Area 10/11 Management Proposal

- 1. Set the pamphlet of opening dates of Area 10 and Area 11 to August 1 while modeling a full season e.g., July 13 Aug. 31 in Area 10; July 1 Sept. 30 in Area 11.
- 2. Use test fishing boats to collect legal marked encounter data starting on the traditional opening date July 1 for Area 11, July 14-16 for Area 10.
- 3. Using a three-day lag of test fishing data to evaluate current abundance of sublegal abundance.
- 4. When the legal marked proportion from the test fishing data approaches the legal marked proportion model by FRAM open the fishery earlier than August 1, attempting to match the FRAM predicted release rates.
- 5. If the test fishing legal marked proportion never approaches the FRAM predicted legal marked proportion open August 1.

This effectively acts as a type of in-season update on the presence of sub-legals in the catch area and tries to avoid them on high sub-legal years relative to the FRAM prediction. Delaying the seasons on sub-legal years can have a large impact on the amount of retained fish as shown in the tables below.

Fisheries that were or could have closed due to management criteria on total sublegals:

Year	Area	Percentage of Total Harvest	Percentage of Total Subelgals
2017	10	36.0%	103.0%
2021	10	7.0%	102.0%
2023	10	<mark>35.0%</mark>	<mark>113.0%</mark>
2015	11	32.0%	106.0%
2017	11	13.0%	101.0%
2019	11	52.0%	147.0%
2021	11	11.0%	122.0%
2023	11	24.0%	96.0%

Same fisheries if they had opened on August 1:

Year	Area	Percentage of Total Harvest	Percentage of Total Subelgals
2017	10	85.0%	92.0%
2021	10	65.0%	92.0%
2023	10	<mark>56.0%</mark>	<mark>39.0%</mark>
2015	11	30.0%	99.0%
2017	11	55.0%	45.0%
2018	11	36.0%	8.0%
2019	11	59.0%	12.0%
2021	11	37.0%	92.0%

