

# 2014 Maine Elver Season Overview

ASMFC: May 12, 2014

# 2014 Measures

- Quota System
- Quota Allocation
- Swipe Card System
- Enforcement and Monitoring
- Penalty Provisions
- Season to Date

# Individual Quota System (LD 1625)

- Authorized Commissioner to establish by rule the individual elver fishing quota for the state (11,749 lbs in 2014), and to allocate quota to non-tribal license holders, using a formula that takes into account prior years' landings.
- Formula: Average of best 2 years of landings from 2011, 2012, and 2013, minus 41.8%.
- A specific percentage of the overall quota is allocated to each of the 4 federally recognized tribes: 21.9% (2581 lbs in 2014).

# Quota Allocations

<b>2013 landings</b>	<b>18076</b>		
<b>minus 35% reduction = TAC</b>	<b>11749</b>		
	Total quota	minus 5% buffer	Allocated lbs.
<b>Passamaquoddy:</b>	1655	82	1573
<b>Penobscot:</b>	750	37	713
<b>Maliseet:</b>	130	6	124
<b>Micmac:</b>	46	2	44
<b>Total Tribal:</b>	2581	129	2452
<b>Non Tribal:</b>	9168	458	8710
		<b>Total poundage allocated:</b>	<b>11,162</b>

# Mechanics of the Swipe Card System

- All license holders (949 individuals) were required to appear in person to pick up the transaction card from a Marine Patrol Officer, show a government issued photo ID, and sign a form that documented their knowledge of their individual quota. All signatures were witnessed by an MPO.
- All license holders were given a summary of all laws and regulations pertaining to the elver fishery.
- All license holders were given a sheet that explained the use of the transaction card.

# Enforcement and Monitoring (LD 1723)

## Harvesters

- Established the requirement for use of the elver transaction (“swipe”) card when selling elvers.
- Requires harvesters to have in their possession when they are fishing: license, transaction card and photo ID.
- Transaction card is deactivated by DMR when quota is reached.
- Reinstated 48 hour closed period.
  - noon Friday to noon Sunday
- St. Croix River restricted to dip net only.
- Season start delayed until April 6<sup>th</sup> (instead of March 22<sup>nd</sup>).

# Enforcement and Monitoring (LD 1723)

## Dealers

- Created requirement for dealers to use DMR-issued reporting equipment (swipe card reader) and DMR-provided reporting software.
- Dealers must sync with DMR licensing system once every 24 hours, in order to ensure they don't buy from a harvester whose card has been deactivated.
- Dealers must upload landings data every 24 hours, by 2 pm.
- Dealers may be immediately suspended for failure to report, and swipe card reader may be seized by Patrol.
- Supplemental buyers must keep "running tally" of purchases - if elvers in possession don't match records, entire bulk pile may be seized.
- All purchases must be made by check only – no cash.
- Elvers must be returned to permanent facility for at least 60 minutes before shipping out of state.
- ***5/4 Emergency Rule – must sync for "0 lbs" purchased.***

# Penalty Provisions

- Possession OR sale of elvers in excess of your quota is a Class D crime:
  - \$2000 fine
  - 1<sup>st</sup> offense: mandatory one year suspension
  - 2<sup>nd</sup> offense: license is revoked
  - A harvester who sells more than their quota must pay restitution to the state equal to the value of the overage.
  - A dealer who purchases elvers without using the swipe card system must pay restitution to the state equal to the value of the overage.
- A collective overage by the non-tribal license holders, or by any of the 4 federally recognized tribes, is deducted from the following year's allocation.

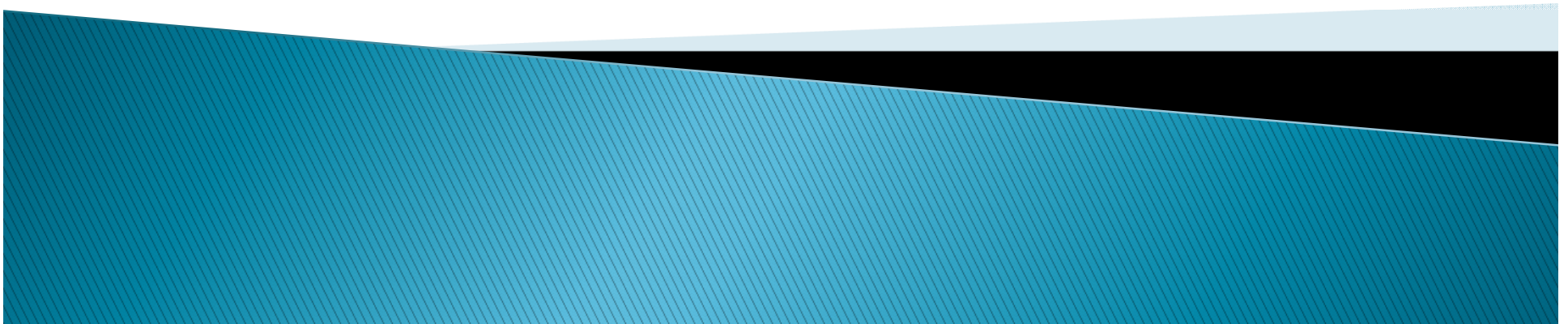


# Update on Season to Date (May 4<sup>th</sup>)

- Despite delayed start and cold water:
  - >50% of quota has been harvested
- Swipe card performance - Excellent
- Enforcement Actions
  - 14 harvester suspensions for reporting violations
  - Instate poaching very limited
  - Compliance of license holders excellent
  - 65 individuals have reached their IFQ - transaction card deactivated
  - 4 individuals have gone over their quota (16lbs)

