

PROPOSED AGENDA

# COASTAL PELAGIC SPECIES ADVISORY SUBPANEL

Pacific Fishery Management Council  
Hilton Vancouver Washington  
301 W. Sixth Street  
Vancouver, WA 98660 USA  
Phone: 360-993-4500  
Hemlock Room  
June 8-9, 2022

Coastal Pelagic Species Advisory Subpanel meetings are open to the public and there will be one daily opportunity for public comment. Specific times on this agenda are subject to change once the meeting begins. Agenda items listed under the Advisory Body Administrative Matters are in numerical order; other agenda items reflect their Council Meeting Agenda numbering. Breaks will be taken as necessary, at the discretion of the Co-Chairs. The CPSAS will be joining the Coastal Pelagic Species Management Team (CPSMT) and the Scientific and Statistical Committee (SSC) meetings for specific agenda items, as indicated below.

## Wednesday, June 8, 2022 – 8:00 a.m.

### CPSAS Administrative Matters

1. Roll Call, Introductions, Announcements Jessi Doerpinghaus
2. Agenda Overview Mike Okoniewski
  
- C. Administrative Matters
7. Membership Appointments and Council Operating Procedures All  
(8:30 a.m.; Joint session with CPSMT; Report to Council Tuesday, June 14)
  
3. Marine Planning Mike Okoniewski  
(9:00 a.m.; Joint session with CPSMT; Report to Council Monday, June 13)
  
- D. Coastal Pelagic Species
1. Central Subpopulation of Northern Anchovy Andre Punt/Peter Kuriyama  
Assessment and Harvest Specifications  
(9:45 a.m.; Join SSC (virtual) in CPSMT room; Report to Council Thursday, June 9)

2. Terms of Reference- Public Review

Steve Crooke

(10:45 a.m.; Join SSC (virtual) in CPSMT room; Report to Council Thursday, June 9)

LUNCH

D. Coastal Pelagic Species

3. Essential Fish Habitat

Anna Weinstein

(1:00 p.m.; Report to Council Thursday, June 9)

CPSAS Administrative Matters (continued)

3. Work Session – Develop and Review Supplemental Reports as Needed

All

(1:30 p.m. – 2:30 p.m.)

PUBLIC COMMENT PERIOD  
2:30 p.m.

CPSAS Administrative Matters (continued)

4. Work Session – Develop and Review Supplemental Reports as Needed

All

(2:45 p.m. – 5 p.m.)

Thursday, June 9, 2022 – 8:00 a.m.

CPSAS Administrative Matters (continued)

5. Work Session – Develop and Review Supplemental Reports as Needed

All

(8 a.m.)

**C. Administrative Matters**

8. Future Council Meeting and Workload Planning All  
(9 a.m.; Report to Council Tuesday, June 14)

<p><b>PUBLIC COMMENT PERIOD</b> 10:00 a.m.</p>
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**CPSAS Administrative Matters (continued)**

6. Review and Finalize Reports All  
(10:15 a.m.)

**LUNCH**

Note: Members of the CPSAS will be attending the Council’s CPS Agenda Items on Thursday, June 9<sup>th</sup> and may reconvene after those items conclude.

**Adjourn**

PFMC  
05/11/22

PROPOSED AGENDA

# COASTAL PELAGIC SPECIES MANAGEMENT TEAM

Pacific Fishery Management Council  
Hilton Vancouver Washington  
301 W. Sixth Street  
Vancouver, WA 98660 USA  
Phone: 360-993-4500  
Cedar Room  
June 8-9, 2022

Coastal Pelagic Species Management Team (CPSMT) meetings are open to the public and the agenda includes opportunities for public comment. Specific times on this agenda are subject to change once the meeting begins. The CPSMT will meet each day from 8 a.m. until 5 p.m. or until business for the day has been completed. Agenda items listed under the Advisory Body Administrative Matters are in numerical order; other agenda items reflect their Council Meeting Agenda numbering. The CPSMT will be joining the Coastal Pelagic Species Advisory Subpanel (CPSAS) and the Scientific and Statistical Committee (SSC) meetings for specific agenda items, as indicated below.

## Wednesday, June 8, 2022 – 8:00 a.m.

### CPSMT Administrative Matters

1. Roll Call, Introductions, Announcements Jessi Doerpinghaus
2. Agenda Overview Kirk Lynn
  
- C. Administrative Matters
7. Membership Appointments and Council Operating Procedures All  
(8:30 a.m.; Join CPSAS in Hemlock room; Report to Council Tuesday, June 14)
  
3. Marine Planning Mike Okoniewski  
(9:00 a.m.; Join CPSAS in Hemlock room; Report to Council Monday, June 13)

D. Coastal Pelagic Species

1. Central Subpopulation of Northern Anchovy Assessment and Harvest Specifications Greg Krutzikowsky  
(9:45 a.m.; Join SSC (virtual) in CPSMT room; Report to Council Thursday, June 9)  
Rapporteur: Greg Krutzikowsky
  
2. Terms of Reference- Public Review Greg Krutzikowsky  
(10:45 a.m.; Join SSC (virtual) in CPSMT room; Report to Council Thursday, June 9)  
Rapporteur: Greg Krutzikowsky

LUNCH

D. Coastal Pelagic Species

3. Essential Fish Habitat Phase 2 Action Plan Kym Jacobson  
(1:00 p.m.; Report to Council Thursday, June 9)  
Rapporteur: Kym Jacobson

<p>PUBLIC COMMENT PERIOD 1:30 p.m.</p>
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D. Coastal Pelagic Species

1. Central Subpopulation of Northern Anchovy Assessment and Harvest Specifications- continued Greg Krutzikowsky  
(1:45 a.m.; Report to Council Thursday, June 9)  
Rapporteur: Greg Krutzikowsky

CPSMT Administrative Matters (continued)

3. Work Session – Develop and Review Supplemental Reports as Needed All  
(2:45 p.m. – 5 p.m.)

<p><b>Thursday, June 9, 2022 – 8:00 a.m.</b></p>
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CPSMT Administrative Matters (continued)

4. Work Session – Develop and Review Supplemental Reports as Needed All  
(8 a.m.)

PUBLIC COMMENT PERIOD  
9 a.m.

**C. Administrative Matters**

8. Future Council Meeting and Workload Planning All  
(9:15 a.m.; Report to Council Tuesday, June 14)

**CPSMT Administrative Matters (continued)**

5. Review and Finalize Reports All  
(10:00 a.m.)

**LUNCH**

Note: Members of the CPSMT will be attending the Council’s CPS Agenda Items on Thursday, June 9<sup>th</sup> and may reconvene after those items conclude.

**Adjourn**

PFMC  
05/11/22

PROPOSED AGENDA

# Enforcement Consultants

Pacific Fishery Management Council  
Hilton Vancouver Hotel  
Heritage C Room  
301 West Sixth Street  
Vancouver, Washington 98660  
Telephone: 360-993-4500  
June 8-13, 2022

The Enforcement Consultants (EC) will be meeting in person. Instructions for how to connect to Advisory Body webinars that are not meeting in person will be posted on the Council's [June 2022 Meeting webpage](#) prior to the first day of the meeting.

The main work session for the Enforcement Consultants (EC) will occur 2 p.m. Wednesday afternoon, June 8. Additionally, from June 9-13 the EC may convene on an ad hoc basis at other times, as the need arises during the Council meeting. Dates and times on this agenda are subject to change once the meeting begins.

EC meetings are open to the public, and public comments will be taken as noted in the agenda. Agenda items listed under the Enforcement Consultant Administrative and Other Matters are in numerical order; other agenda items reflect their Council Meeting Agenda numbering.

## Wednesday, June 8, 2022 – 2 p.m. (Main Work Session)

### Enforcement Consultant Administrative and Other Matters

1. Roll Call, Introductions, Chair Remarks and Announcements, etc. Greg Busch
2. Meeting Information and Agenda Overview Jim Seger
3. Approve Agenda Enforcement Consultants

### Council Agenda Items for Possible Comment

There may or may not be enforcement issues associated with the following items. Items on the Council Agenda, but not listed here, may also be considered during the Enforcement Consultants meeting.

