INTERNATIONAL PACIFIC HALIBUT COMMISSION

IPHC-2019-AM095-PropC1 Rev_1

REGULATORY PROPOSAL 2019
Minimum TCEY in IPHC Regulatory Area 2A

SUBMITTED BY:
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UNITED STATES OF AMERICA
9 JANUARY 2019

IPHC Regulatory Area(s) that may be affected: 2A
Fishery Sector(s): Commercial, Recreational

EXPLANATORY MEMORANDUM

Variable and declines below a certain threshold in fishery limits from year to year create significant uncertainty and hardship for 13 halibut tribes and three coastal states (California, Oregon and Washington) dependent on the Pacific halibut fisheries in IPHC Regulatory Area 2A. Regulatory Area 2A represents a small fraction of Region 2 , and of the overall Pacific halibut stock. As such, a higher IPHC Regulatory Area 2A TCEY than indicated by the biological distribution of the stock estimate by the IPHC Secretariat will not create a biological conservation concern. This has been demonstrated in recent years when the Commission has set TCEYs higher than the levels suggested by the harvest decision table. Recent experience suggests that a constant TCEY floor in IPHC Regulatory Area 2A can be sustained by the biomass available in Region 2. In recent years, the TCEYs adopted for IPHC Regulatory Area 2A have been between 1.06 and 1.47Mlb, which produced FCEYs of 0.96 to approximately 1.33Mlb. A stable level of catch between of 1.5Mlb would reduce the variability and uncertainty for all fisheries in IPHC Regulatory Area 2A, and should be used as a floor level in annual TCEY decisions.

SUGGESTED REGULATORY LANGUAGE

Adopt a TCEY for IPHC Regulatory Area 2A that supports a FCEY no lower than 1.5Mlb. In years when the distribution would indicate a FCEY higher than 1.5Mlb is available, that number would be adopted.

APPENDICES

1. IPHC-2019-AM095-PropC1 Explanatory Statement
2. Northwest Indian Fisheries Commission Supplemental Tribal Report to IPHC Advisory Bodies

IPHC-2019-AM095-PropC1

Explanatory Statement

Submitted by the Makah Indian Tribe
December 20, 2018

Regulatory Proposal IPHC-2019-AM095-PropC1 was submitted to the International Pacific Halibut Commission (IPHC) by the Makah Indian Tribe through Makah Tribal Council Member Patrick DePoe.

The Makah Tribe's regulatory proposal asks the IPHC to adopt a Total Constant Exploitation Yield (TCEY) for IPHC Regulatory Area 2A that supports a Fishery Constant Exploitation Yield (FCEY) of no less than 1.5 million pounds (Mlb) in 2019. According to the IPHC Secretariat, a TCEY of 1.65Mlb would support an FCEY of 1.5Mlb in 2019. Under the Tribe's proposal, if the IPHC Secretariat's coastwide stock assessment and distribution methodology produces a higher Area 2A TCEY for 2019, that level would be adopted. In this sense, the Tribe's proposal sets a minimum harvest policy, not a ceiling, on the Area 2A TCEY.

The Tribe's proposal is based on, but less than, the average total removals from Area 2A during the seven-year period before the current coastwide stock assessment and distribution methodology was implemented in Area 2A in 2009. During that period, total removals from Area 2A averaged 1.79Mlb. As noted, the Tribe's proposal for a TCEY that supports an FCEY of 1.5Mlb translates to a 2019 TCEY of 1.65Mlb and, therefore, is less than the average total removals during the seven-year period before adoption of the current coastwide stock assessment and distribution methodology.

As discussed in more detail below, since the adoption of the current coastwide assessment and distribution methodology, there has been a significant decline in allowable removals from Area 2A. There are several lines of evidence, including survey WPUE, that indicate the decline in allowable removals was not the result of a decline in halibut abundance in Area 2A or excessively high removals under the prior area-specific assessment methodology. To the contrary, the evidence strongly indicates that the average removals from the period before the adoption of the current methodology are sustainable, at least over a three-to-five-year period.

