact sheet may not show all the components within each indicator. To work with an interactive display of the data underlying this indicator, go to:* *http://catchshareindicators.org/indicators/westcoast/groundfish-revenues/*

## Overview

Despite the decline in non-whiting groundfish landings during the first two years of the Shorebased IFQ Program (Groundfish Landings), non-whiting groundfish gross revenues were similar to those in prior recent years. This was primarily because of increased revenues from sablefish landings. High gross revenues in the shorebased Pacific whiting fishery in 2011 reflect increases in the ACL and high ex-vessel prices.

## Baseline Period

Primary graphics provided depict the project's standard baseline (2002-2010), supplementary graphics of an extended baseline provide additional context.

Total gross revenues of trawl vessels (adjusted for inflation to 2012 dollars) from non-whiting groundfish landings declined substantially through the 1980s. But the trend during the baseline period (2002-2010), while fluctuating on an annual basis, did not show strong upward or downward movement. As expected, this trend tracked with landings of non-whiting groundfish species (Groundfish Landings). Total revenues in the non-whiting groundfish trawl fishery during the 2006-2010 period were about 28 percent of those from 1981 through 1985.

After declining dramatically from highs in the 1980s, gross revenues from flatfish, rockfish, thornyheads, lingcod, and Pacific cod leveled off during the baseline period. In contrast, revenues from sablefish trended upward over the baseline years, even though landings of that species remained relatively stable.

With the rapid expansion of the domestic shorebased Pacific whiting fishery after the mid-1980s, gross revenues in the fishery increased substantially. From 2006 through 2010, the average annual value of the shorebased Pacific whiting fishery was around $13 million.

## Catch Share Program

In 2011, total landings of the non-whiting portion of the Shorebased IFQ fishery was worth about $32 million (whiting landings were valued at over $22 million), which is comparable to the average during the baseline. A major reason gross revenues stayed relatively stable despite the decline in landings (Groundfish Landings) was the flexibility under the Shorebased IFQ Program for fishermen to switch gears to target different species at different times of the year (Shorebased IFQ Program).

In 2011 and 2012, some long-time trawl fishermen switched to fixed gear (especially pots) to harvest sablefish because of the higher market price for sablefish caught with fixed gear, compared to trawl-caught sablefish (Sablefish Gross Revenues,  *provided below*, and Ex-Vessel

Sablefish Price, *provided below*). In addition, some of the limited entry trawl permit holders who used fixed gear in 2011 and 2012 to harvest sablefish had no history of trawling; these fishermen primarily participated in the limited entry fixed gear sablefish fishery and then leased trawl permits after the catch share program began in order to acquire quota and fish for sablefish.

Gross revenues from sablefish in 2011 were also enhanced by high ex-vessel prices due to strong markets in Asia, where most of the sablefish are shipped. However, large U.S. and Canada sablefish catches in 2011 appear to have led to a market glut that depressed prices in 2012. Sablefish accounted for about 52 percent of the total non-whiting gross revenues of the Shorebased IFQ fishery and decreased to 39 percent in 2012, compared to an average of around 37 percent in 2006-2010. Rockfish and flatfish gross revenues both increased in 2012, which partially offset the drop in sablefish revenues.

High gross revenues in the shorebased Pacific whiting fishery in 2011 reflect increases in the ACL and high ex-vessel prices. The average ex-vessel price for Pacific whiting has been trending upward within the last ten years, with 2012 prices nearly three times those of 2004. This increase was driven by strong export demand for headed-and-gutted product (Ex-Vessel Price of IFQ Species, *provided below*). The increased flexibility in fishing operations provided by the IFQ program, which allows fishermen the opportunity to delay the start of their whiting season to target larger, higher-priced fish, may also have had a positive effect on the price paid for the product. Moreover, the flexibility to deliver catches over a longer period of time helps to avoid saturating the market (Groundfish Landings). Revenue per vessel also increased in 2011 due to the consolidation that occurred in the shorebased Pacific whiting fleet the under the IFQ program (Number of Active Vessels).

## Data Gaps and Limitations

Data on the distribution of groundfish gross revenues across active limited entry trawl vessels during the baseline years and Shorebased IFQ Program are currently unavailable. In addition, the gross revenues presented here do not take into account the increases in costs that are a result of the IFQ program; these include observer and catch monitor costs, costs for QP purchases, and risk pool management and administration costs (Cost of Fishery Management). On the other hand, the IFQ program may also have led to cost savings due to a reduction in fixed costs as a result of fleet consolidation and a reduction in variable costs if fewer trips with larger landings were made. Detailed cost data necessary for calculation of profitability changes that resulted from the IFQ program are presently not available. However, the NMFS Northwest Fisheries Science Center is currently collecting data through the Economic Data Collection Program that may help clarify these program effects.

## Information Sources

Matson, S. 2013. Annual Catch Report for the Pacific Coast Groundfish, Shorebased IFQ Program in 2012. NMFS Northwest Regional Office. Seattle, WA.

National Marine Fisheries Service. 2012. The West Coast groundfish IFQ fishery: Results from the first year of catch shares. Northwest Regional Office. Seattle, WA.

