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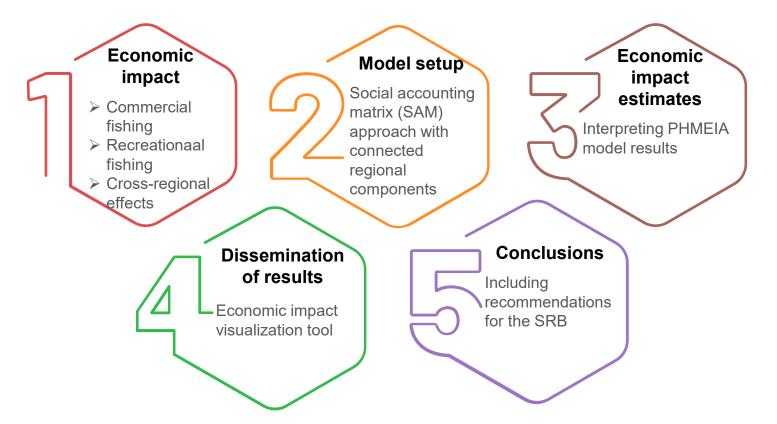
# Pacific halibut multiregional economic impact assessment (PHMEIA): update for SRB019

Agenda Item 8 IPHC-2021-SRB019-09 (B. Hutniczak)

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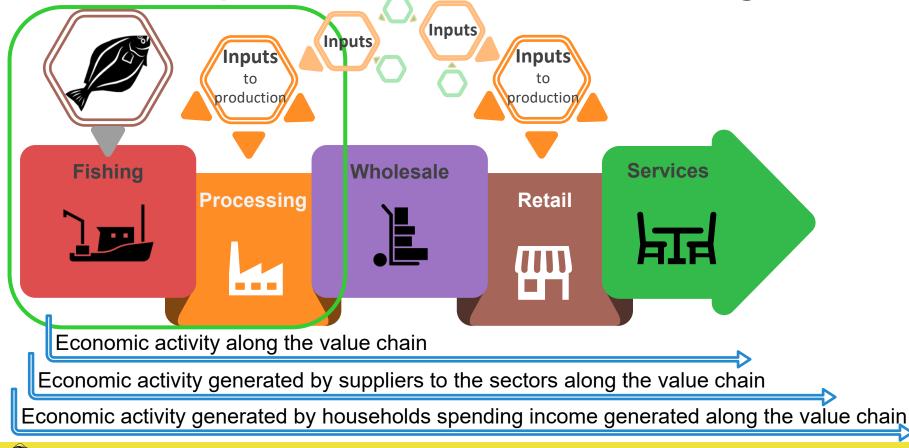
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## Outline



