2019-2021 Specifications

- Summer flounder 2019 (revised) and 2020-2021 measures adopted in early 2019
  - Based on benchmark assessment peer reviewed at SAW/SARC 66, November 2018

- Council revised risk policy in Dec. 2019, SSC has revised 2021 ABC accordingly
MC Objectives

- Review 2021 ACLs, ACTs, comm. quota, and RHL; recommend changes based on revised 2021 ABC recommendation

- Review commercial management measures and recommend changes if warranted
**Stock Status: 2018 Assessment**

**SSB**
- Not overfished in 2017
- 2017 SSB = 44,552 mt
- 78% of SSB_{35%} = SSB_{MSY} = 57,159 mt

**F**
- Overfishing not occurring in 2017
- 2017 F = 0.334
- 25% below F_{35%} = F_{MSY} proxy = 0.448
Fishing Mortality

Total Catch and Fishing Mortality (F)

- Total Catch
- F (age 4)
- FMSY = F35% = 0.448
Spawning Stock Biomass (SSB) and Recruitment (R)

- SSBMSY = SSB35% = 57,159 mt
- 1/2 SSBMSY = 1/2 SSB35%  = 28,580 mt
2020 Data Update

NEFSC Summer Flounder Biomass Indices

- ALB Spring
- ALB Fall
- ALB Winter
- BIG Spring
- BIG Fall

X-axis: Year (1967 to 2018)
Y-axis: ALB Kg per tow (0 to 5)
Y-axis: Winter and BIG Kg per tow (0 to 25)
2020 Data Update

NMFS fall BTS

Stratified mean numbers at length (m/f/tw)

Length (cm)

Stratified mean length (m/f/tw)  Incomplete strata sampling
Fishery Catch

Comm Landings
Comm Discard
Rec Landings
Rec Discard
Total Catch
## Fishery Performance

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>10.68</td>
<td>11.07</td>
<td>-4%</td>
<td>4.72</td>
<td>7.38</td>
<td>-36%</td>
<td>11.83</td>
</tr>
<tr>
<td>2016</td>
<td>7.81</td>
<td>8.12</td>
<td>-4%</td>
<td>6.18</td>
<td>5.42</td>
<td>+14%</td>
<td>13.24</td>
</tr>
<tr>
<td>2017</td>
<td>5.83</td>
<td>5.66</td>
<td>+3%</td>
<td>3.19</td>
<td>3.77</td>
<td>-15%</td>
<td>10.06</td>
</tr>
<tr>
<td>2018</td>
<td>6.14</td>
<td>6.44</td>
<td>-5%</td>
<td>3.35</td>
<td>4.42</td>
<td>-24%</td>
<td>7.60</td>
</tr>
<tr>
<td>2019</td>
<td>9.06</td>
<td>10.98</td>
<td>-17%</td>
<td>--</td>
<td>7.69</td>
<td>1%</td>
<td>7.80</td>
</tr>
<tr>
<td>5-yr Avg.</td>
<td></td>
<td></td>
<td>-5%</td>
<td></td>
<td></td>
<td>-12%</td>
<td></td>
</tr>
</tbody>
</table>

*2015-2018 evaluated using old MRIP data; 2019 with revised MRIP data
2020 Commercial Landings

Commercial landings through July 22, 2020

Quota: 11,530,000 lbs
Covid-19 impacts

- For-hire industry attempting to recover from lost opportunities from earlier in season
- Bait & tackle industries under pressure to make up for lost business before fall
- For-hire industry tackle shortages
- Commercial markets & ex-vessel prices down due to restaurant closures
General Management Issues (All 3 Species)

- Additional restrictions on menhaden have increased prey for sharks; increased shark populations possibly impacting abundance and distribution of rec target species
- Concerns with the accuracy of MRIP data
- One questioned methods MRIP uses to scale up effort estimates
- One requested adoption of mandatory private angler electronic recreational reporting
Email Comments (All 3 Species)

- Discard ban/total retention should be implemented; commercial fisheries should be managed based on dollar value per year based on vessel length
- Explore ocean ranching & stock enhancement
- Recreational fisheries should be managed in numbers of fish instead of pounds to increase fish kept and angler satisfaction
  - Evaluate ways to increase angler satisfaction under existing conservation constraints
Market and Economic Issues

