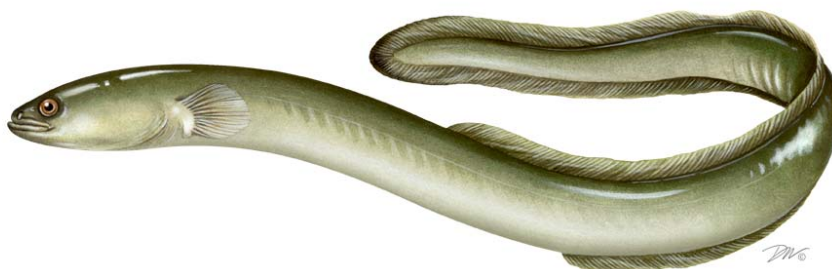




# Draft Addendum V



**American Eel Management Board  
February 6, 2018**

# Outline



- Statement of the Problem
- Potential Timeline of Draft Document
- Overview of Management Options
  - Questions
- Stock Assessment Subcommittee Response to Questions posed by the Allocation Working Group
  - Questions
- Board discussion and potential action

# Statement of the Problem



- Yellow eels: Concerns raised about the current management triggers and potential implementation of state by state quotas

- Glass eels: setting Maine's Quota higher than Addendum IV level requires a new addendum

- Motion from October 2017:

*Move to initiate an addendum to consider alternative allocations, management triggers, and coastwide caps relative to the current management program for both the yellow and glass eel commercial fisheries starting in the 2019 fishing season.*

# Potential Timeline



|  |                      |
|--|----------------------|
| Board Initiated Draft Addendum V                                       | October 2017         |
| <b>Board Considers Approval of Draft Addendum V for Public Comment</b> | <b>February 2018</b> |
| Public Comment   | Feb-Mar 2018         |
| Board Considers Final Action on Addendum                               | May 2018             |

# Draft Addendum V Options

## Glass Eel



### 3.1. Options for Maine Glass Eel Quota

- Option 1: Status Quo Maine Glass eel Quota (**9,688 pounds**)
- Option 2: 2014 Maine Quota (**11,479 pounds**)

### 3.2 Proposed Options for Glass Eel Aquaculture Plans

- Option 1: Status Quo (Addendum IV provisions)
- Option 2: Pooling of Harvest allowance across states and jurisdictions



## 3.1. Options for Maine Glass Eel Quota

- Option 1: Status Quo Maine Glass eel Quota (***9,688 pounds***)
- Option 2: 2014 Maine Quota (***11,479 pounds***)
  - 19% increase from 2015-2017 quota
  - But is 35% below 2012 quota level (21,610 pounds)



## **3.2. Proposed Options for Glass Eel Aquaculture Plans**

- Option 1: Status Quo (Addendum IV provisions)
- Option 2: Pooling of Harvest allowance across states and jurisdictions

# Option 2 for Glass Eel Aquaculture



-Up to **three contiguously bordered** states and jurisdictions would be allowed to pool their harvest of 200 pounds of glass eels up to a maximum of **600 pounds**.

-200 pounds would be harvested from each state within the pooled grouping of states and jurisdictions, unless a strong argument to have all eels harvested from a single watershed system is made.

-Pooling of harvest up to a max of 600 pounds, less than the 750 pounds that requires a life cycle survey, state and jurisdictions pooling harvest of glass eels for domestic aquaculture purposes would not need to implement a life cycle survey.

-States would no longer need to demonstrate harvest would only occur in watersheds that minimally contribute to spawning stock of American eels



# Draft Addendum V Options



## Yellow Eel

### 3.3 Options for Yellow Eel Coastwide Cap, Trigger, and State Allocation

- ***Issue 1: Coastwide Cap***
  - 3 Options
- ***Issue 2: Management triggers***
  - 3 Options
- ***Issue 3: Allocation***
  - 5 Options, 3 with sub-options
- ***Issue 4: Transfers***
  - 2 Options

# Update on Landings information



- Issues with reported yellow eel landings were highlighted on Allocation WG call in late Nov 2017
- All states were asked to confirm landings data or submit new landings information by beginning of January 2018
- New state and coastwide totals differ from data in Assessment Update
- Updated landings now indicate coastwide landings in 2016 were 943,808 pounds
  - Increase from previously reported number

# 2012-2016



| State        | Year             |                |                  |                |                |
|--------------|------------------|----------------|------------------|----------------|----------------|
|              | 2012             | 2013           | 2014             | 2015           | 2016           |
| ME           | 12,775           | 4,596          | 4,320            | 3,559          | 4,509          |
| MA           | 462              | 2,499          | 3,903            | 2,255          | 1,705          |
| RI           | 1,484            | 2,244          | 2,353            | 1,538          | 2,651          |
| CT           | 2,228            | 546            | 1,390            | 2,271          | 2,445          |
| NY           | 35,603           | 42,845         | 38,143           | 50,194         | 36,371         |
| NJ           | 113,806          | 90,244         | 91,225           | 88,828         | 67,422         |
| DE           | 54,304           | 82,991         | 62,388           | 44,708         | 44,558         |
| MD           | 590,412          | 587,872        | 619,935          | 493,043        | 583,578        |
| PRFC         | 90,037           | 32,290         | 49,293           | 31,588         | 58,223         |
| VA           | 121,605          | 100,379        | 109,537          | 86,715         | 96,336         |
| NC           | 64,110           | 33,980         | 60,755           | 57,791         | 39,911         |
| FL           | 11,845           | 15,059         | 14,092           | 5,632          | 6,034          |
| <b>Total</b> | <b>1,100,881</b> | <b>997,052</b> | <b>1,057,467</b> | <b>868,122</b> | <b>943,808</b> |

