



Marine Fisheries Shellfish Advisory Panel Meeting Summary

June 8, 2017

Hanover Public Library, Hanover, MA

Attendance

Panel Members: Bill Doyle, Alex Hay, Rob Doane, Steve Kirk, Allen Rencurrel, Chris Sherman

Division of Marine Fisheries Staff: Dan McKiernan, Mike Hickey, Jeff Kennedy, Tom Shields, Nichola Meserve, Jared Silva, Story Reed, Chris Schillaci, Chrissy Petitpas, Diane Reagan, Kevin McGowan, Greg Bettencourt, Terry O'Neill, Greg Sawyer

Public: David Kelly, Melissa Sanderson, Steve Wisbauer

Call to Order

Deputy Director Dan McKiernan called the meeting to order. He reminded the Panel of its purpose, including raising the profile of shellfish management issues, bringing the full force of the agency to shellfish issues, and improving communication between the industry and management. The panel, staff, and members of the public introduced themselves. Regarding staffing, Dan noted that shellfish biologist Kelly Kleister had left the agency for another job, Chrissy Petitpas had moved into a shellfish classification role, and Chrissy's prior position of aquaculture assistant remained to be backfilled.

The agenda was approved with four additions to Other Business: a PSP update (staff), FDA's request for Memoranda of Agreement (MOAs) between state law enforcement and municipal shellfish constables (staff), a discussion of forming subcommittees to address several areas of concern (Bill Doyle), and the timing of the Panel's next meeting (staff).

Dan provided a quick listing of the topics from the Panel's last meeting in November of 2017, and noted that meeting summaries for all prior meetings reside on the Panel's webpage within the Division's website.

ISSC Update

Shellfish Program Manager Mike Hickey provided a summary of important issues from the last meeting of the Executive Board of the Interstate Shellfish Sanitation Conference (ISSC), held May 23–24 in South Carolina. He drew attention to the meeting agenda provided as a handout, noting that any topics in a lighter color have linked briefing documents. His summary addressed the following topics:

- FDA funding for the operation of the ISSC is expected to be \$500,000 for the current funding cycle, up from roughly \$400,000 in recent years. There will also be a science grant of about \$50,000 available to bring people to meetings. FDA is undergoing a total reorganization of their cooperative programs, of which shellfish is one, including both organizational structure and

funding. As a result, Mike expects it to be more difficult to secure grant funding for shellfish issues.

- EPA's priority issues regarding shellfish include understanding the environmental and health implications of microplastics, which are showing up in bivalve shellfish throughout the world (including north shore mussels); new testing for Coliphage as a viral indicator of wastewater discharge; and ocean acidification.
- NMFS continues to pursue eco-forecasting tools and assess their use for biotoxin events.
- Regarding the upcoming ISSC Biennial Meeting (October 14–19 in Myrtle Beach, SC), the request for proposals for changes to the model ordinance is out and the deadline is soon. There is a new travel funding policy in place.
- The ISSC annual work plan, on which budgets are based, has been drafted for 2017 and submitted to the board. The comment period will close in a few weeks. It is largely a continuation of the 2016 work plan which has been well received.
- Massachusetts and Washington gave updates on their ISSC-funded Vp research projects.
- A new guidance document on the use of MSC as a virus indicator is expected to be available in draft form by month's end. It will need to be approved by the ISSC.
- The ISSC held a biotoxins workshop in March, with a focus on emerging methods for monitoring and responding to events. Each state gave a presentation on its biotoxin monitoring plan. Discussion about ASP and reopening criteria indicated much variation among the states now. A report for the full ISSC on the workshop is forthcoming. One outcome may be cheaper methods for testing.
- The ISSC made new appointments to its Task Forces; MA is well represented on both Task Force I and II.
- A third Vp Workshop will be held this year, possibly in July, to develop recommendations regarding possible changes in *Vibrio* control programs.
- Washington (state) was reprimanded by the ISSC for its handling of norovirus outbreaks, specifically, its use of short and small area closures which led to product recalls. The state was told to have larger and longer closures.
- Regarding the US/EU Equivalency Agreement, FDA personnel indicated that the agency had completed its work and would work through the Federal Register process to finalize the document. This process includes public comment, an Office of Management and Budget review, and a parallel process in the European Union, all of which could lead to additional changes. Mike expected this could take up to another year. As it stands, states with a *Vibrio vulnificus* problem won't be allowed to send product to Europe. (Note that MA's vibrio management plan is for *V. parahaemolyticus* not *V. vulnificus*.) Dan encouraged those interested in this issue to comment during the Federal Register process.

