Framework Adjustment 55
Witch Flounder

Northeast Multispecies (Groundfish) 
Fishery Management Plan

Jamie M. Cournane, PhD 
Groundfish PDT Chair

Groundfish Committee 
Meeting 
January 14, 2016
That the Council recommends a preliminary ABC for witch flounder of 394 mt (with associated ACL and sub-ACLs) described in Table 10, Option 2 (revised ACLs)/Section 4.1 (Annual Catch Limits). Request that the SSC develop an additional alternative for the 2016 ABC for witch flounder without being constrained by 75% $F_{\text{MSY}}$. The Council will accept the temporary risk level associated with an ABC up to the OFL for FY 2016. To expedite Framework 55 include a range for the witch flounder ABC of 394 to 513 mt in Section 4.1.1.4.

The motion carried (12/4/1).
1) Characterize the range of risks and benefits of setting a 2016 ABC for witch flounder that is between the ABC calculated at 75% of $F_{MSY}$ and the OFL. This discussion should, to the extent possible, identify the biological, economic, social impacts of the ABC.

2) Based on the analyses in TOR 1, consider identifying an ABC for witch flounder that is not bound by 75% of $F_{MSY}$. Provide a clear rationale that identifies the risks and benefits of such an ABC.

3) If an ABC that exceeds 75% of $F_{MSY}$ is identified as considered by TOR 2, recommend any necessary adjustments to the OFLs and ABCs for FY 2017 and 2018.
Goal for the Committee Meeting Today

To receive an overview of the PDT’s preliminary work to date for the SSC, for informational purposes only.
<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>June</td>
<td>Council initiates FW55</td>
</tr>
<tr>
<td></td>
<td>Jul-Oct</td>
<td>Develop specifications</td>
</tr>
<tr>
<td></td>
<td>Sep</td>
<td>Council receives update on FW55</td>
</tr>
<tr>
<td></td>
<td>Oct-Nov</td>
<td>Develop NEPA analysis</td>
</tr>
<tr>
<td></td>
<td>Dec</td>
<td>Council takes final action on FW55</td>
</tr>
<tr>
<td>2016</td>
<td>Jan</td>
<td>Council takes final action on FW 55 – witch flounder specifications</td>
</tr>
</tbody>
</table>
PDT Work to Date

A sub-group of the PDT met with industry via webinar on January 6 to discuss if industry had information to bring forward for review by the PDT.

The PDT met twice by webinar on January 7 and 13 to discuss witch flounder. The PDT considered industry information at both webinars.

PDT webinars included opportunities for presentations by industry and for questions from the public.
2015 Witch Flounder Assessment

- The stock is overfished and overfishing is occurring.
- The stock is in a rebuilding plan with a rebuild by date of 2017.
- A retrospective adjustment was applied to the terminal year of the assessment.
- Compared to the 2012 assessment, the magnitude of the retrospective pattern has increased slightly for F and decreased slightly for SSB.
- In 2014, the stock was estimated to be at 22% of the rebuilding target SSB and 246% of its target F.
PDT’s Revised CY 2015 Estimate of Catches

- The PDT updated the estimated CY 2015 catches for witch flounder, using data through November 2015.
- The result is a revised catch estimate of 601 mt (reduced from the previous estimate of 637 mt).
- The PDT used the revised catch estimate for CY 2015 as the “bridge” year for catch projections.
- The revised catch assumption had relatively little effect on the $75\%F_{MSY}$ and $F_{MSY}$ estimate in 2016.
  - The $75\%F_{MSY}$ estimate increased from 394 mt to 399 mt and the $F_{MSY}$ estimate increased from 513 mt to 521 mt in 2016.
Rebuilding Projections

- The plan is a 7 year plan set to rebuild by 2017 with a 75% probability.
- Projections indicate that the stock cannot rebuild by 2017 with $F=0$.
- At $F=0$ the stock is projected to rebuild in 2020 with a 75% probability.
- At $75\%FMSY=0.209$ the stock is projected to rebuild in 2025 with a 76% probability and 2023 at a 61% probability.
Catch Projections

- The PDT developed four new catch projections at:
  - $75\% F_{\text{MSY}}$
  - $75\% F_{\text{MSY}}$ constant with the value for 2016 (399 mt)
  - Middle constant (between $75\% F_{\text{MSY}}$ and $F_{\text{MSY}}$) with the value for 2016 (460 mt)
  - $F_{\text{MSY}}$ constant with the value for 2016 (521 mt)

- The constant candidate ABC projections cover the range from a low using the updated $75\% F_{\text{MSY}}$ (399 mt) to the $F_{\text{MSY}}$ estimate (OFL = 521 mt) in 2016.