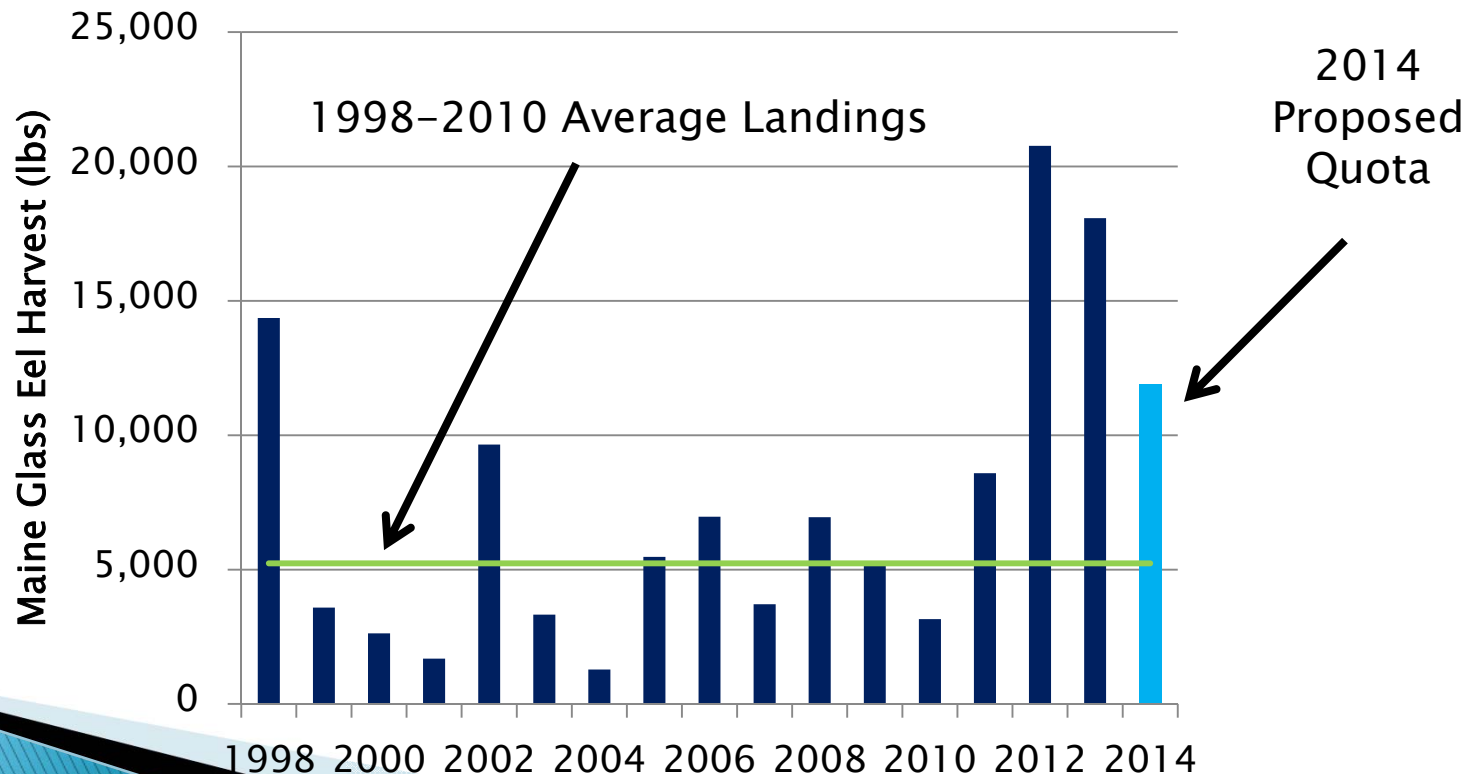
# American Eel Technical Committee Update

ASMFC Management Board Meeting  
February 2014



# 2014 Maine Elver Harvest

- ▶ TC is supportive of Quota Management
- ▶ Ensure mechanisms in place so Quota not exceeded
- ▶ TC does not support increased harvest level from Stock Assessment time period (1998–2010)



# Draft Addendum IV Tasks

- ▶ Updating Indices
  - Harvest data through 2013
    - Available to be used for quota development
  - YOY survey through 2013
    - Not complete yet, but results vary along coast
  - Will be no updates to 10, 20 and 30 year indices
  
- ▶ Review of European and Canadian Eel Fisheries
  - Preliminary review looks as though their management methods are similar to what ASMFC has considered and/or implemented in US



# Draft Addendum IV Tasks

- ▶ Life Cycle Survey
  - Currently not a complete survey available
    - Some existing surveys conduct parts of survey
  - TC is developing sampling framework & suggested methodology



# American Eel Farm Aquaculture Request

- ▶ TC has reviewed the request
- ▶ Request is similar in quantity to SC glass eel harvest
- ▶ TC views this request as a new fishery
- ▶ A new fishery is in opposition to 2012 SA
- ▶ TC does not support a new fishery, therefore does not support this request
- ▶ No proposal to evaluate scientific merit of information to be collected



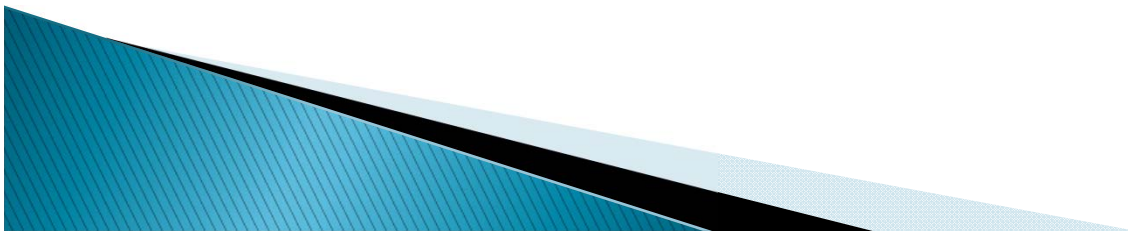
# Glass Eel Collection Requests

- ▶ Participate in or complete a Life Cycle Survey as developed by the TC
  - NC's glass eel survey has no recent data available
- ▶ Collection of catch, effort, location, and environmental data with harvest
- ▶ Harvest restrictions
  - Include non-fishing days or partial releases
  - Cap total amount allowed by river system
  - Potential for restocking with approval from TC



