

JOINT REPORT OF THE CANADIAN AND U.S. ADVISORY PANEL of
The Agreement between the Government of the United States of America
and the Government of Canada on Pacific Hake/Whiting (the Agreement)

March 6, 2018

The U.S. and Canadian Advisory Panels (“AP”) convened March 5-6, 2018 to receive and review the advice of the SRG and JTC, review the management of the fisheries of the two Parties, provide advice and make recommendations on the 2018 TAC, provide a list of scientific experts and representatives to be candidates for the JTC and SRG, appoint representatives to the MSE working group and trawl survey design group and make their recommendations to the JMC on these items.

The U.S. AP members in attendance were Joe Bersch (Chair), Mike Okoniewski, Mike Hyde, Bob Dooley, Dave Smith, Brent Paine, Tom Libby and Al Carter.

The Canadian AP members in attendance were Dave Dawson (Chair), Shannon Mann, Albert Radil, and Brian Mose.

Members of the public also attended the meeting and were provided the opportunity for public comment.

The AP attended the presentations from the Joint Technical Committee (JTC) and Scientific Review Group (SRG) on the 2017 fishery and on the 2018 stock assessment. The AP also attended the presentation of the Management Strategy Evaluation Workplan presented by Dr. Kristin Marshall.

The AP considered the 2018 Pacific Hake Assessment Report and Appendices, the advice of the JTC and the SRG, the reports on the U.S. and Canadian fisheries in 2017 and comments from the public. After consideration of this information, the AP recommends the following for consideration by the JMC:

1. TAC ADVICE

- The AP recommends a 2018 adjusted (including carry over) total allowable catch (TAC) of 597,500 mt.
- The AP considers the 2018 Pacific Hake Assessment Report and Appendices provided by the JTC and reviewed by the SRG to be the best available science. The AP’s recommended TAC is well- supported by the decision tables in the assessment document as reflected by Tables 28, 29, and A.4, A.5 in Appendix A. The adjusted TAC recommended by the AP is projected to result in actual harvest well below the default harvest level under both the Base Model and the Alternative Model still under development.

- The AP acknowledges the introduction of an Alternative Model as part of the 2018 Pacific Hake Assessment and Report and Appendices. The AP acknowledges and agrees with the JTC and SRG that this Alternative Model requires further work and evaluation.
- The AP encourages the JTC and SRG to continually update and refine the models and other inputs (acoustic survey and others) used to inform the JMC in managing the whiting fishery. The AP believes that the use and consideration of this Alternative Model is, however, premature and procedurally inconsistent with the SRG's Terms of Reference (Bullet 9) which state:

Any alternative modeling approach not generated through the JTC will be provided to the JMC, AP, SRG, and JTC for review and comment prior to any detailed consideration by the JTC and SRG. If deemed useful, the modeling approach will be considered in the next cycle.

- The AP supports further investigation and analysis by the JTC into whether an alternative means for estimating B_0 is appropriate and encourages the JMC, consistent with the SRG terms of reference and good scientific principles, to direct the JTC to conduct a full review and sensitivity analysis of any alternatives developed by the JTC. The AP recommends that a robust scientific review of this issue be prepared and presented for consideration of the Parties not later than the August, 2018 JMC meeting.
- Although the default harvest control rule produces a 2018 median catch limit of 725,984 mt, (Section 3.7) the AP recommends an adjusted TAC of 597,500 which is a more conservative approach to reduce fishing-related impacts and account for uncertainty.
- The AP reviewed past harvest, past fishing effort, performance of individual sectors in the US and Canadian industry and considered relevant factors influencing potential harvest outcomes for 2018. Based on this review, the AP estimates total coastwide harvest in 2018 will be similar to the 440,000 mt harvest in 2017.
- The 2010 and 2014 cohorts are expected to continue to contribute economically and biologically over multiple years providing benefits to the nations of Canada and the U.S. In addition, there are indications of an above average recruitment of the 2016 year class in both the acoustic survey and fishery data.
- Members of the AP intend to renew their efforts to inform fishery participants of the benefits of minimizing fishery harvest of one and two year old whiting and develop voluntary protocols to minimize impacts on these age classes.
- The AP will continue to annually evaluate the latest surveys, stock assessments, best available science and provide their advice to the JMC accordingly. The continued conservative management recommendations of the AP are intended to ensure that each country will have the opportunity to receive, over the long term, the intended benefits contemplated in the Treaty.

2018 TAC RECOMMENDATION

AP Recommended Unadjusted TAC	517,775
Unadjusted Canada TAC @26.12%	135,243
Unadjusted US TAC @ 73.88%	382,532
Canada 2017 Carryover @15% of previous Year TAC	20,824
US 2017 Carryover @15% of previous Year TAC	58,901
Canada Adjusted TAC	156,067
US Adjusted TAC	441,433
Coastwide Adjusted TAC Total	597,500

2. MSE ADVICE

- Although the AP agrees that the 2018 Pacific Hake Assessment Report and Appendices is the best available science, it is the opinion of the AP that it does not adequately inform industry/managers on issues relevant to the long-term management of the Pacific whiting stock.
- Consistent with the recommendations of the JTC and SRG, the AP supports the efforts of the JMC to expedite progress towards developing a MSE framework that includes a spatially-explicit model that may be used to assist in assessing management procedures and decisions related to management of Pacific whiting.
- The AP is encouraged that the Parties have secured funding and staff resources to move forward with the development of the MSE and has developed a timeline and schedule for moving forward.
- The AP requests that the following individuals serve as representatives of the AP on the MSE Working Group- **U.S. Representatives**- Joe Bersch, Mike Okoniewski, Alternate Dave Smith **Canadian Representatives**- Shannon Mann, TBD, Alternate Dave Dawson

3. SURVEY RECOMMENDATIONS

- The AP continues to be concerned about the impacts on the acoustic survey caused by limited resources, the loss of the Canadian survey vessel in 2017 and other factors requiring periodic modification to survey operation, implementation and design. The AP requests that all reasonable efforts be made by the JMC to insure that adequate resources are available and allocated to insure that a survey of consistent design is completed annually and if not annually, not less than bi-annually. Annual surveys will allow for better management by reducing uncertainty associated in management of a dynamic and highly variable stock and as a result will improve long term economic performance for the Parties.

- The AP renews its request to be involved in acoustic survey design, sampling methodology and planning. The AP again emphasizes the importance of input/involvement from industry representatives in this process and again recommends Dave Smith and Joe Greene to advise the survey team for this purpose. Involvement of industry is one of many critical factors in achieving transparency into the process and building confidence that acoustic survey outputs adequately and accurately reflect the actual biomass observed by the fishery.
- The AP finds it significant that the 2017 acoustic survey does not correlate well with the 2017 fishery CPUE data and on the water observations of biomass, especially in the U.S., and requests further explanation from the JTC/Survey Team of these apparent inconsistencies and whether they are related to survey design or otherwise.
- Rather than allocating further limited resources on research projects of limited value, e.g. additional winter cruise, Saldrones, investigation into distinct genetic stocks, etc. the AP recommends that the Parties focus their limited resources on issues central to the effective implementation of the Agreement such as funding necessary resources and staff to produce the Stock Assessment, the annual acoustic survey and other core functions.

4. SRG/JTC APPOINTMENTS

- The AP recommends the following individuals for appointment as independent members of the JTC and SRG. For the JTC: **Sean Cox**, Andre Punt, and Mark Maunder. For the SRG: **Trevor Branch**, **Allan Hicks**, Dave Sampson, Tom Jagielo, John Horn, and Sandy McFarlane. (Bold face type indicates preferred candidates).

End of Report