- The range of constant projections all meet the requirement that projected $F$ in 2017 is below $75\% F_{\text{MSY}} = 0.209$. 
Possible OFLs and ABCs (mt) for FY 2016- FY 2018 for witch flounder, under 75% $F_{\text{MSY}}$ projections. Projected F and SSB provided.

<table>
<thead>
<tr>
<th>year</th>
<th>OFL</th>
<th>ABC</th>
<th>F</th>
<th>SSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>521</td>
<td>399</td>
<td>0.209</td>
<td>3,253</td>
</tr>
<tr>
<td>2017</td>
<td>745</td>
<td>572</td>
<td>0.209</td>
<td>4,309</td>
</tr>
<tr>
<td>2018</td>
<td>945</td>
<td>724</td>
<td>0.209</td>
<td>5,466</td>
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</table>

Possible OFLs and ABCs (mt) for FY 2016- FY 2018 for witch flounder, holding the lowest value of 75% $F_{\text{MSY}}$ for FY 2016- FY 2018 projected catches constant for three years (i.e., 75% $F_{\text{MSY}}$ constant 2016). Projected F and SSB provided.

<table>
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<tr>
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<td>521</td>
<td>399</td>
<td>0.209</td>
<td>3,253</td>
</tr>
<tr>
<td>2017</td>
<td>745</td>
<td>399</td>
<td>0.142</td>
<td>4,342</td>
</tr>
<tr>
<td>2018</td>
<td>982</td>
<td>399</td>
<td>0.107</td>
<td>5,688</td>
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Possible OFLs and ABCs (mt) for FY 2016- FY 2018 for witch flounder, holding the middle value for 75% $F_{MSY}$ and $F_{MSY}$ for 2016 projected catches constant for three years (i.e., 460 mt). Projected F and SSB provided.

<table>
<thead>
<tr>
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<th>F</th>
<th>SSB</th>
</tr>
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<tbody>
<tr>
<td>2016</td>
<td>521</td>
<td>460</td>
<td>0.244</td>
<td>3,244</td>
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<tr>
<td>2017</td>
<td>732</td>
<td>460</td>
<td>0.169</td>
<td>4,276</td>
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<tr>
<td>2018</td>
<td>954</td>
<td>460</td>
<td>0.128</td>
<td>5,562</td>
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</table>

Possible OFLs and ABCs (mt) for FY 2016- FY 2018 for witch flounder, holding the 2016 $F_{MSY}$ value constant for three years (i.e., $75\%F_{MSY}$ for 2016). Projected F and SSB provided.

<table>
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<th>ABC</th>
<th>F</th>
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</tr>
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<tbody>
<tr>
<td>2016</td>
<td>521</td>
<td>521</td>
<td>0.279</td>
<td>3,234</td>
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<tr>
<td>2017</td>
<td>719</td>
<td>521</td>
<td>0.197</td>
<td>4,210</td>
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<tr>
<td>2018</td>
<td>927</td>
<td>521</td>
<td>0.150</td>
<td>5,437</td>
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</table>
Catch Performance

[Graph showing catch performance for Witch Flounder with years on the x-axis and catch (in thousands of metric tons) on the y-axis. The graph includes lines for catch, historical ABCs, catch assumption, Fmsy, and 75%Fmsy.]
Observed Hauls
Sector Trips: CY 2014
Work in Progress

- Analysis of the relative biological risk of setting a quota in 2016 to the stock in 2017
  - Using projections at various 2016 quotas
  - Calculating resulting SSB and F from projections in 2017
- Quota change model results for a range of quota for sectors:
  - 271 mt, 331 mt, and 388 mt – these corresponds to the range of catch projections for FY 2016
  - Early results indicate minimal differences between runs
- Evaluating observer data from sector trips
  - Early results indicate that some targeting of witch flounder occurs in the Gulf of Maine and to a lesser extent Georges Bank.
  - Also, the majority of witch flounder catches occur in the Gulf of Maine and parts of Georges Bank.
- Evaluation of social impacts of the range of quotas
- Discussion of biological, economic, and social trade-offs of the range of quotas
Next Steps

- PDT Webinar on Friday, January 15 at 9:30 AM
- PDT finalizes its memo to the SSC on Friday, January 15
- SSC convenes on Wednesday, January 20
- Council discusses witch flounder on January 27