As also discussed in more detail below, the reduction in allowable removals from Area 2A under the current coastwide assessment and distribution methodology has caused severe hardship within Area 2A. As allowable removals have declined and fishery WPUE has increased, it has become increasingly difficult to manage Area 2A fisheries under the Catch Sharing Plan adopted by the Pacific Fishery Management Council (PFMC) and tribal treaty rights have been impaired. The Tribe's regulatory proposal is a reasonable measure to stabilize the Area 2A TCEY for a three-to-five-year period while the IPHC, the Secretariat and related bodies, including the Management Strategy Advisory Board, continue to evaluate questions about the current coastwide stock assessment, distribution methodology and appropriate levels of coastwide fishing intensity.

Under the Tribe's proposal, if the current stock assessment and distribution methodology produce an Area 2A TCEY that does not result in an FCEY of 1.5Mlb, the TCEY would be increased by an amount sufficient to reach the 1.5Mlb target. The Tribe suggests that the amount of the increase be added to the coastwide "Total Mortality" determined by the IPHC Secretariat and not be subtracted from any other management area. When the Tribe's proposal was presented to IPHC at its interim meeting on November 28, 2018, the Secretariat stated and the IPHC itself noted that a TCEY that produces an FCEY of 1.5Mlb for IPHC Regulatory Area 2A does not currently represent a conservation concern for the coastwide stock or for Region 2. The IPHC Secretariat added that this was true even if no reductions were made in other areas to compensate for the difference between: (1) the Area 2A TCEY produced by the Secretariat's current stock assessment and distribution methodology at the desired level of fishing intensity; and (2) the Area 2A TCEY proposed by the Tribe. Accordingly, there is no conservation need to reduce the TCEY in any other area if the Tribe's proposal is adopted.

For these reasons, the Tribe respectfully requests that IPHC adopt its regulatory proposal in 2019 and adhere to it over a three-to-five-year period. The proposal would help stabilize Area 2A fisheries that have been seriously and adversely affected by the current coastwide assessment and apportionment methodology, without adversely affecting any other area or the halibut resource.

This memorandum provides additional background information to support the Tribe's proposal.

1. Total Removals from Area 2A Declined Significantly after the Adoption of the Current Coastwide Assessment and Distribution Methodology.

The IPHC adopted its current coastwide stock assessment and distribution methodology in 2008. A comparison of the years before and after adoption of the current methodology shows that there has been a significant reduction in total removals from Area 2A. The following table presents total removals and survey WPUE for Area 2A from 2002 through 2008, before implementation of the current coastwide assessment and distribution methodology in Area 2A, and from 2009 through 2018, after implementation of the current methodology in Area 2A, based on the most current data available from the IPHC Secretariat. There was a significant decline (approximately 30%) in total removals from the period before adoption of the current methodology to the period after its adoption even though the survey WPUE was relatively stable throughout those periods.[1] The decline in total removals resulted from a decline in allowable removals under the new coastwide assessment and distribution methodology and would have been even greater if IPHC or the United States had not adopted TCEYs for Area 2A in some years that exceeded those produced by the coastwide assessment and distribution methodology (such as, most recently, in 2017 and 2018).

[1] In 2017, there were changes in the timing and direction of the survey in Area 2A and a significant hypoxic event (which recurred in 2018). It is possible that, but for those factors, the Area 2A survey WPUE would have been higher in 2017 and 2018.

Table 1
Area 2A Total Removals and Survey WPUE by Year

Year	Total Removals	Survey WPUE
2002	1,930,000	27.7
2003	1,550,000	25.4
2004	1,720,000	26.8
2005	1,910,000	27.3
2006	2,010,000	21.4
2007	1,760,000	18.9
2008	1,680,000	19.4
Average 2002 - 2008	**1,794,000**	**23.8**
2009	1,580,000	15.4
2010	1,220,000	19.6
2011	1,090,000	23.9
2012	1,220,000	22.9
2013	1,170,000	22.2
2014	1,160,000	23.5
2015	1,170,000	29.3
2016	1,320,000	27.8
2017	1,420,000	21.7
2018	1,350,000	20.8
Average 2009 - 2018	**1,270,000**	**22.71**

2. There is Evidence that the Declines in Total Removals from Area 2A Have Been the Result of Problems with the Application of the Current Coastwide Assessment and Distribution Methodology to Area 2A, Not of Previous Overfishing or a Decline in Halibut Abundance in Area 2A.