#### F. Groundfish Management

##### F.5 Sablefish Gear Switching

Council Action: Consider the Alternatives Adopted for Analysis at the September 2021 Meeting and Refine Those Alternatives, As Needed

##### F.6 Exempted Fishing Permits, Harvest Specifications, and Management Measures for 2023-2024 Fisheries – Final Action

Council Action: Adopt Final Exempted Fishing Permit Recommendations and Final

Preferred Harvest Specifications and Management Measures for 2023-2024  
Fisheries

G. Highly Migratory Species Management

G.3 Exempted Fishing Permits

Council Action: Preliminary Review of Exempted Fishing Permit Applications

G.4 Drift Gillnet Fishery Hard Caps

Council Action: Adopt a Range of Alternatives and Preliminary Preferred Alternative, as Appropriate

F. Groundfish Management (continued)

F.7 Inseason Adjustments – Final Action

Council Action: Adopt Final Inseason Adjustments for 2022, as Necessary, to Achieve but Not Exceed Annual Catch Limits and Other Management Objectives

C. Administrative Matters

C.3 Marine Planning

Council Action: Approve Final Recommendations on Oregon Call Areas, Review and Adopt the Draft Policy Guidance Document, and Develop Comments on the Aquaculture Opportunity Areas Programmatic Environmental Impact Statement

C.8 Future Council Meeting Agenda and Workload Planning

Council Discussion and Guidance on Future Meeting Agenda and Workload Planning

PUBLIC COMMENT

There will be one public comment period each session, which will occur after the EC completes its initial discussions and prior to finalization of its decisions for the session.

Enforcement Consultant Administrative and Other Matters (*continued*)

4. Discussions Related to U.S. Coast Guard Training

Chris German/Lelea Lingo

5. Office of Law Enforcement – Annual Report to the Council (see informational reports)

Greg Busch

6. Other

**Thursday, June 9, 2022 through Monday, June 13, 2022**

Meet as necessary.

ADJOURN

PFMC

05/12/22



PROPOSED AGENDA

# Groundfish Advisory Subpanel

Pacific Fishery Management Council  
Hilton Vancouver Washington  
301 W. Sixth Street  
Vancouver, WA 98660 USA  
Phone: 360-993-4500  
Heritage F  
June 8-13

The Groundfish Advisory Subpanel (GAP) meeting will be conducted in a hybrid format of in-person and remote participation. Instructions for how to connect to the GAP webinar will be posted on the Pacific Fishery Management Council's [June Meeting Webpage](#) prior to the first day of the meeting.

Times listed in the agenda are approximations. The following Groundfish and Administrative Agenda items reflect the Council Meeting Agenda numbering. Note, times not specified for discussion and/or presentations are for to the GAP's drafting and reviewing of statements, reports, etc.

GAP meetings are open to the public. A dedicated public comment agenda item has been scheduled for each day the GAP meets.

## Wednesday, June 8, 2022 – 8:00 AM

### **GAP Administrative Matters**

1. Roll Call, Introductions, Announcements, etc. Susan Chambers, Chair
2. Opening Remarks and Agenda Overview Brett Wiedoff
3. Approve Agenda

### **F. Groundfish Management**

1. National Marine Fisheries Service Report  
(8:30 a.m.; Report to the Council Friday, June 10)
2. Limited Entry Fixed Gear Catch Share Program Review Jessi Doerpinghaus/Jim Seger  
(9:00 a.m.; Report to the Council Friday, June 10)

### **Public Comment Period**

(10:00 a.m. or immediately following the previous agenda item)

### **F. Groundfish Management (continued)**

5. Sablefish Gear Switching Jim Seger  
(10:15 a.m.; Report to the Council Saturday, June 11)

**Public Comment Period**

(11:15 a.m. or immediately following the previous agenda item)

**F. Groundfish Management (continued)**

- 6. Exempted Fishing Permits, Harvest Specifications, and Management Measures for 2023-2024 Fisheries – Final Action (1:00 p.m.; Report to the Council Saturday, June 11) Todd Phillips
- 4. Stock Definitions — Scoping (2:00 p.m.; Report to the Council Friday, June 10) John DeVore

**Public Comment Period**

(3:00 p.m.)

**F. Groundfish Management (continued)**

- 3. Stock Assessment Plan and Terms of Reference — Final Action (3:15 p.m.; Report to the Council Friday, June 10) John DeVore

**GAP Administrative Matters (continued)**

- 4. Draft and Review Statements (4:00 p.m.)

**Thursday, June 9, 2022 – 8:00 AM**

**F. Groundfish Management (continued)**

- 6. Exempted Fishing Permits, Harvest Specifications, and Management Measures for 2023-2024 Fisheries – Final Action (8:00 a.m.; Joint Session with the GMT in the GAP, Report to Council Saturday, June 11) Todd Phillips
- 7. Inseason Adjustments– Final Action (9:00 a.m.; Joint Session with the GMT in the GAP; Report to Council Monday, June 13) Todd Phillips

**Public Comment Period**

(10:30 a.m. or immediately following the previous agenda item)

**F. Groundfish Management (continued)**

- 2. Limited Entry Fixed Gear Catch Share Program Review (*Continue discussion*) (11:00 a.m.; Report to the Council Friday, June 10)
- 3. Stock Assessment Plan and Terms of Reference — Final Action (*Continue discussion*) (1:00 p.m.; Report to the Council Friday, June 10)

**C. Administrative Matters**

- 3. Marine Planning (2:00 p.m.; Report to the Council Monday, June 13) Kerry Griffin/Susan Chambers

**Public Comment Period**

(3:15 p.m. or immediately following the previous agenda item)

**F. Groundfish Management (continued)**

- 5. Sablefish Gear Switching (*Continue discussion*)

(4:00 p.m.; Report to the Council Saturday, June 11)

**GAP Administrative Matters (continued)**

- 5. Draft and Review Statements

(4:30 p.m.)

**Friday, June 10, 2022 — 8:00 AM**

**GAP Administrative Matters (continued)**

- 6. Draft and Review Statements

(8:00 a.m.)

Note: Members of GAP will be attending the Council session for Groundfish Agenda Items. The GAP is expected to reconvene after the conclusion of F.4.

**Saturday, June 11, 2022 — 8:00 AM**

**F. Groundfish Management (continued)**

- 7. Inseason Adjustments– Final Action

Todd Phillips

(8:00 a.m.; Joint Session with the GMT in the GAP; Report to Council Monday, June 13)

**GAP Administrative Matters (continued)**

- 7. Draft and Review Statements

(9:00 a.m.)

Note: Members of GAP will be attending the Council session for Groundfish Agenda Items. The GAP is expected to reconvene after the conclusion of F.6.

**Sunday, June 12, 2022 — 8:00 AM**

**C. Administrative Matters (continued)**

- 7. Future Council Meeting Agenda and Workload Planning

(8:00 a.m.; Report to the Council Tuesday, June 14)

**Public Comment Period**

(9:00 a.m. or immediately following the previous agenda item)

**GAP Administrative Matters (continued)**

- 8. Draft and Review Statements

(1:00 p.m.)

Note: Members of the GAP will be attending the Council's Groundfish Agenda Items. The team is expected to briefly reconvene after the conclusion of Agenda Item F.5.

**Monday, June 13, 2022 — 8:00 AM**

**GAP Administrative Matters (continued)**

- 9. Draft and Review Statements  
(1:00 p.m.)

Note: Members of the GAP will be attending the Council's General Session and is expected to adjourn after the conclusion of Agenda Item C.3.

**ADJOURN**

PFMC  
05/11/22

PROPOSED AGENDA

# Groundfish Management Team

Pacific Fishery Management Council  
Hilton Vancouver Washington  
301 W. Sixth Street  
Vancouver, WA 98660 USA  
Phone: 360-993-4500  
Oak Room  
June 8-13

The Groundfish Management Team (GMT) meeting will be conducted in a hybrid format of in-person and remote participation. Instructions for how to connect to the GMT webinar will be posted on the Pacific Fishery Management Council's [June Meeting Webpage](#) prior to the first day of the meeting.

Times listed in the agenda are approximations. The following Groundfish and Administrative Agenda items reflect their Council Meeting Agenda numbering. Note, times not specified for discussion and/or presentations are for to the GMT's drafting and reviewing of statements, reports, etc.

GMT meetings are open to the public. A dedicated public comment agenda item has been scheduled for each day the GMT meets.

## Wednesday, June 8, 2022 – 8:00 AM

### GMT Administrative Matters

1. Roll Call, Introductions, Announcements, etc. Melissa Mandrup, Chair
2. Opening Remarks and Agenda Overview Todd Phillips
3. Approve Agenda
4. Review of 5/24/2022 Webinar Items

### F. Groundfish Management

1. National Marine Fisheries Service Report  
(8:30 a.m.; Joint session with the GAP in the GAP, Report to the Council Friday, June 10)
6. Exempted Fishing Permits, Harvest Specifications, and Management Measures for 2023-2024 Fisheries – Final Action Todd Phillips  
(9:00 a.m.; Report to the Council Saturday, June 11)
4. Stock Definitions — Scoping (*continue discussion from May 24 webinar*)  
(11:00 a.m.; Report to the Council Friday, June 10)

**Wednesday, June 8, 2022 – continued**

**Public Comment Period**

(1:00 p.m.)