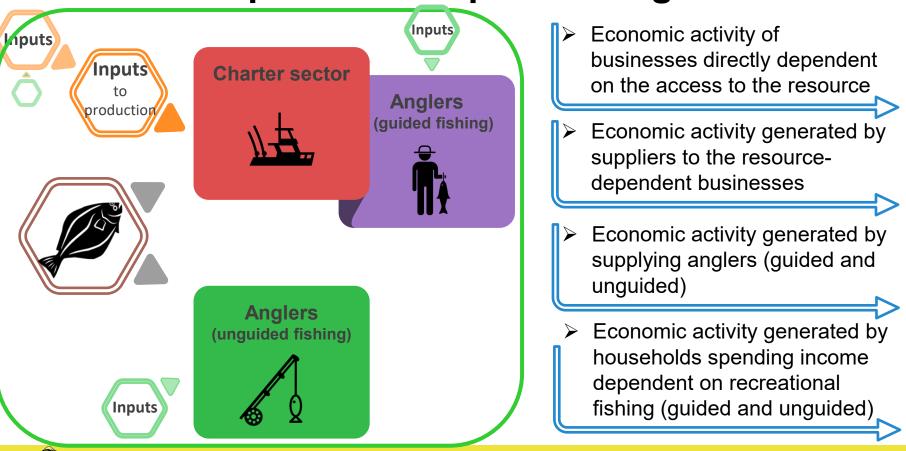


#### Economic impact of the commercial fishing sector





#### Economic impact of the sport fishing sector





### **Multiregional effects**

Economic impact in the area of resource extraction





Monetary flows related to inputs to production / import of inputs

Monetary flows related to final consumption / export of services

Wages earned by residents vs. non-residents

Profit from ownership of residents vs. non-residents



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# Regions

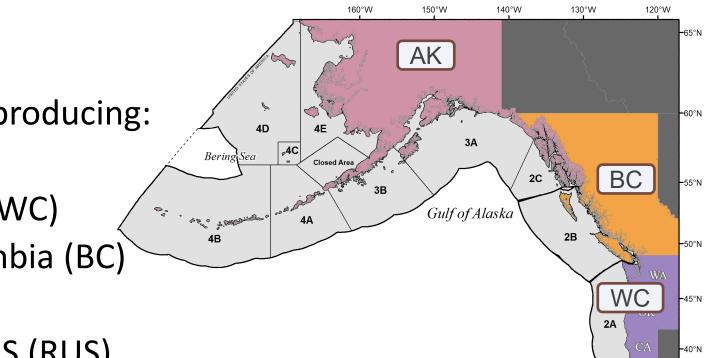
Pacific halibut producing:

- Alaska (AK)
- West Coast (WC)
- British Columbia (BC)
- Rest of the US (RUS)
- Rest of Canada (ROC)
- Rest of the world (ROW)\*

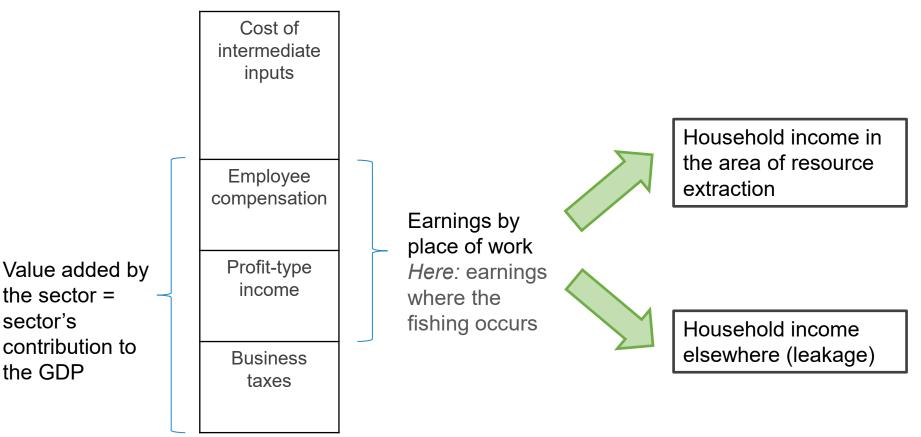
Multiregional social accounting matrix/SAM-based approach

\*treated as exogenous

**IPHC** 



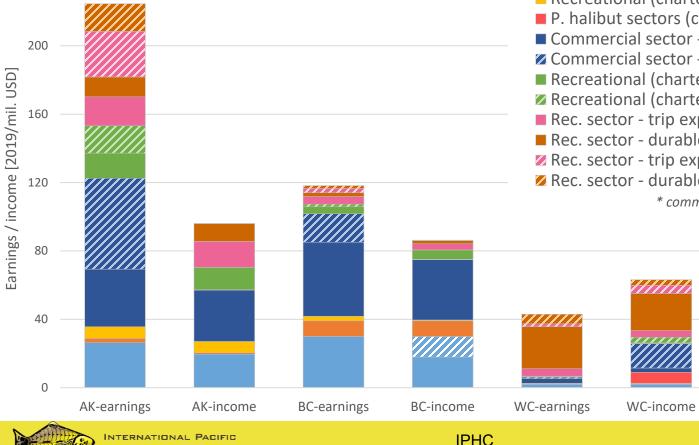
#### **Direct earnings & income**





#### **Earnings and income** 240

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Commercial sector - direct

Commercial sector - direct - investors

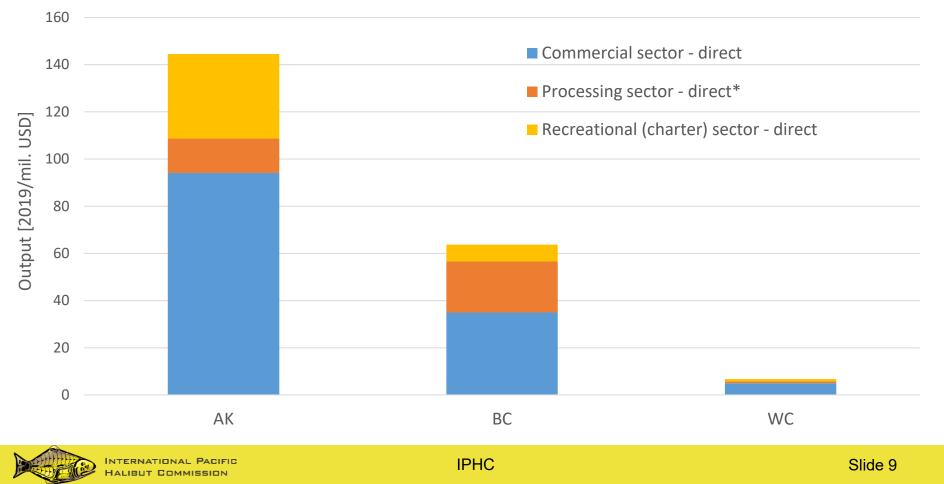
- Processing sector direct
- Recreational (charter) sector direct
- P. halibut sectors (combined) spillovers
- Commercial sector indirect\* locally
- Commercial sector indirect\* elsewhere
- Recreational (charter) sector indirect locally
- Recreational (charter) sector indirect elsewhere
- Rec. sector trip exp. local
- Rec. sector durables local
- Rec. sector trip exp. elsewhere
- Rec. sector durables elsewhere