There are three possible explanations for the decline in allowable removal levels in Area 2A since the adoption of the current coastwide assessment and distribution methodology:

a. there has been a decline in the abundance of halibut in Area 2A since the adoption of the current methodology;

b. allowable removals were too high in Area 2A before adoption of the current methodology and have been appropriately reduced to reflect actual abundance in Area 2A since adoption of the current methodology; or

c. there are problems with the application of the current methodology in Area 2A.

There are several lines of evidence that make it unlikely that there has been a decline in the abundance of halibut in Area 2A since the adoption of the current methodology. First, as shown in Table 1, survey WPUE has been relatively stable in the period before and after adoption of the current methodology.

Second, commercial WPUE in the tribal unrestricted fishery has been stable or increasing since the adoption of the current methodology. The fishery takes place in a limited area on the Washington coast that does not change from year-to-year, with the fishermen essentially fishing "transects" within that area. Effort in the fishery has been very uniform over the years and all the participants use the same gear, providing a very consistent data set. From 2010 to 2015, the catch in the fishery increased each year with approximately equal effort. From 2016 to 2018, tribal managers reduced the duration of the fishery (from 48 hours to 39 hours to 36 hours) in an effort to stay within the inter-tribal harvest guideline for the fishery. Despite these reductions, the catch continued to increase with the same effort. In 2018, fewer fish were harvested in the first opener due to weather, tides and dogfish, but catch rates were at record levels in a second 30-hour opener. Overall, the data from the fishery suggests increasing abundance of halibut in Area 2A and makes hyperstability unlikely.

Third, WPUE has been stable or increasing in non-treaty halibut fisheries and halibut bycatch has been increasing in the fixed-gear sablefish fishery as well. Increasing catch rates in non-tribal recreational fisheries have led the three Area 2A States (Washington, Oregon and California) to impose new limits on their fisheries to remain within applicable harvest ceilings. The non-tribal commercial longline fishery for sablefish has been encountering more halibut. Bycatch in the sablefish fishery now exceeds trawl bycatch.

Fourth, Area 2A managers have observed an increase in halibut density in Washington coastal waters as well as an expansion of halibut into shallow water and south into California. The Area 2A managers, including the Tribes and the States, are experienced, conservation-minded fisheries managers, and they are uniformly seeing a growing halibut resource and the absence of a conservation problem in Area 2A.

We recognize, as the IPHC Secretariat has pointed out, that there has been a decrease in the coastwide population in recent years, but, for the reasons outlined above, there is little evidence of a similar decrease in Area 2A. The disparate trends are illustrated by the fact that the proportion of the coastwide biomass in Region 2 has increased from about 10 percent to about 24 percent in the last ten years.

These same lines of evidence also make it unlikely that allowable removals were too high in Area 2A before the adoption of the current methodology and that they have been appropriately reduced to reflect the actual abundance in Area 2A since its adoption. If the TCEY and corresponding harvest levels during the seven years preceding the adoption of the current methodology were too high, *i.e.*, if there had been seven years of overharvesting, one would expect to have seen some evidence of that in declining survey WPUE, declining fishery WPUE, or a more restricted distribution of the resource, yet none of that has been observed.

