## Supp Econ Table

## Vienna Saccomanno

3/23/2020

```
#Attach packages
library(knitr)
library(kableExtra)
library(tidyverse)
library(dplyr)
library(magick)
library(webshot)
webshot::install_phantomjs()
#Load data
supp <- read_csv("C:/Users/v.r.saccomanno/Desktop/Fed_Fish_Disasters/Supp_econ_table_csv_R_FINAL.csv")</pre>
#View(supp)
kable(supp, "latex", booktabs = T, longtable = T, align =rep("1", 8))%>%
 kable_styling(latex_options = c("striped", "full_width", "repeat_header"), font_size = 8) %>%
  #landscape(margin = NULL)%>%
  column_spec(1, width = "5em")%>%
  column_spec(2, width = "6em")%>%
  column_spec(3, width = "5em")%>%
  column_spec(4, width = "7em")%>%
  column_spec(5, width = "5em")%>%
  column_spec(6, width = "5em")%>%
  column_spec(7, width = "5em")%>%
  column_spec(8, width = "8em")%>%
  row_spec(0, bold= T)%>%
  footnote(number = c("ADFG: Alaska Department of Fish and Game", "CDWF: California Department of Fish
```

Disaster Number	Data Availability	Disaster Years (count)	Net Revenue Change (2019 USD)	Revenue Change (%)	Minimum policy threshold met?	Confidence in data	Data source(s)/ notes*
90	Data	1	\$(1,687,134.16)	-96.30%	Yes	Medium	NOAA FOSS; no 2018 or 2019 data
89	No Data	NA	NA	NA	NA	NA	NA
87	Data	2	\$(4,020,219.06)	(- )26.7135% and (- )16.4367%	No	High	CDFW, PacFIN
86	No Data	NA	NA	NA	NA	NA	NA

 $\underline{(continued)}$ 

Disaster Number	Data Availability	Disaster Years (count)	Net Revenue Change (2019 USD)	Revenue Change (%)	Minimum policy threshold met?	Confidence in data	Data source(s)/ notes*
85	Data	1	\$(12,785,858.18)	-100.00%	Yes	Medium	Data is from the request letter, but it is thorough
84	Data	1	\$(17,602,000.00)	-17.80%	No	Medium	2018 data not available through NOAA FOSS; data is from NCDMF
83	Data	1	\$(13,478,042.66)	-5.40%	No	High	FFWCC
82	Data	1	\$(392,816.94)	-1.30%	No	High	GDNR and NCDENR
81	Data	1	\$(1,265,552.70)	-60.60%	Yes	High	ADFG -for only the gulf
80	No Data	1	\$(1,702,614.88)	NA	NA	Low	Request letter
79	Data	1	\$8,567,582.29	3.60%	No	High	NOAA FOSS; revenue increase
78	No Data	1	\$(450,486.10)	NA	NA	Low	Revenue loss data from determination letter - unclear if "economic loss" is only langings
77	No Data	1	\$(112,360,000.00)	NA	NA	High	NOAA press release
75	Data	2	\$(6,857,470.90)	[-97.1%, - 89.8%]	Yes	High	NOAA FOSS
74	Data	2	\$(24,689,000.00)	[-63.8%, -51,8%]	Yes	Low	Data from OR and CA request letter because regionally specific no tribal data
73	Data	1	\$(1,736,732.80)	-86.40%	Yes	Low	Data taken from 3 out of 7 request letters and extrapolated out
72	Data	1	\$(121,986,123.30)	-73.60%	Yes	Medium	NOAA FOSS; includes the Yukon management area
71	Data	1	\$(1,092,398.00)	-38.40%	Yes	High	PFMC 2018 Review of Ocean Salmon Fisheries
70	No Data	NA	NA	NA	NA	NA	NA
69	Data	1	\$(3,300,000.00)	NA	NA	Low	Request letter; did not provide 5-year revenue, but did specify direct revenue los
68	Data	1	\$(743,740.80)	-93.90%	Yes	Low	Request letter. No economic estimate from Squaxin or Nisqually; estimate from Port Gamble or S'Klallam

(continued)