**F. Groundfish Management**

3. Stock Assessment Plan and Terms of Reference — Final Action  
(*continue discussion from May 24 webinar*)  
(1:30 p.m.; Report to the Council Friday, June 10)

**GMT Administrative Matters (continued)**

5. Draft and Review Statements  
(2:30 p.m.)

**Thursday, June 9, 2022 – 8:00 AM**

**F. Groundfish Management**

6. Exempted Fishing Permits, Harvest Specifications, and Management Measures for 2023-2024 Fisheries – Final Action  
(8:00 a.m.; Joint Session with the GAP in the GAP, Report to Council Saturday, June 11) Todd Phillips
7. Inseason Adjustments – Final Action  
(9:00 a.m.; Joint Session with the GAP, Report to the Council Monday, June 13) Todd Phillips

**Public Comment Period**

(11:30 a.m. or immediately following the previous agenda item)

**GMT Administrative Matters (continued)**

6. Draft and Review Statements  
(1:30 p.m.)

**Friday, June 10, 2022 — 8:00 AM**

**GMT Administrative Matters (continued)**

7. Draft and Review Statements  
(8:00 a.m.)

Note: Members of GMT will be attending the Council session for Groundfish Agenda Items. The team is expected to briefly reconvene after the conclusion of F.4.

**Saturday, June 11, 2022 — 8:00 AM**

**F. Groundfish Management**

7. Inseason Adjustments– Final Action  
(8:00 a.m.; Joint Session with the GAP in the GAP; Report to Council Monday, June 13) Todd Phillips

**Saturday, June 11, 2022 — continued**

**GMT Administrative Matters (continued)**

- 8. Draft and Review Statements  
(9:00 a.m.)

Note: Members of GMT will be attending the Council session for Groundfish Agenda Items. The team is expected to briefly reconvene after the conclusion of F.6.

**Sunday, June 12, 2022 — 8:00 AM**

**F. Groundfish Management**

- 7. Inseason Adjustments – Final Action (*continue discussion*)  
(8:00 a.m.; Report to the Council Monday, June 13)

**C. Administrative Matters**

- 8. Future Council Meeting Agenda and Workload Planning Melissa Mandrup  
(9:00 a.m.; Report to the Council Tuesday, June 14)

**Public Comment Period**

(11:30 a.m. or immediately following the previous agenda item)

**GMT Administrative Matters (continued)**

- 9. Draft and Review Statements  
(1:00 p.m.)

**Monday, June 13, 2022 — 8:00 AM**

**GMT Administrative Matters (continued)**

- 10. Draft and Review Statements  
(1:00 p.m.)

Note: Members of the GMT will be attending the Council’s Groundfish Agenda Items in the morning and is expected to adjourn after the conclusion of Agenda Item F.7.

**ADJOURN**

PFMC  
05/11/22

PROPOSED AGENDA

# Habitat Committee

Hilton Vancouver Hotel  
301 West Sixth Street  
Vancouver, Washington 98660  
(360) 993-4500  
Heritage D Room

June 8 – 9, 2022

The Pacific Fishery Management Council’s (Council) Habitat Committee (HC) will be meeting in person, June 8 – 9, 2022 in conjunction with the June Council meeting. Additional meeting information will be posted on the Council’s [June 2022 meeting webpage](#) and HC meetings are open to the public. To ensure the public may comment on the agenda items below, a dedicated public comment agenda item has been scheduled for each day. Times on this agenda are subject to change once the meeting begins. Agenda items listed under Habitat Issues are in numerical order; other agenda items reflect their Council meeting agenda numbering. Times not specified for discussion and/or presentations will be allocated to the advisory body’s drafting and reviewing of statements, reports, etc. The Council will consider Habitat Issues on Friday, June 10.

## Wednesday, June 8, 2022 – 8:00 a.m.

### Habitat Committee Administrative Matters

1. Introductions, Approve Agenda, Assign Note Takers Correigh Greene  
(8 a.m., 30 minutes)
2. Member Updates All  
(8:30 a.m., 1 hour) Notes: Arlene Merems

### D. Coastal Pelagic Species

3. Coastal Pelagic Species Essential Fish Habitat Kym Jacobson/Kerry Griffin  
Phase 2 Action Plan  
(9:30 a.m., 30 minutes; Report to Council June 9) Notes: Eric Wilkins

BREAK (10 a.m. – 10:15 a.m.)

### C. Administrative Matters

3. Marine Planning – Oregon Call Areas Kerry Griffin/Steve Scheiblaue



(10:15 a.m., 1 hour 45 minutes; Report to Council June 13)

Notes: Waldo Wakefield

LUNCH (12 p.m. – 1 p.m.)

### **Habitat Committee Administrative Matters (continued)**

3. Protected Seas Marine Protected Area Database  
(1 p.m., 1 hour)

Deirdre Brannigan  
Notes: Scott Heppell

### **C. Administrative Matters**

1. Council Coordination Committee Report  
(2 p.m., 30 minutes; Report to Council June 9)

Kerry Griffin  
Notes: Correigh Greene

PUBLIC COMMENT PERIOD

2:30 p.m.

### **Habitat Committee Administrative Matters (continued)**

4. Review Draft Habitat Committee Report  
(2:45 p.m., 1 hour)

All

### **F. Groundfish**

6. Exempted Fishing Permits, Harvest Specifications, and Management Measures for 2023-2024 Fisheries – Final Action  
(3:45 p.m., 1 hour; Report to Council June 13)

Todd Phillips  
Notes: Fran Recht

**Thursday, June 9, 2022 – 8:00 a.m.**

### **C. Administrative Matters**

3. Marine Planning – Guidance Document  
(8 a.m., 1 hour; Report to Council June 13)

Kerry Griffin  
Notes: John Netto

3. Marine Planning – Aquaculture Opportunity Areas  
(9 a.m., 1 hour; Report to Council June 13)

Kerry Griffin  
Notes: Fran Recht

BREAK (10 a.m. – 10:15 a.m.)

**Habitat Committee Administrative Matters (continued)**

- 5. Habitat Committee Handbook  
(10:15 a.m., 45 minutes)

Correigh Greene

LUNCH (11 a.m. – 1 p.m.)

<p>PUBLIC COMMENT PERIOD 1 p.m.</p>
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- 6. Update on Central Valley Spring Run Chinook Habitat Indicators  
(1:15 p.m.; 30 minutes)

Correigh Greene  
Notes: Arlene Merems

- 7. Future Workload Planning  
(1:45 p.m., 30 minutes)

Correigh Greene  
Notes: Barry McCovey

ADJOURN

PFMC  
5/13/22

PROPOSED AGENDA

# Highly Migratory Species Advisory Subpanel

Pacific Fishery Management Council  
Hilton Vancouver Washington  
301 W. Sixth Street  
Vancouver, WA 98660 USA  
Phone: 360-993-4500  
Heritage D Room  
June 10-12, 2022

Highly Migratory Species Advisory Subpanel (HMSAS) meetings are open to the public and public comment opportunities have been scheduled. Additional public comments may be taken at the discretion of the Chair. Dates and times on this agenda are subject to change once the meeting begins. Agenda items listed under the Advisory Body Administrative Matters are in numerical order; other agenda items reflect their Council Meeting Agenda numbering. Note, times not specified for discussion and/or presentations will be allocated to the Advisory Body's drafting and reviewing of statements, reports, etc.

## Friday, June 10, 2022 – 8:00 a.m.

### HMSAS Administrative Matters

- |   |            |
|---|------------|
| 1. Roll call and review of agenda         | Kit Dahl   |
| 2. Introductions and introductory remarks | Dave Rudie |
| 3. Adoption of the agenda                 | HMSAS      |

### G. Highly Migratory Species

- |  |                           |
|--|---------------------------|
| G.2 International management activities<br>(8:30 a.m.; report to the Council on Sunday, June 12) | Dave Rudie, Celia Barroso |
|--|---------------------------|

Joint meeting with the HMS Advisory Subpanel focusing on harvest strategy recommendations for North Pacific albacore and Pacific bluefin tunas.

### Public Comment

11:45 a.m. or immediately following previous agenda item

- |  |                         |
|--|-------------------------|
| G.4 Drift gillnet hard caps – ROA/PPA<br>(1:00 p.m.; report to the Council on Sunday, June 12) | Steve Stohs, Dave Rudie |
|--|-------------------------|

Discuss and draft report.