The evidence thus makes it important to consider the possibility that the explanation for the significant declines in allowable and actual removals from Area 2A since the adoption of the current coastwide assessment and distribution methodology lies with the methodology itself. When the methodology was adopted, Area 2A managers and independent reviewers raised substantial concerns about its application to Area 2A. Among other things, Area 2A managers and independent reviewers expressed concerns about the assumption that catchability is equal among

areas. This was a particular concern for Area 2A. One independent reviewer noted that the assumption of equal catchability in the survey was problematic and that, if the "realized harvest rates" estimated under the new methodology were accurate there would have been much greater declines and a significantly depleted biomass in Area 2A (among other problems). Area 2A managers appreciate the on-going efforts to evaluate the coastwide assessment and distribution methodology, but their underlying concerns have not yet been resolved and provide a plausible explanation for the declines in allowable and actual removals from Area 2A since its adoption.

3. The Declines in Total Removals from Area 2A Have Caused Substantial Harm, Threaten to Make Area 2A Fisheries Unmanageable, and Violate the Tribes' Treaty Rights.

The declines in allowable removals from Area 2A have caused substantial harm. To maximize the available directed take of halibut, Area 2A managers have drastically reduced bycatch. In 2011, the PFMC implemented a trawl IFQ program that placed a cap on halibut bycatch and allocated individual shares of the cap (IBQ) to vessel accounts. Together with 100% observer coverage, the trawl IFQ program resulted in substantial reductions in halibut bycatch. Total halibut discard mortality in all Area 2A fisheries went from an average of 585,603 pounds per year in the period from 2002 to 2010 to an average of 122,239 pounds per year in the period from 2011 to 2016, a savings of 463,364 pounds per year or almost 80%. About one-third of the savings was from sub-legal (under 32 inch) fish, which provide disproportionate benefit in terms of an increased spawning potential ratio.

Under the current coastwide assessment methodology, these savings are distributed at the coastwide scale before calculating TCEY levels by area. Thus, while a greater portion of the Area 2A TCEY level is available for directed fisheries, the TCEY level itself does not fully reflect the savings from these bycatch reductions. As shown in Table 1, the result has been a significant decline in total removals from Area 2A since 2008.

Moreover, even with these bycatch savings, managing halibut fisheries in Area 2A in the face of declining TCEYs and increasing WPUE has been extremely challenging. The Area 2A FCEY is allocated among tribal and non-tribal fisheries. The tribal share is managed by 13 Indian Tribes with treaty-secured fishing rights while the non-tribal share is divided into commercial and recreational components; the commercial component is largely managed by IPHC and the recreational component is divided among and managed by the three Area 2A States.

The tribal allocation is managed under an inter-tribal management plan that was developed in 2000 but has been the subject of numerous disputes and court proceedings as the Tribes seek to manage their harvests to remain within declining catch limits. The Tribes reserve a portion of their allocation for ceremonial and subsistence fisheries and manage the remainder to accommodate the very different needs of coastal and Puget Sound Tribes. The Tribal management plan has included an unrestricted fishery (discussed above) that is essential to the coastal Tribes and a restricted (*i.e.*, trip-limit) fishery that is essential to other Tribes. As FCEYs have declined and WPUE has increased in the unrestricted fishery, it has become increasingly difficult to manage the tribal fisheries for the benefit of all the Tribes. As noted above, in the last three years, the Tribes repeatedly have had to shorten the length of the unrestricted fishery (from 48 hours to 39 hours to

36 hours) in an attempt to remain within the inter-tribal harvest guideline for that fishery. Because of the larger boats, required safety equipment and other gear needed to participate in ocean fisheries as well as the distance to the fishing grounds, it is significantly more expensive for members of coastal Tribes to participate in the fishery than it is for members of Puget Sound Tribes. Further reductions in the length of the unrestricted fishery may eliminate its viability for participating tribal fishermen and effectively transfer a large component of the tribal harvest from the coast into Puget Sound, depriving the coastal Tribes of their treaty-secured fishing rights.