# Draft Addendum V Options



## Yellow Eel

### *Issue 1: Coastwide Cap*

- Option 1: Status Quo (**907,671 pounds**)
- Option 2: Cap set at 50<sup>th</sup> percentile or median of 1998-2016 landings (**943,808 pounds**)
- Option 3: Cap set at mean of 1998-2016 landings (**951,102 pounds**)

Note: revised averaged landings from 1998-2010 increased to 916,469 pounds from status quo Cap

# Draft Addendum V Options



## Yellow Eel

### *Issue 2: Management triggers*

- Option 1: Status Quo (two triggers)
  - 1) exceed the Coastwide Cap by 10% in given year
  - 2) exceed the Coastwide Cap for two consecutive years, regardless of overage
- Option 2: One year trigger of exceeding the Coastwide Cap by 10%
- Option 3: Two year trigger of exceeding the Coastwide Cap by 10%

Please note: management trigger could rise to 1.04 million pounds under Issue 1, Option 3 (4.78% increase from status quo)

# Draft Addendum V Options



## Yellow Eel

### *Issue 3: Allocation*

- Option 1: Status Quo state by state quotas
- Option 2: no state-by-state quotas (2 sub-options)
- Option 3: Modified Addendum IV Quotas
- Option 4: Simple Time series Average of Yellow eel landings (2 sub-options)
- Option 5: Allocation based on Weighted Time series Average of Yellow eel landings (2 sub-options)

# Draft Addendum V Options



## Yellow Eel

### *Issue 3: Allocation*

#### Option 2: no state-by-state quotas (2 sub-options)

- Sub-Option 2A: Equitable Reduction
  - States will collectively develop measures to achieve needed reduction; process not specified
- Sub Option 2B: 1% rule for states to reduce landings
  - Only states with >1% of coastwide landings take the reduction; those states will collectively develop measures to achieve needed reduction

# Draft Addendum V Options



## Yellow Eel

### *Issue 3: Allocation*

#### Option 3: Modified Addendum IV Quotas

- 1) States assigned quota cannot exceed their 2012-2016 average landings by more than 25%
- 2) 2,000 pound min quota for NH, MA, CT, SC, and GA redistributed to remaining states; all assigned 1,000 pounds now
- 3) ME's quota set at 2012-2016 avg landings (5,952 pounds)
- 4) Remainder quota from above added to NY, MD, VA quotas, with additional added to MD



| State     | Avg harvest 2012-2016 (pounds) | Addendum IV allocation in pounds | % change: Avg 2012-2016 harvest to Addendum IV quota | Addendum V option 3 quotas | % change: Avg 2012-2016 harvest to option 3 quota |
|-----------|--------------------------------|----------------------------------|--|----------------------------|---|
| ME        | 5,952                          | 3,907                            | -34.356  | 5,907                      | -0.7  |
| NH        |                                | 2,000                            |  | 1,000                      |   |
| MA        | 2,165                          | 2,000                            |  | 1,000                      |   |
| RI        | 2,054                          | 4,642                            | 125.998  | 2,551                      | 24.2  |
| CT        | 1,776                          | 2,000                            |  | 1,000                      |   |
| NY        | 40,631                         | 15,220                           | -62.541  | 32,613                     | -19.7   |
| NJ        | 90,305                         | 94,899                           | 5.087  | 94,187                     | 4.3   |
| DE        | 57,790                         | 61,632                           | 6.649  | 61,170                     | 5.8   |
| MD        | 574,968                        | 465,968                          | -18.958  | 481,788                    | -16   |
| PRFC      | 52,286                         | 52,358                           | 0.137  | 51,965                     | -0.6  |
| VA        | 102,914                        | 78,702                           | -23.527  | 95,619                     | -7.1  |
| NC        | 51,309                         | 107,054                          | 108.644  | 63,818                     | 24.4  |
| SC        |                                | 2,000                            |  | 1,000                      |   |
| GA        |                                | 2,000                            |  | 1,000                      |   |
| FL        | 10,532                         | 13,287                           | 26.154   | 13,051                     | 23.9  |
| Coastwide |                                | 907,669                          |  | 907,669                    |   |

# Draft Addendum V Options



## Yellow Eel

### *Issue 3: Allocation*

- Option 4: Simple Time series Average of Yellow eel landings (2 sub-options)
  - Sub Option 4A: Average Landings over recent 10-year time series (2007-2016)
  - Sub Option 4B: Average Landings over recent 5-year time series (2012-2016)