Chris Sherman inquired as to the expected impact of the MSC guidance document in Massachusetts. Jeff Kennedy responded that the intent is to allow for continued use of existing standards while providing guidance to states that want to newly use it. Any mandatory adoption of hard numbers for area closures/openings in the future would likely have impacts for states like Massachusetts, although he didn't think the science was strong enough yet to support this. Chris also noted Mike's large role at the ISSC and expressed support for the Division having a strong succession plan in place that would maintain Massachusetts' influence.

Alex Hay asked if there were any proposed changes to the Model Ordinance, including any from the Division, which the industry should be aware of and lend its support for. Mike responded that the Division was working to submit two proposals before the deadline; one on resubmergence protocols

and the other on the marina vs mooring issue later on the agenda. He expected that the latter would go to committee and thus be on a two-year schedule to come before the general assembly again.

NESSA Update

Regional Shellfish Supervisor Jeff Kennedy provided a review of the 2017 Annual Meeting of the Northeast Shellfish Sanitation Association (NESSA), which took place in April in Freeport, ME. With representation from Maine through New Jersey, NESSA is one of the regional shellfish groups that influences the National Shellfish Sanitation Program.

One discussion topic of note was the use of lab methods and rapid tests in managing biotoxins. While there are many indicators, not all are allowed for reopening of areas and those that are can be very expensive. DMF experienced this last year with the Wellfleet norovirus outbreak and closure. Additional analytical methods are in the pipeline, and DMF is working on some at its lab.

The meeting included a presentation from each state on a particular issue dealt with in the past year. For example, New York presented on a fecal coliform from birds issue it had confronted, which was challenging because the Model Ordinance didn't provide relevant guidance. Jeff had presented for Massachusetts on the Wellfleet Norovirus outbreak. Maine described a "phantom" diarrhetic shellfish poisoning event it experienced, in which closures were implemented based on a testing kit that provided false positive results.

Another interesting presentation had been given by Dr. Mark Wells of the University of Maine regarding his and other researchers' hypothesis that *Pseudo-nitzschia* only produces toxins when it is stressed by iron or nutrient limitation. More research is needed to assess this. The last day of the workshop was largely devoted to a Vibrio Workshop.

Overall, Jeff felt that the 2017 meeting had helped to reinvigorate the group. The 2018 and 2019 meetings are planned to occur in New Hampshire and Massachusetts, respectively.

Aquaculture Update

Annual Summary

Aquaculture and Vibrio Specialist Chris Schillaci began his update on the Division's aquaculture activities with an annual summary of data for 2016. He and Statistics staff had been working hard to resolve some accounting errors, so he warned that the numbers he was reporting could change. In 2016, there had been an addition of nearly 130 cultivated acres, although Mattapoissett's contribution to that was expected to decline with further editing. The state saw continued growth in many towns, with some notable increases in Provincetown, Plymouth, and Westport. However, production per acre has changed and there is a big difference between areas. Landings hadn't changed significantly between 2015 and 2016 but Chris attributed that to some late season challenges in 2016. The number of oysters increased by about 1.25 million pieces, with Duxbury, Wellfleet, Barnstable, Edgartown, and Dennis being the top five producers. Looking at oyster production by month from 2015 to 2016, a steady decline beginning after July in 2016 was indicative of the impact of various closures. January to March of 2016 had higher production than the same period in 2015 probably related to ice conditions.

Permitting Out-of-state Hatcheries

Chris moved on to the subject of permitting out-of-state hatcheries, which the Panel had been briefed on at its prior meeting. There are more out-of-state seed providers than in-state, and despite increases in MA seed production, Chris felt the state would continue to be reliant on imports to a degree. In-state seed operations are permitted by DMF, can only sell to permitted growers, and must report seed sales.