# Additional Considerations

- ▶ Potential for socio-economic impacts on current eel fisheries
- ▶ Likely to be similar requests from other entities to collect “scientific information” through glass eel harvest





# Update on ESA Status Review

- ▶ No significant changes since October 2014
- ▶ FWS 12-month finding – due September 2015
- ▶ FWS is currently collecting & analyzing information
  - Looking for additional information on climate change and impacts on eels





# Draft Addendum IV for Public Comment



American Eel Management Board  
May 2014



# Background

- FMP approved in 1999
- Board initiated Addendum II in 2006 to propose measures that facilitate escapement of silver eel on their spawning migration with the intent of halting any further declines in juvenile recruitment and eel abundance.
- In 2008 the Board delayed management on Addendum II in order to incorporate the results of the benchmark stock assessment in management.





# Statement of the Problem

- Stock Assessment completed and accepted for management in 2012.
- The Stock Assessment found the American eel population in U.S. waters is depleted.
- The Board initiated the development of Draft Addendum III in response to the Stock Assessment in August 2012.
  - Draft Addendum III for Public Comment included a range of options for the commercial glass, yellow, and silver eels fisheries and recreational fishery.





# Statement of Problem

- The Board approved Addendum III in 2013.
  - 9 inch minimum size limit for commercial and recreational fishery
  - ½ by ½ inch mesh requirement for commercial fishery
  - 25 fish bag recreational bag limit (exemption for party/charter boats)
  - Pigmented eel restrictions
  - Silver eel fishery restrictions





# Statement of Problem

- At that time the Board initiated Addendum IV to include but not limited to addressing:
  - Coastwide glass eel quota
  - Adequate monitoring requirements
  - adequate enforcement measures and penalties
  - Transferability
  - Timely reporting
  - NY silver eel weir fishery