\* commercial indirect effects include processing

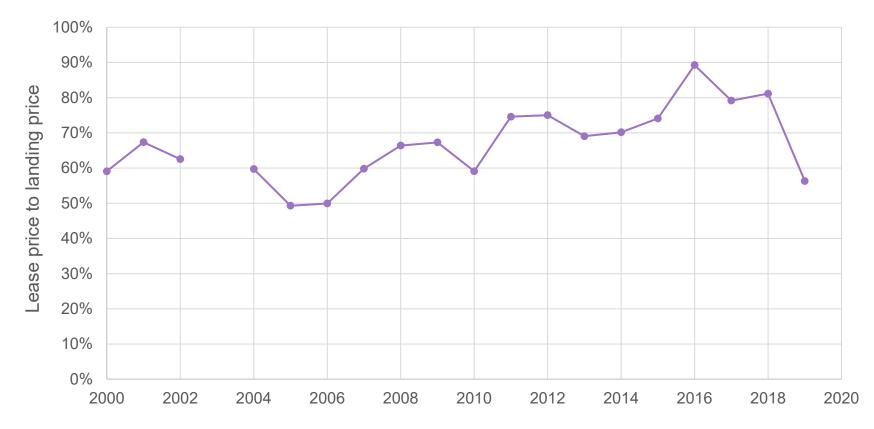
**RUS-income** 

**ROC-income** 

#### **Output by sector / direct impact**

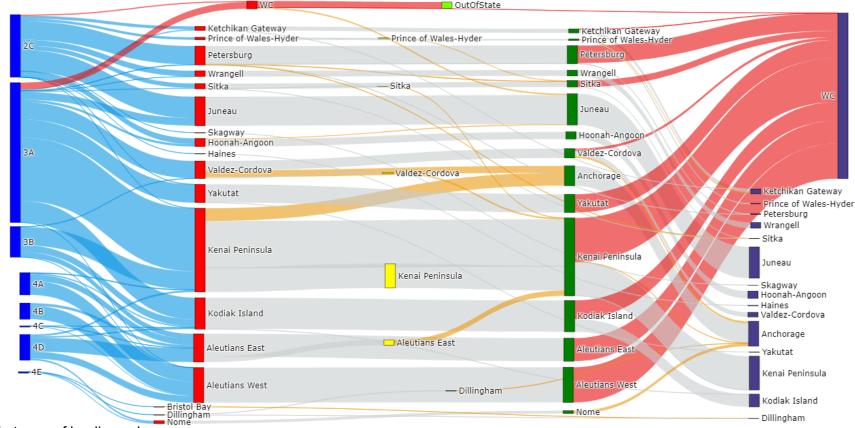


## Lease price to landing price in BC





#### Flows in the commercial sector (1/2)



Flows in terms of landing value



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## Flows in the commercial sector (2/2)



(1) Landing area vs. vessel owner residence

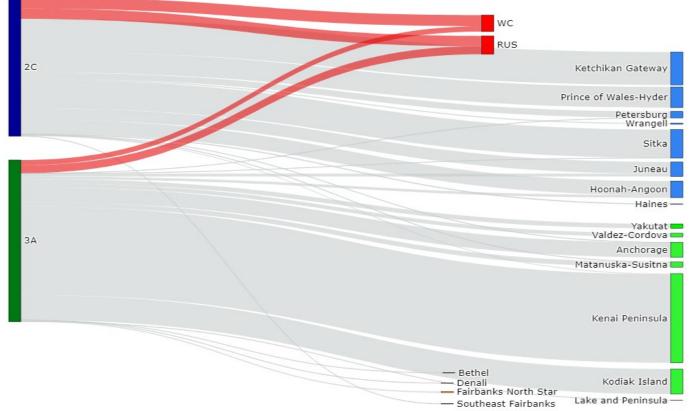


(2) Landing area vs. permit owner residence



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#### Flows in the charter sector