Out-of-state seed operations are not permitted by DMF, but are supposed to sell seed only to permitted growers as a condition of being on the Division's approved list; however, compliance is difficult to gauge and enforce.

Management of seed is imperative to prevent shellfish disease introduction. There is concern about unpermitted "shellfish gardeners" that don't employ proper controls. DMF makes a list of permitted growers available online for seed sellers to reference, and requires pathology testing to be on the approved sellers list. But without permitting out-of-state operations, the Division can't utilize permit sanctions as an enforcement tool.

Dan McKiernan suggested this issue could be one for the Atlantic States Marine Fisheries Commission (ASMFC) to become involved in given the interjurisdictional nature of the problem; this would facilitate interstate coordination. Mike Hickey noted that there is an old ASMFC shellfish transport plan, and perhaps it could be updated/expanded to address this issue.

Alex Hay commented that in Wellfleet he had observed a divergence in growers between those that are very careful about techniques and those less careful and this was creating turmoil. He wanted the standards to be reinforced with more outreach/education because there are well-intentioned but ill-informed individuals getting involved in the industry. There was general support from the Panel for more outreach, including to unpermitted individuals who could cause a lot of damage to the legitimate fishery. While the state may have all the rules it needs, there was agreement that they need to be better interpreted and distributed.

Upwellers in Closed Contaminated Shellfish Growing Areas

Chris moved on to the subject of expanded use of upwellers in waters closed to harvest. The Division had recently drafted a policy on this issue. The policy allows for the licensing of private shellfish nursery sites in closed contaminated shellfish growing areas for the exclusive use of floating upwellers, or other similar nursery devices. The policy is intended to provide expanded access for private aquaculturists to shellfish nursery sites prior to the promulgation of regulations, and is necessary to ensure projects remain in compliance with NSSP requirements.

The policy requires several conditions to be met, including: the municipality has a current MOA with DMF delegating patrol and inspection protocols; the nursery device is secured to a licensed or permitted structure; operation at the site is limited to March 1–November 1; all shellfish seed are removed prior to reaching 25mm shell length; use of the site is limited to the nursery growout of first year seed purchased from a DMF approved hatchery; no overwintering or other activities at the site; records of all transplant and seed activities are submitted annually to DMF; and an operation plan to fulfill the above is submitted to DMF.

Three towns were working on getting an MOA signed: Barnstable, Plymouth, and Eastham. More were expected. The Division's ultimate goal is to turn the policy into regulation for improved enforcement.

Alex Hay asked how the policy had been received. Chris Schillaci replied that there had been little feedback so far. Steve Wisbauer (Provincetown Shellfish Constable) asked how the new policy fits in with prior allowances for land-based upwellers. Chris Schillaci replied that there was no change to those allowances.

Chris Sherman asked if there were implications for restoration activities. Mike Hickey replied that the Division does not permit towns to grow shellfish for any reason other than to benefit the public fishery

(as required by statute). Chris Sherman remarked that industry doesn't want municipalities or NGOs growing product for commercial purposes. Steve Kirk commented that NGOs take the industry's concerns seriously, but thought it reasonable to try restoration if it can lead to reopening of an area for harvest/aquaculture.

Bill Doyle suggested that "contaminated" not be used in the policy because it is not one of the NSSP classifications. Chris Schillaci replied that MA's statute, which predates the NSSP classifications, uses the term "contaminated". Dan suggested that a footnote be added to the policy to clarify this issue. Mike Hickey added that the NSSP does say that anything not open all the time (i.e., "approved") is "contaminated"; the other classifications basically refer to different levels of contamination. Chris Sherman suggested that the title could be softened but the text maintained so that the policy would be better received.

Vibrio Update

Chris provided a *Vibrio* update next. In 2016, confirmed illnesses declined drastically to just 10, despite continued increase in oyster landings: four cases in Duxbury, one in Barnstable, one in Dennis, two on the Vineyard, and two in Wellfleet. A first clam case also occurred in Wellfleet.

