

## Summary of the $94^{\text {th }}$ Session of the IPHC Interim Meeting (IM094)

NPFMC Meeting<br>Agenda Item B8<br>5 December 2018

# 944 IPHC Interim Meeting (IM094) Information Session 

- 27-28 Nov 2018, Seattle, WA, U.S.A.
- Open to the public and webcast in full
- Meeting materials available at:
https://iphc.int/venues/details/94th-session-of-the-iphc-interim-meetingim094
- Report published: 29 November 2018



## 94 ${ }^{\text {th }}$ IPHC Interim Meeting (IM094)

Information sharing forum in preparation for the $95^{\text {th }}$ Annual Meeting (AM095), which will be held in Jan/Feb 2019:

- Data collection methods;
- Fishery Statistics;
- Fishery-Independent Setline Survey (FISS);
- Space-Time modelling to produce the Biological distribution;
- Stock assessment;
- Harvest decision table;
- Management Strategy Evaluation;
- Biological and Ecological Research plans;
- Regulation Proposals.

2018 Pacific Halibut Landings
If an error message appears, please reload or refresh the page.

## Landing Report

## - https://iphc.int/data/ landings



| IPHC Regulatory Area | Last updated: 15 November 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fishery limits (net weight) |  | Landings (net weight) |  |  |
|  | Pounds (lb) | Tonnes (t) | Pounds (lb) | Tonnes (t) | Pct (\%) |
| Area 2A (California, Oregon, and Washington) | 1,190,000 | 539.78 | 1,177,742 | 534.21 | 99 |
| Non-treaty directed commercial (south of Pt. Chehalis) | 201,845 | 91.56 | 203,630 | 92.36 | 101 |
| Non-treaty incidental catch in salmon troll fishery | 35,620 | 16.16 | 34,903 | 15.83 | 98 |
| Non-treaty incidental catch in sablefish fishery (north of Pt. Chehalis) | 50,000 | 22.68 | 43,716 | 19.83 | 87 |
| Treaty Indian commercial | 389,500 | 176.68 | 403,754 | 183.14 | 104 |
| Treaty Indian ceremonial and subsistence (year-round) | 27,000 | 12.25 | 27,000 | 12.25 | 100 |
| Recreational - Washington | 225,366 | 102.22 | 222,261 | 100.82 | 99 |
| Recreational - Oregon | 229,730 | 104.2 | 211,322 | 95.85 | 92 |
| Recreational - California | 30,940 | 14.03 | 31,156 | 14.13 | 101 |
| Area 2B (British Columbia) | 6,223,985 | 2,823.18 | 6,126,703 | 2,779.02 | 98 |
| Commercial fishery | 5,295,995 | 2,402.25 | 5,324,529 | 2,415.16 | 101 |
| Recreational fishery | 927,990 | 420.93 | 802,174 | 363.86 | 86 |
| Area 2C (southeastern Alaska) ${ }^{1}$ | 4,450,000 | 2,018.51 | 4,082,784 | 1,851.92 | 92 |
| Commercial fishery | 3,570,000 | 1,619.32 | 3,414,784 | 1,548.92 | 96 |
| Commercial discard mortality | 70,000 | 31.75 | n/a | n/a | n/a |
| Guided recreational fishery | 810,000 | 367.41 | 668,000 | 303.00 | 82 |
| Area 3A (central Gulf of Alaska) | 9,450,000 | 4,286.49 | 9,031,027 | 4,096.40 | 96 |
| Commercial fishery | 7,350,000 | 3,333.91 | 7,181,027 | 3,257.26 | 98 |
| Commercial discard mortality | 320,000 | 145.15 | n/a | n/a | n/a |
| Guided recreational fishery | 1,790,000 | 811.94 | 1,850,000 | 839.15 | 103 |
| Area 3B (western Gulf of Alaska) | 2,620,000 | 1,188.41 | 2,421,127 | 1,098.20 | 92 |
| Area 4A (eastern Aleutians) | 1,370,000 | 621.42 | 1,212,814 | 550.12 | 89 |
| Area 4B (central/western Aleutians) | 1,050,000 | 476.24 | 1,036,707 | 470.24 | 99 |
| Areas 4CDE ${ }^{2}$ | 1,580,000 | 716.68 | 1,410,070 | 639.60 | 89 |
| Area 4C (Pribilof Islands) | 733,500 | 332.71 | n/a | n/a | n/a |
| Area 4D (northwestern Bering Sea) | 733,500 | 332.71 | n/a | n/a | n/a |
| Area 4E (Bering Sea flats) | 113,000 | 51.26 | n/a | n/a | n/a |
| Total | 27,933,985 | 12,670.63 | 26,498,974 | 12,019.72 | 95 |