#### Flows in terms of the number of endorsed anglers



#### Comparison of the results between sectors (2019)

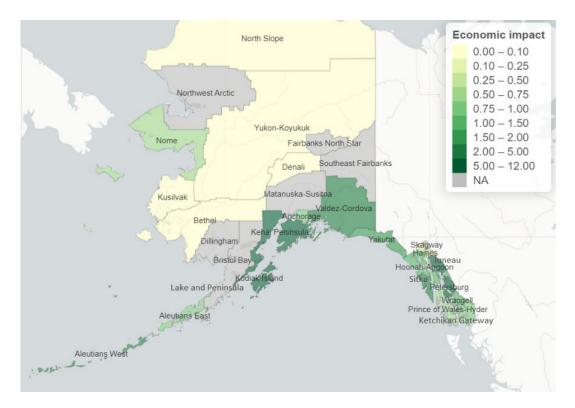
	Unit	Charter	Commercial
EI on households	Total in mil. USD	34.1	106.4
EI on households in Alaska	Total in mil. USD	19.7	50.6
EI on households	USD per 1 USD of output	0.95	1.13
EI on households in Alaska	USD per 1 USD of output	0.55	0.54
EI on households	USD per 1 lb of removals	12.02	5.81
EI on households in Alaska	USD per 1 lb of removals	6.93	2.76

**IPHC** 

Slide 14



# **Community impacts**

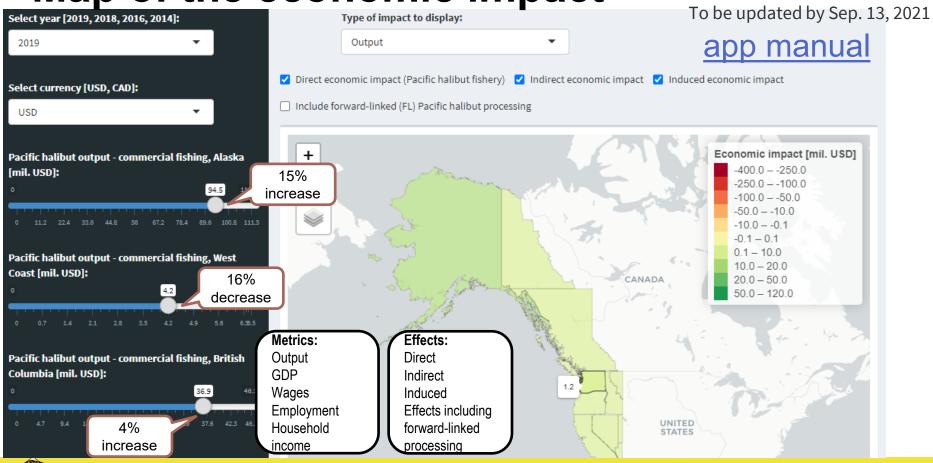


County-level economic impact estimates for Alaska [2019]



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## Map of the economic impact





web-based tool

## Conclusions

- Comprehensive understanding of the impact of the Pacific halibut resource
- The results suggest that the revenue generated by Pacific halibut at the harvest stage accounts for only a fraction of economic activity that would be forgone if the resource was not available to fishers (commercial and recreational)
- Economic impacts are highly heterogenous, vary significantly by region and sector
- PHMEIA model results can inform the community impacts of the Pacific halibut resource throughout its range and highlight communities particularly dependent on Pacific halibut fishing-related economic activities



# Way forward

The Secretariat continues improving the Pacific Halibut Multiregional Economic Impact Assessment (PHMEIA) with an intention to inform stakeholders on the importance of the Pacific halibut resource and fisheries to their respective communities, but also broader regions and nations, and contribute to a wholesome approach to Pacific halibut management that is optimal from both biological and socioeconomic perspective.

Additional effort is planned to develop an improved strategy for primary data collection following the 2021 fishing season.

Tasks enhancing the PHMEIA usability to the Commission are included in the IPHC 5-year Program of Integrated Science and Research (2021-26)



#### Recommendations

That the SRB:

**a) NOTE** paper IPHC-2021-SRB019-09 which provides an update on the development of the Pacific Halibut Multiregional Economic Impact Assessment (PHMEIA) and responds to comments made during the SRB18.



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