# 4A: Avg Landings 10-year ('07-'16)



| State            | Addendum IV Percentage Allocation | Addendum IV Quota | Percentage Allocation under Option 4A | New Quota under Option 4A |
|------------------|-----------------------------------|-------------------|---------------------------------------|---------------------------|
| ME               | 0.430%                            | 3,907             | 0.57%                                 | 5,217                     |
| NH               | 0.220%                            | 2,000             | 0.01%                                 | 61                        |
| MA               | 0.220%                            | 2,000             | 0.20%                                 | 1,776                     |
| RI               | 0.511%                            | 4,642             | 0.32%                                 | 2,928                     |
| CT               | 0.220%                            | 2,000             | 0.17%                                 | 1,555                     |
| NY               | 1.677%                            | 15,220            | 3.05%                                 | 27,696                    |
| NJ               | 10.455%                           | 94,899            | 11.44%                                | 103,808                   |
| DE               | 6.790%                            | 61,632            | 7.56%                                 | 68,661                    |
| MD               | 51.337%                           | 465,968           | 53.65%                                | 486,947                   |
| PRFC             | 5.768%                            | 52,358            | 5.97%                                 | 54,201                    |
| VA               | 8.671%                            | 78,702            | 9.88%                                 | 89,719                    |
| NC               | 11.794%                           | 107,054           | 5.89%                                 | 53,429                    |
| SC               | 0.220%                            | 2,000             | 0.00%                                 | 3                         |
| GA               | 0.220%                            | 2,000             | 0.05%                                 | 436                       |
| FL               | 1.464%                            | 13,287            | 1.24%                                 | 11,232                    |
| <b>Coastwide</b> | <b>100.000%</b>                   | <b>907,669</b>    | <b>100.00%</b>                        | <b>907,669</b>            |

# 4B: Avg Landings 5-year ('12-'16)



| State            | Addendum IV Percentage Allocation | Addendum IV Quota | Percentage Allocation under Option 4B | New Quota under Option 4B |
|------------------|-----------------------------------|-------------------|---------------------------------------|---------------------------|
| ME               | 0.430%                            | 3,907             | 0.60%                                 | 5,438                     |
| NH               | 0.220%                            | 2,000             | 0.01%                                 | 50                        |
| MA               | 0.220%                            | 2,000             | 0.22%                                 | 1,978                     |
| RI               | 0.511%                            | 4,642             | 0.21%                                 | 1,877                     |
| CT               | 0.220%                            | 2,000             | 0.18%                                 | 1,623                     |
| NY               | 1.677%                            | 15,220            | 4.09%                                 | 37,122                    |
| NJ               | 10.455%                           | 94,899            | 9.09%                                 | 82,506                    |
| DE               | 6.790%                            | 61,632            | 5.82%                                 | 52,799                    |
| MD               | 51.337%                           | 465,968           | 57.87%                                | 525,313                   |
| PRFC             | 5.768%                            | 52,358            | 5.26%                                 | 47,771                    |
| VA               | 8.671%                            | 78,702            | 10.36%                                | 94,027                    |
| NC               | 11.794%                           | 107,054           | 5.16%                                 | 46,878                    |
| SC               | 0.220%                            | 2,000             | 0.00%                                 | 1                         |
| GA               | 0.220%                            | 2,000             | 0.07%                                 | 665                       |
| FL               | 1.464%                            | 13,287            | 1.06%                                 | 9,623                     |
| <b>Coastwide</b> | <b>100.000%</b>                   | <b>907,669</b>    | <b>100.00%</b>                        | <b>907,669</b>            |

# Draft Addendum V Options



## Yellow Eel

### *Issue 3: Allocation*

- Option 5: Allocation based on Weighted Time series Average of Yellow eel landings (2 sub-options)
  - Sub Option 5A: 50 % of the time series (1998-2016) and 50% of the recent 10 years (2007-2016)
  - Sub Option 5B: Weighted average: 50 % of the time series (1998-2016) and 50% of the recent 5 years (2012-2016)

# 5A: 50 % of (19 yr) and 50% of (10 yr)



| State            | Addendum IV Percentage Allocation | Addendum IV Quota | Percentage Allocation under Option 5A | New Quota under Option 5A |
|------------------|-----------------------------------|-------------------|---------------------------------------|---------------------------|
| ME               | 0.430%                            | 3,907             | 0.745%                                | 6,759                     |
| NH               | 0.220%                            | 2,000             | 0.009%                                | 79                        |
| MA               | 0.220%                            | 2,000             | 0.243%                                | 2,209                     |
| RI               | 0.511%                            | 4,642             | 0.540%                                | 4,899                     |
| CT               | 0.220%                            | 2,000             | 0.222%                                | 2,017                     |
| NY               | 1.677%                            | 15,220            | 2.707%                                | 24,570                    |
| NJ               | 10.455%                           | 94,899            | 11.209%                               | 101,743                   |
| DE               | 6.790%                            | 61,632            | 8.915%                                | 80,920                    |
| MD               | 51.337%                           | 465,968           | 48.673%                               | 441,788                   |
| PRFC             | 5.768%                            | 52,358            | 8.298%                                | 75,319                    |
| VA               | 8.671%                            | 78,702            | 10.315%                               | 93,624                    |
| NC               | 11.794%                           | 107,054           | 6.911%                                | 62,731                    |
| SC               | 0.220%                            | 2,000             | 0.000%                                | 2                         |
| GA               | 0.220%                            | 2,000             | 0.041%                                | 376                       |
| FL               | 1.464%                            | 13,287            | 1.171%                                | 10,632                    |
| <b>Coastwide</b> | <b>100.000%</b>                   | <b>907,669</b>    | <b>100.000%</b>                       | <b>907,669</b>            |