## 2018 Fishery-Independent Setline Survey

 (FISS)


## Research plans

- Fishery-independent setline survey (FISS) expansion - 2019



## Stock Assessment: Summary

- Fishery and modelled survey trends down coastwide
- Setline survey expansion data increased coastwide biomass estimates
- Setline survey observations of the 2011 and 2012 cohorts reduced recent fishing intensity estimates
- Spawning biomass still estimated to be decreasing and projected to decrease for TCEYs >20 Mlb, with greater uncertainty in this year's results


## Space-Time modelled O32 WPUE by biological region

Region 2


Region 3


Region 4


## Stock assessment summary table

| Indicators | Values | Trends | Status |
| :---: | :---: | :---: | :---: |
| Total mortality 2018: <br> Retained catch 2018: <br> Average removals 2014-18: | 38.74 MLBS, 17,572 т <br> 31.81 MLbs, 14,427 т <br> 41.39 MLBS, 18,772 т | MORTALITY DECREASED FROM 2017 то 2018 | 2018 MORTALITY NEAR 100-YEAR LOW |
| $\begin{array}{r} \mathrm{SPR}_{2018}: \\ \mathrm{P}(\mathrm{SPR}<46 \%): \\ \mathrm{P}(\mathrm{SPR}<\text { limit }): \end{array}$ | $\begin{aligned} & \text { 49\% (28-62\%) } \\ & 34 \% \end{aligned}$ <br> LIMIT NOT SPECIFIED | Fishing intensity DECREASED FROM 2017 то 2018 | Fishing intensity BELOW REFERENCE LEVEL |
| $\begin{array}{r} \hline \mathrm{SB}_{2019}(\mathrm{MIb}): \\ \mathrm{SB}_{2019} / \mathrm{SB}_{0}: \\ \mathrm{P}\left(\mathrm{SB}_{2019}<\mathrm{SB}_{30}\right): \\ \mathrm{P}\left(\mathrm{SB}_{2019}<\mathrm{SB}_{20}\right): \end{array}$ | $\begin{aligned} & 199 \text { MLBS (125-287) } \\ & 43 \%(27-63 \%) \\ & 11 \% \\ & <1 \% \end{aligned}$ | SB DECREASED FROM 2017 TO 2018 | Not OVERFISHED |
| Biological stock distribution: | See Tables and Figures | DIStRIBUTION StABLE 2014-18 | Region 2 above, Region 3 below Historical values |

# Projections - Reference ( $F_{46 \%}, 40$ Mlb TCEY) 



## Full decision

 table|  | otal mortalit |  | 0.0 | 11.7 |
| :---: | :---: | :---: | :---: | :---: |
|  | TCEY (M lb) |  | 0.0 | 10.0 |
|  | 2019 Fishing intensity |  | $\mathrm{F}_{100 \%}$ | $\mathrm{F}_{78 \%}$ |
|  | Fishing intensity interval |  | - | 56-87\% |
| Stock Trend (spawning biomass) | in 2020 | is less than 2019 | 1 | 3 |
|  |  | is 5\% less than 2019 | $<1$ | <1 |
|  | in 2021 | is less than 2019 | 1 | 7 |
|  |  | is 5\% less than 2019 | $<1$ | 1 |
|  | in 2022 | is less than 2019 | 1 | 12 |
|  |  | is 5\% less than 2019 | <1 | 3 |
| Stock Status (Spawning biomass) | in 2020 | is less than 30\% | 5 | 7 |
|  |  | is less than $\mathbf{2 0 \%}$ | $<1$ | <1 |
|  | in 2021 | is less than $\mathbf{3 0 \%}$ | 3 | 7 |
|  |  | is less than 20\% | $<1$ | $<1$ |
|  | in 2022 | is less than 30\% | 2 | 8 |
|  |  | is less than $\mathbf{2 0 \%}$ | $<1$ | $<1$ |
| Fishery Trend (TCEY) | in 2020 | is less than 2019 | 0 | <1 |
|  |  | is 10\% less than 2019 | 0 | $<1$ |
|  | in 2021 | is less than 2019 | 0 | $<1$ |
|  |  | is 10\% less than 2019 | 0 | $<1$ |
|  | in 2022 | is less than 2019 | 0 | $<1$ |
|  |  | is $10 \%$ less than 2019 | 0 | $<1$ |
| Fishery Status <br> (Fishing intensity) | in 2019 | is above $\mathbf{F}_{\mathbf{4 6 \%}}$ | 0 | $<1$ |