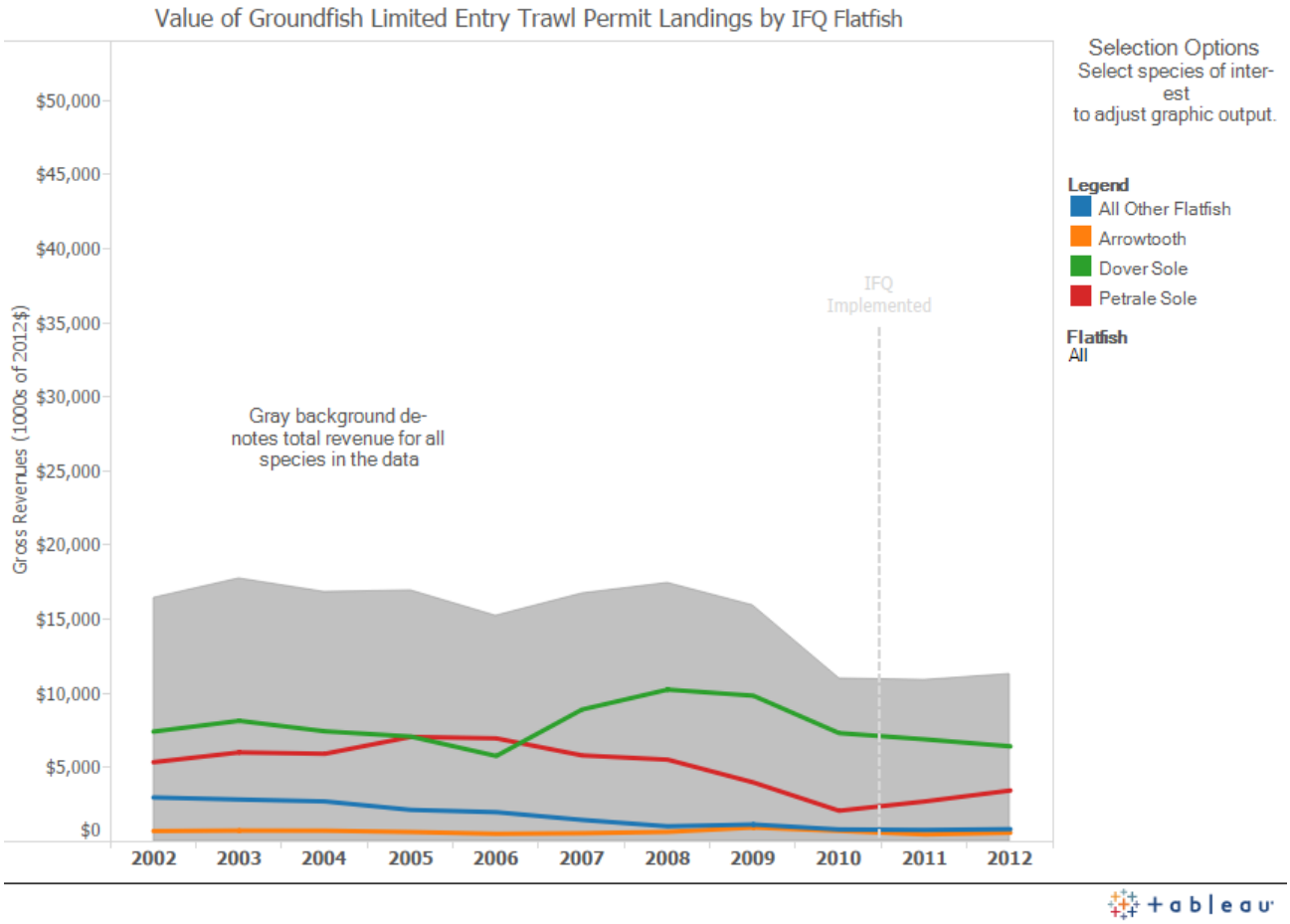
Oregon Department of Fish and Wildlife. 2012. Oregon Department of Fish and Wildlife Report on the Individual Fishing Quota (IFQ) Program off Oregon. Prepared for Pacific Fishery Management Council. Portland, OR.

Pacific Fishery Management Council and National Marine Fisheries Service. 2012. Proposed Harvest Specifications and Management Measures for the 2013-2014 Pacific Coast Groundfish Fishery and Amendment 21-2 to the Pacific Coast Fishery Management Plan, Final Environmental Impact Statement. Pacific Fishery Management Council, Portland, OR.

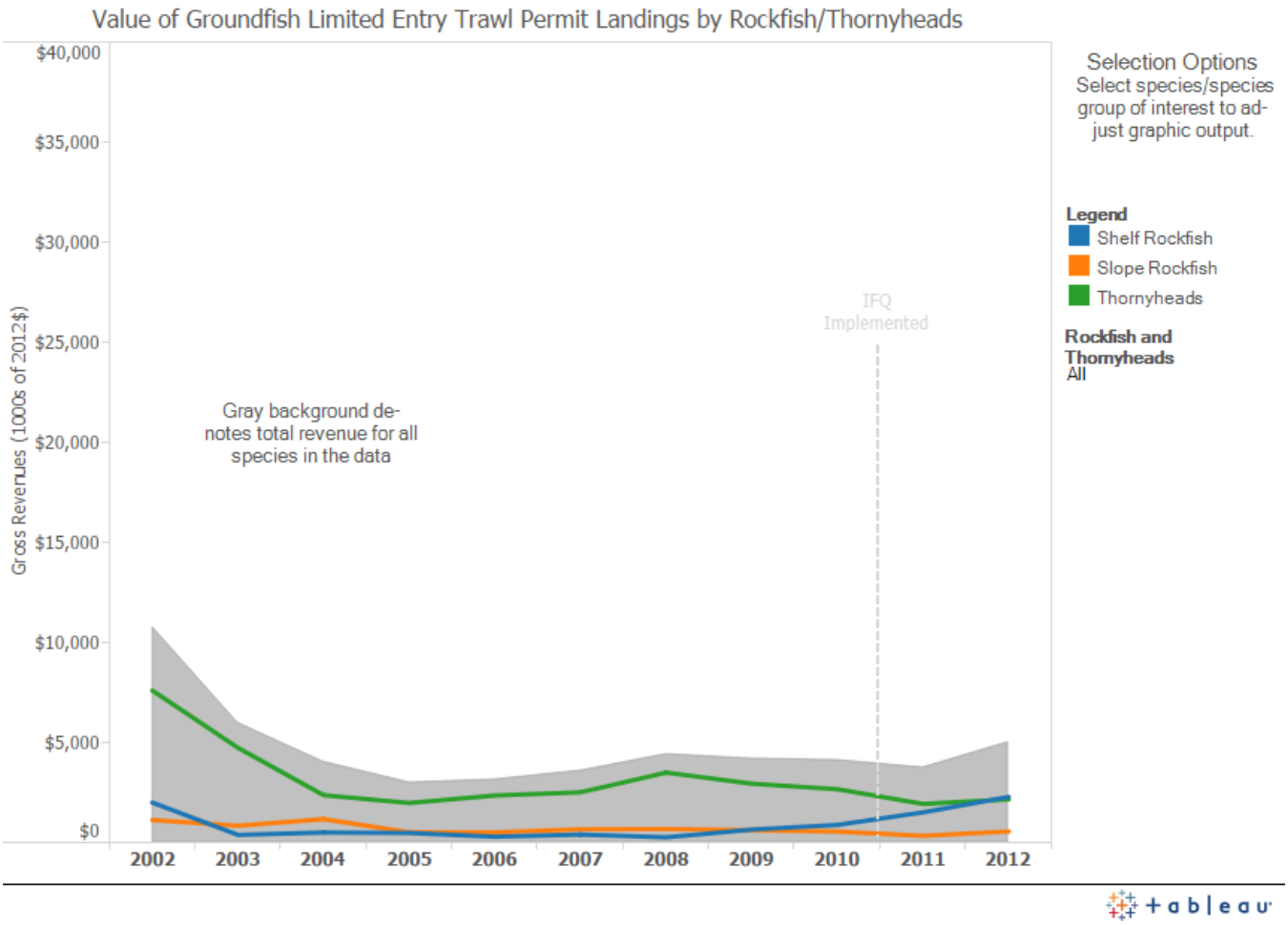
Pacific Fisheries Information Network (PacFIN). 2013. PFMC Groundfish Management Team Reports, Pacific States Marine Fisheries Commission. Available online: http://pacfin.psmfc.org/pacfin_pub/pfmc.php