- Summer flounder ex-vessel price is down due to covid and restaurant closures
  - One report of ~$1/lb in NY compared to $3-4 coastwide avg. in recent years
  - Has not been worth it for many vessels to go fishing
  - NY more beholden to fresh fish market than other states

- Email comment: prices stable, markets available
Market and Economic Issues

- One advisor: Medium size summer flounder set market price
  - Imports tend to fit size consumers want and current size limits disadvantage fluke markets
  - Supported lowering minimum size below 14”
Environmental and General Fishing Trends

- Mixed reports from Long Island
  - Commercial fishermen on north side of Long Island seeing few fish; catch per day is down
  - One member of public disagreed, for-hire season has been good in Long Island Sound (but poor for southern shore and west end)

- Fishing in Rhode Island is slow, poor catch rates

- Eastern shore of VA rec. fishing had slow start due to weather and covid, but effort and catch high in recent weeks
Environmental and General Fishing Trends

- Email comment: Regional depletions of fluke seen in New Jersey and elsewhere (due to concentrated fishing effort?); disparate access to fishery
  - Need better knowledge of migration patterns
  - Rec fishing in NJ good this spring, believe due to covid-related reduced commercial harvest

- Email comment: 2019 recreational fishing in MA was even worse than 2018; few legal size fish inside of 23+ miles
Management Issues

- Questioned MRI P data on landings by recreational mode
  - One said shore mode estimate is too low; two others said they believe it’s too high
- One request for consideration of a recreational total length limit for summer flounder with mandatory retention
- Email comment: comm. quota increase will decrease discards
2019 Council Risk Policy Revisions

![Graph showing the comparison between previous and revised risk policies. The graph plots P* against B/Bmsy. The previous risk policy is represented by a solid line, and the revised risk policy is represented by a dashed line.]
SSC ABC Recommendation

- Recommended revising previously adopted 2021 ABC based on revisions to Council risk policy
- Same OFL, continued 60% CV, proj. 2021
  \[ \frac{B}{B_{msy}} = 0.88 \]

<table>
<thead>
<tr>
<th></th>
<th>2021: Current</th>
<th>2021: SSC Rec</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OFL</strong></td>
<td>31.67 mil lb</td>
<td>31.67 mil lb</td>
</tr>
<tr>
<td></td>
<td>(14,367 mt)</td>
<td>(14,367 mt)</td>
</tr>
<tr>
<td><strong>ABC</strong></td>
<td>25.03 mil lb</td>
<td>27.11 mil lb</td>
</tr>
<tr>
<td></td>
<td>(11,354 mt)</td>
<td>(12,297 mt)</td>
</tr>
<tr>
<td><strong>P</strong>*</td>
<td>0.34</td>
<td>0.39</td>
</tr>
</tbody>
</table>
Summer Flounder
2021 Measures

- **OFL = 31.67 m lb**
  - From stock assessment projections

- **ABC = 27.11 m lb**
  - Recommended by SSC based on prior 2021 rec. with updated Council risk policy

---

**Landings portion = 20.81 m lb**
- Same proportion from prior NEFSC provided projections

**Commercial landings = 12.49 m lb**
- 60% of ABC landings portion (FMP)

**Recreational landings = 8.32 m lb**
- 40% of ABC landings portion (FMP)

**Projected commercial discards = 2.14 m lb**
- 34% of ABC discards portion, based on 2015-2017 average % of total discards by sector (revised MRIP)

**Projected recreational discards = 4.16 m lb**
- 66% of ABC discards portion, based on 2015-2017 average % of total discards by sector (revised MRIP)

---

**Discards portion = 6.30 m lb**
- Same proportion from prior NEFSC provided projections

**Commercial ACL = 14.63 m lb**
- Commercial landings allocation plus proj. commercial discards

**Commercial ACT = 14.63 m lb**
- Staff rec, Set equal to ACL; no deduction for management uncertainty

**Commercial Quota = 12.49 m lb**
- ACT minus commercial discards (before overage deductions)

---

**Recreational ACL = 12.48 m lb**
- Recreational landings allocation plus proj. recreational discards

**Recreational ACT = 12.48 m lb**
- Staff rec, Set equal to ACL; no deduction for management uncertainty

**Recreational Harvest Limit = 8.32 m lb**
- ACT minus recreational discards

---

**State Quotas**
- Recreational landings = 8.32 m lb
  - 40% of ABC landings portion (FMP)

- Projected commercial discards = 2.14 m lb
  - 34% of ABC discards portion, based on 2015-2017 average % of total discards by sector (revised MRIP)