Chris described how about 1/3 of the production out of Edgartown had been resubmerged in the "summer pasture" or Middle Ground. The much lower temperatures in the area seem to be linked to lower *Vibrio* numbers. Four growers were licensed there. Paul Bagnall called it quite a feat that the area was able to be licensed for production within one year.

Other activities in 2016 included additional resubmergence trials, with more planned for 2017. Based on the research, *Marine Fisheries* was able to decrease the requirement from 14 days to 10 days already, and was hoping to get down to seven days. The Division also developed *Vibrio* training videos, which are on the website. Another available tool is NOAA's ecological forecasting models. These can tell you what time of day to harvest and which cooling technique to use to best reduce the risk of *Vibrio*.

Surf Clam Issues

North Shore Survey

Shellfish Biologist Greg Bettencourt updated the Panel on a recent survey for surf clam abundance along the north shore, specifically from the Annisquam River north along Plum Island, to assess whether there was a commercially exploitable resource present. The cooperative survey had been requested by Allen Rencurrel and took place using his vessel. The initial planning by the Division included design work and review for potential adverse impacts (e.g., eel grass). Greg and Allen conducted 23 tows in one day, with most between the 20' and 30' contour lines. The best tows produced about 80 surf clams (a bushel and a peck) from 10 minute tows. Nowhere did they find sufficient biomass to support a commercial fishery. Minimal ocean quahogs were also caught, as was expected due to temperature of the survey area (too warm). All pieces were measured during the survey and the average shell length was 6". Allen thanked DMF for the investigation.

Combined Surf Clam and Ocean Quahog Permit

Dan McKiernan reminded the Panel that the Division's permitting scheme had, for the past 26 years or so, includes separate permit endorsements for surf clams and ocean quahogs because of different control dates that had been used to limit entry into these fisheries. A recent review of permit issuance led to a decision to combine the permit endorsements.

Permitting Leader Story Reed provided more details, explaining that as part of a larger cleanup of the Division's permitting regulations late last year, the ocean quahog and surf clam endorsements had been

joined in a single section. Due to the timing of permit renewals, however, two separate endorsements were still issued for 2017. A combined endorsement will be issued for 2018. By implementing this, five ocean quahog only endorsement holders will have the opportunity to harvest surf clams by dredge, and 12 surf clam only endorsement holders will have the opportunity to harvest ocean quahogs. The Division expects to have a total of 38 dual endorsed harvesters, compared to 21 with both endorsements now.

Related to permitting but on a different issue, Allen Rencurrel asked about the status of a petition submitted to the Division for a separate, smaller surf clam trip limit (e.g., 50 bushels) for individuals without a surf clam permit endorsement. Regulatory Coordinator Jared Silva responded that the Division reviewed the petition and discussed it with the Marine Fisheries Advisory Commission (MFAC). Members of the MFAC expressed concern about establishing a secondary permit. Public scoping meetings will be held this fall to further discuss the petition and potential alternatives.

Dredge Bar Spacing

Dan McKiernan stated that Allen Rencurrel had asked for further discussion of a possible dredge bar spacing rule. He noted that federal and state management differ with a federal ITQ system but no minimum size (annually suspended) and a state minimum size but no quota system. Neither has a gear rule such as for minimum dredge bar spacing.

Allen stated his interest was to have a 2" minimum bar spacing rule, to reduce catch of sublegal product both for release mortality and compliance reasons. Dan committed the Division to taking this to public hearing in its next round of proposals.

Thinning Out Clams at Horseneck Beach

Mike Hickey stated that the Division had been asked to consider thinning out surf clams at Horseneck Beach in Westport because the population is fairly dense and the clams never seem to reach the minimum legal size. It was suggested that overpopulation was stunting growth and some clams should be transplanted elsewhere.

Mike explained that Shellfish Program personnel had concluded that a transplant program was not feasible in terms of cost and survivability of transplanted clams, and moreover that clam size in the area may not be related to clam density but to there being a different species or subspecies of surf clams in the area, specifically the southern surf clam (as opposed to the northern surf clam). Consequently, the Division has arranged to obtain samples from Horseneck Beach for analysis to determine species. DNA testing will be required because of morphological similarities between the northern and southern species. Mike also noted that the Division's authority to manage surf clams (by legislation) is limited to the northern surf clam, so if it is southern surf clams at Horseneck Beach, they would be subject to municipal control.