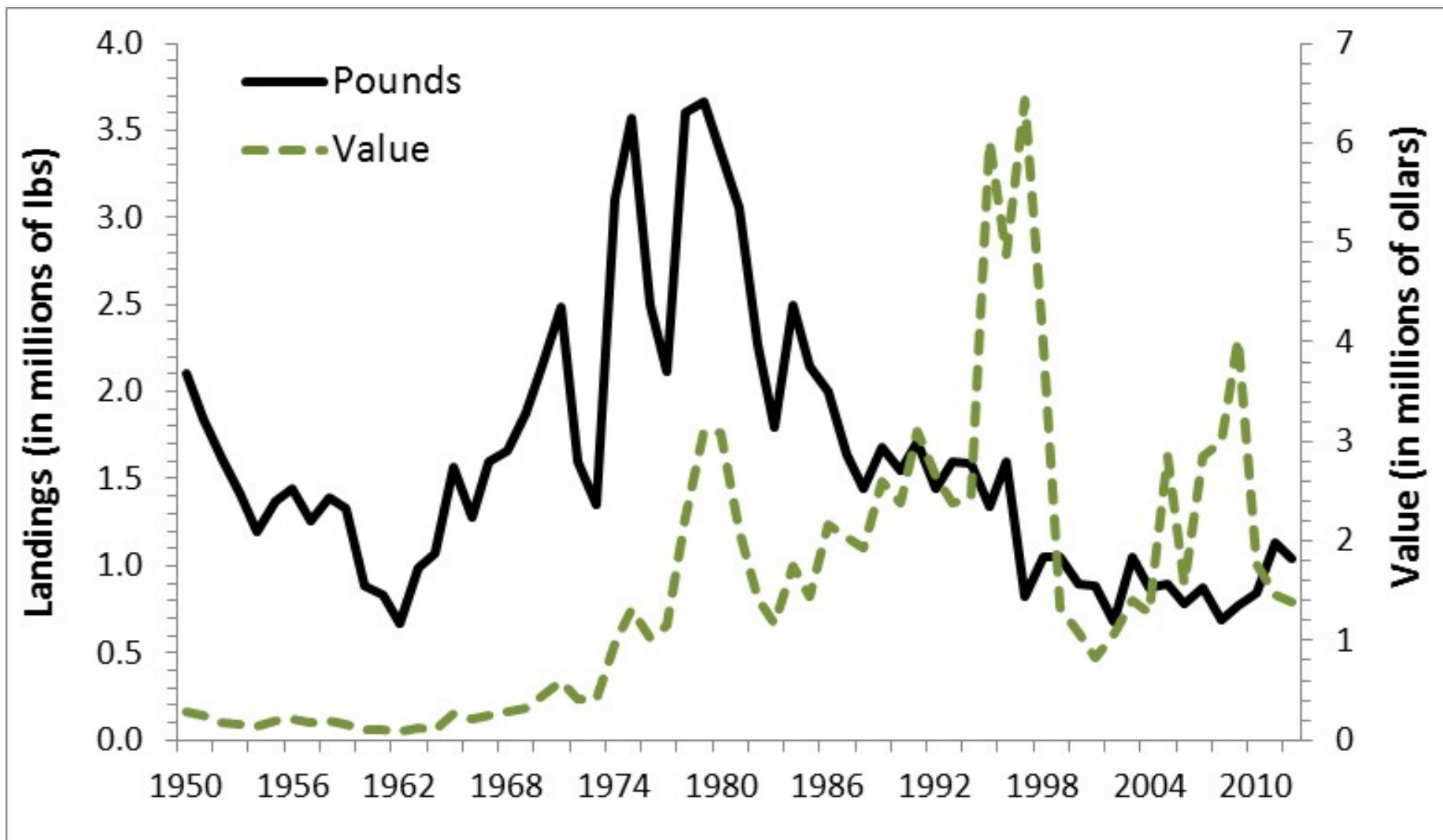
# Status of Management

- ESA Petition submitted in 2010
- The five factors on which listing is considered include:
  - Present or threatened destruction, modification, or curtailment of its habitat or range;
  - Over-utilization of the species for commercial, recreational, scientific, or educational purposes;
  - Disease or predation;
  - Inadequacy of existing regulatory mechanisms; and
  - Other natural or manmade factors affecting its continued existence.
- USFWS required to make a determination by Sept 2015





# Status of the Fishery







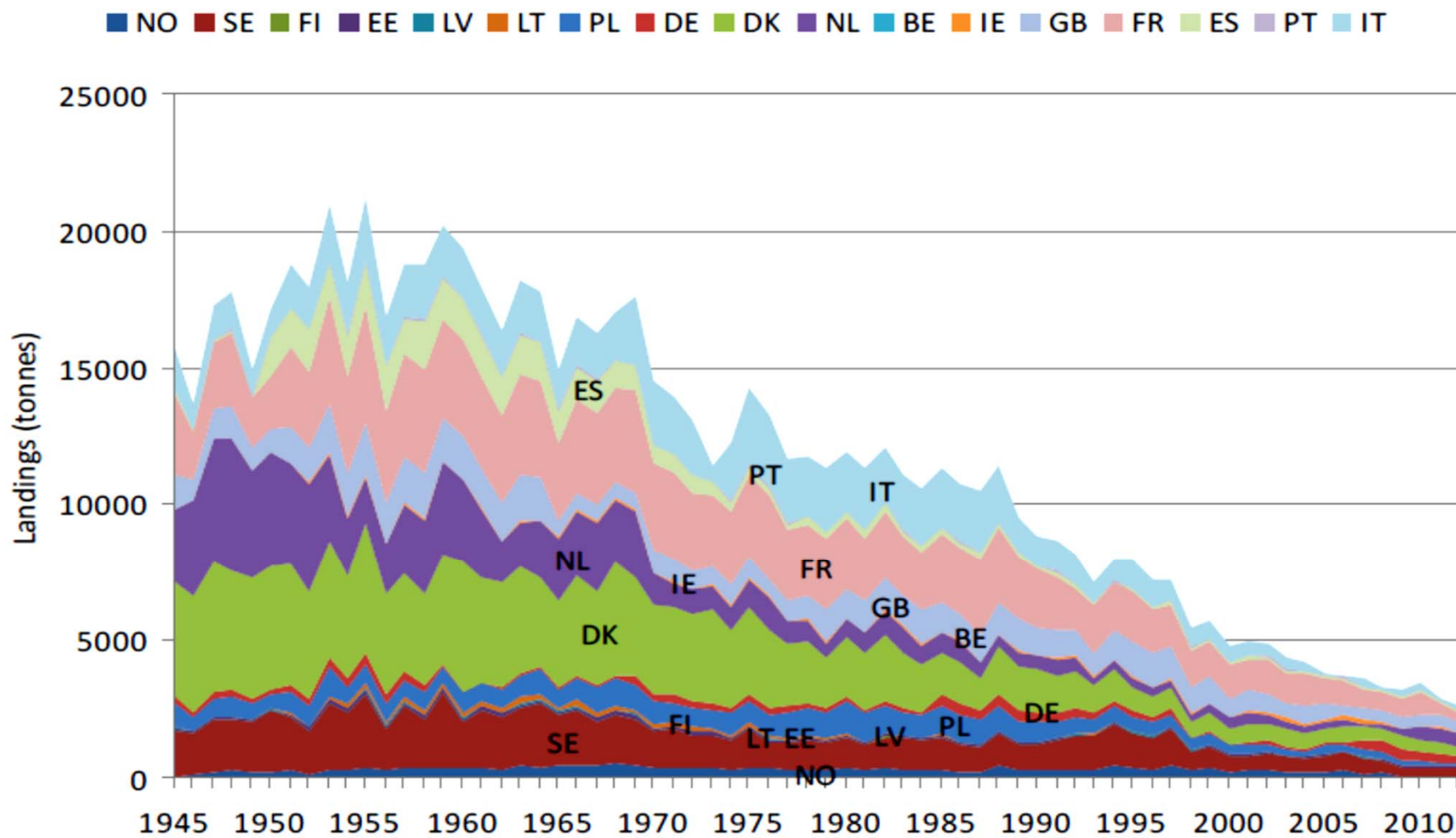
# Status of Management

- European Management
  - European eel stock is considered severely depleted
  - In 2007 passed regulations to develop national eel management plans at the river-basin level
    - allow 40% of eels to out-migrate for spawning purposes.
    - use 60% of their catch of glass eels for restocking
  - In September 2013 found that additional regulations are needed