# 5B: 50 % of (19 yr) and 50% of (5 yr)



| State            | Addendum IV Percentage Allocation | Addendum IV Quota | Percentage Allocation under Option 5B | New Quota under Option 5B |
|------------------|-----------------------------------|-------------------|---------------------------------------|---------------------------|
| ME               | 0.430%                            | 3,907             | 0.755%                                | 6,849                     |
| NH               | 0.220%                            | 2,000             | 0.008%                                | 73                        |
| MA               | 0.220%                            | 2,000             | 0.254%                                | 2,305                     |
| RI               | 0.511%                            | 4,642             | 0.477%                                | 4,333                     |
| CT               | 0.220%                            | 2,000             | 0.225%                                | 2,045                     |
| NY               | 1.677%                            | 15,220            | 3.243%                                | 29,432                    |
| NJ               | 10.455%                           | 94,899            | 10.014%                               | 90,891                    |
| DE               | 6.790%                            | 61,632            | 8.002%                                | 72,636                    |
| MD               | 51.337%                           | 465,968           | 50.906%                               | 462,057                   |
| PRFC             | 5.768%                            | 52,358            | 7.902%                                | 71,721                    |
| VA               | 8.671%                            | 78,702            | 10.551%                               | 95,767                    |
| NC               | 11.794%                           | 107,054           | 6.527%                                | 59,247                    |
| SC               | 0.220%                            | 2,000             | 0.000%                                | 1                         |
| GA               | 0.220%                            | 2,000             | 0.054%                                | 493                       |
| FL               | 1.464%                            | 13,287            | 1.082%                                | 9,819                     |
| <b>Coastwide</b> | <b>100.000%</b>                   | <b>907,669</b>    | <b>100.000%</b>                       | <b>907,669</b>            |

# Draft Addendum V Options



## Yellow Eel

### *Issue 4: Transfers*

- Option 1: Status Quo (No Transfers after December 31)
- Option 2: Extend Transfer through April 1 of the following fishing season
- Note: Black Sea Bass and Scup are the only FMPs that allow transfers past the end of the fishing season and specify a cut-off date (45 days after the last day of the fishing season; Feb 15)





**Questions?**



# Extra Slides

# Landings 1998-2006



| State        | Year    |           |         |         |         |           |         |         |         |
|--------------|---------|-----------|---------|---------|---------|-----------|---------|---------|---------|
|              | 1998    | 1999      | 2000    | 2001    | 2002    | 2003      | 2004    | 2005    | 2006    |
| <b>ME</b>    | 0       | 0         | 0       | 9,007   | 11,617  | 15,312    | 29,646  | 17,189  | 27,489  |
| <b>MA</b>    | 3,456   | 3,456     | 2,976   | 3,867   | 3,949   | 4,047     | 5,328   | 3,073   | 3,676   |
| <b>RI</b>    | 967     | 140       | 25      | 14,357  | 22,965  | 24,883    | 19,858  | 22,001  | 1,034   |
| <b>CT</b>    | 5,606   | 10,250    | 4,643   | 1,724   | 3,710   | 1,868     | 1,374   | 337     | 3,443   |
| <b>NY</b>    | 16,867  | 7,882     | 5,824   | 18,192  | 30,930  | 8,296     | 5,354   | 27,726  | 10,601  |
| <b>NJ</b>    | 94,327  | 90,252    | 45,393  | 57,700  | 64,600  | 100,701   | 120,607 | 148,127 | 158,917 |
| <b>DE</b>    | 131,478 | 128,978   | 119,180 | 121,515 | 99,529  | 155,516   | 137,489 | 111,200 | 123,994 |
| <b>MD</b>    | 301,833 | 305,812   | 259,552 | 271,178 | 208,659 | 346,412   | 273,142 | 378,659 | 362,966 |
| <b>PRFC</b>  | 209,008 | 163,351   | 208,549 | 213,440 | 128,595 | 123,450   | 116,263 | 103,628 | 83,622  |
| <b>VA</b>    | 123,837 | 183,255   | 114,972 | 97,032  | 75,549  | 121,091   | 123,812 | 66,956  | 82,756  |
| <b>NC</b>    | 91,084  | 99,939    | 127,099 | 107,070 | 59,940  | 172,065   | 128,875 | 49,278  | 33,581  |
| <b>FL</b>    | 13,819  | 17,533    | 6,054   | 14,218  | 7,587   | 8,486     | 7,330   | 3,913   | 1,248   |
| <b>Total</b> | 992,741 | 1,011,093 | 894,577 | 929,523 | 717,698 | 1,082,614 | 969,318 | 932,087 | 894,192 |