**Public Comment**

4:15 p.m. or immediately following previous agenda item

**Saturday, June 11, 2022 – 8:00 a.m.**

G.3 Exempted fishing permits – preliminary recommendations  
(8:00 a.m.; report to the Council on Sunday, June 12)

Dave Rudie

Discuss and draft report.

**Public Comment**

11:15 a.m. or immediately following previous agenda item

**C. Administrative**

C.3 Marine planning update  
(1:30 p.m.; report to the Council on Monday, June 13)

Mike Conroy

Discuss and draft report.

C.8 Future Council meeting agenda and workload planning  
(3:30 p.m.; report to the Council on Tuesday, June 13)

Dave Rudie

Discuss and draft report.

**Public Comment**

4:15 p.m. or immediately following previous agenda item

**Sunday, June 12, 2022 – 8:00 a.m.**

**HMSAS Administrative Matters**

HMS agenda items on the Council floor starting at 8:00 a.m.; finalize reports as appropriate.

**ADJOURN**

PFMC  
05/11/22

PROPOSED AGENDA

# Highly Migratory Species Management Team

Pacific Fishery Management Council  
Hilton Vancouver Washington  
301 W. Sixth Street  
Vancouver, WA 98660 USA  
Phone: 360-993-4500  
Heritage E Room  
June 9-12, 2022

Highly Migratory Species Management Team (HMSMT) meetings are open to the public and public comment opportunities have been scheduled. Additional public comments may be taken at the discretion of the Chair. Dates and times on this agenda are subject to change once the meeting begins. Agenda items listed under the Advisory Body Administrative Matters are in numerical order; other agenda items reflect their Council Meeting Agenda numbering. Note, times not specified for discussion and/or presentations will be allocated to the Advisory Body's drafting and reviewing of statements, reports, etc.

## Thursday, June 9, 2022 – 8:00 a.m.

### HMSMT Administrative Matters

1. Roll call and review of agenda Kit Dahl
2. Introductions and introductory remarks Steve Stohs
3. HMSMT operations Amber Rhodes, Steve Stohs
4. Adoption of the agenda HMSMT

### G. Highly Migratory Species

- G.4 Drift gillnet hard caps – ROA/PPA Steve Stohs  
(8:30 a.m.; report to the Council on Sunday, June 12)

Discuss and draft supplemental report.

### HMSMT Administrative Matters

5. HMS SAFE Apex Portal Camille Kohler, Kit Dahl, Amber Rhodes  
(10:30 a.m.)

Presentation of Apex portal development and HMSMT feedback.

**Public Comment**

11:45 a.m. or immediately following previous agenda item

**G. Highly Migratory Species**

G.4 Drift gillnet hard caps – ROA/PPA (cont.)

Steve Stohs

(1:30 p.m.; report to the Council on Sunday, June 12)

Discuss and draft supplemental report.

**Public Comment**

4:15 p.m. or immediately following previous agenda item

**Friday, June 10, 2022 – 8:00 a.m.**

G.2 International management activities

Dave Rudie, Celia Barroso

(8:30 a.m.; report to the Council on Sunday, June 12)

Joint meeting with the HMS Advisory Subpanel focusing on harvest strategy recommendations for North Pacific albacore and Pacific bluefin tunas.

**Public Comment**

11:45 a.m. or immediately following previous agenda item

G.3 Exempted fishing permits – preliminary recommendations

Matthew Craig

(1:30 p.m.; report to the Council on Sunday, June 12)

Discuss and draft report.

**Public Comment**

4:15 p.m. or immediately following previous agenda item

**Saturday, June 11, 2022 – 8:00 a.m.**

**C. Administrative**

C.3 Marine planning update

Mike Conroy

(8:00 a.m.; report to the Council on Monday, June 13)

Discuss and draft report.

**Public Comment**

11:15 a.m. or immediately following previous agenda item

C.8 Future Council meeting agenda and workload planning  
(10:00 a.m.; report to the Council on Tuesday, June 13)

Amber Rhodes

Discuss and draft report.

**Public Comment**

4:15 p.m. or immediately following previous agenda item

**Sunday, June 12, 2022 – 8:00 a.m.**

**HMSMT Administrative Matters**

HMS agenda items on the Council floor starting at 8:00 a.m.; finalize reports as appropriate.

**ADJOURN**

PFMC  
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PROPOSED AGENDA

# Legislative Committee

Hilton Vancouver Hotel  
Heritage E  
301 West Sixth Street  
Vancouver, Washington 98660

June 8, 2022

Legislative Committee meetings are open to the public and there is an opportunity for public comment. Dates and times on this agenda are subject to change once the meeting begins. Agenda items listed under the Advisory Body Administrative Matters are in numerical order; other agenda items reflect their Council Meeting Agenda numbering. Breaks will be taken as necessary, at the discretion of the Chair.

**Wednesday, June 8, 2022 – 10:00 am.**

- |  |             |
|--|-------------|
| 1. Call to Order, Introductions, and Approval of Agenda                        | Dave Hanson |
| 2. Review of Legislation in the 117th Congress                                 | Mike Burner |
| 3. General Discussion of Current Legislation and Requests for Comment (if any) | All         |
| 5. Future Meeting Plans and Other Business                                     | All         |
| 6. Public Comment  |             |
| 7. Develop Report to Council   | All         |

ADJOURN

PFMC  
05/18/22



PROPOSED AGENDA

# Scientific and Statistical Committee

Pacific Fishery Management Council

Online Meeting

June 8-9, 2022

Instructions for how to connect to the Scientific and Statistical Committee's (SSC) webinar will be posted on the Pacific Fishery Management Council's (Council's) June Meeting Webpage prior to the first day of the meeting.

SSC meetings are open to the public and public comment periods have been scheduled for each day. Additional public comments may be taken at the discretion of the Chair. Dates and times on this agenda are subject to change once the meeting begins. Agenda items listed under the SSC Administrative Matters are in numerical order; other agenda items reflect their Council Meeting Agenda numbering. Committee member work assignments are noted in parentheses at the end of each agenda item. The first name listed is the discussion leader and the second, the rapporteur. Note, times not specified for discussion and/or presentations will be allocated to the SSC's drafting and reviewing of statements, reports, etc.

## Wednesday, June 8, 2022 – 8 AM

### SSC Administrative Matters

1. Roll Call, Introductions, Announcements, etc. Dan Holland
2. Report of the Executive Director Merrick Burden
3. Approve Agenda and April 2022 Minutes
4. Subcommittee Assignments - Current assignments are listed at the end of this agenda
5. Open Discussion and Future Meeting Planning

### C. Administrative Matters

7. Membership Appointments and Council Operating Procedures (SSC Closed Session)  
(9:00 a.m.; Report to the Council Thursday, June 9)

BREAK (9:30 – 9:45 a.m.)

D. Coastal Pelagic Species Management

1. Central Subpopulation of Northern Anchovy Assessment and Harvest Specifications André Punt and Peter Kuriyama  
(9:45 a.m.; **Byrne, Satterthwaite**; Report to the Council Thursday, June 9)
2. Stock Assessment Terms of Reference (TOR) André Punt  
(10:45 a.m.; **Munch, Hamel**; Report to the Council Thursday, June 9)

LUNCH (11:30 a.m. – 1:00 p.m.)

F. Groundfish Management

3. Stock Assessment Plan and Terms of Reference – Final Action Jim Hastie and John Budrick  
(1:00 p.m.; **Tsou, Haltuch**; Report to the Council Friday, June 10)
4. Stock Definitions – Scoping John DeVore  
(2:00 p.m.; **Field, Punt**; Report to the Council Friday, June 10)
2. Limited Entry Fixed Gear Catch Share Program Review Jim Seger and Jessi Doerpinghaus  
(3:00 p.m.; **Shelton, Johnson**; Report to the Council Friday, June 10)
5. Sablefish Gear Switching Jim Seger and Jessi Doerpinghaus  
(3:30 p.m.; **Reimer, Speir**; Report to the Council Saturday, June 11)

PUBLIC COMMENT PERIOD

4:30 p.m. (or immediately following Agenda Item D.6)

Public comments, including comments on issues not on the agenda, are accepted at this time.

SSC Administrative Matters (*continued*)

6. Draft and Review Statements  
(Following the public comment period)

**Thursday, June 9, 2022 — 8 AM**

SSC Administrative Matters (*continued*)

7. Draft and Review Statements  
(8:00 a.m.)

BREAK (9:15 – 9:30 a.m.)

F. Groundfish Management (*continued*)

6. Exempted Fishing Permits, Harvest Specifications, and Management Measures for 2023-2024 Fisheries – Final Action

John DeVore

(9:30 a.m.; **Marshall, Budrick**; Report to the Council Saturday, June 11)

C. Administrative Matters (*continued*)

8. Future Council Meeting Agenda and Workload Planning

(10:30 a.m.; **DeVore, Holland**; Report to the Council Tuesday, June 14)

PUBLIC COMMENT PERIOD  
 11:30 a.m. (or immediately following Agenda Item C.8)  
 Public comments, including comments on issues not on the agenda, are accepted at this time.

