



Rhode Island
Department of Environmental Management

DIVISION OF FISH AND WILDLIFE

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TO: W. Michael Sullivan, Director DEM

FROM: Robert Ballou, Acting Chief DFW

DATE: November 5, 2010

SUBJECT: Request for decisions on Shellfish Management Area regulations for the 2010-2011 winter season

Recommendations pertaining to Shellfish Management Area regulations for the 2010-2011 winter season are hereby presented for final decision. The issues were reviewed by the RI Marine Fisheries Council at their October 4, 2010 and November 1, 2010 meetings.

Supporting documentation submitted along with this memo include the following:

- Minutes of the June 23, 2010 Shellfish Advisory Panel meeting
- Minutes of the October 4, 2010 and November 1, 2010 Marine Fisheries Council meetings
- An October 27, 2010 DEM Marine Fisheries staff report titled “Analysis of RIMFC Recommendation on Winter Schedule for Quahogs in Western Greenwich Bay”
- An October 25, 2010 DEM Marine Fisheries staff report titled “Analysis of and Recommendation for a Winter Fishing Schedule for Quahogs in the High Banks Management Area”
- A 2-page Summary of Proposed Shellfish Management Area Harvest Schedules for 2010 (December) and 2011 (January-April).

December 2010 Schedule

On June 23, 2010, the Council’s Shellfish Advisory Panel convened to consider industry proposals for the 2010-2011 season. With regard to the schedule for Shellfish Management Area openings for December 2010, one proposal was brought forward and reviewed by the Panel. The proposal recommended 2-hour openings, from 8 – 10 AM, for the Greenwich Bay Management Area, and 4-hour openings, from 8 AM – Noon for the other four management areas (High Banks, Bissel Cove/Fox Island, Bristol Harbor, and Potowomut), on the following eight (8) days:

- Wed, Dec 15
- Fri, Dec 17
- Mon, Dec 20
- Tues, Dec 21
- Wed, Dec 22
- Mon, Dec 27
- Tues, Dec 28
- Wed, Dec 29

This proposed schedule involves fewer days than last year (8 instead of 11) and, for Greenwich Bay, fewer hours per day (2 instead of 4). The industry feels that the more limited schedule will help to control initial effort and manage the flow of product to the market. The Advisory Panel voted unanimously to support the proposal. The proposal was then brought before the Council at their November 1, 2010 meeting. There were no objections to the proposal, and the Council voted unanimously to recommend adoption.

Having reviewed the entire record, and conferred with staff, I hereby urge adoption of the proposed changes pertaining to the December 2010 Schedule for the five Shellfish Management Areas, as set forth above.

If you concur, please indicate by signing this memo below and returning it to me. Upon receipt of the signed memo, I will initiate the filing process. If you feel the need to make any changes that differ from those proposed, please delineate those changes via a separate memo.



Approved for filing as presented



W. Michael Sullivan, Director

Date: November 16, 2010

Greenwich Bay Management Program

The management program for the Greenwich Bay SFMA is of particular interest this year, in the wake of the westward expansion of the pollution closure line enacted by DEM this year, based on improved water quality. The new western boundary opens up 105 more acres of the Bay. The expanded access to previously closed waters will benefit shellfishermen in the short-term, but it will also open up to exploitation areas of concentrated, and heretofore protected, broodstock that are believed to be important to maintaining productivity. Experiences with re-opening Greenwich Bay in 1995 and Conimicut Point in 2010 reveal that intense fishing pressure can be generated quickly when previously unfished areas are opened to harvest.

On June 23, 2010, the Council's Shellfish Advisory Panel convened to consider industry proposals for the 2010-2011 season. With regard to the Greenwich Bay management program, one proposal was brought forward and reviewed by the Panel. The proposal recommended dividing the western portion of Greenwich Bay into two sub-areas for the 2010-2011 season. Area 1, which would include the new 105 acres of fishable waters in addition to 390 acres of waters that have been subject to harvest over the past five years (495 acres total), would be open to harvest during the 2010-2011 season, subject to a proposed harvest schedule. Area 2, which would include 451 acres of waters that have been subject to harvest over the years, would be closed for the 2010-2011 season. The closure would be designed to allow the clam population in the closed area to grow, for one year, without disturbance. The proposal envisioned that the two areas – 1 and 2 – would be combined and opened for the 2011-2012 season. The proposed harvest schedule would be as follows:

- January – Mondays & Wednesdays, 8 AM – 10 AM
- February & March – Mondays Wednesdays, & Fridays, 8 AM – 11 AM
- April – closed

The Advisory Panel voted unanimously to support the above-described proposal.