- Projected recreational discards = 4.16 m lb
  - 66% of ABC discards portion, based on 2015-2017 average % of total discards by sector (revised MRIP)
Assumes same split of ABC into expected discards (23%) and landings (77%) compared to current measures
- Based on 2019 NEFSC projections for 2019-2021
- Very close to estimated discards/landings in recent years (Table 6)
Staff Rec. for Revised ACLs & Landings Limits

- Uses same comm/rec discards split as applied previously
- Could use more recent data
  - Shifts 441,000 lb discards to comm. ACL; does not impact landings limits
  - Neither configuration expected to cause ACL overages given recent performance
  - Staff rec. keeping 2015-2017 proportions; more reflective of trends over past 10 years
## Sector discards & ACLs under these discard assumptions

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Staff Rec</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>25.03</td>
<td>27.11</td>
</tr>
<tr>
<td>ABC Landings Portion</td>
<td>19.21</td>
<td>20.81</td>
</tr>
<tr>
<td>ABC Discards Portion</td>
<td>5.82</td>
<td>6.30</td>
</tr>
<tr>
<td>Expected Commercial Discards</td>
<td>2.00</td>
<td>2.14</td>
</tr>
<tr>
<td>Expected Recreational Discards</td>
<td>3.82</td>
<td>4.16</td>
</tr>
<tr>
<td>Commercial ACL</td>
<td>13.53</td>
<td>14.63</td>
</tr>
<tr>
<td>Recreational ACL</td>
<td>11.51</td>
<td>12.48</td>
</tr>
</tbody>
</table>
Fishery Performance Considerations for ACTs

- Commercial landings well monitored/controlled; in-season closure authority
- Commercial discards caused overages of commercial ACLs in 2016-2018 (2%-21%)
  - Likely due to low quotas
- 2019 data from NEFSC indicates 20% ACL underage; GARFO estimate not yet available
  - Under revised limits, may not be a concern for 2020-2021
# Comm. Discard Projection Performance

<table>
<thead>
<tr>
<th></th>
<th>Projected comm. Discard (mil lb)</th>
<th>NEFSC Comm. Discard Estimates (mil lb)</th>
<th>% difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2.03</td>
<td>1.83</td>
<td>-10%</td>
</tr>
<tr>
<td>2015</td>
<td>2.27</td>
<td>1.55</td>
<td>-32%</td>
</tr>
<tr>
<td>2016</td>
<td>1.31</td>
<td>1.70</td>
<td>+30%</td>
</tr>
<tr>
<td>2017</td>
<td>0.92</td>
<td>2.00</td>
<td>+117%</td>
</tr>
<tr>
<td>2018</td>
<td>1.07</td>
<td>2.20</td>
<td>+105%</td>
</tr>
<tr>
<td>2019</td>
<td>2.00</td>
<td>1.73</td>
<td>-13%</td>
</tr>
</tbody>
</table>
Fishery Performance Considerations for ACTs

- Recreational performance can only be evaluated with old MRIP through 2018
  - Variable performance using old MRIP 2015-2018; a few years of notable underages
  - 2019 harvest was 1% over RHL
### Rec. discard projection performance

<table>
<thead>
<tr>
<th>Projected rec. Discard (mil lb)</th>
<th>NEFSC rec. discard Estimates – OLD MRI P through 2018 (mil lb)</th>
<th>% difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 1.84</td>
<td>2.05</td>
<td>12%</td>
</tr>
<tr>
<td>2015 2.06</td>
<td>1.24</td>
<td>-40%</td>
</tr>
<tr>
<td>2016 1.41</td>
<td>1.48</td>
<td>5%</td>
</tr>
<tr>
<td>2017 0.95</td>
<td>0.94</td>
<td>-1%</td>
</tr>
<tr>
<td>2018 1.11</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>2019 3.82</td>
<td>3.04</td>
<td>-20%</td>
</tr>
</tbody>
</table>
ACT Recommendation

