Upper Cook Inlet Drift Gillnet Vessel Costs

This analysis is based on the operational costs to participate in the Upper Cook Inlet (UCI) Drift Gillnet Salmon Fishery. The direct fixed and consumable (fuel) costs are listed and described for three types of vessels: Twin Diesel, Single Gas and Single Diesel. A $100,000 vessel was used as the standard value as appropriate.

Table 1. Fixed Fishing Vessel Costs		
• Annual unless otherwise noted		
Item	Amount $	Notes
Insurance - Hull & Machinery	2,300 - 4,700	Depends on Insured Value
Insurance - Liabillity	1,700 - 2,000	$500,000 or $1,000,000 policy limits
Insurance - Crew	1,200 - 1,400	$600 - $700 per month per crew member
CFEC	420 - 420	Vessel & Permit Fees
Kenai Peninsula Borough	300 - 500	Personal Property Tax on Vessel
Nets & Repair	1,425 - 2,375	Web purchase - $300 each & $175 for hanging
Maintenance	1,400 - 3,000	Welding, Fiberglass, Hydraulics, Electrical,
		Batteries, Lights, Lube, Oil & Filters
Crew - Average 10% of Gross	1,000 - 20,000	Highly Variable
Harbor/Vessel Storage	0 - 3,500	
Propeller/Shaft/Cutlass	1,000 - 3,500	Due to silty and debris-laden waters
Groceries	1,500 - 2,000	
Seasonal Totals	$12,245 - $46,895	
400 Hours per Season	$26.86 - $103.48	
Notes: Not Included in Above Fixed Costs or Annual Payments		
1. Vessel or Permit Payment After Purchase: $7,500 - $15,000		
2. Vessel and Permit Payment After Purchase: $10,000 - $20,000		
3. Diesel Engine - Each $50,000 replacement - $3,000 - $5,000		
4. Electronic Upgrades, GPS, Sonar, Radar Systems, etc.: $500 - $1,000		
5. Pick-up Trucks and Trailers: $5,000 - $10,000		
6. Shop or Maintenance Facility Upkeep: $2,000 - $4,000		
Annual Costs NOT Included in Total Season Cost: ~ $28,000 - $55,000		

Table 1 lists and describes the fixed costs for a drift gillnet salmon vessel at a value of $100,000.

The fixed vessel value costs are quite variable.

These variable costs are a reflection of individual business plans and preferences. The fixed costs may be adjusted by, for example, a business decision to be self-insuring and fishing without any

insurance. However, if there is any form of financing of the vessel or permit, then insurance is mandatory. Similarly, a fisherman may choose to hang their own nets, saving $875 (5 nets @ $175.00 each for labor) but with the cost of 5 to 6 days of time spent hanging nets.

Items not included in fixed costs include a variety of additional costs that are unique to individual fishing style and vessel age and condition. The vessel and/or permit purchases will apply to new entrants into the fishery. These costs also apply to a family member that is "taking over" from a parent or other family member that is "self-financing" the new fisherman. These often are a form of "self-financing – retirement" arrangements.

To replace a 350hp diesel engine, with transmission and installation, costs will often exceed $50,000 per engine. Not many fishermen that own their own businesses can actually afford to set aside cash reserves to finance engine replacements. Insurance, second mortgages, government loans and processors often provide the ready cash for these engine or transmission replacements. A well-maintained diesel should last 10,000 hours, a single gas engine about 4,000 hours before a rebuild or replacement. Popular brands include Caterpillar, Cummins, John Deere and Volvo diesels and GMC, Chevy and Mercury Cruiser gas engines.

Table 2. Fishing Vessel Costs present the combined fixed fuel costs and hourly costs for a 16 and 18-hour day.

Table 2 organizes and explains the hourly costs for a fisherman to participate in an 16-hour district wide opening and a 18-hour expanded corridor opening in the UCI Drift Fishery. Some individuals may be surprised to see the actual costs involved. For over 60 years, the UCI drift fishery had a positive economic benefit to the participating fishermen. The benefits are widely shared within the Kenai, Alaska and national economies. However, due to allocative and escapement goal decisions, this UCI fishery is now at an economic impasse. Fishermen have foregone vessel maintenance, insurance and often reducing or eliminating crewmembers in an attempt to remain economically viable. Young, often newly entered fishermen have gone to other areas or to other fisheries.

Every salmon, not just sockeye, are both an economic opportunity and food security for the nation. Most UCI salmon harvested go directly into the fresh fish markets across North America. Upper Cook Inlet salmon, halibut, cod and black cod landings occur in communities that have developed the fishing, processing, transportation and marketing workforces to move these high-quality food supplies to established markets in a timely fashion to maintain a desirable freshness for the end consumer. Because of these location and infrastructure developments, UCI can and does receive a premium price for our salmon and other seafood products.

Table 2. Fishing Vessel Costs

2a. Hourly Vessel Costs - 400 Hours per Year - District Wide						
Item	Twin Diesel		Single Gas		Single Diesel	
Fuel Cost	$27.39	$27.39	$19.17	$19.17	$15.40	$15.40
Fixed Costs - Low	$30.61		$30.61		$30.61	
Fixed Costs - High		$117.23		$117.23		$117.23
Total Cost per Hour - Low	$58.00		$49.78		$46.01	
Total Cost per Hour - High		$144.62		$136.40		$132.63
2b. Daily Vessel Costs - 18 Hour District Wide Opening						
Item	Twin Diesel		Single Gas		Single Diesel	
Fuel Cost	$493.00	$493.00	$345.00	$345.00	$277.00	$277.00
Fixed Costs - Low	$551.00		$551.00		$551.00	
Fixed Costs - High		$2,110.00		$2,110.00		$2,110.00
Total Cost - Low	$1,044.00		$896.00		$828.00	
Total Cost - High		$2,603.00		$2,455.00		$2,387.00
2c. Daily Vessel Costs - 16 Hour Expanded Corridor Opening						
Item	Twin Diesel		Single Gas		Single Diesel	
Fuel Cost	$438.00	$438.00	$307.00	$307.00	$246.00	$246.00
Fixed Costs - Low	$490.00		$490.00		$490.00	
Fixed Costs - High		$1,876.00		$1,876.00		$1,876.00
Total Cost - Low	$928.00		$797.00		$736.00	
Total Cost - High		$2,314.00		$2,183.00		$2,122.00

Notes concerning Table 2a & 2b

Twin Diesel:

6 hrs from harbor to fishing grounds and back

6 hrs transiting @ 18 gal/hr = 108 gal

12 hrs fishing @ 4 gal/hr = 48 gal

Total gal per day = 156

156 gal @ $3.16/gal = $492.96 per 18 hr day

$492.96/18 hrs = $27.39 per hr

Single Gas:

Half the twin diesel gallons x 1.4

Higher gal/hr and higher cost/gal

Single Diesel:

Half the gal/hr of the Twin Diesel

Half the cost/hr of the Twin Diesel