The proposal was then brought before the Council at their October 4, 2010 meeting. There was a fair amount of discussion on the proposal by the shellfishermen who were in attendance, with some opposing the split, and others supporting it. The proponents noted that there are a significant number of undersized quahogs in Area 2; thus, it would benefit the resource, and ultimately the industry, to allow the animals to grow, undisturbed, for a year. Supporters of the split cautioned that the closed portion should only remain closed for one year, as there was no support for a rotational schedule that essentially allowed one area to get fished out every other year. Opponents of the split noted that limiting the fishable waters of Greenwich Bay to the 495 acres constituted by Area 1 would cause overcrowding, given that about 200 boats typically fish the waters of Greenwich Bay. There were concerns expressed as to the effects of intensive fishing pressure on the biomass.

The Council voted unanimously to recommend adoption of the proposal, with the caveat that the Council's support for the split and the closure of area 2 was conditioned on the understanding that the two areas would be combined and opened next year.

Subsequent to the Council's October 4 meeting, DEM Marine Fisheries staff completed an "Analysis of RIMFC Recommendation on Winter Schedule for Quahogs in Western Greenwich Bay" (document dated October 27, 2010; attached hereto). With a view to maintaining healthy size compositions and standing stock biomass levels and a spawner density of about 1.5 per m² (below which recruitment declines), and in consideration of fishery independent (dredge survey) and fishery dependent (CPUE) data, which yielded estimates of population size and a catchability coefficient for commercial bullrakes, the report employed models to project the number of fishing days needed for a fleet of a given size to achieve a target (20%) exploitation rate. The report concluded that between

30 and 40 fishing days are needed for a fleet of 83 boats to reach the target exploitation rate. (83 boats is the average fleet size determined to have operated last year during the winter fishery.) Based on concerns regarding the continued productivity of Greenwich Bay, the report urged a precautionary management stance, namely, a limit of 34 fishing days. The report supported the proposed split, to the extent that the two areas become part of a larger, rotational harvest program, with area 1 slated for closure next year as area 2 reopens.

The Council was provided with the DEM staff report in advance of its November 1, 2010 meeting, and the Council was afforded the opportunity to review the report with staff at the meeting. Notwithstanding the report's recommendations, the Council opted to maintain its recommendation to adopt the original proposal that emerged from the Council's Shellfish Advisory Panel.

The recommendation of the Council is to adopt a 42-day fishing season, totaling 109 hours, for the Greenwich Bay management area. The recommendation of DEM Marine Fisheries staff is to adopt a 34-day season, totaling 75 hours. It is important to note that the schedule for Greenwich Bay is inevitably affected by rainfall-induced closures. Typically, the area is subject to closure about 25% of the time. Applying that average to the 42-day proposal would result in about 30 days of actual fishing, which would bring the program in line with the days needed to achieve the target exploitation rate. Accordingly, the recommendation of the Council constitutes a sound approach. While there are valid concerns associated with the overcrowding and heavy fishing pressure that may result from the closure of area 2 for this year, the condition of area 2 – low densities and truncated size composition – warrants a respite. The question as to whether both areas should open next year, or whether a rotational schedule should be employed, is an important one, but the answer is not needed at this point. The matter can, and should, be taken up next summer as the Shellfish Advisory Panel reconvenes, with DEM staff input, to consider management options for the 2011-2012 season.