The three Area 2A States face equally complex challenges. As noted, a portion of the non-tribal share is allocated to commercial fisheries and managed by IPHC, while the remainder is divided among recreational fisheries in each State. The allocations to Washington and Oregon's recreational fisheries are then further subdivided among eleven different fisheries. The allocation to the smallest of these fisheries is only 0.4% of the Area 2A FCEY. With declining FCEY levels, the States have been compelled to impose limitations that are discouraging participation in recreational fisheries at substantial economic cost to participants in the recreational sector and the small coastal communities that rely on it. For example, the Columbia River has been shortened to 5 days, the fishery off of Neah Bay has been reduced to only 3 or 4 days, Washington has scheduled all openings simultaneously to spread out effort, and Washington and Oregon have adopted restrictive bag limits – to the point where charter trips are being canceled due to the uncertainty of being able to retain halibut. The effects are being felt in all coastal communities from northern California to Washington and into Puget Sound.

Finally, the declining Area 2A TCEYs have violated the Tribes' treaty rights by resulting in allocations to the Tribes that are less than 50% of the available harvest passing through their usual and accustomed fishing grounds as determined in accordance with the conservation necessity standard.

4. The Tribe's Regulatory Proposal Provides a Reasonable Short-Term Solution to Address the Declines in Area 2A TCEYs that: (a) Does Not Create a Conservation Concern; (b) Does Not Require Reductions in Other Areas; (c) Is Tailored to the Unique Circumstances in Area 2A; and (d) Provides Stability for Area 2A Fisheries while an Evaluation of the Coastwide Assessment and Distribution Methodology and Appropriate Levels of Fishing Intensity Is Completed.

The Tribe's regulatory proposal provides a reasonable short-term solution to address the declines in the Area 2A TCEYs while an evaluation of the coastwide assessment and distribution methodology and appropriate levels of fishing intensity goes forward. This section provides background for the Tribe's proposal and then discusses several factors that demonstrate it is a reasonable solution.

In 2015, the Tribe proposed, as an interim measure, a 2016 Area 2A FCEY of 1.33Mlb. The proposal was based on previous years' catches under the old closed-area assessment methodology. The Tribe was unable to secure information or assistance from the IPHC Secretariat in developing the proposal and it was not adopted by IPHC. With the lower FCEY adopted by IPHC, the Tribes reduced the length of their unrestricted fishery to 39 hours but, as noted above, they still harvested more fish in that fishery than in previous years.

In 2016, the Tribe worked closely with NOAA and again proposed an interim 2017 Area 2A FCEY of 1.33Mlb. The IPHC adopted that proposal, setting the TCEY at 1.47Mlb which translated into an FCEY of 1.33Mlb. Given the record catch-level in 2016, the Tribes continued to limit the unrestricted fishery to 39 hours in 2017 but had another record setting harvest in the fishery.

The Tribe again sought an Area 2A FCEY of 1.33Mlb in 2018. However, after IPHC failed to reach agreement on catch levels, NOAA reduced the Area 2A FCEY to 1.19Mlb. This led to another reduction in the length of the tribal unrestricted fishery and additional restrictions in non-tribal fisheries such as those discussed above. However, after the first problematic opening in the tribal unrestricted fishery, the Tribes again experienced record catch rates in the second opening.

For 2019, the Tribe has worked closely with the IPHC Secretariat, NOAA, and other 2A managers to develop a proposal that addresses the problems in Area 2A without creating a conservation concern for the resources as a whole or any segment of it. The assistance of the IPHC Secretariat has been especially helpful in developing a proposal that does not present a conservation concern. And, although the proposal is somewhat higher than what the Tribe proposed as interim measures in 2016 – 2018, it reflects a minimal amount needed to make the Area 2A catch-sharing plan and the inter-tribal management plan workable under current conditions.

The following considerations demonstrate the reasonableness of the Tribe's proposal:

First, as described above, the Tribe's regulatory proposal would set a floor on the Area 2A TCEY at a level that is sufficient to support an FCEY of 1.5Mlb, which translates into a TCEY of 1.65Mlb in 2019. During the seven-year period before adoption of the current coastwide assessment and apportionment methodology in 2009, total removals from Area 2A ranged from 1.55Mlb to 2.01Mlb per year, with an average of 1.79Mlb per year. As also discussed above, there is no evidence that this level of removals was unsustainable or that it created a conservation concern; to the contrary survey and fishery WPUE has been stable or increasing since then and halibut have been expanding their range in Area 2A. The Tribe's proposal, which translates into an Area 2A TCEY in 2019 of 1.65Mlb, is *less than* the average removals from Area 2A in the seven-year period preceding adoption of the current coastwide assessment and distribution methodology. Under the Tribe's proposal, the Area 2A TCEY would rise above that floor only if the current assessment and distribution methodology supported a higher number.