## Charts

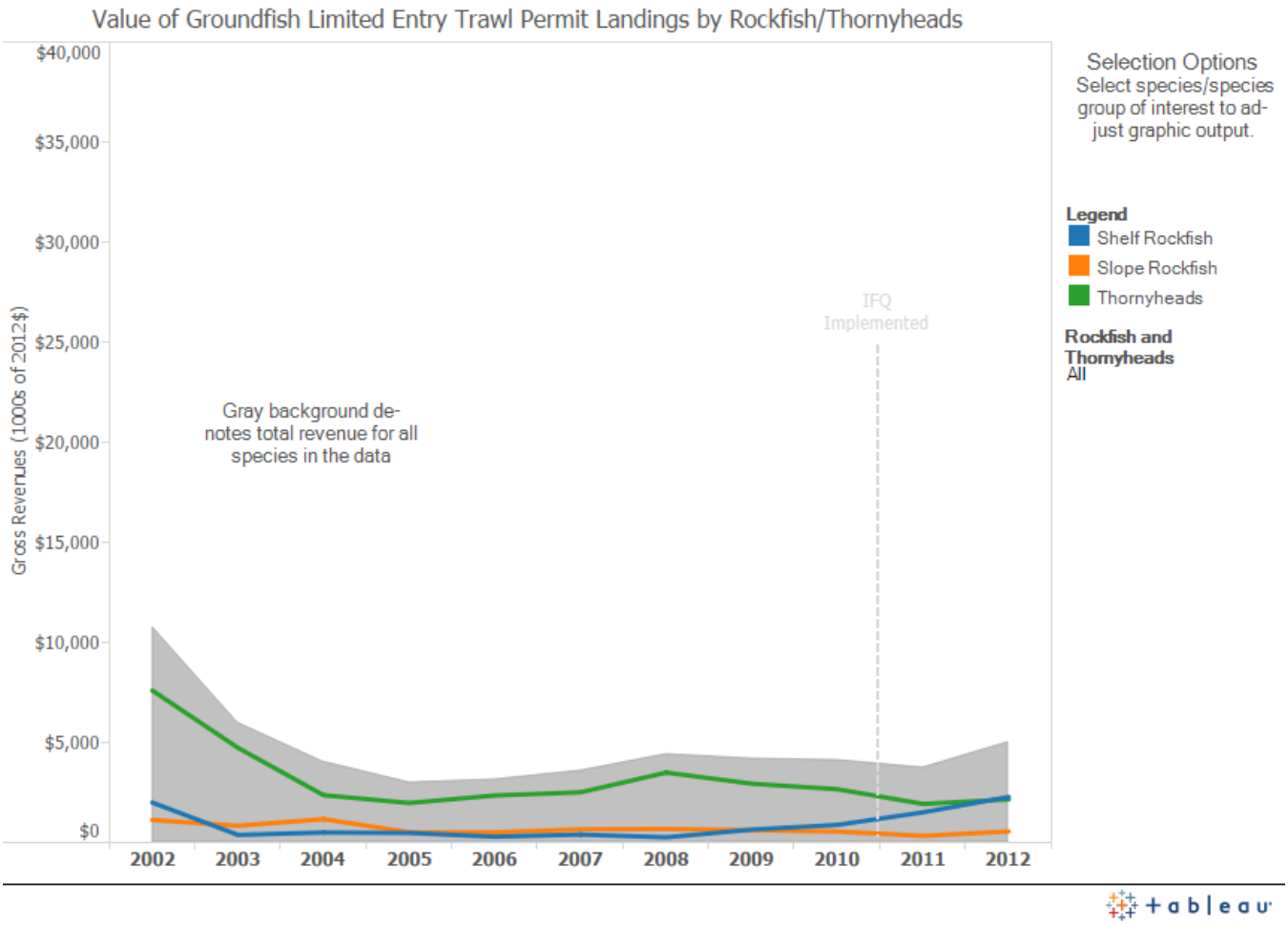
## Value by Aggregated IFQ Species/Species Group