Having reviewed the entire record, and conferred with staff, I hereby urge adoption of (1) the splitting of the Greenwich Bay shellfish management area into two sub-areas for the 2010-2011 season, (2) the closure of area 2 for the 2010-2011 season, and (3) for area 1, the adoption of the following schedule for the 2011 season:

- ***January – Monday & Wednesday, 8 AM – 10 AM***
- ***February & March – Monday, Wednesday, & Friday, 8 AM – 11 AM***
- ***April – closed***

If you concur, please indicate by signing this memo below and returning it to me. Upon receipt of the signed memo, I will initiate the filing process. If you feel the need to make any changes that differ from those proposed, please delineate those changes via a separate memo.



Approved for filing as presented



W. Michael Sullivan, Director Date: November 16, 2010

High Banks, Bissel Cove/Fox Island, and Bristol Harbor Management Programs

On June 23, 2010, the Council's Shellfish Advisory Panel convened to consider industry proposals for the 2010-2011 season. With regard to the High Banks, Bissel Cove/Fox Island, and Bristol Harbor Management Areas, one proposal was brought forward and reviewed by the Panel. The proposal recommended maintaining the January schedules (M-W-F, 8 to 12) but expanding the schedules during February, March, and April. For High Banks, the proposal would expand the 5 days/week, sunrise-noon schedule to 7 days/week, sunrise-sunset. For Bissel Cove/Fox Island and Bristol Harbor, the proposal recommended expanding the M-W-F, 8-noon schedule to 7 days/week, sunrise-sunset.

In advance of the Council's November 1 meeting, DEM Marine Fisheries staff completed an "Analysis of and Recommendation for a Winter Fishing Schedule for Quahogs in the High Banks Management Area" (document dated October 25, 2010; attached hereto).

The report noted that the dual purpose of this 620-acre management area is to provide additional quahog broodstock for the west passage of Narragansett Bay (via annual transplants) and to provide additional harvesting opportunities for winter shellfishermen. With a view to maintaining healthy size compositions and standing stock biomass levels and a spawner density of about 1.5 per m² (below which recruitment declines), and in consideration of fishery independent (dredge survey) and fishery dependent (CPUE) data, which yielded estimates of population size and a catchability coefficient for commercial bullrakes, as well as the amount of clams transplanted to the area in May 2010, the report employed models to project the number of fishing days needed for a fleet of a given size to achieve a target (35%) exploitation rate. The report concluded that between 40 and 50 4-hour fishing days are needed for a fleet of 83 boats to reach the target exploitation rate. (83 boats is the average fleet size determined to have operated last year during the winter fishery.)

The staff report noted that the proposal that emerged from the Shellfish Advisory Panel would significantly exceed the appropriate number of fishing days in High Banks and lead to overexploitation and compromise the enhanced spawner biomass function of the management area. Whereas last year's schedule for High banks totaled 88 days (and 480 hours), the 2010-2011 proposal totaled 110 days (and 1307 hours). The Report urged a much more conservative approach, not exceeding 50 4-hour days.

The Council met on November 1 and reviewed the report with staff at the meeting. The Council was also presented with a compromise proposal from the RI Shellfishermen's

Association. The compromise proposal included two elements: 1) retention of last year's schedule for High Banks (totaling 88 days and 480 hours, including December), and synchronization of the High Banks schedule with the schedules for Bissel Cove/Fox island and Bristol Harbor. The proposed harvest schedule would be as follows:

- January – Mondays, Wednesdays, and Fridays, 8 AM – noon
- February, March, & April – Monday through Friday (5 days), sunrise - noon

DEM's Division of Law Enforcement voiced support for the synchronization aspect of the proposal. DEM Marine Fisheries staff indicated that while the compromise proposal was not as conservative as the recommendation set forth in the staff report, it was an acceptable approach for this year, pending the outcome of follow-up dredge surveys of the area (to be conducted in 2011) and follow-up refinements of SAFIS landing report requirements that will better assess removal rates from the area. There being no objections from any of the shellfishermen in attendance, the Council voted unanimously to recommend adoption of the compromise proposal.

Having reviewed the entire record, and conferred with staff, I hereby urge adoption of the following schedule for the 2011 winter season for the High Banks, Bissel Cove/Fox Island, and Bristol Harbor shellfish management areas:

- *January – Mondays, Wednesdays, and Fridays, 8 AM – noon*
- *February, March, & April – Monday through Friday (5 days), sunrise - noon*

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