Second, as discussed above, the IPHC Secretariat has confirmed that the Tribe's proposal does not create a conservation concern and does not create a need to reduce harvests in other regulatory areas. Because removals from Area 2A comprise only about 10% of total removals from Region 2, and a much smaller fraction of coastwide removals (1.5Mlbs comprises only about 1% of the coastwide spawning potential ratio), the Secretariat has concluded that the Tribe's proposal does not present a conservation concern for the coastwide stock or for the resource in Region 2, even without adjustments to harvest levels in other areas.

Third, the Tribe's proposal is tailored to several unique features in Area 2A that are not present in other areas: (1) Area 2A is at the southern end of the distribution range, making impacts on other areas from removals in Area 2A less likely; (2) Area 2A has taken significant management action to reduce trawl bycatch, such that further bycatch reductions are not a viable answer to problems created by reduced TCEYs; (3) mortality in Area 2A is very closely monitored – Area 2A managers effectively count every fish – such that there is a high level of confidence that TCEY levels set by IPHC will not be exceeded; and (4) a very small increase in the TCEY level (measured as a percentage of the coastwide spawning biomass) will have large benefits for multiple commercial, recreational, and tribal fisheries. For example, the Tribe's proposal will help preserve the viability of the inter-tribal management plan, allow retention of bycatch in the fixed-gear non-tribal sablefish fishery, and ease the restrictions on the recreational fisheries that support coastal communities from California to Washington. The Tribe's proposal should be evaluated in light of these unique circumstances and not on the basis of how it might (or might not) apply in other areas.

Finally, it should be noted that the current coastwide assessment and distribution model can produce wide swings in Area 2A TCEYs, on the order of hundreds of thousands of pounds per year, with only minor changes in the Area 2A survey WPUE. This is driven by the need to sum to 100% (*i.e.*, areas with increases in survey WPUE "take" from areas with decreases in survey WPUE) and is magnified when there are changes to survey WPUE in the "core area," particularly Area 3, due to the large proportion of the stock there. However, as the IPHC Secretariat has reminded us, changing catch limits annually is generally a bad management practice given the uncertainty in the stock assessment model. The Tribe's proposal would avoid that problem on a short-term basis, providing critically needed stability to Area 2A fisheries without compromising any other management objectives.

Northwest Indian Fisheries Commission

Supplemental Tribal Report to IPHC Advisory Bodies

The Makah Indian Tribe, with the support of the other 12 tribes (i.e., Hoh, Jamestown, Lower Elwha, Lummi, Nooksack, Port Gamble, Quileute, Quinault, Skokomish, Suquamish, Swinomish, Tulalip) with treaty rights to fish Pacific halibut and other 2A managers, has submitted a regulatory proposal for consideration to the International Pacific Halibut Commission (IPHC). The proposal asks the IPHC to adopt a Total Constant Exploitable Yield (TCEY) that would support a Fishery Constant Exploitable Yield (FCEY) of no less than 1.5 M pounds for IPHC regulatory area 2A. According to IPHC staff, this would require an Area 2A TCEY of 1.65 M pounds in 2019. If adopted, the proposal would set a minimum harvest policy, not a ceiling for 2A, over an expected period of three to five years.

The proposed 1.65 M pound TCEY is based on the average total removals from 2A during the seven years prior to the adoption of a coastwide stock assessment and distribution methodology in 2009. The average total removals were 1.79 M pounds which suggests that 2A is capable of supporting a fishery of the proposed magnitude. The setline survey weight-per-unit-effort (WPUE) in 2A has been relatively stable in recent years. Furthermore, fishery WPUE has gradually, or in some years dramatically increased during the tribal unrestricted fishery; the number of hours fished during the unrestricted fishery has decreased while maintaining a near equal level of participation (effort) during 2013-2018 (Figure 1).