# Landings 2007-2015



| State        | Year    |         |         |         |           |           |         |           |         |
|--------------|---------|---------|---------|---------|-----------|-----------|---------|-----------|---------|
|              | 2007    | 2008    | 2009    | 2010    | 2011      | 2012      | 2013    | 2014      | 2015    |
| <b>ME</b>    | 14,251  | 3,882   | 2,285   | 2,605   | 2,666     | 12,775    | 4,596   | 4,320     | 3,559   |
| <b>MA</b>    | 2,853   | 3,297   | 1,217   | 322     | 368       | 462       | 2,499   | 3,903     | 2,255   |
| <b>RI</b>    | 1,230   | 8,866   | 4,855   | 3,860   | 2,038     | 1,484     | 2,244   | 2,353     | 1,538   |
| <b>CT</b>    | 935     | 6,046   | 435     | 167     | 60        | 2,228     | 546     | 1,390     | 2,271   |
| <b>NY</b>    | 14,881  | 15,025  | 12,676  | 12,179  | 36,451    | 35,603    | 42,845  | 38,143    | 50,194  |
| <b>NJ</b>    | 169,902 | 137,687 | 118,533 | 105,089 | 120,576   | 113,806   | 90,244  | 91,225    | 88,828  |
| <b>DE</b>    | 139,647 | 80,002  | 59,619  | 69,355  | 92,181    | 54,304    | 82,991  | 62,388    | 44,708  |
| <b>MD</b>    | 343,141 | 381,993 | 335,575 | 524,768 | 715,162   | 590,412   | 587,872 | 619,935   | 493,043 |
| <b>PRFC</b>  | 97,361  | 71,655  | 58,863  | 57,755  | 29,010    | 90,037    | 32,290  | 49,293    | 31,588  |
| <b>VA</b>    | 56,512  | 84,031  | 117,974 | 77,263  | 103,222   | 121,605   | 100,379 | 109,537   | 86,715  |
| <b>NC</b>    | 37,937  | 23,833  | 65,481  | 122,104 | 61,960    | 64,110    | 33,980  | 60,755    | 57,791  |
| <b>FL</b>    | 7,379   | 15,624  | 6,824   | 11,287  | 25,601    | 11,845    | 15,059  | 14,092    | 5,632   |
| <b>Total</b> | 886,470 | 832,475 | 784,420 | 986,937 | 1,189,455 | 1,100,881 | 997,052 | 1,057,467 | 868,122 |

# 1998-2016 Yellow eel Landings



| Year | ME     | NH | MA    | RI     | CT     | NY     | NJ      | DE      | MD      | PRFC    | VA      | NC      | SC | GA | FL     | Total     |
|------|--------|----|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|----|----|--------|-----------|
| 1998 | 0      |    | 3,456 | 967    | 5,606  | 16,867 | 94,327  | 131,478 | 301,833 | 209,008 | 123,837 | 91,084  |    |    | 13,819 | 992,741   |
| 1999 | 0      |    | 3,456 | 140    | 10,250 | 7,882  | 90,252  | 128,978 | 305,812 | 163,351 | 183,255 | 99,939  |    |    | 17,533 | 1,011,093 |
| 2000 | 0      |    | 2,976 | 23     | 4,643  | 5,824  | 45,393  | 119,160 | 259,552 | 208,549 | 114,972 | 127,099 |    |    | 6,054  | 894,577   |
| 2001 | 9,007  |    | 3,867 | 14,357 | 1,724  | 18,192 | 57,700  | 121,515 | 271,178 | 213,440 | 97,032  | 107,070 |    |    | 14,218 | 929,523   |
| 2002 | 11,617 |    | 3,949 | 22,965 | 3,710  | 30,930 | 64,600  | 99,529  | 208,659 | 128,595 | 75,549  | 59,940  |    |    | 7,587  | 717,698   |
| 2003 | 15,312 |    | 4,047 | 24,883 | 1,868  | 8,296  | 100,701 | 155,516 | 346,412 | 123,450 | 121,091 | 172,065 |    |    | 8,486  | 1,082,614 |
| 2004 | 29,646 |    | 5,328 | 19,858 | 1,374  | 5,354  | 120,607 | 137,489 | 273,142 | 116,263 | 123,812 | 128,875 |    |    | 7,330  | 969,318   |
| 2005 | 17,189 |    | 3,073 | 22,001 | 337    | 27,726 | 148,127 | 111,200 | 378,659 | 103,628 | 66,956  | 49,278  |    |    | 3,913  | 932,087   |
| 2006 | 27,489 |    | 3,676 | 1,034  | 3,443  | 10,601 | 158,917 | 123,964 | 362,966 | 63,622  | 82,756  | 33,581  |    |    | 1,248  | 894,192   |
| 2007 | 14,251 |    | 2,853 | 1,230  | 935    | 14,881 | 169,902 | 139,647 | 343,141 | 97,361  | 56,512  | 37,937  |    |    | 7,379  | 886,170   |
| 2008 | 3,882  |    | 3,297 | 8,888  | 6,048  | 15,025 | 137,887 | 80,002  | 381,993 | 71,833  | 84,031  | 23,833  |    |    | 15,824 | 832,475   |
| 2009 | 2,283  |    | 1,217 | 4,853  | 435    | 12,876 | 118,533 | 59,619  | 335,573 | 58,863  | 117,974 | 65,481  |    |    | 6,624  | 784,420   |
| 2010 | 2,605  |    | 322   | 3,860  | 167    | 12,179 | 105,085 | 69,355  | 524,768 | 57,755  | 77,263  | 122,104 |    |    | 11,287 | 986,937   |
| 2011 | 2,666  |    | 368   | 2,038  | 60     | 36,451 | 120,576 | 92,181  | 715,162 | 29,310  | 103,222 | 61,960  |    |    | 25,601 | 1,189,455 |
| 2012 | 12,775 |    | 462   | 1,484  | 2,228  | 35,603 | 113,806 | 54,304  | 590,412 | 90,337  | 121,605 | 64,110  |    |    | 11,845 | 1,100,881 |
| 2013 | 4,596  |    | 2,499 | 2,244  | 546    | 42,845 | 90,244  | 82,991  | 587,872 | 32,290  | 100,379 | 33,980  |    |    | 15,059 | 997,052   |
| 2014 | 4,370  |    | 3,903 | 2,353  | 1,390  | 38,143 | 91,225  | 62,388  | 619,835 | 49,293  | 109,537 | 60,755  |    |    | 14,097 | 1,057,467 |
| 2015 | 3,559  |    | 2,255 | 1,538  | 2,271  | 50,194 | 88,828  | 44,708  | 493,243 | 31,588  | 86,715  | 57,791  |    |    | 5,622  | 868,122   |
| 2016 | 4,509  |    | 1,705 | 2,051  | 2,445  | 30,371 | 67,422  | 44,558  | 583,578 | 58,223  | 96,330  | 39,911  |    |    | 6,034  | 943,808   |