Shellfish Initiative

Chris Sherman introduced this topic which he had asked to be on the agenda. In its infant stage at current, the Shellfish Initiative is a collaborative effort by the Massachusetts Aquaculture Association, the Cape Cod Commercial Fishermen's Alliance (CCCFA), and The Nature Conservancy to maximize the economic, environmental and social benefit of Massachusetts shellfish resources. Its design is based on a NOAA program. He invited Melissa Sanderson of the CCCFA to give a presentation.

Melissa provided background on the initiative and its current status. Strategies to meet its goal include the creation of overarching guidelines for towns/the state, increasing efficiency, and leveraging available funding. It is a voluntary effort, but other states that have undertaken a similar effort have seen

successes. There are many reasons to take action now including conflict between user groups, increased management closures, legislative efforts to divest management authority, raising the status of MA shellfish, and an educational opportunity.

For progress to date, the initiative had: had a team of UMass students conduct a review of shellfish initiatives around the country for which a report was pending; worked with core constituents to help guide the development of a survey for stakeholders; hosted five public meetings and made additional presentation and media communications to raise awareness of the initiative and get stakeholders to take the survey (237 respondents as of the day prior, with the survey being open through August); and conducted some analysis of initial results (last month when there were 182 respondents). Commonalities present in these results included desire for more: resources for DMF to carry out for water quality monitoring; cooperation between permitting and regulatory agencies; funding for research and hatcheries; and education.

For its next steps, the initiative would be collecting more feedback via the survey and public meetings through August; analyzing results in September; reporting findings to the community in October/November; and starting in November, convening working groups and an advisory council to develop recommendations and draft a plan (a projected 12–18 month process) with the end goal of having it endorsed/sponsored by the Governor. Currently, the initiative is running on donated staff time, although it has applied for grant funding and will have a PhD student's support.

Melissa concluded by asking the Panel members to complete the survey if they had not already and asking the Division to consider if and how it could increase awareness and/or show support for the initiative.

Dan McKiernan suggested that the initiative try to get buy-in from the administration at the executive level (i.e., Secretary's office) as early as possible, and use Washington State's report on its shellfish initiative and a DMF white paper on shellfish management as tools. Chris Sherman indicated that a meeting with the Secretary had been scheduled. Mike Hickey expressed support for the initiative's participation at an upcoming Mass. Shellfish Officers' Association meeting to drive survey responses. Dan also suggested the initiative reach out to State Representative Sarah Peake, because of her influence at the State House on fishery issues.

2016 FDA State Growing Area Evaluation: "Marina" vs. "Mooring Area" Classification

Mike Hickey advised the Panel of an ongoing situation relevant to the state's classification of shellfish growing areas in 2016. The FDA staff conducting the evaluation wanted "mooring areas" to be included in the classification of "marina," whereas we consider them distinct. The effect would be the application of "marina" rules to "mooring areas" (e.g., closed during boating season). This had not been an issue in 2015 and Mike suggested that it was the effect of a staff change at FDA. Consequently, he had reached out to higher level officials at FDA but a resolution was still pending. He felt confident the issue could be favorably settled directly with FDA, or if necessary, through the ISSC (rather than a political route).

Transaction Swipe Card Progress

Story Reed provided an update on the Transaction Swipe Card Project (eDR mobile). It is available for any state-reporting shellfish dealer. One dealer is using it now and six are queued up for possible set up. The Division had created a handout describing the available swipe devices, as well as training materials available on the *Marine Fisheries* website. Anyone interested can contact the Division's Anna Webb for setup or questions.

Story reported that additional states were interested in making eDR mobile available and this would put pressure on NMFS to adopt it for federal reporting dealers as well. We'll likely get to the point where every harvester (not just shellfish) will have a transaction card to initiate a sale. Development of several other components continues such as an electronic spreadsheet for DPH logs.