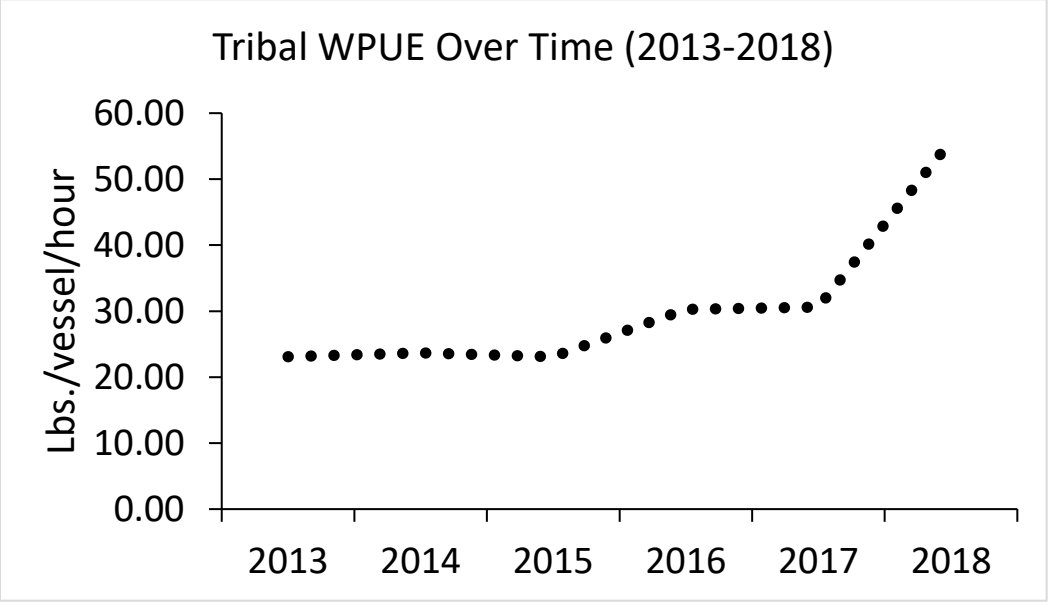

Figure 1. Tribal unrestricted fishery weight-per-unit-effort in lbs. per vessel per hour fished during 2013 – 2018.

To achieve a TCEY of 1.65 M pounds for 2A, the tribes propose adding 880,000 pounds to the coastwide total mortality reference level of 40 M pounds presented at the 2018 Interim Meeting using the IPHC's mortality projection tool. This would prevent the need to take pounds from other management areas. The 880,000 pounds constitute an additional 2.2% in coastwide total mortality. With the assistance of the IPHC Secretariat Staff, the tribes generated the following table (Table 1) using the mortality projection tool to compare the proposed distribution with that of the reference level. The increase in total mortality to 40.88 M pounds increases the harvest rate to $SPR_{45\%}$, however, 880,000 pounds does not constitute a whole percent, and the harvest rate is rounded down to the nearest percent.

The IPHC Secretariat Staff stated during the 2018 Interim Meeting that such an increase would not present a conservation concern. The harvest rate Spawning Potential Rate (SPR) associated with the tribes' proposal would also be consistent with the Management Strategy Advisory Board's (MSAB) primary biological sustainability objective within IPHC's management strategy evaluation (MSE) framework (AM95-12). Using the IPHC's online MSE tool, the tribes have generated an additional table (Table 2) to illustrate the short, medium, and long-term probabilities of passing below the spawning biomass (dSRB) at 20% threshold associated with the MSAB's primary conservation objective. The resulting probabilities of passing below that threshold are 1% or less under all scenarios.

Table 1. IPHC Mortality Tool Projections under the reference level of $SPR_{46\%}$ (top), and with an additional 880,000 pounds distributed to 2A (bottom).