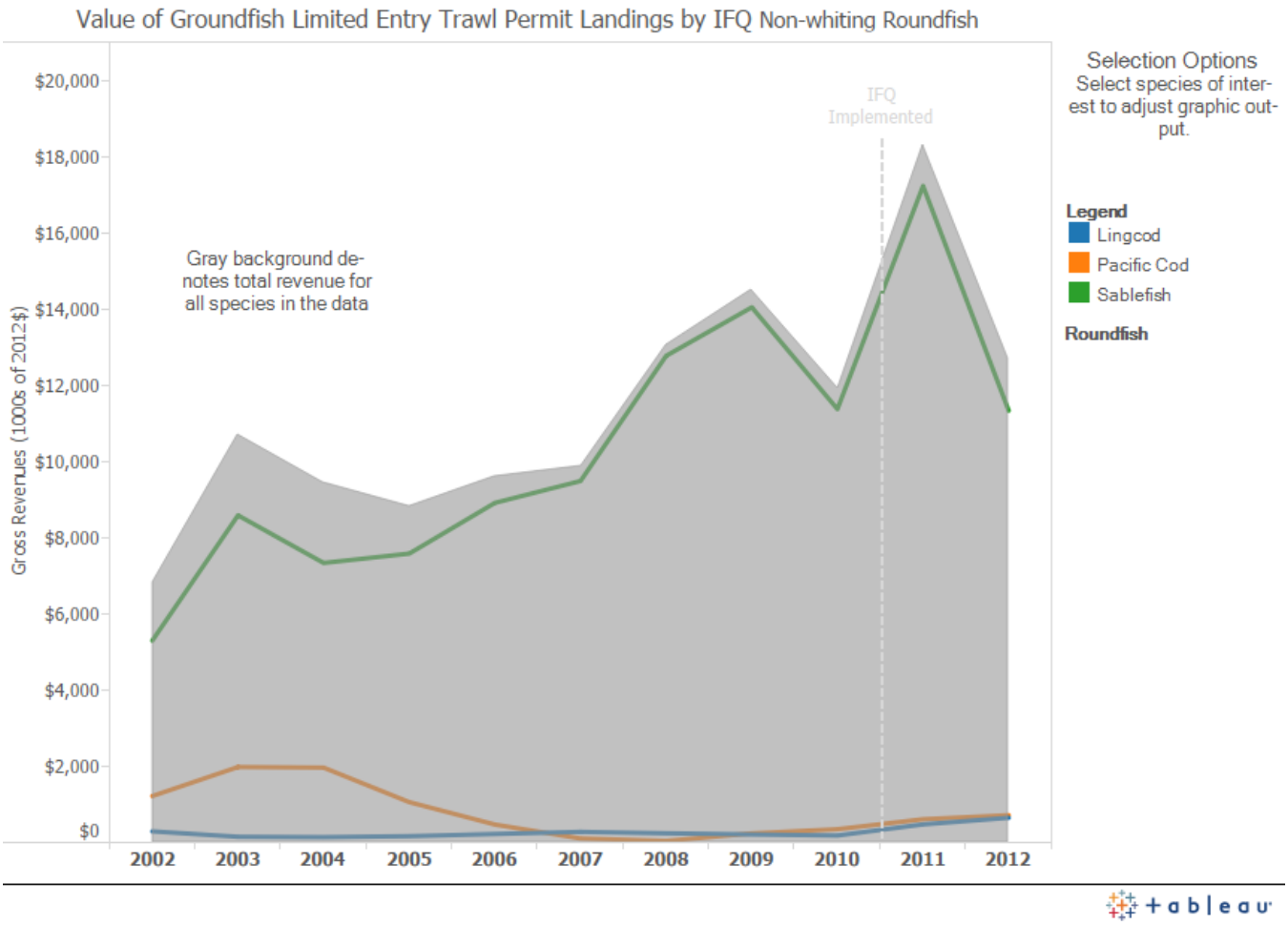
# Value by IFQ Flatfish



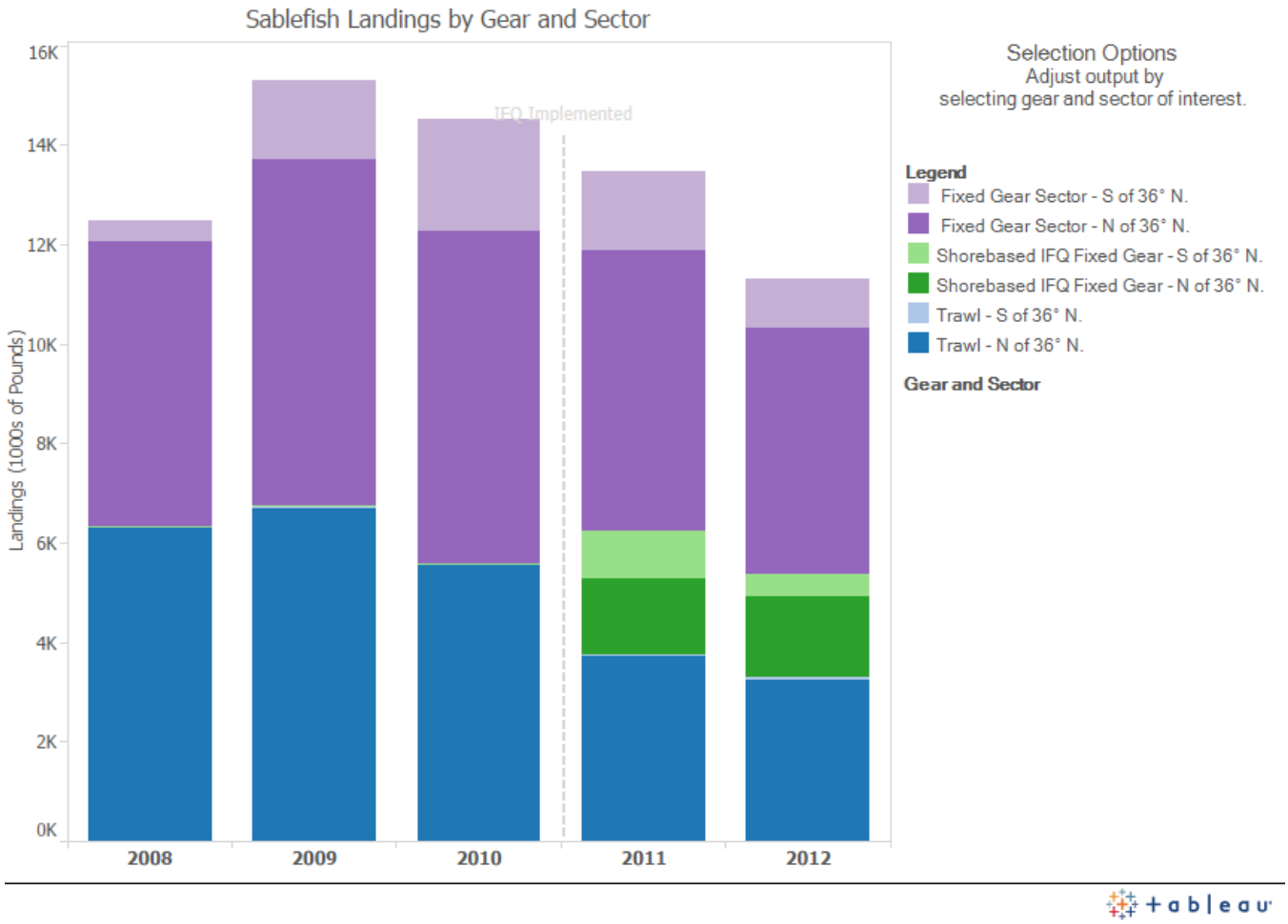
# Value by IFQ Rockfish



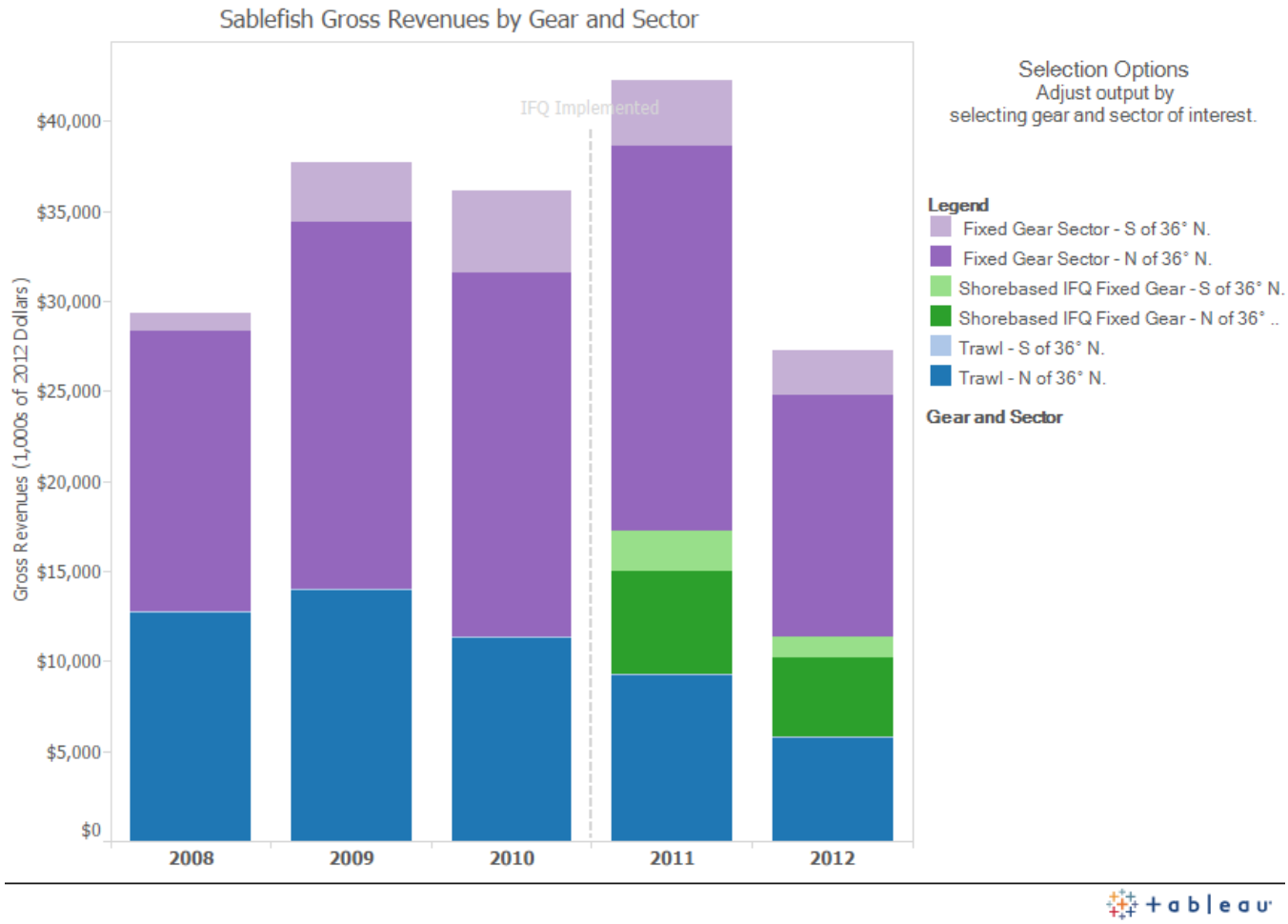