Disaster Number	Data Availability	Disaster Years (count)	Net Revenue Change (2019 USD)	Revenue Change (%)	Minimum policy threshold met?	Confidence in data	Data source(s)/ notes*
67	Data	2	\$(38,543,340.51)	[22.7%, -74.1%]	No, yes	High	CDFW and value from PacFIN
66	Data	1	\$(5,521,605.54)	-84.60%	Yes	Low	NOAA FOSS; data doesn't isolate Willapa and Grays; no tribal esitmate
65	No Data	NA	NA	NA	NA	NA	NA
64	Data	1	(4,402,333.38)	-49.40%	Yes	High	NOAA FOSS
63	Data	1	\$(4,463,200.00)	-97.00%	Yes	High	NOAA press release
61	Data	1	\$18,876,190.91	7.30%	No	High	NOAA FOSS- revenue increase
59	Data	1	\$3,380,400.50	43.50%	No	High	FFWCC - Commercial Fisheries Landings Summaries report creator. Revenue increase.
58	Data	2	\$(3,513,196.58)	[-92.5%, -67.1%]	Yes	Medium	ADFG -isolated by region but not tribal
56	Data	3	\$(12,464,202.97)	[-26.3%, -1.4%, 12.7%]	No	Medium	NOAA- in house species selection
55	Data	1	\$9,499,689.58	36.80%	No	High	NOAA - revenue increase
53	Data	1	\$(548,564.53)	-17.80%	No	Medium	ODFW for all ports south of cape Falcon
51	Data	1	\$(244,000.00)	-80.00%	Yes	High	Federal Register
50	No Data	NA	NA	NA	NA	NA	NA
49	Data	1	\$(19,344,226.59)	-3.40%	No	High	NOAA
47	No Data	NA	NA	NA	NA	NA	NA
47 46	Data Data	1	\$(5,798,529.70)	-23.30%	No	Medium	NOAA- in house species selection
45	Data	1	\$(1,536,771.64)	-32.00%	No	High	ADFG - isloated by region
43	Data	1	\$(15,479,881.67)	-78.20%	Yes	High	NOAA
40	Data	1	\$6,239,124.65	2.30%	No	Medium	NOAA- in house species selection
39	Data	1	\$21,304,712.87	6.60%	No	High	NOAA
38	No Data	NA	NA	NA	NA	NA	NA
37	Data	1	\$14,827,133.85	21.70%	No	Medium	NOAA - do not isloate Chesepeake Bay
36	Data	1	\$(11,888,830.46)	-26.20%	No	Medium	NOAA; includes "rainbow trout" for steelhead. Did not isolate tribal
33	Data	2	\$73,615,385.11	[73.2%, 9.3%]	No	Medium	ADFG - does not islote just Bering Sea
31	Data	2	\$(1,126,347.04)	[12.1%, -12.7%]	No	Medium	ADFG - does not islote just Bering Sea

Disaster Number	Data Availability	Disaster Years (count)	Net Revenue Change (2019 USD)	Revenue Change (%)	Minimum policy threshold	Confidence in data	Data source(s)/ notes*
					met?		
30	Data	2	\$(541,845.00)	[-72.7%, 21%]	Yes, No	High	SWFSC technical report on the Klamath
29	Data	1	\$(169,681,221.60)	-21.00%	No	High	NOAA
27	Data	1	\$(1,378,229.04)	-5.40%	No	Medium	NOAA - in-house species selection
26	Data	1	\$20,118,330.72	273.40%	No	Medium	NOAA - in-house species selection
25	Data	3	\$(787,346,805.20)	[-69.5%, -70.6%, -77.5%]	Yes	Medium	ADFG - does not islote just Bering Sea
23 22	Data Data	1	\$(924,612.84) \$(239,347,663.90)	-24.80% -69.20%	No Yes	High Medium	NOAA ADFG - does not islote just Bering Sea
21	Data	1	\$(289,342,968.90)	-77.80%	Yes	Medium	ADFG - does not islote just Bering Sea
19	Data	1	\$(14,130,000.00)	NA	NA	Low	Request letter - specifies loss as "direct benefits"; assumed to be total over multi-year period
18	Data	3	\$(30,467,009.78)	[-81.1%, -45.0%, -62.6%]	Yes	NA	NA
17	Data	1	\$(300,618,828.80)	-72.00%	Yes	High	ADFG
15	Data	1	\$10,067,473.34	11.90%	No	Medium	NOAA - in-house species selection
14	Data	1	\$(348,354.43)	-0.60%	No	High	NOAA
13	Data	1	\$(16,669,638.28)	-10.80%	No	Medium	PacFIN Commercial Groundfish Catch Report for All Gear Types and All Areas
12	Data	1	\$(1,315.88)	-1.20%	No	High	Florida Fish and Wildlife Conservation Commission
11	Data	1	\$(143,208,615.80)	-54.60%	Yes	High	ADFG
10	Data	1	\$(19,862,009.38)	-46.80%	Yes	High	NOAA
9	Data	1	\$45,284,095.87	33.10%	No	High	NOAA
7	Data	1	(192,057,607.70)	-62.90%	Yes	High	ADFG
6	Data	1	\$(30,668,064.08)	-41.00%	Yes	High	NOAA
5	Data	1	\$(74,261,440.87)	-38.20%	Yes	Medium	NOAA - no American Plaice
4	Data	1	\$139,911,238.60	11.80%	No	High	NOAA
3	Data	3	\$(361,357,959.60)	[-66.6%, -66.2%, -69.%2]	Yes	High	NOAA
2	Data	1	\$(58,047,168.26)	-38.70%	Yes	Medium	NOAA - no American Plaice
1	No Data	NA	NA	NA	NA	NA	NA

## $\underline{(continued)}$

Disaster Data Disaster Net Revenue Revenue Number Availability Years (count) USD) (%)	Minimum Confidence Data source(s)/policy in data notes* threshold met?
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<sup>&</sup>lt;sup>1</sup> ADFG: Alaska Department of Fish and Game

# as\_image(width=8)

 $<sup>^2</sup>$  CDWF: California Department of Fish and Wildlife

 $<sup>^3</sup>$  FFWCC: Florida Fish and Wildlife Conservation Commission

 $<sup>^4</sup>$  GDNR: Georgia Department of Natural Resources/Coastal Resources Division

 $<sup>^{5}</sup>$  NCDENR: North Carolina Department of Environment and Natural Resources

 $<sup>^{\</sup>rm 6}$  NCDMF: North Carolina Division of Marine Fisheries

 $<sup>^{7}</sup>$  ODFW: Oregon Department of Fish and Wildlife

 $<sup>^{8}</sup>$  PacFIN: Pacific Fisheries Information Network

 $<sup>^9</sup>$  PFMC: Pacific Fisheries Management Council

 $<sup>^{10}</sup>$  SWFSC: Southwest Fisheries  $\mathbf{\bar{S}} \text{cience Center}$