- Staff recommend continued application of ACLs=ACTs; no reduction applied for management uncertainty
## Current vs. Recommended 2021 Catch and Landings Limits

<table>
<thead>
<tr>
<th></th>
<th>2021 Current (mil lb)</th>
<th>2021 Staff Rec. (mil lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFL</td>
<td>31.67</td>
<td>31.67</td>
</tr>
<tr>
<td>ABC</td>
<td>25.03</td>
<td>27.11</td>
</tr>
<tr>
<td>Commercial ACL = ACT</td>
<td>13.53</td>
<td>14.63</td>
</tr>
<tr>
<td>Recreational ACL = ACT</td>
<td>11.51</td>
<td>12.48</td>
</tr>
<tr>
<td>Commercial Quota</td>
<td>11.53</td>
<td>12.49</td>
</tr>
<tr>
<td>Recreational Harvest Limit</td>
<td>7.69</td>
<td>8.32</td>
</tr>
</tbody>
</table>
### Commercial Allocation Revisions Pending Implementation for Jan. 1

<table>
<thead>
<tr>
<th>State</th>
<th>Existing Allocations</th>
<th>Revised Allocation System (Pending NMFS Approval and Implementation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Allocation (%)</td>
<td>Status Quo Quotas under 11.53 mil lb quota (2020)</td>
</tr>
<tr>
<td>ME</td>
<td>0.04756</td>
<td>5,484</td>
</tr>
<tr>
<td>NH</td>
<td>0.00046</td>
<td>53</td>
</tr>
<tr>
<td>MA</td>
<td>6.82046</td>
<td>786,399</td>
</tr>
<tr>
<td>RI</td>
<td>15.68298</td>
<td>1,808,248</td>
</tr>
<tr>
<td>CT</td>
<td>2.25708</td>
<td>260,241</td>
</tr>
<tr>
<td>NY</td>
<td>7.64699</td>
<td>881,698</td>
</tr>
<tr>
<td>NJ</td>
<td>16.72499</td>
<td>1,928,391</td>
</tr>
<tr>
<td>DE</td>
<td>0.01779</td>
<td>2,051</td>
</tr>
<tr>
<td>MD</td>
<td>2.03910</td>
<td>235,108</td>
</tr>
<tr>
<td>VA</td>
<td>21.31676</td>
<td>2,457,822</td>
</tr>
<tr>
<td>NC</td>
<td>27.44584</td>
<td>3,164,505</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>11,530,000</strong></td>
</tr>
</tbody>
</table>
Staff Recommendation: Mesh and Fish Size Regulations

- No changes to:
  - Minimum fish size (14”)
  - Seasonal mesh size thresholds (200 lb Nov 1-Apr 30; 100 lb May 1-Oct 31)
Staff Recommendation: Mesh and Fish Size Regulations

- Minimum mesh size (5.5” diamond/6.0” square)
  - Staff recommend **further evaluation in 2021** of phasing out 6.0” square mesh size, based on results of Hasbrouck et al. 2018 (as previously discussed by MC)
  - Additional analysis needed; Council/Board identified as lower near-term priority given other actions
Summer Flounder

- Currently required: 5.5” diamond or 6.0” square

- Mesh size study results indicate these may not be equivalent
  - 6.0” square appears closer to 5.0” diamond

- Some MC concern about retention of undersized fish with 6.0” square
Staff Recommendation: Small Mesh Exemption Program

- SMEP allows authorized small mesh vessels to land more than 200 lb of summer flounder east of longitude 72° 30.0’W, Nov. 1 - April 30

- FMP requires review of observer data to determine whether these vessels are discarding more than 10% of their summer flounder catch
# Staff Recommendation: Small Mesh Exemption Program