# Value by IFQ Non-Whiting Roundfish



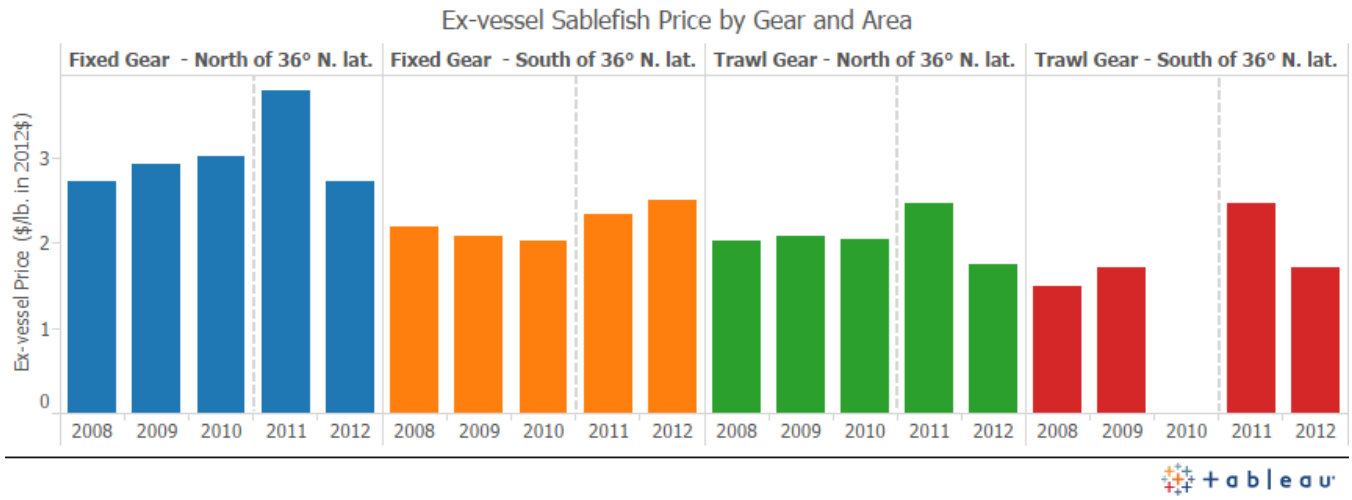
# Sablefish Landings



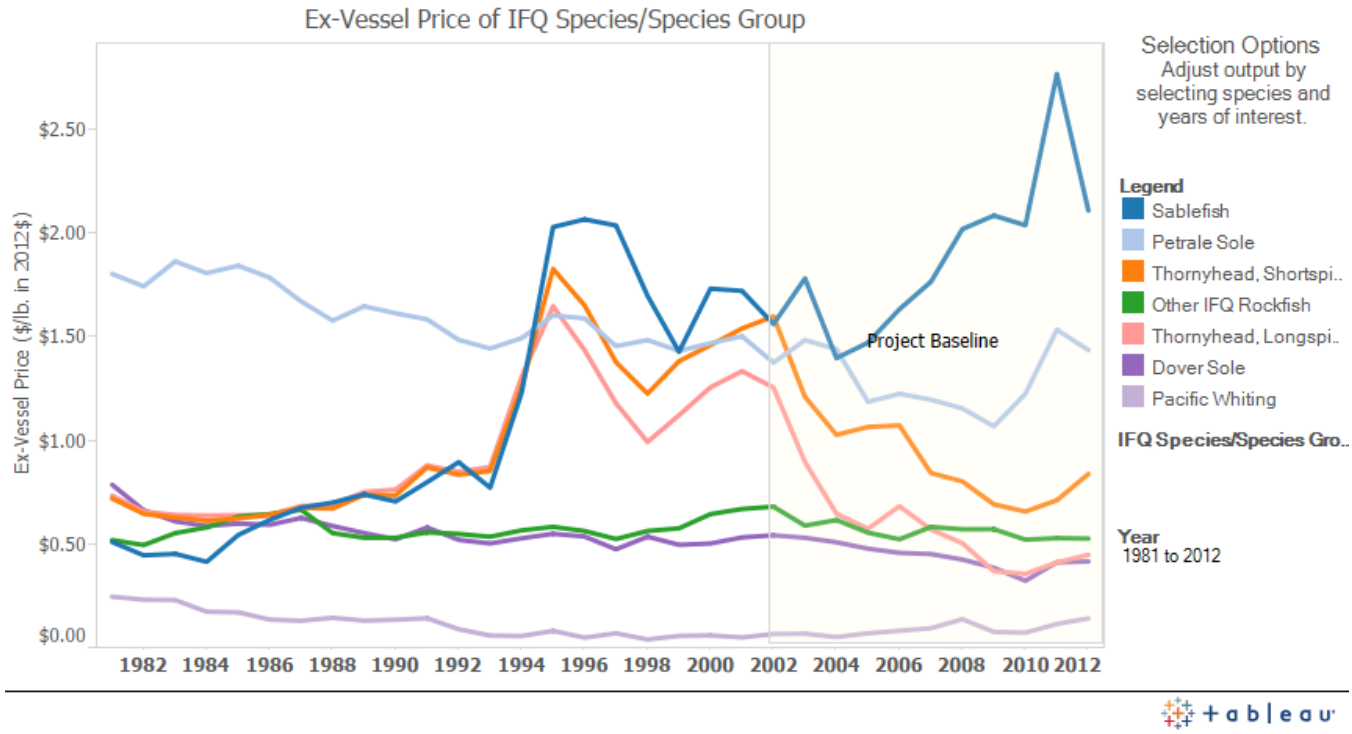