Story also drew the Panel's attention to a Fisheries Statistics handout Anna compiled with shellfish landings, value, and permit issuance.

Update on Fines and Penalties

Dan McKiernan updated the Panel on the Division's objective to modernize the state's fines and penalties schedule for marine fisheries violations. He commented that the current arrangement of fines and penalties is like a house built one room at a time, and the goal is to recreate it systematically in a way that makes sense. The Division had worked with law enforcement to develop a legislative proposal and had acquired MFAC support for it, but it hadn't moved forward because of legislative timeline issues. He wants to build support for the proposal now, so that when the time is right to introduce new legislation, the Division will be ready to defend it. He emphasized that the rewrite is not meant to be a revenue generator but to improve compliance. Dan had begun and would continue to visit various fishing groups to generate awareness and support for the proposal. He said he'd share the proposal with the Panel and would like the members to ask their respective groups to consider sending a letter of support to be used in the future.

Other Business/Adjourn

MOAs between state law enforcement and municipal shellfish constables

Mike Hickey drew the Panel's attention to a letter that he and Major Patrick Moran (MA Environmental Police) had sent to coastal municipalities requesting the attendance of their shellfish constable or deputy at a workshop to be held during the June 15 meeting of the MSOA. The workshop is being held to discuss FDA's request that the state develop more formalized agreements between the Environmental Police and municipal shellfish enforcement authorities regarding NSSP patrol requirements. FDA agrees that town constables help the state to meet its law enforcement needs, but wants this formalized in Memoranda of Agreement.

PSP Update

Jeff Kennedy informed the Panel that both Maine and New Hampshire had reported increased PSP counts and closures were in effect in Casco Bay and into western Maine. The Division had recorded increases in Ipswich and Essex mussels, and he expected that there could be a mussel closure for the north shore within a week.

He also noted that Eastham and Orleans was scheduled to reopen on Saturday (June 10), with the exception of Salt Pond in Eastham and the harvest of moon snails. The Nauset System had been closed effective May 4.

Subcommittees

Bill Doyle stated his interest to have the Panel further consider several issues through the use of subcommittees: 1) uniformity of municipal shellfish regulations; 2) uneven enforcement by shellfish constables across towns; 3) the role of municipalities in licensing tidelines for aquaculture; 4) compliance and enforcement of No Discharge Zones; and 5) state grant money for food safety equipment.

There was some initial discussion about these topics, particularly uniformity of municipal shellfish regulations and uneven enforcement by shellfish constables across towns. *Marine Fisheries* will further consider Bill's suggestion and report back at the next meeting.

Next Meeting

The Panel discussed whether its next meeting should be before or after the ISSC 2017 Biennial Meeting (October 14–19). It was determined that *Marine Fisheries* would coordinate a conference call for anyone interested for before the ISSC meeting to review the proposals for the meeting (released at least 90-days prior) and coordinate efforts, and that the Panel would formally meet in November to review outcomes of the ISSC meeting.

Meeting Documents & Presentations

- June 8, 2017 Shellfish Advisory Panel Draft Agenda
- November 17, 2016 Shellfish Advisory Panel Meeting Summary
 - ISSC Executive Board Meeting Agenda, May 23–24, 2017
 - European Union Exports Update Memo (by J.M. Hickey)
 - NSSC Meeting Agenda, April 11–13, 2017
- ECSGA Newsletter (2017 Issue 2) Excerpt: "Biotoxins at the NESSA Meeting"
 - Aquaculture Update Presentation (by C. Schillaci)
 - North Shore Surf Clam Survey Presentation (by G. Bettencourt)
- Combined Surf Clam/Ocean Quahog Endorsement Presentation (by S. Reed)
 - Surf Clams at Horseneck Beach Memo (by J.M. Hickey)
 - Massachusetts Shellfish Initiative Presentation (by M. Sanderson)
- Classification of SGAs: Marina vs Mooring Area Memo (by J.M. Hickey)
 - Fisheries Statistics and Swipe Card Project Updates (by A. Webb)
 - Law Enforcement MOA Letter (from P. Moran & J.M. Hickey)