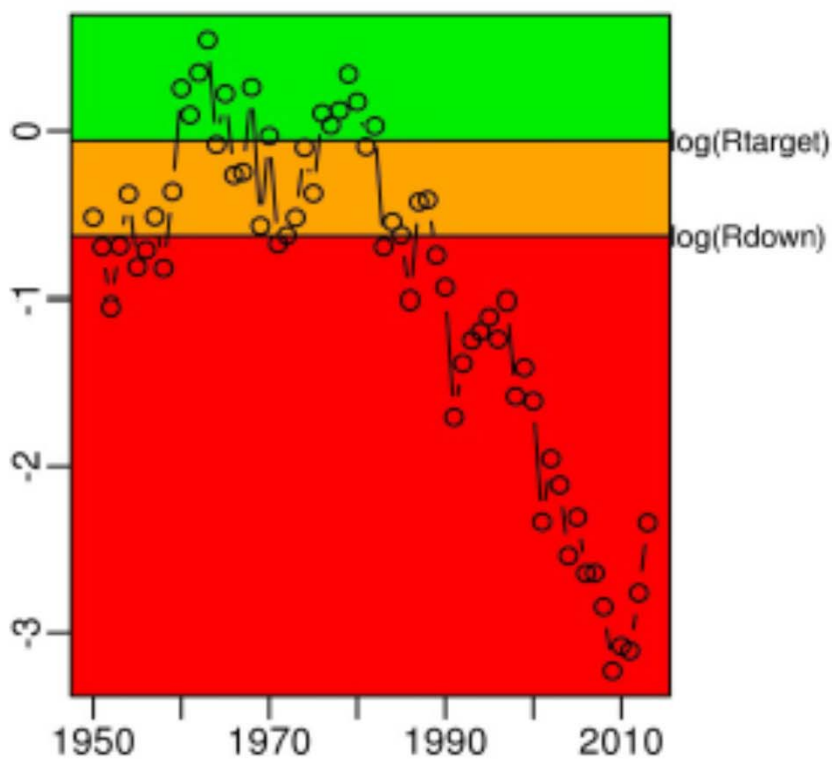




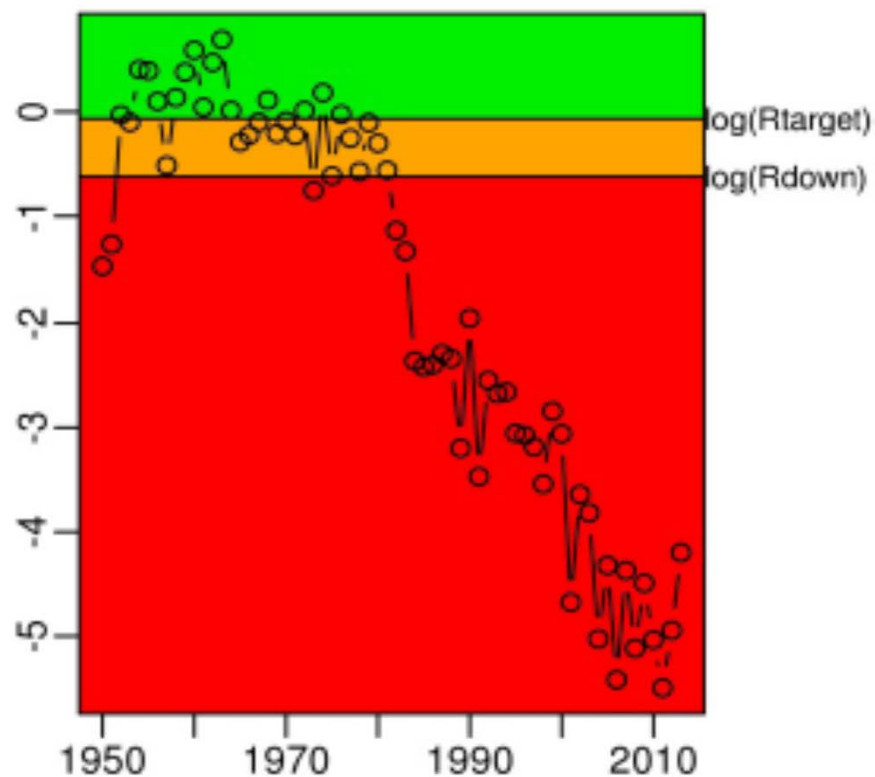
# EU Landings



# EU Recruitment Index



South and Central Europe



Northern Europe



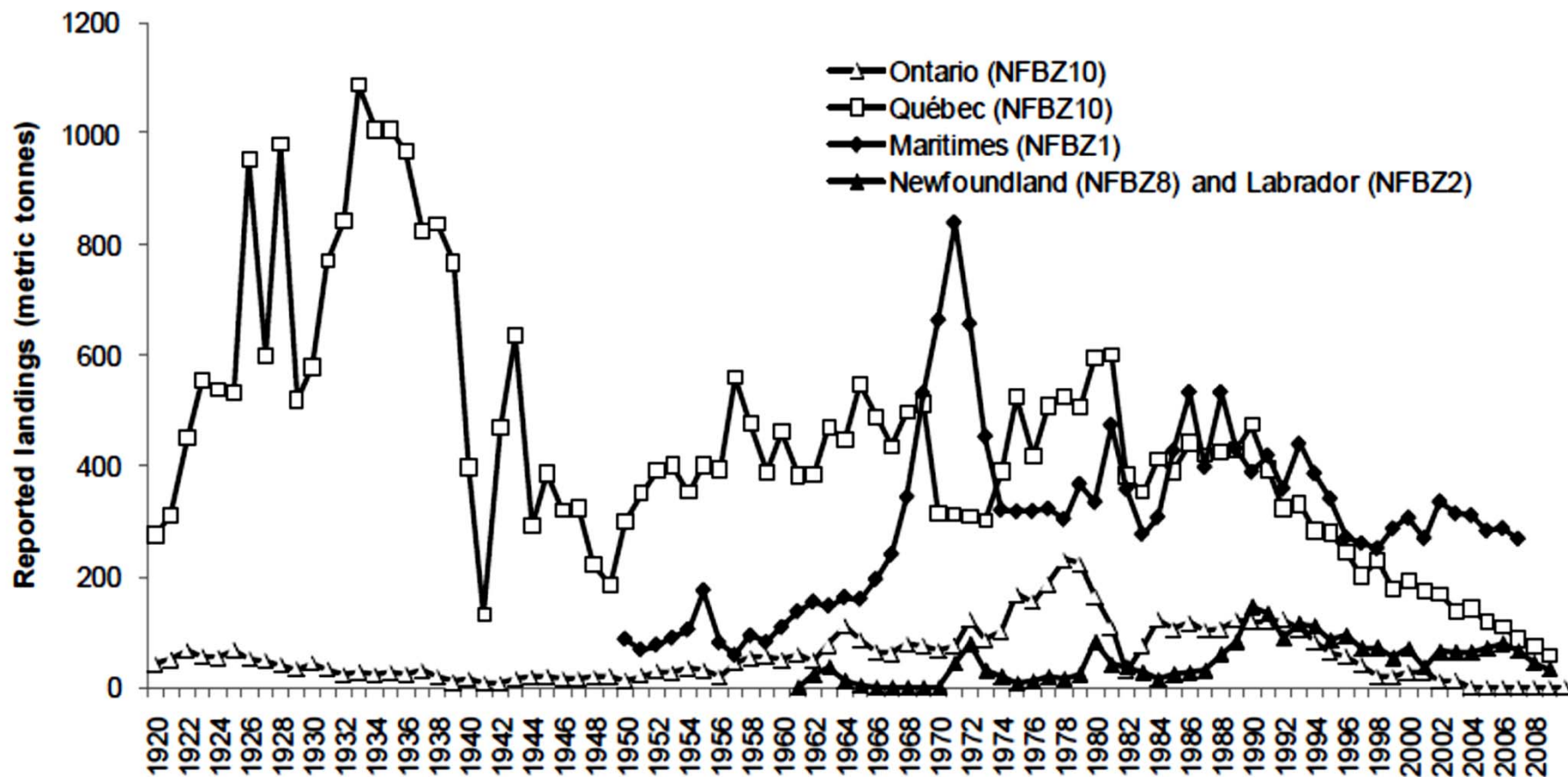


# Status of Management

- Canadian Management
  - Populations is widespread in eastern Canada, but dramatic declines throughout its range, including Lake Ontario and the upper St. Lawrence.
  - National Management Plan for American Eel in Canada was developed in 2010
    - Short-term goal is to reduce eel mortality from all anthropogenic sources by 50% relative to the 1997-2002 average.
    - Long-term goals includes rebuilding overall abundance of to its mid-1980s levels.



# DFO Landings





# Status of Management

- International Management Measures have included:
  - Seasonal and area closures
  - Size limits (e.g. 11 – 21.6 inches)
  - Prohibiting glass eel fisheries where fisheries exist for larger eels
  - License caps, limited entry, and license reductions
  - Gear restrictions, ↑ mesh size (e.g. 1" x ½") and banning fyke nets
  - Implementing quotas and/or quota reductions (e.g. 10% cut)
  - Lowering recreational bag limit (e.g. 2 - 5 fish/angler/day)
  - Implementing catch and release recreational fisheries only
  - Reducing effort (e.g. by at least 50%)
  - Prohibiting glass, silver or all commercial fishing
  - Working to reduce illegal harvest and poaching
  - Increasing fish passage
  - Restocking suitable inland waters with glass eels





## Status of the Stock

- 2014 Review of YOY indices from assessment
- No change in the YOY status from the benchmark assessment with the exception of one survey in Goose Creek, SC which is ↓
- No recommended change in the conclusions of the benchmark assessment and the depleted stock status is still warranted.





# Draft Addendum IV

- Commercial Fishery Management Program
  - Glass Eel Fisheries
  - Yellow Eel Fisheries
  - Silver Eel Fisheries
- Law Enforcement Recommendations







# Glass Eel Fishery

- **Option 1 – Status Quo**