SSC Administrative Matters (*continued*)

8. Draft and Review Statements

(11:30 a.m.)

### SSC Subcommittee Assignments

Salmon	Groundfish	Coastal Pelagic Species	Highly Migratory Species	Economics	Ecosystem-Based Management
<b>Alan Byrne</b>	<b>John Budrick</b>	<b>André Punt</b>	<b>John Field</b>	<b>Cameron Speir</b>	<b>Kristin Marshall</b>
John Budrick	Fabio Caltabellotta	John Budrick	Fabio Caltabellotta	Dan Holland	John Field
Owen Hamel	John Field	Alan Byrne	Dan Holland	André Punt	Melissa Haltuch
Galen Johnson	Melissa Haltuch	John Field	Kristin Marshall	Matt Reimer	Dan Holland
Steve Munch	Owen Hamel	Owen Hamel	André Punt		Galen Johnson
Will Satterthwaite	Kristin Marshall	Steve Munch			André Punt
Jason Schaffler	André Punt	Will Satterthwaite			Matt Reimer
Ole Shelton	Jason Schaffler	Tien-Shui Tsou			Will Satterthwaite
Cameron Speir	Tien-Shui Tsou				Ole Shelton
Tien-Shui Tsou					Cameron Speir

**Bold** denotes Subcommittee Chairperson

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05/11/22

# Scientific and Statistical Committee

Pacific Fishery Management Council  
Online Meeting

April 7-8, 2022

## **Members in Attendance**

Dr. John Budrick, California Department of Fish and Wildlife, Belmont, CA  
Mr. Alan Byrne, Idaho Department of Fish and Game, Boise, ID  
Dr. Fabio Caltabellotta, Oregon State University, Corvallis, OR  
Dr. Melissa Haltuch, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA  
Dr. Owen Hamel, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA  
Dr. Dan Holland, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA  
Dr. Galen Johnson, SSC Chair, Northwest Indian Fisheries Commission, Olympia, WA  
Dr. Kristin Marshall, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA  
Dr. André Punt, University of Washington, Seattle, WA  
Dr. William Satterthwaite, National Marine Fisheries Service Southwest Fisheries Science Center, Santa Cruz, CA  
Dr. Jason Schaffler, Muckleshoot Indian Tribe, Auburn, WA  
Dr. Ole Shelton, National Marine Fisheries Service Northwest Fisheries Science Center, Seattle, WA  
Dr. Cameron Speir, National Marine Fisheries Service Southwest Fisheries Science Center, Santa Cruz, CA  
Dr. Tien-Shui Tsou, Washington Department of Fish and Wildlife, Olympia, WA

## **Members Absent**

Dr. John Field, National Marine Fisheries Service Southwest Fisheries Science Center, Santa Cruz, CA  
Dr. Steve Munch, National Marine Fisheries Service Southwest Fisheries Science Center, Santa Cruz, CA

SSC Recusals for the April 2022 Meeting		
SSC Member	Issue	Reason
Dr. William Satterthwaite	H.1 -	

A. Call to Order

Dr. Dan Holland called the meeting to order at 0800. Mr. Merrick Burden briefed the Scientific and Statistical Committee (SSC) on their tasks at this meeting. Dr. Matt Reimer volunteered to serve on the Economics and Ecosystem Subcommittees.

E. Coastal Pelagic Species Management  
 2. Exempted Fishing Permits (EFPs) for 2022-2023 –  
 Final Action

The Scientific and Statistical Committee (SSC) reviewed three proposals to renew exempted fishing permits (EFPs) for Coastal Pelagic Species (CPS) from the California Wetfish Producers Association (Agenda Item E.2, Attachments 1 and 2) and the West Coast Pelagic Conservation Group (Agenda Item E.2, Attachment 3). The California Wetfish Producers Association EFPs are to obtain point sets to validate the aerial survey estimates of CPS biomass in the nearshore area and collect biological samples from a limited directed Pacific sardine fishery. The West Coast Pelagic Conservation Group EFP intends to continue complementary acoustic sampling to quantify the CPS assemblage in waters inaccessible to the National Oceanic and Atmospheric Administration’s fisheries science vessel *Reuben Lasker*. All three proposals were previously reviewed by the SSC, and all three proposals continue work and employ similar methods that were used in previous years. The SSC notes that future EFPs submitted for renewal should include a section to explain how the data that were collected are or will be used in CPS management.

The SSC supports the approval of the three EFPs and commends the applicants for their dedication to the continued research needed to improve assessment of the Northern Subpopulation of Pacific Sardine and the Central Subpopulation of Northern Anchovy.

The SSC repeats its call (see [Agenda Item H.1.a, Supplemental SSC Report 1, November 2020](#)) that the Council Operating Procedure (COP) 23 explicitly outline the role of the SSC to review the scientific component(s) of EFPs. The SSC recommends modifying COP23 to have the CPS Management Team conduct an initial review of EFP applications and identify any scientific or experimental design elements of the EFP application that need SSC review. This will allow the SSC to focus on the scientific aspects of the EFP and will be similar to the process that is used to review Highly Migratory Species and Groundfish EFPs.

SSC Notes:

*Point set data are very useful as they can be informative with respect to aerial survey estimates of nearshore abundance. There is a need for additional point set data for anchovy.*

*Northern subpopulation sardine age data that were collected are useful for inclusion in the assessment, as there is no directed sardine fishery at this time. However, it is unclear how informative these data are in terms of estimating annual recruitment given fishery selectivity is assumed to be time-varying.*

*There is a need to assess the model we use to assign sardines to the Northern or Southern subpopulation.*

*What have EFP removals contributed to our knowledge of CPS and what do we want to learn in the future?*

### 3. Pacific Sardine Assessment, Harvest Specifications, and Management Measures – Final Action

The Scientific and Statistical Committee (SSC) reviewed the 2022 stock assessment update for the Northern Subpopulation (NSP) of Pacific Sardine, and the SSC Coastal Pelagic Species Subcommittee (CPSSC) review report on the assessment. Dr. Peter Kuriyama, National Marine Fisheries Service (NMFS), Southwest Fisheries Science Center (SWFSC) presented the 2022 stock assessment update. Drs. Emmanis Dorval (SWFSC) and Kevin Hill (SWFSC) were available for questions. Dr. André Punt (CPSSC Chair) gave a summary of the assessment review conducted on March 2, 2022 via the RingCentral platform.

The stock assessment update was based upon the February 2020 benchmark assessment and included:

- new Acoustic-Trawl (AT) survey index data for Spring 2021 and index and age data for Summer 2021 ;
- updated (re-aged) age data for the AT survey for 2016;
- updated catches for model-year semesters July-December 2019 and January-June 2020;
- new catch data for July-December 2020; and
- new catch and age data for January-June 2021 and July-December 2021), along with an assumption about fishing mortality to estimate 1+ biomass for 1 July 2022.

The uncertainties in this assessment update are the same as discussed for the 2020 benchmark and 2021 catch-only projection reports, especially the uncertainties related to the amount of nearshore biomass and the proportion of northern subpopulation in the catches off Ensenada, Mexico. The estimated catch for the MexCal season 2 fishery (Mexico, Southern California, Central California) and the associated fishing mortality rate (F), which is estimated at the maximum allowed by the software (4), remain a concern. This F value was also assumed to be constant in the forecast as was done in the previous assessments.

The SSC agrees with the CPSSC that the 2022 update to the 2020 sardine assessment satisfies the Terms of Reference for update assessments. The results are consistent with the previous assessment given the new data, and hence represent the best scientific information available for management of the NSP Pacific Sardine. The SSC recommends that the assessment be designated as category 2 based on the uncertainties related to the Mexican catch of NSP Pacific sardines and the observed retrospective pattern. The harvest guideline is 0 mt for 2022 based on the forecast age 1+ biomass of 27,369 mt, which is below the 150,000 mt management threshold.

The stock assessment team (STAT) has concerns about their ability to properly address the most substantial uncertainties discussed above as part of a 2023 benchmark assessment. There may be insufficient time to reprocess catch and survey data before the data deadline. The SSC recommends that the STAT focus on stock structure, how to compute catches and abundance indices for use in assessments, and improvements to estimates of abundance based on surveys (acoustic trawl method, nearshore acoustics, and aerial survey estimates) rather than conducting an assessment that will have the same concerns as the last benchmark assessment. Delaying the full assessment to 2024 and conducting a methodology review based on work conducted during 2022 would seem warranted. This would allow for discussions concerning potential improvements to the structure of the assessment as well.