Note: Due to data confidentiality rules, annual landings for New Hampshire, South Carolina, and Georgia are not shown rather the time series landings average of less than 400 pounds.



# Stock Assessment Subcommittee Report



# Overview



- Several questions were posed to the SAS by the American Eel Allocation Working Group
- SAS met via conference call on January 24 to discuss questions and review the document
- SAS recommends the TC review the draft addendum before public comment

# Question 1 from WG



Provide feedback on the accuracy of the following statement:

American eels reach maturity at a younger age and smaller size in estuarine water than in fresh water (Clark 2009), and the 19-year time series of landings likely represents at least two generations (COSEWIC 2012) of estuarine yellow eels that have been exposed to the yellow eel fishery. Given the American eel's panmictic life history, if the fishery were causing a population decline, that population decline should be evident in all areas of its range, especially the areas of maximum exploitation.



# SAS Response



- SAS agreed this statement is incorrect
- Stocks often decline from the edges inward
  - Range outside of US and ASMFC jurisdiction
  - Assessment tracks trends in estuarine, not FW areas
  - Detecting hyperstability difficult for data-poor species
- Statement does not consider how sex ratios and maturation varies latitudinally
- “No trend” in several indices means not increasing or decreasing
- Stock is stable, but low and depleted

# Question 2 from WG



In considering new proposed Coastwide Landings Cap above the status quo, what are the implications for the stock if the coastwide cap is set a different (higher) level than its current level of 907,671 pounds?

# SAS Response



- None of the proposed options are a 12% reduction from the time series average as was suggested by the TC prior to Addendum IV to decrease mortality across all life stages
  - In 2014, TC suggested a 12% reduction to 1998-2010 average (798,751 lbs) was precautionary; Board chose time series average of 907,671 lbs
- American eel is data poor and the assessment does not have reference points, cannot run projections to address different removal levels
- Current levels of harvest may not allow for rebuilding

# Recalculation of TC Advice (2014)



- **SAS did not review this table**, but did reference the TC memo of 2014 and the 12% reduction:
  - *What should the reduction be for the yellow eel fishery?*
    - Annual harvest fluctuated; CV of 12%
    - Any reduction less than 12% is likely not to provide a measurable harvest reduction

|   | Average Landings (lbs) | With 12% Reduction |
|---|------------------------|--------------------|
| Baseline Harvest (1998-2010)                            | 907,671                | 798,751            |
| Baseline Harvest (1998-2010)<br><b>Revised Landings</b> | 916,473                | 806,496            |
| Baseline Harvest (1998-2016)                            | 951,102                | 836,969            |

# Question 3 from the WG



In considering changes to the current Management Triggers, what is the impact to the resource if the current coastwide cap is exceeded by two current management triggers (1. 10% overage= harvest at or above 998,438 pounds in one year; 2. Any overage of 907,671 pounds for two consecutive years)?

# SAS Response



- Current stock assessment is not quantitative enough to answer these questions but given the depleted status, increasing the cap will hamper rebuilding possibilities and reduce the stocks ability to expand
- Stock status has not changed, stock remains depleted and at historic low levels
- SAS is unclear about Board's management goals
  - Maintaining current levels or rebuilding from depleted
  - Level of risk willing to take

# Question 4 from WG



What type of guidance can the SAS/Technical Committee provide the Board in addressing overages of the Coastwide Cap?