Total Mortality	40 M lbs.								
	2A	2B	2C	3A	3B	4A	4B	4CDE	
	1.9%	12.3%	15.7%	40.9%	7.4%	5.5%	4.9%	11.5%	100 %
Total Mortality Limits	0.78	4.93	6.26	16.74	3.09	2.32	1.96	5.72	41.78
TCEY (M lbs.)	0.78	4.91	6.26	16.35	2.97	2.21	1.95	4.59	40
FCEY (M lbs.)	0.64	4.09	4.42	13.12	2.41	1.92	1.7	2.62	30.9
SPR	**46%**								

Total Mortality	40.88 M lbs.								
	2A	2B	2C	3A	3B	4A	4B	4CDE	
	4.1%	12.3%	15.7%	40.9%	7.4%	5.5%	4.9%	11.5%	102.2%
Total Mortality Limits	1.66	4.93	6.26	16.74	3.09	2.32	1.96	5.72	42.67
TCEY (M lbs.)	1.66	4.91	6.26	16.35	2.97	2.21	1.95	4.59	40.88
FCEY (M lbs.)	1.5	4.09	4.42	13.12	2.41	1.92	1.7	2.62	31.76
SPR	**45%**								

Table 2. Short, medium, and long-term biological sustainability objective results using IPHC's online MSE Tool and the default 30:20 harvest control rule (note that an SPR of 45% is not an available option using the online tool).

Input Control Rule	30:20	
Input SPR	44%	46%
Short-term (4-13 years)		
P(all dRSB<20%)	0.0505	0.0505
P(any dRSB_y<20%)	0.1020	0.1020
Medium-term (14-23 years)		
P(all dRSB<20%)	0.0111	0.0111
P(any dRSB_y<20%)	0.0165	0.0165
Long-term (24-100 years)		
P(all dRSB<20%)	0.0026	0.0037
P(any dRSB_y<20%)	0.0040	0.0040

The purpose of this proposal is to provide 2A with enough pounds to stabilize the Pacific halibut fisheries managed under the Pacific Fishery Management Councils (PFMC) annual Pacific halibut Catch Sharing Plan (CSP). The CSP is a framework between the PFMC and National Marine Fisheries Service and describes how the total allowable catch is divided for area 2A (Washington, Oregon and California and the Treaty Indian Tribes' fishery). The current IPHC coastwide distribution methodology has resulted in substantial hardship for 2A halibut fisheries, including the impairment of tribal treaty rights; for example, small changes in survey WPUE result in disproportionately large impacts to the distribution and management of 2A's TCEY. An FCEY minimum of 1.5M lbs. would provide the tribes with enough fish for equal opportunity within the intertribal sharing plan, and other 2A managers with enough fish to meet similarly complex challenges.

The proposal is tailored to meet the needs that those complex challenges present while accounting for 2A's other unique qualities. 2A's management is unique in that the managers: 1) maintain full accounting of all catch annually, effectively eliminating the difference between total mortality limits and realized TCEY (Table 1); and 2) have taken extensive action to reduce trawl bycatch of halibut. 2A is biologically unique in its location at the southern terminus of the stock distribution; fishing in 2A does not have an impact on spawning to the north, or the genetic integrity of Biological Region 2 (IPHC Secretariat Staff, Personal Communication).

This proposal is meant to be a short-term solution that will not cause hardship to other management areas but can meet the specific needs of 2A. The three to five-year time span of the proposal presents an opportunity to ground-truth the performance of a multi-year harvest policy for 2A while the IPHC MSAB evaluates coastwide distribution procedures. The full proposal and detailed explanatory statement can be found in the Annual Meeting documents.

Parallel to the IPHC Annual Meeting process, the 13 halibut treaty tribes are also engaged in ongoing government-to-government conversations with the United States Government through the National Marine Fisheries Service and the Department of State concerning this proposal. The tribes intend to keep the IPHC and its advisory bodies (i.e., CB and PAB) apprised of developments and outcomes from these conversations, and will be giving presentations to advisory bodies at the 2019 Annual Meeting. However, the tribes will not be directly participating in the CB process during the 2019 Annual Meeting.