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>A Observed trips with at least one catch record east of 72° 30' W Longitude</td>
<td>395</td>
<td>382</td>
<td>401</td>
<td>391</td>
<td>555</td>
<td>724</td>
<td>646</td>
</tr>
<tr>
<td>B That met the criteria in row A and used small mesh at some point during their trip</td>
<td>139</td>
<td>113</td>
<td>172</td>
<td>252</td>
<td>376</td>
<td>364</td>
<td>354</td>
</tr>
<tr>
<td>C That met the criteria in rows A-B and landed more than 200 pounds summer flounder on whole trip</td>
<td>63</td>
<td>35</td>
<td>72</td>
<td>92</td>
<td>150</td>
<td>135</td>
<td>164</td>
</tr>
<tr>
<td>D That met the criteria in rows A-C and discarded &gt;10% of summer flounder catch east of 72° 30' W Longitude</td>
<td>8</td>
<td>7</td>
<td>21</td>
<td>18</td>
<td>36</td>
<td>47</td>
<td>53</td>
</tr>
<tr>
<td>E % of observed trips with catch east of 72° 30' W Longitude that also used small mesh, landed &gt;200 pounds of summer flounder, and discarded &gt;10% of summer flounder catch (row D/row A)</td>
<td>2.00%</td>
<td>1.80%</td>
<td>5.20%</td>
<td>4.60%</td>
<td>6.50%</td>
<td>6.50%</td>
<td>8.20%</td>
</tr>
<tr>
<td>F Total summer flounder discards (pounds) from trips meeting criteria in A-D</td>
<td>1,472</td>
<td>2,140</td>
<td>14,579</td>
<td>16,470</td>
<td>14,640</td>
<td>33,868</td>
<td>18,186</td>
</tr>
<tr>
<td>G Total summer flounder landings (pounds) from trips meeting criteria in A-D</td>
<td>4,342</td>
<td>5,876</td>
<td>15,224</td>
<td>23,295</td>
<td>25,472</td>
<td>76,780</td>
<td>59,960</td>
</tr>
<tr>
<td>H Total catch (pounds) from trips meeting criteria in A-D</td>
<td>5,814</td>
<td>8,016</td>
<td>29,804</td>
<td>39,763</td>
<td>40,113</td>
<td>110,648</td>
<td>69,145</td>
</tr>
</tbody>
</table>
Staff Recommendation: Small Mesh Exemption Program

- Increase in percent of observed SMEP trips discarding >10% of summer flounder Nov. 2016-April 2019 could be driven by lower quotas during these periods
- Data not yet available through April 2020 (will be incomplete due to covid)
- Possible that 2019-2021 quota increases will reduce discards
- Does the MC recommend changes or further analysis/input?
Staff Recommendation: Flynet Exemption

- Vessels fishing with two-seam otter trawl flynet are exempt from the minimum mesh size requirements.

- Exempt flynets have large mesh in the wings that measure 8 to 64 inches, the belly of the net has 35 or more meshes that are at least 8 inches, and the mesh decreases in size throughout the body of the net, sometimes to 2 inches or smaller.
Staff Recommendation: Flynet Exemption

- NC flynet fishery analyzed annually
- No summer flounder landed in NC flynet fishery in last 5 years
- General decrease in flynet landings in recent years largely due to shoaling at Oregon Inlet
Staff Recommendation: Flynet Exemption

- Advisor comment from early 2020: flynet exemption is being used more commonly than understood by MC

- Used by many vessels to increase retention of fluke on multispecies trips, using “high rise” nets that fall under the flynet definition

- Requests change in definition to include 4-seam nets in addition to 2-seam nets
Staff Recommendation: Flynet Exemption

- Insight from Emerson Hasbrouck: Very few, if any SNE/Mid-Atlantic fishermen in offshore mixed winter trawl fishery use 2 seam nets
  - 2 seam net: no side panels, top net sewn directly to net bottom. Limited “rise”
  - 4 seam net: has side panels, box shaped
  - Also recommended consideration of using large mesh belly panel in nets with small mesh codend
Staff Recommendation: Flynet Exemption

Questions for Monitoring Committee:

- Do you recommend changes to this exemption program for 2021, or further analysis/industry input of issues raised today?
- If further analysis/input, what would be helpful?
- Should consideration be given to expanding the definition of a flynet to include 4-seam nets?
MC Decision Points

- Review 2021 ACLs, ACTs, commercial quota, and RHL (recommend changes based on SSC-recommended ABC)
- Review commercial management measures and recommend any changes to:
  - Commercial minimum fish size
  - Commercial minimum mesh size
  - Possession thresholds for minimum mesh size requirement
  - Mesh size exemptions (small mesh exemption program and flynet exemption)