

Q-Calc - Individual Fisheries Quota Calculator

Should I buy IFQ? Can I afford it? If I fish my “Q”s with someone else, what’s a fair split of the gross? What happens if the price or TAC drops?

Q-Calc lets you quickly analyze a potential IFQ purchase, figure out if you are better off fishing your quota with somebody else, estimate the effects of price changes to your bottom line, and ask other “what if” questions. It *does not* provide a full-blown economic analysis, but it does give you quick answers to some of the most frequently asked questions in wheelhouses these days.

The Q-Calc workbook contains three individual worksheets – one for halibut, one for sablefish, and a calculator sheet to figure out loan payments and to translate quota share (QS) units into pounds of fish.

Instructions

In all of the Q-Calc worksheets **User Input Fields** are outlined in green. These are the cells in which you can enter data.

Since there are more people fishing halibut than sablefish, **HALIBUT Q-Calc** will be the most frequently used worksheet, so we’ll start there. Begin by filling in the **IFQ Pounds Purchased** and **Price per Pound** User Input Fields. The **Total Cost of Purchase** will be calculated automatically. (Most IFQ transactions are conducted in “pounds” based on the most current year. But, if you only know the number of Quota Share Units, you can convert that to pounds by using the **Loan & Poundage Calculators worksheet**. See instructions below.)

Next, input the percentage of the total purchase that you intend to finance in the **Percent Financed** field. Financing percentages can range from 80% for National Marine Fisheries Service loans to 50% for conventional financing. State of Alaska IFQ loans are in between, at about 65%. Having made this input the **Amount of Loan** and **Equity Amount** will automatically be calculated. The Equity Amount is what you must invest, i.e. your “down payment”.

The next step is to enter your annual loan cost in the **Annual Payment** field. If you do not already know what your annual loan payment will be, you can get a good estimate by using the **Annual Loan Payment Calculator** on the Loan & Poundage Calculators worksheet. Once you have run through that routine, enter the result in the Annual Payment field.

Now go to the **Landed Price** field. For basic analysis purposes you should use a price for fish that is reasonable to expect given current market conditions. The Landed Price will

be multiplied by the IFQ Pounds Purchased, and that value will be entered automatically in the appropriate fields “below the line”.

*Note: Once you have completed a basic Q-Calc analysis, you can come back to the Landed Price field and vary this value to get a rough estimate of break-even points. Keep lowering the price value until the **Contribution To "Q" Holder Overhead** (see below) in either scenario equals “zero”. That will be the operational break-even price at which you are paying your loan, and paying basic fishing expenses, but are not making any positive cash flow. You can also estimate the effects of possible TAC changes using this method. Let’s say the break-even price you just calculated equals 60% of the price you are expecting to get under current conditions. You can then figure that if the price holds at your current estimate, the TAC – hence the amount of quota you have to fish – could decline to 60% of its current value and you could still be breaking even.*

The next entry field is for the **NMFS Management Fee %**. The National Marine Fisheries Service is the federal agency that manages the IFQ programs. NMFS is authorized by Congress to assess fees of up to 3% of your landed value to recover the management costs of the IFQ program. Typically the actual amount assessed has been less than the full amount. Check the NMFS Alaska Fisheries website to determine the current assessment percentage <http://www.fakr.noaa.gov/ram/ifq.htm> (There is lots of other valuable IFQ program information at this website.) Note that NMFS allows two calculation methods. You can apply the percentage to standard prices published by NMFS or, in some cases, to your actual price if properly documented. For purposes of Q-Calc the price you enter is used, and gives an estimate only.

Now move “below the line” to calculate the expected cash flow from your IFQs. Two calculation options are available, allowing you to get a “snap shot” of fishing the Qs on your own boat, or fishing them on somebody else’s boat.

If You Fish the Q's on Your Own Boat this column will allow you to estimate your results. The value for Landed Price multiplied by the IFQ Pounds Purchased will have been automatically entered on the **IFQ Holder Gross** line, and the NMFS IFQ Management Fee will also have been entered below that. You need to input other values to estimate the costs of harvesting your fish. First, enter the **Crew Share** – the percentage of the gross that you will pay to your crew. Next, estimate your costs for **Fuel**, **Provisions** and **Bait**. The sum of all these costs – crew share, fuel, provisions, bait and NMFS management fees – will be subtracted from the IFQ Holder Gross to give the figure for **Contribution To "Q" Holder Overhead**.

The figure you previously entered for Annual Payment will have been automatically entered and deducted at Less Annual Payment line and the result is your cash flow expressed as **Net to IFQ Holder**, which is essentially your gross operating profit from fishing your halibut. That figure is then compared to the down payment you made on your IFQ and expressed as **Net Cash as Percent of Equity**.

(It is important to emphasize that these figures are general estimates only. Costs have only been estimated in a simplified way, and no accounting is made for your tax or other liabilities. These rough estimates are to give you a “snap shot” look at an IFQ investment and should not be substituted for a complete financial analysis.)

It is now quite common for IFQ holders to “charter” on a boat that is specialized for longlining. This can be an attractive, efficient option. You don’t need to maintain longline gear, or go through changing your own boat’s set-up. And, you’ll be fishing with somebody who has been doing a lot of longlining, and who therefore knows where the fish are. The **If You Fish the Q's with Someone Else** column allows you to calculate this option and to figure out what a fair arrangement is for you and for the boat owner.

Start by entering the percentage you expect to receive in the **IFQ Holder Share** User Input Field. The value for Landed Price multiplied by the IFQ Pounds Purchased will be automatically multiplied by this percentage to give the **IFQ Holder Gross** [need separate hyperlink](#) under this method. As with the other method, the NMFS IFQ Management Fee will also have been entered below that, and will be subtracted from the IFQ Holder Gross to give the figure for **Contribution To "Q" Holder Overhead**.

IFQ charter arrangements typically assign all the fishing expenses or share some or all of those costs between the vessel owner and the IFQ holder. Since the types of sharing arrangements are quite varied, in Q-Calc we have chosen to assign all the costs to the boat. When you entered the percentage you will receive in the IFQ Holder Share box, the **Boat Share** percentage was automatically calculated and applied to the total catch value and the result entered under **Vessel Gross**. In this method, the costs of fishing – Crew Share, Fuel, Provisions and Bait are deducted from Vessel Gross. The result is the **Contribution To Boat Overhead**.

You can now compare your Contribution to Overhead to that of the boat owner to see if a fair split has been reached.

SABLEFISH Q-Calc works the same as Halibut Q-Calc, so simply refer to the sections above for guidance. The only difference with sablefish is with the calculation of **Landable Pounds**. Halibut is landed “dressed, head-on”, and IFQ pounds are bought that way. However, sablefish IFQ is normally bought and sold in round weight equivalents. However, it is almost universally landed in headed and gutted form. A standard Product Recovery Rate (PRR) of 62% is applied to the landed weight to calculate how much IFQ has been landed. Thus, if you land 6,200 lbs. of H&G sablefish that would require 10,000 lbs of IFQ. When you enter a figure in **IFQ Pounds Purchased** use the round weight value. Q-Calc will automatically calculate your **Landable Pounds**, and that figure will be used in subsequent calculations.

Quota Shares to Pounds Conversion lets you convert Quota Share units (QS) into landable pounds. The number of actual pounds you can fish every year varies according to Total Allowable Catch (TAC) divided by the total number of QS units outstanding in

each regulatory area. Go to <http://www.fakr.noaa.gov/ram/ifqreports.htm#participants> and look for the report series titled “QS Pools and TACs”. You can find current year figures and data for earlier years of the IFQ program. QS IFQ ratio