# SAS Response



- SAS was in agreement that is an allocation issue, not a biological or population issue
- Decisions depend on rebuilding targets if the Board intends to rebuild the stock



# Response to Proposed Aquaculture Plan



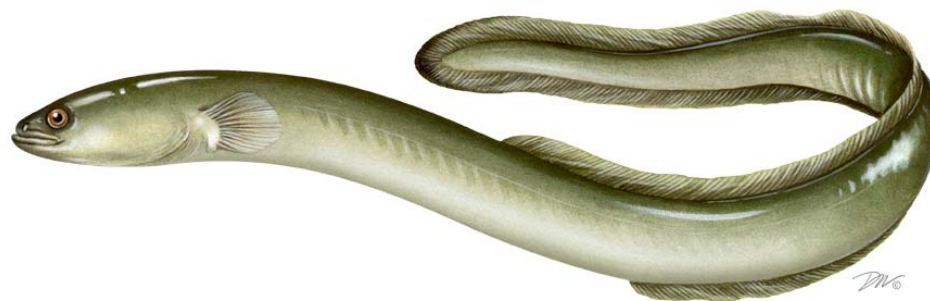
- While proposal does not increase coastwide allocation of glass eel for aquaculture, it does increase access and increase glass eel harvest
- May not affect overall population, but increasing the harvest without requiring any data collection continues to inhibit the progress of the stock assessment
- With depleted status, harvesting more eels at any stage likely will not improve the stock and may be detrimental



**Questions?**



# 2017 American Eel FMP Review



**American Eel Management Board**

**February 6, 2018**

# Outline



- Status of the FMP
- Stock Status
- Status of the Fishery
  - Commercial
  - Recreational
- State Compliance with FMP
- PRT Recommendations

# Status of the FMP



- No new addenda were initiated in 2016
- Another plan was submitted, and approved, for the American Eel Farm for the 2017 season
- Any state that harvests over 750 lbs of glass eel a year must implement a fishery-independent life cycle survey
  - Maine implemented their survey in 2016; no data was collected due staffing issues. The TC anticipates receiving an update on the 2017 survey results later this year.

# Stock Status: 2017 Stock Assessment



- American eel stock status remains depleted.
- No reference points for management use were approved from the 2012 Stock Assessment, and no new reference points were developed during the Update.
- Given the continued depleted status of the resource, the Board initiated an addendum to consider alternative allocations, management triggers, and coastwide caps for both the yellow eel fishery and Maine's quota for the glass eel fisheries (2017).

# Status of the Fishery: Commercial



- State-reported landings of yellow/silver eels were 865,070 lbs in 2015 and 937,346 lbs in 2016.
  - 8.4% increase from 2015 to 2016
  - Maryland and Virginia account for 72.5% of harvest
- Landings of glass eels were reported from Maine and South Carolina.
  - 5,442 lbs in 2015
  - 9,399.61 lbs in 2016

# Status of the Fishery: Recreational



- As of 2009, recreational data are no longer provided for American eel in CRs.
- This is a result of the unreliable design of MRIP that focuses on active fishing sites along coastal and estuarine areas and the high associated PSE.



# Fishery Management Plan



## Glass Eel Fishery Regulations

- All states must implement YOY survey (2000)
- All states must maintain regulations (2000)
- Max of 25 pigmented eels per one pound of glass eels. Use 1/8" mesh to grade eels (2014)
- Maine glass eel quota of 9,688 lbs with payback (2015)
- Maine implements swipe card monitoring program for daily reporting (2014/2015):
  - Harvester to dealer
  - Dealer to dealer
  - Export from state
- Maine is required to implement life cycle survey (2015)
- No change in regulations

# Fishery Management Plan



## Glass Eel Fishery Regulations

PRT Review (from 2017):

- No noted issues on glass eel regulations from state compliance reports

# Fishery Management Plan



## Yellow Eel Fishery Regulations (both Com and Rec)

- Increase in minimum size to 9" (2014)
- ½" x ½" min mesh size for yellow eel pots
- Allowance of 4x4" escape panel of ½" x ½" mesh
- Recreational 25 fish bag limit per day per angler
- Crew and captain allowed 50 fish bag limit per day
- Coastwide harvest cap of 907,671 lbs; the 1998-2010 average harvest (2015)
- State by state allocation triggered if quota exceeded by 10% in one year or by any amount for two years
- State by state quota requires payback and allows transfers
- **No change in regulations**

# Fishery Management Plan



## Yellow Eel Fishery Regulations (both Com and Rec)

PRT Review (from 2017):

- No noted issues on yellow eel regulations from state compliance reports

# Fishery Management Plan



## Silver Eel Fishery Regulations

- Seasonal closure from Sept 1 – Dec 31, no take except from baited pots/traps and spears (2015)
- One year exemption for weir fishery in Delaware River and its tributaries in NY (2014)
- NY weir fishery exemption continued, but restricted to 9 permits that may be transferred (2015)
- **No change in regulations**

# Fishery Management Plan



## Silver Eel Fishery Regulations

PRT Review (from 2017):