- Glass eel fisheries operate in Maine and South Carolina. States are required to maintain existing or more conservative measures at the time of implementation of the American Eel FMP. These measures prohibit the development of glass eel fisheries in the remaining states and jurisdictions. Addendum III restricts the development of pigmented eel fisheries in states that allow glass eel harvest.





# Glass Eel Fishery

- **Option 2 – 2014 Management Measures**
  - the current 2014 fishing regulations for glass eel fisheries in Maine and South Carolina will be required to be maintained





# Glass Eel Fishery

- **Option 3 - Closure of the fishery**
  - Immediate
  - Delayed



# Glass Eel Fishery

- **Option 4 – Quota based on landings**
  - Sub Option 4a – Average Landings from 2004 – 2013
  - Sub Option 4b - 20% reduction from 2004 - 2013 landings average
  - Sub Option 4c - 2010 Landings

	Sub-option 4a: Average 2004 - 2013 Landings	Sub-option 4b: 20% reduction	Sub-option 4c: 2010 Landings
<b>Maine</b>	8,008	6,406	3,158
<b>South Carolina</b>	250	200	239
<b>Total</b>	<b>8,257</b>	<b>6,606</b>	<b>3,397</b>





# Glass Eel Fishery

- **Option 5 – Quota Overages**

- Equal Payback: If overages occur, the state will be required to deduct their entire overage from the quota the following year, pound for pound.
- Overage Tolerance: up to 5% overage would be allowed without payback

- **Option 6 – Quota Underages**

- Up to 25% percent of the unused quota may be added to the states quota the following year. Any quota that is rolled over can only be used in the year following the underage and cannot be carried over for any additional years





# Glass Eel Fishery

- **Option 7 – Aquaculture Quota**

- Under this option, the Board may choose to allocate a percentage of the total quota for approved aquaculture purposes.
- This amount would first be deducted from the total glass eel quota (as specified under Options 2 or 4), then the remainder of the quota would be distributed as specified under the option.