*SSC Notes:*

*Possible structural improvements for a future assessment include a continuous time or seasonal model, assessing sardine in U.S. waters without apportioning to subpopulations, or other modeling changes.*

## **Coastal Pelagic Species Subcommittee of the Scientific and Statistical Committee Review of the 2022 Stock Assessment Update for Pacific Sardine**

Dr. Peter Kuriyama, National Marine Fisheries Service (NMFS), Southwest Fisheries Science Center (SWFSC) presented the 2022 stock assessment update for the Northern Subpopulation (NSP) of Pacific sardine on behalf of the Stock Assessment Team, and Dr. Emmanis Dorval (SWFSC) presented information on double reading and re-ageing of the 2016 age data that were used in the 2020 benchmark assessment. Drs. Kevin Hill (SWFSC) and Juan Zwolinski (University of California Santa Cruz) also participated in the discussion and answered questions about the assessment.

The stock assessment update that estimated 1+ biomass for 1 July 2022 was based upon the February 2020 benchmark assessment and included:

- new Acoustic-Trawl (AT) survey index data for Spring 2021 (model-year semester 2020-2) and index and age data for Summer 2021 (2021-1);
- updated (re-aged) age data for the AT survey for 2016 (2016-1);
- updated catches for model-year semesters July-December 2019 (2019-1) and January-June 2020 (2019-2);
- new catch data for July-December 2020 (2020-1); and
- new catch and age data for January-June 2021 (2020-2) and July-December 2021 (2021-1), along with an assumption about fishing mortality for model year-semester 2021-2.

While some of the catch values were previously updated for the catch-only projection that was reviewed by the Coastal Pelagic Species Subcommittee of the Scientific and Statistical Committee (SSC-CPSSC) during early 2021, that projection was rejected for use in management because a change in recruitment deviation parameters resulted from, and was necessary to achieve, the fit to the new catch data, and such changes are outside the Terms of Reference (TOR) for catch-only projections.

The 2016 AT age data did not match the patterns of recruitment estimated in the 2020 assessment based upon other age data. The new analysis and double reads of the AT 2016 age data found that the original age reader for the 2016 age structures estimated ages that were biased high. Therefore, all structures were re-read and a new age composition was produced. New ageing error matrices were produced for the 2016 AT survey age data and for ages read in 2021.

AT survey catchability  $q$  is set at values less than 1.0 from 2015 forward to account for nearshore sardine biomass missed by (e.g., inshore of) the AT survey sampling grid, as observed by an aerial survey of sardine in the nearshore. Three recent aerial surveys with timing concurrent with AT surveys were used for this analysis, in Summer 2019 (2019-1), Spring 2021 (2020-2), and Summer 2021 (2021-1). Comparing the acoustic estimates to the sum of the acoustic and aerial estimates, results in identical values of 0.733 for  $q$  for both summer surveys, whereas the spring survey results in a  $q$  of 0.589. However, larger discrepancies are observed in the spring survey when the AT surveys are treated as separate surveys of the “Core” and “Nearshore” areas to reflect differences in survey methods, timing, and spatial coverage for each. If the aerial survey is used instead of the nearshore AT data to represent the biomass inshore of the core area AT survey in the nearshore area due to the greater water area observed inshore of the AT core area, the  $q$  value for the spring 2021 survey changes substantially, from 0.589 to 0.071 given the low value of the biomass



observed in the core area (1,409 mt). The AT nearshore estimate is also higher than the aerial estimate for Spring 2021, which raised additional concerns, although differences in the methodologies, and overall variability, could explain these differences. Concerns were also expressed that combining the results of the nearshore AT survey estimates with those of the core area AT survey as if they reflected a single survey, and then calculating  $q$  for the nearshore estimate from the aerial survey would result in redundant accounting for biomass inshore of the core AT survey area. Work should be undertaken to better understand the relationship of the AT and aerial surveys in the nearshore areas and in spring vs. summer before the next assessment, in particular to evaluate areas that are surveyed by both survey techniques.

The SSC-CPSSC requested four additional model runs to correct an input error (and create a revised base model) and to explore the effect of different assumptions about how to use the data for the AT and aerial surveys in the nearshore to compute survey  $q$ . These included (1) correct the AT  $q$  values to match those in Table 2 of the update (New 2022 update (AT total); the revised base model); (2) use the ratio of nearshore AT survey to total AT survey estimates to calculate Core AT survey  $q$  (Scen 1); (3) use only Core AT survey data along with aerial survey data to estimate  $q$  (Scen 2); and (4) take the annual average nearshore biomass values from Scens 1 and 2 (e.g. average the nearshore AT and aerial survey estimates; Scen 3). The estimates of 1+ biomass from these model runs are shown in Figure 1. While the time series of estimated biomass changed somewhat for these scenarios, the biomass for July 1, 2022 varied little.

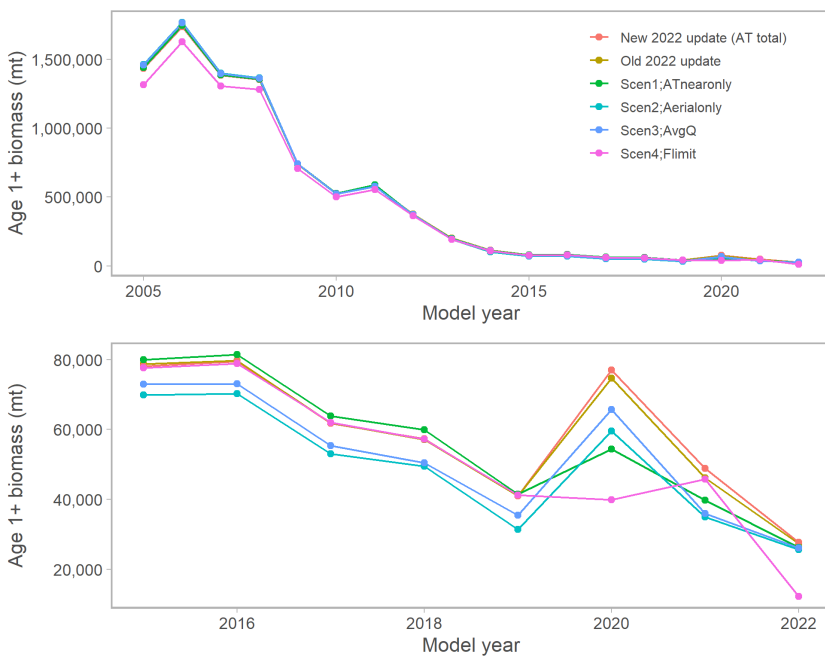


Figure 1. Complete and recent biomass trajectories from alternative model runs requested during the Sardine Assessment Update Review Meeting. See text for specifications of each run.

The method for estimating the catch of the NSP in the MexCal fishery depends on an analysis of the temperatures for which each of two substocks of Pacific sardine occur. This results in estimates of over 33,000 mt in model year-semester 2019-2, and over 48,000 mt in 2020-2, which is also

assumed for 2021-2. Given the large catch of sardine (from both subpopulations) in Mexico, any overlap, uncertainty or error in the temperature used to split the Mexican catch to the two subpopulations could result in substantial errors in the estimated catch of the NSP. The NSP Mexican catch estimates are driving the results of the assessment. Alternative methods or approaches for assessing and managing this stock may need to be explored given this uncertainty. The SSC-CPSSC requested an extra model run where the catch values for model year-semester 2 for the MexCal fleet for the past five years and the projection be capped at 10,000 mt (Figure 1; Scen4). This resulted in a decrease in the estimate of current biomass. However, the estimated fully-selected fishing mortality for those semesters remained at the upper bound of 4, due to changes in model estimated recruitment and biomass.

Figures 3 and 4 in the assessment update report show a substantial retrospective pattern that indicates the assessment may be providing an underestimate of current biomass. While there are certainly other concerns with the assessment that should be addressed, the effect of the retrospective pattern should be considered in management decision making.

The SSC-CPSSC agreed that the 2022 update to the 2020 sardine assessment satisfies the TOR for update assessments. The results are adequately consistent with the previous assessment given the new data, and hence represent the best scientific information available for management of the northern subpopulation of Pacific Sardine.