# Sablefish Gross Revenues



## Ex-Vessel Sablefish Price

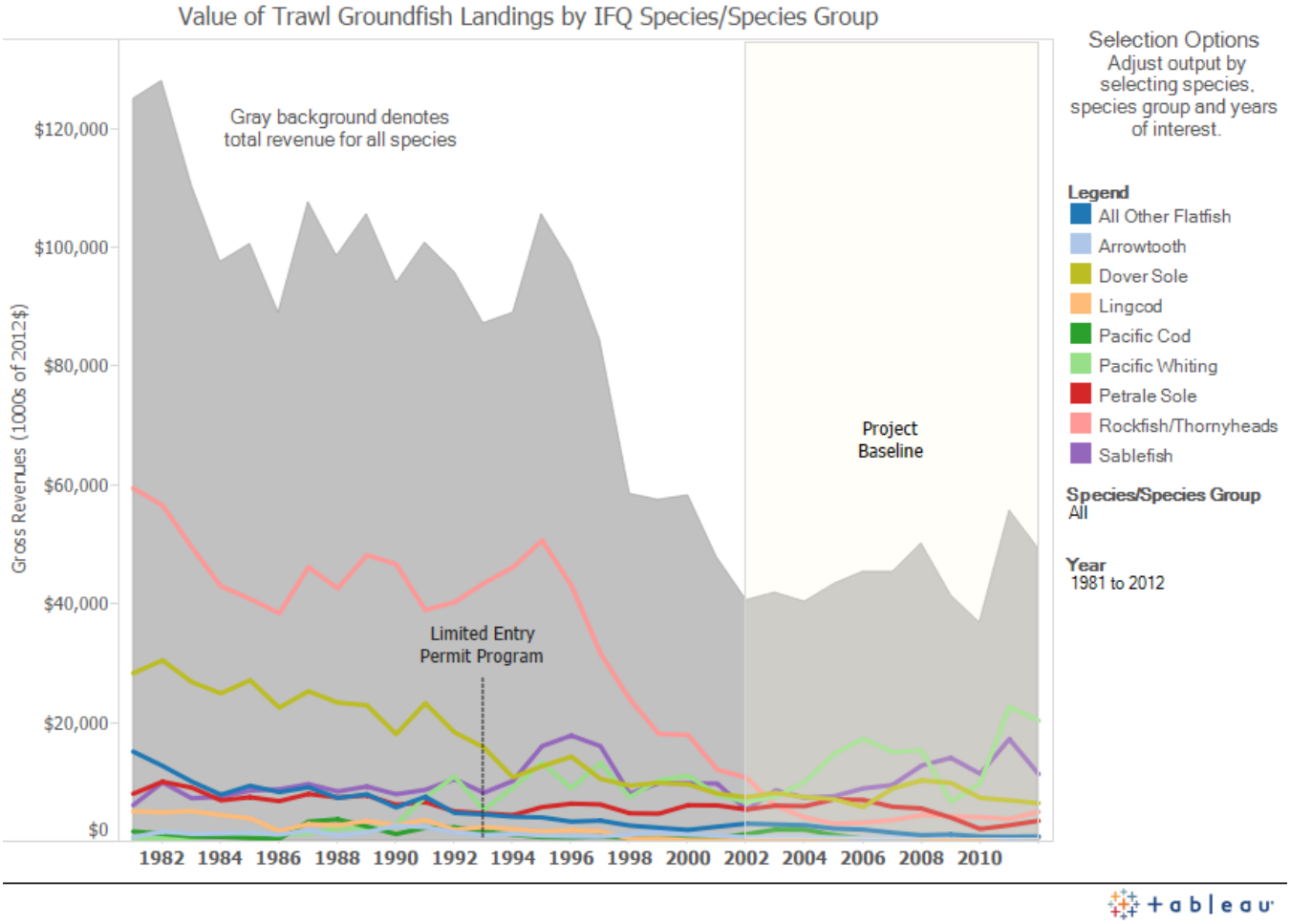



## Ex-Vessel Price of IFQ Species