# Glass Eel Fishery

- **Option 8 – Aquaculture Permitting**
  - Any harvest of glass eels for commercial aquaculture purposes must be collected under an approved Aquaculture Permit issued by the states or jurisdiction the collection will occur in and subject to any monitoring and reporting requirements as specified by the jurisdiction.





# Glass Eel Fishery

- **Option 9 – Reporting Requirements**
  - implement daily trip level reporting with daily electronic accounting to the state for harvesters and dealers in order to ensure accurate reporting of glass eel harvest.
- **Option 10 – Monitoring Requirements**
  - states or jurisdictions with a commercial glass eel fishery must implement a fishery independent life cycle survey covering glass, yellow, and silver eels within at least one river system.







# Yellow Eel Fishery

- **Option 1 – Status Quo**
- **Option 2 – Quota based on landings**
  - The PDT recommends the following criteria be applied in the distribution of the quota:
    1. States be allocated a min quota 2,000 pounds. This is not expected to promote a notable increase in effort.
    2. No state is allocated a quota that is more than 10,000 pounds above its 2010 harvest.
    3. No state or jurisdiction is allocated a quota that is more than a 15% reduction from its 2010 harvest.





# Yellow Eel Fishery

- **Option 2 – Quota based on 2010 landings**
  - Sub – Option 2a: No Reduction
  - Sub-Option 2b: 10% Reduction
  - Sub-Option 2c: 20 % Reduction





	2010 Landings	Allocation	Option 2a: No Reduction	Option 2b: 10% Reduction	Option 2c: 20% Reduction
Maine	2,624	0.5%	4,621	4,122	3,664
New Hampshire	80	0.01%	2,000	2,000	2,000
Mass	277	0.04%	2,000	2,000	2,000
Rhode Island	4642	0.2%	2,000	2,000	2,000
Connecticut	164	0.2%	2,000	2,000	2,000
New York	13,220	4.2%	23,220	23,220	23,220
New Jersey	107,803	10.1%	99,650	91,633	91,633
Delaware	68,666	6.9%	68,132	60,774	58,366
Maryland	511,201	56.2%	521,201	494,813	439,834
PRFC	57,755	4.6%	49,092	49,092	49,092
Virginia	78,076	9.5%	88,076	83,537	74,255
North Carolina	122,104	5.8%	103,788	103,788	103,788
South Carolina	2		2,000	2,000	2,000
Georgia	103	0.1%	2,000	2,000	2,000
Florida	11,287	1.7%	16,506	14,724	13,088
<b>Total</b>	978,004	100%	<b>986,286</b>	<b>937,701</b>	<b>868,939</b>



# Yellow Eel Fishery

- **Option 3 – Weighted Yellow Eel Quota**
  - Sub – Option 3a: No Reduction
  - Sub-Option 3b: 10% Reduction
  - Sub-Option 3c: 20 % Reduction
- Allocation to states and jurisdictions is based on a weighted distribution.
- The three highest landings from the period 2004 – 2013 were averaged and then weighted at 30%.
- This was combined with the average landings from 2011 – 2013, which was weighted at 70%.





	Allocation	Option 3a: No Reduction	Option 3b: 10% Reduction	Option 3c: 20% Reduction
Maine	0.9%	8,314	7,483	6,651
New Hampshire	0.01%	2,000	2,000	2,000
Mass	0.2%	2,000	2,000	2,000
Rhode Island	0.3%	2,549	2,294	2,040
Connecticut	0.2%	2,292	2,063	2,000
New York	3.9%	38,360	34,524	30,688
New Jersey	10.6%	103,423	93,081	82,739
Delaware	8.1%	79,546	71,591	63,637
Maryland	52.2%	510,264	459,238	408,211
PRFC	5.9%	57,997	52,197	46,398
Virginia	9.3%	90,819	81,737	72,655
North Carolina	6.8%	66,337	59,703	53,069
South Carolina	0.01%	2,000	2,000	2,000
Georgia	0.1%	2,000	2,000	2,000
Florida	1.6%	15,498	13,949	12,399
<b>Total</b>	100.00%	<b>983,399</b>	<b>885,859</b>	<b>788,486</b>



# Yellow Eel Fishery

- **Option 4 – Quota Overages**

- If overages occur, the state will be required to reduce their following year's quota by the same amount the quota was exceeded, pound for pound.

- **Option 5 – Quota Transfers**

- States or jurisdictions implementing a commercial quota for American eel may request approval to transfer all or part of its annual quota to one or more states.
- States that receive the automatic 2,000 pound quota would not be eligible to participate in these transfer management measures.





# Yellow Eel Fishery

- **Option 6 – Catch Cap**

- Based off the 2010 harvest levels.
- States and jurisdictions would be allowed to fish until the cap is reached.
- Once the cap or threshold is reached, all states and jurisdictions would be required to close all directed fisheries and prohibit landings.
- Controls amount of mortality without needing allocation
- Still need timely reporting, no state specific payback mechanism, promote derby style fishery, potential loss of historic fall/winter fisheries.