#### *SSC-CPSSC Notes:*

##### *Things to update in updated assessment document:*

- 1. Correct the figures and tables, add sensitivities.*
- 2. Add figure 1 of this report (or a similar one) to the assessment document.*
- 3. Include more detail on the analysis leading to new 2016 age data and ageing error, as well as ageing error for 2021 and other years.*
- 4. Add an appendix from Ed Weber on the temperature analysis.*
- 5. Fix table 4 to have a Fraction of 0.20.*
- 6. Fix plot 5 to sum correctly*

*Future analysis should be undertaken to know exactly where the fish are being seen and where there are areas of overlap between the AT and aerial surveys, which do not appear to be surveying the same fish in 2019-1 and 2021-1 as the estimate of abundance for the nearshore acoustic survey was very low, but the two surveys could have overlapped to some extent in time and/or space. Differences between spring and summer nearshore sampling should be evaluated.*

*What the STAT provided was as close as possible to the base model from the previous assessment and the results are consistent with the previous assessment and data, and model fits the data adequately. However, the SSC-CPSSC remains uncomfortable with the inconsistency with the catch estimates and the biomass, which leads to the retrospective pattern. Both the AT survey and the assessment may be underestimating biomass, unless Mexican catch is very substantially in error. It is quite plausible that the Mexican catch is in error if the algorithm for differentiating northern from southern subpopulations is incorrect.*

*The STAT has concern about ability to prepare for an assessment next year. They are not sure they will be able to address all issues for the benchmark for next year. This should be discussed during the April SSC meeting.*

## H. Administrative Matters, Continued

### 1. Final West Coast Regional Framework for Determining the Best Scientific Information Available

The Scientific and Statistical Committee (SSC) received an update presentation on Developing a Regional Best Scientific Information Available (BSIA) Framework from Dr. Jim Hastie (Northwest Fisheries Science Center) and Ms. Sarah Shoffler (Southwest Fisheries Science Center) and discussed the latest version of the documents. The presentation and documents provided accurately describe the existing BSIA process for annual catch specifications and status determinations.

The SSC thanks NMFS for their attention to previous suggestions, which have been addressed. The SSC recommends the following clarifications before the BSIA Framework is finalized. The documentation of the arbitration process has been expanded. However, the SSC notes that the process should be clearly stated to be a public process. The SSC also noted three inconsistencies in the level of detail represented in the workbook across the Fishery Management Plans (FMPs): 1) the level of detail in description of the involvement of advisory bodies differs between Coastal Pelagic Species (CPS) and groundfish, 2) a timeline is included for salmon but not for other FMPs, and 3) review of rebuilding analyses is described for groundfish and CPS, but not for salmon.

The SSC recognizes several needs for future work after the BSIA Framework is finalized. Further documentation is needed of the salmon review process. Questions were previously raised by the SSC regarding the review and updating of the reference points used in salmon status determinations and about the process for initiating reviews of the processes and models providing inputs to annual salmon management, such as the forecasts used to inform catch specifications. Also, the current modeling and review process differs by salmon species and these differences should be further described. Moreover, the SSC recommends that the Council explore opportunities for strengthening review processes across all FMPs, including external review.

#### *SSC Notes:*

*The following issues raised previously were addressed sufficiently in the current version:*

- 1) Description of overfishing determination process for CPS; and*
- 2) Fuller documentation of the stock status determination process for each of the FMPs, as well as the SSC's role in each.*

*Different salmon modeling and assessment teams do not follow the same review process and these processes have not yet been well documented in the BSIA Framework. For example, the Pacific Salmon Commission's Technical Committees operate differently by species. Coho exploitation rates are determined in a different way from Chinook exploitation rates, and there are differing*

*levels of scrutiny of the data that go into the different methods. The level of scrutiny is not specified in the Pacific Salmon Treaty, so it can differ depending on who is on the committee. Individual SSC members may understand parts of external salmon review processes due to their participation in them in other roles, however they were not documented as part of the BSIA Framework effort.*

*The Salmon Technical Team (STT) also commented on the Framework in November 2021 and suggested that extensive review processes for salmon exist external to the Council.*

*Presenters noted that some inconsistencies in the level of detail present in the workbook across FMPs were due to needing all contributors to agree on a joint product (e.g., this may contribute to not including salmon rebuilding analyses).*

#### D. Salmon Management

##### 4. Methodology Review Preliminary Topic Selection

The Scientific and Statistical Committee (SSC) met with members of the Salmon Technical Team (STT) and Model Evaluation Workgroup (MEW) to discuss potential topics to be reviewed by the SSC Salmon Subcommittee (SSCSS) in October 2022. The SSC discussed a range of topics and identified four as high priority for SSCSS review [responsible entities in brackets]:

- 1) Summarize and review changes to the two model outputs that determine the southern resident killer whale (SRKW) Chinook salmon forecasted abundance threshold used to trigger SRKW-specific management measures under Amendment 21 to the salmon FMP.
  - a. Changes to the Fishery Regulation Assessment Model (FRAM) in 2022 to model the abundance of Chinook salmon stocks used in determining the SRKW threshold [MEW, STT].
  - b. Updates to Chinook salmon ocean distribution models that derive from two publications (Shelton et al. 2019, 2021) used to apportion the modeled abundance of Chinook salmon stocks among ocean regions [NWFSC, SWFSC].

As many SSCSS members were involved in the creation of these science products, a substantial fraction of SSCSS members would be recused from reviewing parts of this work and inviting additional reviewers may be necessary for a successful review of this topic.

- 2) Review new technical documentation for FRAM algorithms [MEW].
- 3) Review the choice of point estimate (i.e., mean versus median) for forecasts used in salmon management with specific application to the Sacramento River Fall Chinook (SRFC) model, and the potential impacts of this choice [STT, SWFSC].

The SSC reiterates its suggestion to establish a process that outlines how and when salmon reference points and conservation objectives are reviewed and updated as appropriate (see Salmon Subcommittee report appended [Agenda Item C.10.a, Supplemental SSC Report 1, June 2021](#)). Conservation objectives and reference points (e.g.,  $S_{MSY}$  and  $F_{MSY}$ ) for two sets of salmon stocks – SRFC and multiple Washington Coastal Fall Chinook stocks – were derived from publications produced in 1984 and do not incorporate any information on run sizes, productivity, or other available biological parameters from the last 40 years. In addition, the

SRFC conservation objective/ $S_{MSY}$  is directly targeted by management in most years, while Washington Coastal Chinook exploitation rate estimates have generally been well below their respective  $F_{MSY}$  values, although the most recent estimates were larger than usual and above  $F_{MSY}$  estimates for some other PFMC Chinook stocks. The SSC notes that for other FMPs (e.g., groundfish, CPS) the values for reference points are routinely updated as a part of the stock assessment process, and populations with assessments that do not incorporate recent data are judged to have increased uncertainty. The SSC and STT agreed that an appropriate initial step toward examining conservation objectives would be to review documentation cited in the FMP that supports current conservation objectives. Moving to develop any potential updates to conservation objectives could benefit from the involvement of additional entities with salmon expertise.

## References

Shelton, A. O., W. H. Satterthwaite, E. J. Ward, B. E. Feist, and B. Burke. 2019. Using hierarchical models to estimate stock-specific and seasonal variation in ocean distribution, survivorship, and aggregate abundance of fall run Chinook salmon. *Canadian Journal of Fisheries and Aquatic Sciences* 76:95-108.

<https://cdnsiencepub.com/doi/abs/10.1139/cjfas-2017-0204>

Shelton, A. O., G. H. Sullaway, E. J. Ward, K. A. Somers, V. J. Tuttle, J. T. Watson, and W. H. Satterthwaite. 2021. Redistribution of salmon populations in the Northeast Pacific Ocean in response to climate. *Fish and Fisheries* 22:503-517.

<https://onlinelibrary.wiley.com/doi/10.1111/faf.12530>

## SSC Notes:

### *Additional topics that were discussed:*

- *Reviewing the documentation of data and analysis decisions that went into developing the FRAM base period. This was described as a very complicated and involved process that would be unlikely to be completed by Oct. 2022.*
- *Examining the Sacramento River Fall Chinook  $F_{MSY}$  reference point. The current reference point proxy was developed from productivity estimates from other west coast rivers. All data informing this reference point come from the 2000 brood year or earlier. The STT indicated that it did not have the information at hand to directly estimate  $F_{MSY}$  for this stock and did not have time or expertise to develop such an estimate before the October meeting.*
- *The SSC briefly discussed a general review of the Klamath and Sacramento Chinook salmon ocean harvest models. This was motivated by the observation that in recent years ocean harvest rates have been substantially underpredicted by the preseason harvest planning models. The STT was open to suggestions for potential improvements but did not have an identified approach to improve the models.*

*For the SRKW threshold work, the SSC viewed the salmon methodology review as an appropriate venue for examining this topic. There were several questions about why we were only discussing the salmon component of this project and not discussing how the salmon components were connected to SRKW populations.*

H. Administrative Matters, Continued

### 3. Future Council Meeting Agenda and Workload Planning

The Scientific and Statistical Committee (SSC) discussed workload planning and has the following updates to our March 2022 statement under this agenda item.