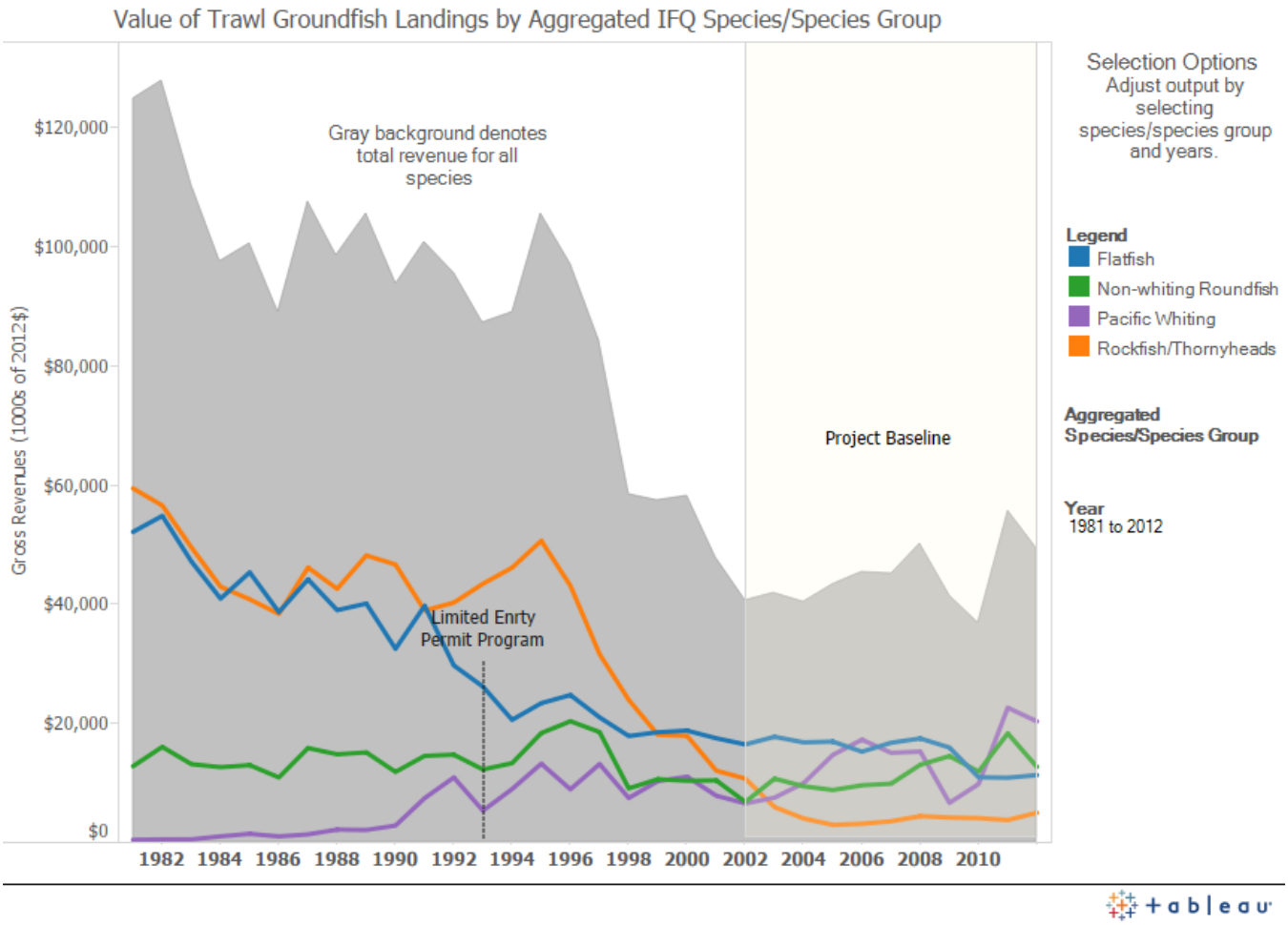


## Extended Baseline Charts

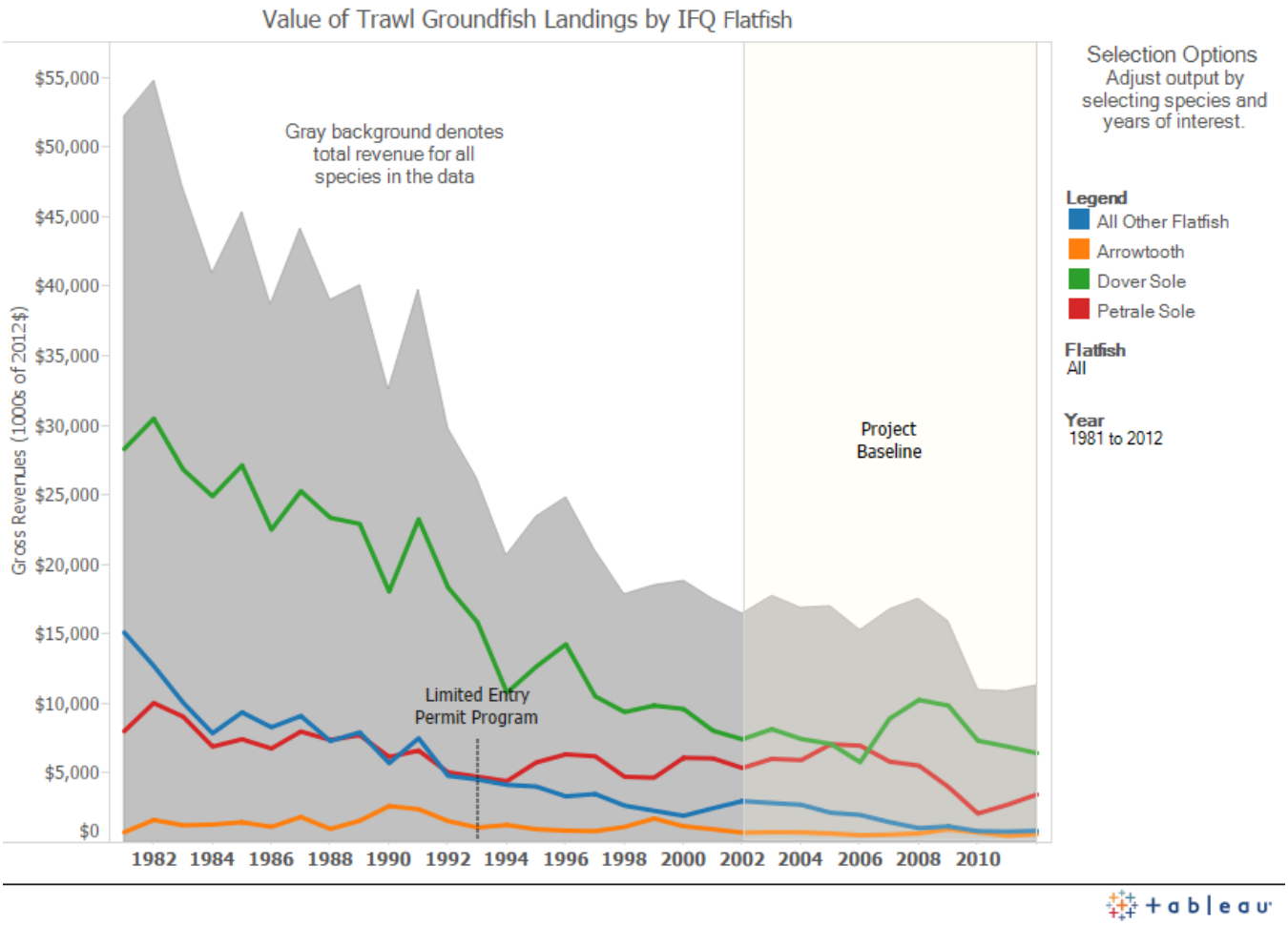
## Value by IFQ Species/Species Group



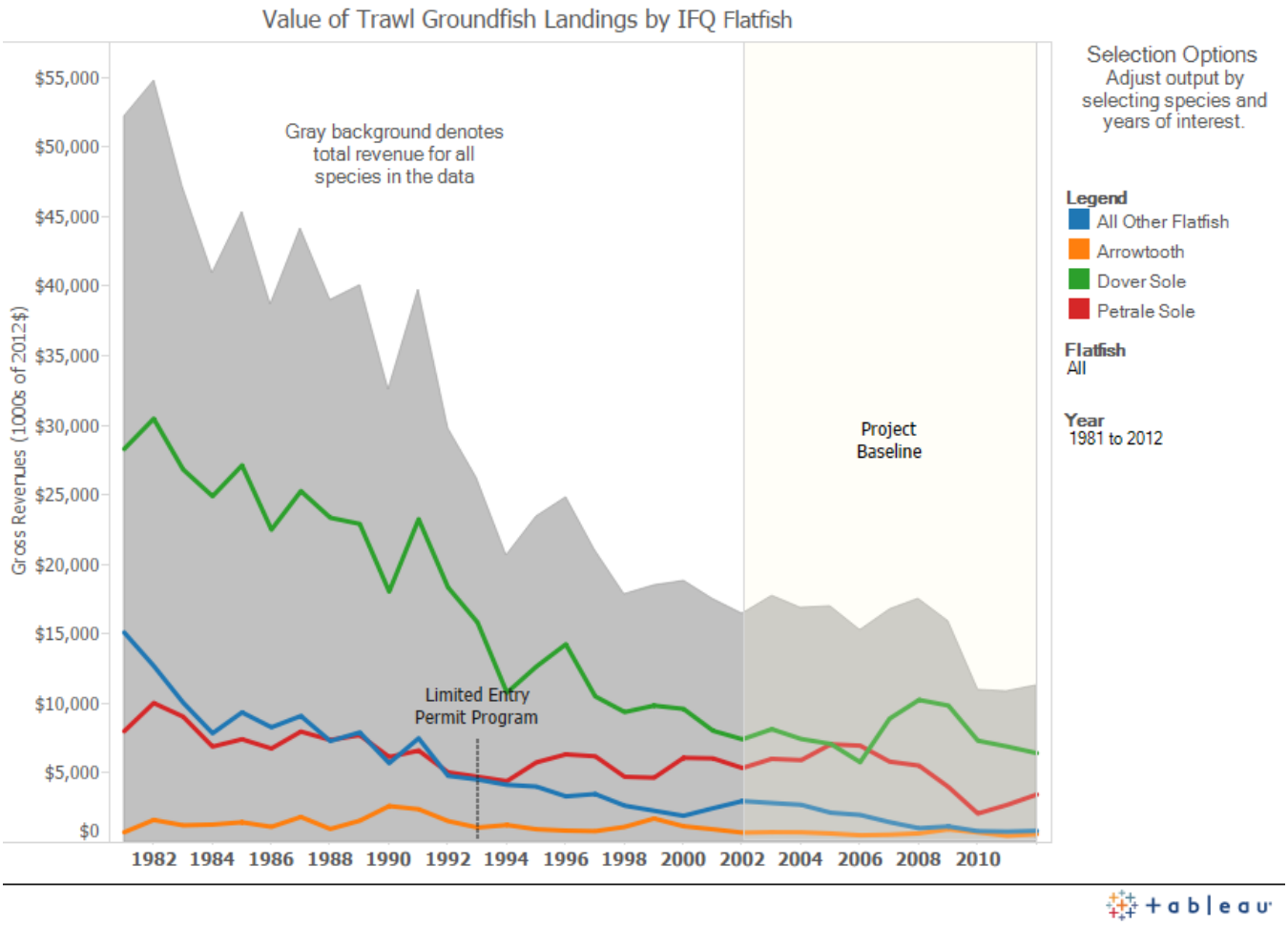
# Value by Aggregated IFQ Species/Species Group



## Value by IFQ Flatfish



## Value by IFQ Rockfish



# Value by IFQ Non-Whiting Roundfish