|  |  |  | Status quo |  | $\begin{aligned} & \text { Reference } \\ & \text { SPR=46 } \end{aligned}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21.8 | 31.8 | 37 | 39.0 | 40.4 | 41.8 | 43.1 | 44.3 | 45.5 | 46.8 | 48.3 | 49.9 | 61.8 |
| 20.0 | 30.0 | 35.8 | 37.2 | 38.6 | 40.0 | 41.3 | 42.5 | 43.7 | 45.0 | 46.5 | 48.1 | 60.0 |
| F64\% | $\mathrm{F}_{54 \%}$ | $\mathrm{F}_{49 \%}$ | $\mathrm{F}_{48 \%}$ | $\mathrm{F}_{47 \%}$ | $\mathrm{F}_{46 \%}$ | F45\% | $\mathrm{F}_{44 \%}$ | F43\% | $\mathrm{F}_{42 \%}$ | $\mathrm{F}_{41 \%}$ | $\mathrm{F}_{40 \%}$ | $\mathrm{F}_{34 \%}$ |
| 41-76\% | 31.67\% | 27.63\% | 26.62\% | 25.61\% | 25.60\% | 24.59\% | 23-59\%/ | 23-58\% | 22.57\% | 22-56\%/ | 1.55 | 1749\% |
| 26 | 60 | 77 | 81 | 84 | 87 | 90 | 92 | 93 | 95 | 96 | 97 | >99 |
| 1 | 10 | 26 | 30 | 34 | 37 | 39 | 41 | 43 | 45 | 48 | 50 | 78 |
| 41 | 75 | 90 | 93 | 94 | 96 | 97 | 98 | 98 | 99 | 99 | 99 | $>99$ |
| 11 | 42 | 57 | 61 | 65 | 69 | 73 | 77 | 80 | 83 | 87 | 90 | 99 |
| 51 | 82 | 93 | 94 | 96 | 97 | 98 | 98 | 99 | 99 | 99 | >99 | $>99$ |
| 28 | 58 | 76 | 79 | 83 | 86 | 88 | 90 | 92 | 93 | 95 | 96 | $>99$ |
| 11 | 14 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 25 |
| <1 | <1 | <1 | <1 | $<1$ | <1 | <1 | $<1$ | <1 | <1 | <1 | $<1$ | 1 |
| 13 | 20 | 24 | 25 | 25 | 26 | 27 | 27 | 27 | 28 | 29 | 29 | 33 |
| <1 | <1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 10 |
| 17 | 25 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 33 | 33 | 41 |
| <1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 13 | 15 | 24 |
| 18 | 26 | 40 | 45 | 51 | 56 | 60 | 63 | 66 | 69 | 73 | 77 | 95 |
| 12 | 25 | 29 | 33 | 37 | 42 | 47 | 51 | 54 | 58 | 62 | 66 | 95 |
| 20 | 28 | 46 | 51 | 56 | 60 | 64 | 67 | 70 | 73 | 77 | 81 | 97 |
| 16 | 26 | 35 | 39 | 44 | 49 | 53 | 56 | 59 | 63 | 66 | 71 | 97 |
| 22 | 32 | 50 | 54 | 58 | 62 | 66 | 69 | 72 | 76 | 79 | 83 | 98 |
| 19 | 28 | 40 | 45 | 49 | 53 | 56 | 60 | 62 | 66 | 69 | 73 | 98 |
| 16 | 25 | 35 | 40 | 46 | 50 | 56 | 59 | 62 | 65 | 69 | 72 | 92 |

## Evening presentation

The stock status of Pacific halibut (2018), harvest decision table, and preliminary mortality projections

5 December 2018<br>17:30-19:00<br>Aleutian Room

## The $95^{\text {th }}$ Session of the IPHC Annual Meeting (AM095)

- Dates: 28 January 2019-1 February 2019
- Venue: Fairmont Empress hotel (Victoria, B.C., Canada)
- Documents: https://iphc.int/venues/details/95th-session-of-the-iphc-annual-meeting-am095
- Document deadline: 29 December 2018


# INTERNATIONAL PACIFIC 