- No noted issues on silver eel regulations from state compliance reports

# Fishery Management Plan



## Other Management Measures

- Trip level reporting by both harvesters and dealers at least monthly
- Sustainable fishery management plans:
  - Fishing Mortality Plan
  - Transfer Plan quota from yellow to glass
  - Aquaculture Plan: 200 pounds of glass eels if can demonstrate watershed contributes minimally to spawning stock
- All plans must scientifically demonstrate that they will not increase overall fishing mortality
- **No change in regulations**

# Fishery Management Plan



## Other Management Measures

PRT Review (from 2017):

- Only issue from state compliance reports is that DC has not submitted one
- UPDATE: DC submitted a compliance report on February 5<sup>th</sup> and continues to not have commercial fishery, landings, nor recreational data



# De minimis



- FMP stipulates that states may apply for *de minimis* status for each life stage if, for the preceding two years, their average commercial landings constitute less than 1% of the coastwide commercial landings for that life stage.
- New Hampshire, Massachusetts, Pennsylvania, South Carolina, Georgia, and Florida requested *de minimis* status for their yellow eel fisheries.
- All states that applied for *de minimis* status for yellow eels met the 1% landings criteria; District of Columbia also met this criteria as well.
- South Carolina requested *de minimis* status for glass eels, but **did not** meet the 1% landings criteria.

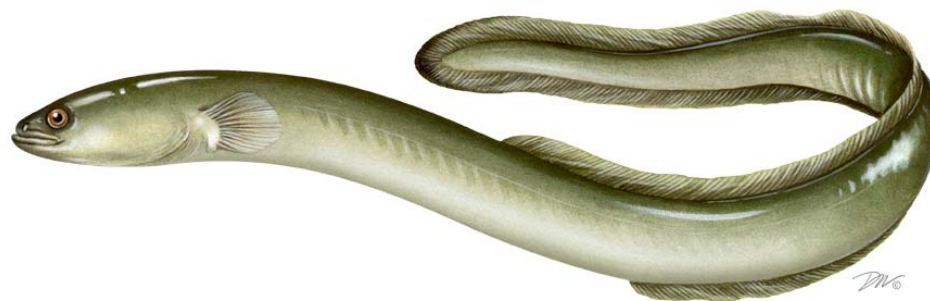
# PRT Recommendations



- The PRT recommends the Board consider state compliance as mentioned. Additionally:
  - Consider reevaluating of requirement that states provide estimates of the percent harvest going to food versus bait
  - States work with law enforcement agencies to include information on illegal or undocumented fisheries
  - PRT request NY work to separate yellow and silver eel landings
  - States quantify upstream and downstream passage, and provide information to the TC for evaluation



# **2017 American Eel Advisory Panel (AP) Call Summary**



**American Eel Management Board  
February 6, 2018**

# American eel AP Call Agenda



The AP met via conference call on December 21<sup>st</sup> to receive presentations on:

- The 2017 Stock Assessment Update
- Recent Technical Committee work
- An update on recent Management Board activity

# Stock Assessment Update

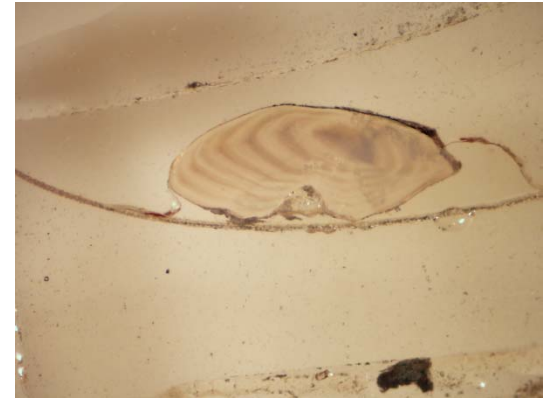


- Jeff Brust (SAS Chair) presented an overview of the Assessment Update Report
  - Resource remains depleted
- AP: Questions were posed on whether fishing license data could be used to get a stock size in the 1970s
  - Most states didn't have license data until the 1990s
- The AP encouraged the SAS to collaborate with Canada DFO to conduct a range wide assessment

# Recent Technical Committee work



- Kristen Anstead presented on:
  - the Ageing Workshop (January 2018)
  - Recent analysis on YOY surveys, and
  - Nematode Research conducted by Zoemma Warshafsky



# Recent Board Activity



- Highlighted recent Board approval on NC's aquaculture proposals (2016-2017) and Draft Addendum V
  - An AP member requested the addendum consider an option for the pooling of glass eel aquaculture harvest among multiple states
  - Interest stemmed from high market price for glass eels
- The AP will have an opportunity to comment on Draft Addendum V during public comment
  - That AP report will be presented to the Board at the next meeting

# Other Business



- Mari-Beth Dulcia (AP Chair) brought up that IUCN is going through a re-assessment of the resource in 2018
  - IUCN currently lists American eel on their ‘red list’
  - Designation is used to guide the prioritization of conservation initiatives by governments, NGOs, and scientific institutions
  - IUCN does not have management authority, but can influence public perception and international trade
- Any new information will be shared with the AP and Board once available





**Questions?**