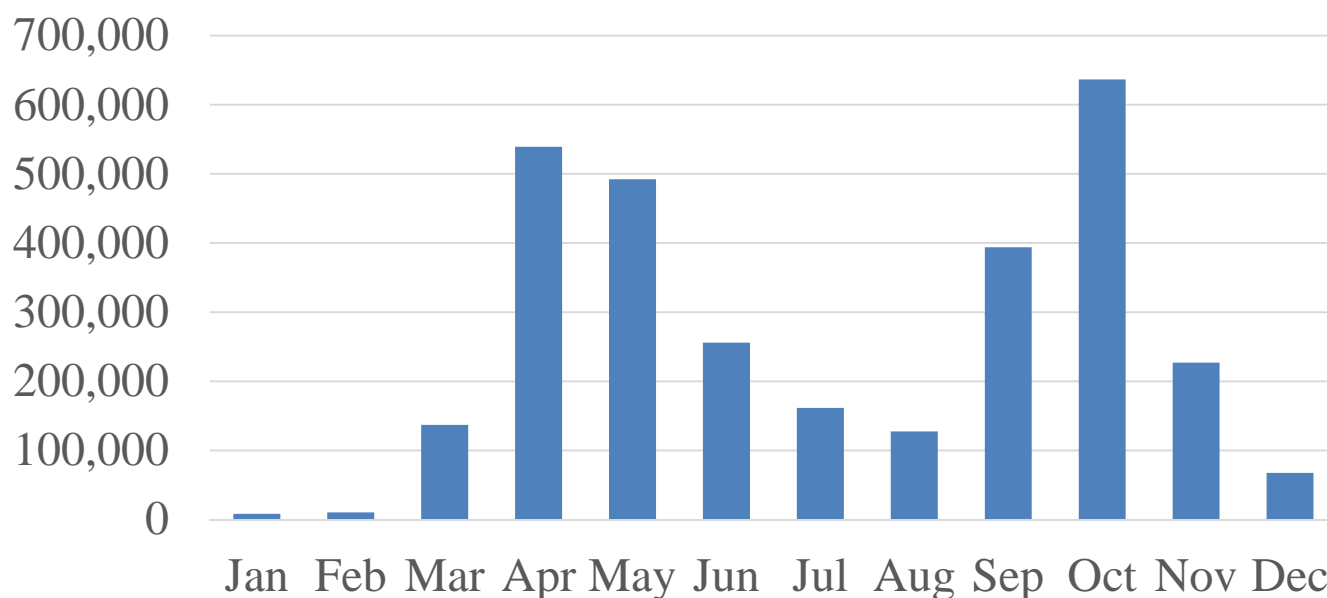




# Yellow Eel Fishery

- **Option 6 – Catch Cap**

- Sub-option 6a – 2010 harvest level: **978,004 pounds**
- Sub-option 6b – 10% reduction: **880,203 pounds**
- Sub-option 6c – 20% reduction: **782,403 pounds**







# Silver Eel Fishery

- Under Addendum III:
  - *States and jurisdictions are required to implement no take of eels from September 1st through December 31st from any gear type other than baited traps/pots or spears (e.g. fyke nets, pound nets, and weirs). These gears may still be fished, however retention of eels is prohibited*
  - NY was granted a one year exemption from the requirements under Addendum III





# Silver Eel Fishery

- **Option 1 – Status Quo**
  - Current regulations would remain and the one year exemption would expire on December 31, 2014.
- **Option 2 – Extension of the sunset provision**
  - Timeframe as specified by the Board





# Silver Eel Fishery

- **Option 3- Effort Reductions/Time Closures**
  - No take of eels in the Delaware River and its tributaries within New York from August 15th through September 30th from any gear type other than baited traps/pots, or spears and weirs (e.g. fyke nets and pound nets).

Month	Average Landings
July	139
August	1,005
September	2,574
October	1,653
November	2





# Silver Eel Fishery

- **Option 4 – License Cap**
  - The Delaware River weir fishery would be limited to those permitted New York participants that fished and reported landings anytime during the period from 2010 – 2013.
  - Once issued, licenses are not eligible for transferability.
  - Only one license can be issued per participant.





# State Sustainable Fishing Plans

- States or jurisdictions would be allowed to manage their American eel fishery (glass, yellow, or silver) through an alternative program to meet the needs of their current fishermen while providing conservation benefit for the American eel population.





# State Sustainable Fishing Plan

- States must assess, with some level of confidence, the status of abundance and level of mortality that is occurring within their jurisdiction.
- Once documented, states will be allowed to allocate their fishing mortality to any American eel fishery even if the state does not currently participate in that fishery or for aquaculture or research purposes
- States would be allowed to increase the fishing mortality rate provided it is offset by decreases in other mortality (habitat/restoration) and there is an overall net gain to conservation.





# State Sustainable Fishing Plan

- **TRANSFER PLAN:** If states or jurisdictions are unable to assess the current level of mortality and abundance with certainty, and the Board chooses to adopt quota management, then a state would be allowed to develop a SFP to request a transfer of quota from one fishery to another (e.g. from yellow to glass) based on the life history characteristic inherent to that area
  - If states are allocated a minimum 2,000 pound quota they will not be eligible for this transfer provision.





# Law Enforcement Recommendations

- SQ measures for all eel fisheries is impractical for enforcement, specifically for the glass eel fishery given the enforcement challenges associated with the prosecution of the fishery in those states currently closed to harvest of glass eels.
- A quota system would be difficult to enforce although enforceability depends largely on how quota systems are managed. Increased complexity of quota systems will generally reduce enforceability.
- Enforcement of time/area closures for silver eels is considered reasonable.







# Law Enforcement Recommendations

- Specific changes to regulations that would enhance field enforcement and/or penalties are encouraged, and those that have been implemented (e.g. in Maine) have improved the outcome of arrests and convictions.
- Because of the cross-state nature of illegal glass eel harvest, strengthening of extradition or bail provisions for criminal violations would enhance the deterrent effect of enforcement actions.





# Draft Addendum IV