The SSC has planned two meetings of the relevant subcommittees to discuss proposed changes to two separate Stock Assessment Terms of Reference (TOR) for Groundfish and Coastal Pelagic Species (CPS). The SSC Groundfish Subcommittee will meet via webinar on April 22 to discuss the Groundfish TOR and the SSC CPS Subcommittee will meet via webinar on May 5 to discuss development of the CPS TOR. Members of the Groundfish and CPS management teams and advisory subpanels are encouraged to participate in these meetings. The revisions to the TOR for groundfish stock assessments is scheduled for final adoption by the Council in June 2022, while revisions of the CPS TOR are slated for initial review in June and final adoption in November 2022.

The 7<sup>th</sup> National Meeting of the Scientific Coordination Subcommittee of the Council Coordination Committee (SCS7) is scheduled for August 15-17 in Sitka, Alaska. The meeting will explore fishery management adaptations to a changing climate. Dr. André Punt has been invited to be a keynote speaker and other SSC members anticipated to attend include Drs. Kristin Marshall, Melissa Haltuch, Theresa Tsou and most likely Galen Johnson and Owen Hamel. The SSC will keep the Council apprised of the plans for the SCS7 meeting as they are decided.

The SSC recommends convening the annual SSC Ecosystem Subcommittee meeting with the CCIEA team to review additions to the Integrated Ecosystem Assessment (IEA) report on September 7, the day prior to the full SSC meeting. The SSC also recommends inviting the SSC Salmon Subcommittee, Salmon Technical Team, and Salmon Advisory Subpanel to the September SSC Ecosystem Subcommittee meeting since one of the recommended topics is specifically relevant to salmon management. The salmon topic could be scheduled in the afternoon so that those attending for that topic need only attend a half day. The SSC requests the Council support remote participation of some participants to this meeting due to limited travel budgets for Science Center IEA staff.

The SSC recommends holding the annual Salmon Methodology Review in late September or late October - a specific date is yet to be determined.

The SSC Groundfish Subcommittee is planning several additional meetings and workshops over the next several months.

- The SSC Groundfish Subcommittee is planning to meet June 21-23 to review the Template Model Builder implementation of a species distribution model to generate biomass indices in combination with a workshop on the treatment of indices for hook-and-line survey data

from Oregon and California. In order to accommodate Washington Department of Fish and Wildlife (WDFW) field work schedules, WDFW Rod-and-Reel survey data and index development will be discussed at a subsequent fall meeting noted below. Pairing the

methodology review of the Template Model Builder implementation of a species distribution model to generate biomass indices with the hook-and-line data and index development workshops will reduce the number of meetings and reports and provide time for proponents to work on requests while other topics are discussed.

- The SSC Groundfish Subcommittee proposes a planning meeting in late July or early August to coordinate aging prioritization and catch estimation to inform the groundfish stock assessments prioritized for review in 2023.
- The SSC Groundfish Subcommittee proposes conducting a workshop in late August to explore approaches for modeling large closed areas and other regulation changes in upcoming groundfish stock assessments.
- The SSC Groundfish Subcommittee recommends a methodology review September 26-30 to review Oregon Department of Fish and Game (ODFW)'s proposed acoustic/ROV survey methodology for semi-pelagic rockfish, with the participation of a Center of Independent Experts scientist on acoustic abundance estimation methods. The SSC recommends combining the review of methods for constructing abundance indices based on WA hook-and-line surveys to this meeting to reduce the number of meetings.
- The SSC Groundfish Subcommittee recommends scheduling a workshop on using ROV data in stock assessments in November or December of 2022 with the participation of a Center of Independent Experts scientist.
- The SSC Groundfish Subcommittee previously proposed a workshop to discuss alternative harvest control rules for spiny dogfish to reflect its lower productivity and the finding from the most recent assessment that the SPR 50% harvest rate may not be sustainable. The SSC recommends postponing that workshop until 2024 due to lack of data and capacity to make progress on this topic prior to the 2023 stock assessment cycle.

*SSC Notes:*

*For the ROV workshop to be held in November or December, it may not be possible to get this on the March SSC agenda. The workshop could be included in the briefing book as an informational item but it would not get the review and approval of the full SSC.*



**Proposed Workshops and SSC Subcommittee Meetings for 2022 and Beyond**

<b>Workshop/Meeting</b>		<b>Potential Dates</b>	<b>Sponsor/ Tentative Location</b>	<b>SSC Reps.</b>	<b>Additional Reviewers</b>	<b>AB Reps.</b>	<b>Council Staff</b>
<b>1</b>	GFSC Meeting to Review Proposed Changes to the TORs	April 22	Council/Webinar	Groundfish Subcommittee Members	Science Center Assessment Staff	GMT GAP	DeVore
<b>2</b>	CPSSC Meeting to Review Proposed Changes to the TORs	May 5	Council/Webinar	CPS Subcommittee Members	Science Center Assessment Staff	CPSMT CPSAS	Doerpinghaus
<b>3</b>	Proposed Workshop to Develop Methods for Constructing Abundance Indices Based on Hook-and-line Surveys/ sdmTMB Model Review	June 21-23	Council/Webinar	Groundfish Subcommittee Members	TBD	GMT GAP	DeVore
<b>4</b>	Aging Prioritization and Catch Estimation Meeting for 2023 Stock Assessments	late July/Aug TBD	Council/Webinar	Groundfish Subcommittee Members	NA	GMT GAP	DeVore
<b>5</b>	Proposed Groundfish Subcommittee Meeting to Explore Approaches to Deal with Large Closed Areas and Other Regulation Changes in Stock Assessments	late Aug TBD	Council/TBD	Groundfish Subcommittee Members (Budrick -chair)	TBD	GMT GAP	DeVore

6	7 <sup>th</sup> National Meeting of the Scientific Coordination Subcommittee of the Council Coordination Committee	Aug 15-17, 2022	NPFMC/ Sitka, AK	Punt, Marshall, Haltuch, Tsou, Johnson?	NA	NA	DeVore
7	Ecosystem Subcommittee/CCIEA Team Meeting	Sept 7?, 2022 TBD	Council/Boise/ Hybrid?	Ecosystem Subcommittee Members	CCIEA Team	EWG EAS STT SAS	DeVore Dahl Ehlke
8	Proposed Methodology Review for the ODFW Acoustic Survey, Proposed Workshop to Develop Methods for Constructing Abundance Indices Based on WA Hook-and-line Surveys	Sept 26-30, 2022	Council/Portland	Groundfish Subcommittee Members (Budrick & Haltuch - co-chairs)	CIE, Science Center Assessment Staff	GMT GAP	DeVore
9	Salmon Methodology Review	Sept or Oct 2022 TBD	Council/TBD	Salmon Subcommittee Members	TBD	STT MEW	Ehlke
10	ROV Survey and Workshop for Using ROV Data in Stock Assessments	Nov/Dec TBD	Council/Webinar	Groundfish Subcommittee Members (Budrick -chair)	CIE, Science Center Assessment Staff	GMT GAP	DeVore
11	Proposed Workshop to Develop Alternative Harvest Control Rules for Spiny Dogfish	2024 TBD	Council/Webinar	Groundfish Subcommittee Members	TBD	GMT GAP	TBD

## SSC Subcommittee Assignments

<b>Salmon</b>	<b>Groundfish</b>	<b>Coastal Pelagic Species</b>	<b>Highly Migratory Species</b>	<b>Economics</b>	<b>Ecosystem-Based Management</b>
<b>Alan Byrne</b>	<b>John Budrick</b>	<b>André Punt</b>	<b>John Field</b>	<b>Cameron Speir</b>	<b>Kristin Marshall</b>
John Budrick	Fabio Caltabellotta	John Budrick	Fabio Caltabellotta	Dan Holland	John Field
Owen Hamel	John Field	Alan Byrne	Dan Holland	André Punt	Melissa Haltuch
Galen Johnson	Melissa Haltuch	John Field	Kristin Marshall		Dan Holland
Steve Munch	Owen Hamel	Owen Hamel	André Punt		Galen Johnson
Will Satterthwaite	Kristin Marshall	Steve Munch			André Punt
Jason Schaffler	André Punt	Will Satterthwaite			Will Satterthwaite
Ole Shelton	Jason Schaffler	Tien-Shui Tsou			Ole Shelton
Cameron Speir	Tien-Shui Tsou				Cameron Speir
Tien-Shui Tsou					

**Bold** denotes Subcommittee Chairperson

ADJOURN

PFMC  
05/11/22