

**Aquaculture Advisory Council**  
**October 30, 2015**  
**Rutgers Building, ACCC Campus, Mays Landing**  
**Meeting Minutes**

**Members Present:** Secretary Douglas Fisher, Mr. Dave Chanda (Commissioner Bob Martin), My. Loel Muetter (Acting Comm. Cathleen D. Bennett), Dr. Dave Bushek, Mr. Gef Flimlin, Dr. Bradley Hillman (Dr. Robert Goodman), Mr. Ned Gaine, Mr. Steve Carnahan, Mr. Bill Avery (Mr. George Saridakis), Mr. Paul Waterman, Ms. Amanda Wenczel

**Members Absent:** Ms. Nancy Belonzi (Lt. Gov. Kim Guadagno), Mr. John Maxwell, Mr. Richard Herb, Mr. Dave Burke

**Public in Attendance:** Mr. Brian Harman, Mr. Matthew Williams, Ms. Lisa Calvo (Rutgers), Mr. Jack Burke, Ms. Betsy Haskin, Mr. Richard Cash, Ms. Stephanie Cash, Mr. Matthew Gregg, Mr. Scott Lennox, Ms. Monique Purcell (NJDA), Mr. Mike DeLuca (Rutgers), Mr. Jonathan Atwood (Sen. Van Drew/ Asm. Andrzejczak), Mr. Russel Babb (NJDEP), Ms. Wendy Walsh (USFWS), Ms. Jenny Tomko (NJDEP), Mr. Dominick Fresco (NJDEP), Mr. Craig Tomlin (NJDEP), Mr. Eric Schradling (USFWS), Mr. Dale Parsons

Secretary Fisher called the meeting to order. Ms. Wenczel performed roll call. There was a quorum present.

Secretary Fisher called for a motion to approve January 23, 2015 meeting minutes. Approval of the minutes was motioned by Gef Flimlin and seconded by Dave Bushek. All voted in favor and the motion passed. The July 17, 2015 meeting did not have a quorum, was considered informational only, and therefore those meeting minutes did not require approval by the Council.

Secretary Fisher moved onto the agenda items, beginning with a review of publications related to red knots and structural aquaculture. Moving the review of publications and potential response by the AAC to a subcommittee for better use of time and expertise was discussed. A motion to move this review to subcommittee was made by Gef Flimlin, seconded by Dave Bushek. All voted in favor and the motion was passed. A motion was then passed to form a subcommittee which included: Dr. Dave Bushek, Mr. Ned Gaine, Mr. Bill Avery, Ms. Lisa Calvo, Mr. Mike DeLuca, Mr. Matt Gregg, and Ms. Elizabeth Haskin. The subcommittee will review red knot-aquaculture publications and develop an AAC response to those publications. The subcommittee document will then be reviewed and approved by full council.

The Council moved onto the second agenda item- a detailed review of the Draft Conservation Measures (draft dated 10.29.15) from the consultation process between the State, the US Army Corps of Engineers (USACE), and the US Fish and Wildlife Service (USFWS). Secretary Fisher provided background in terms of the timing of this process and how quickly the Council needed to provide comments. Priority of today's meeting is to ensure assistance to the State's growers while complying with the needs of consultation through the Endangered Species Act (ESA).

***Draft Conservation Measures-Introduction:***

Conservation measures contained within the Draft Conservation Measures document are being presented outside of the Biological Assessment, which is a larger document containing background information on red knots, their habitat and structural aquaculture on Delaware Bay. These details, not presented today, will aid in understanding the Conservation Measures, and may answer some of the questions posed during the discussion. This will be reviewed section-by-section, not line-by-line. If there are questions with a section, we can discuss the intent and content of the section.

[Ned Gaine (NG)], question on page 1- what are the agencies' shared concerns or where can I find these? This will help in the assessment of the Conservation Measures as well as to provide a basis for suggesting alternative measures. [Amanda Wenczel (AW)] These shared concerns can be provided to the group as a separate document and will be provided within other portions of the Biological Assessment. [Wendy Walsh (WW)] Speaking for the USFWS, the primary concern is direct disturbance to red knots with secondary concerns for coverage of tidal flats. Indirectly these concerns relate to horseshoe crabs, with continued efforts to clarify these exact interactions. Outside of those generalities, I do not want to speak for the entire group without conferring with everyone first.

***Conservation Measure 1 (CMI):*** The process for consultation was explained. This is a formal Programmatic Biological Assessment (PBA, or BA) that is supplied to the USACE. There are several steps between the BA and the end permitting; what results is a Programmatic Biological Opinion (PBO) from the USFWS. This measure is stating how the PBO will be implemented. The content of the PBO will be incorporated into the USACE permits for the Aquaculture Development Zone (ADZ) ADZ4a and ADZ4b, leases, and riparian grants.

[Steve Carnahan arrived]

***CM2:*** This Conservation Measure is looking at the geographic limits of the PBA. It is divided into two segments- North Segment and South Segment. These were developed as complimentary segments, such that greater restrictions on activity in one could allow for greater flexibility (e.g. access, amount of gear) in another so that the overall cumulative impacts can be reduced. Refer to Figure 1 in the document (page 12) to determine the North-South divide and what each section encompasses. [Bill Avery (B. Avery)] Current activity, where is, where are the growers? (AW) Current activity is mostly within the Southern Segment (blue box on color copy, Figure 1-page 12), with two active growers within the north (yellow box on color copy). Those active growers in the north are going to be handled differently than any new growers entering the Northern Segment. (NG) How many active growers in the south? (Estimates were discussed by the group, somewhere between 6-8 growers in the south).

(NG) In the northern segment the yellow area is much tighter to the beach than the blue for the south. (AW) The seaward edge of the Northern Segment is the seaward edge of nearshore leases. [Craig Tomlin (CT)] There are several reasons for the narrower area in the north. The first is the narrow nature of the flats in that area (e.g. smaller than areas in the south). The second reason is that we had to draw a line somewhere and that line (on figure 1) is the seaward edge of all those nearshore leases. This encompasses the entire lease area for the nearshore leases as opposed to

half of the lease. (AW) The southern area is larger to allow for seaward expansion of ADZ under the Programmatic consultation. That would eliminate the need to conduct another consultation for expansion of ADZ acreage. [Dave Bushek (DB)] Those leases outside of the PBA, there is no issue with those leases? (AW) Any leases outside of the area defined as being contained within the PBA- e.g. outside of the yellow and blue boxes in Figure 1- will not be covered through this process. Those leases would still need to go through the consultation process, but are not bound by the Conservation Measures included within the final PBO. They would need to work with the USACE, and USFWS directly. (DB) my understanding is that these (the seaward/subtidal leases) would not present a major issue. (WW) Seaward leases, outside of the PBO area, would likely be reviewed via a quicker timeline as the primary concern is boat/access routes.

[Secretary Fisher (SF)] Speaking to that item, in the Northern Segment all currently active leases are encompassed. In the southern zone there is area for potential expansion at the same time? (AW) There is potential for expansion of the ADZ, with a focus on the seaward expansion. (SF) I want to highlight the comment from DB that the leases outside of the area included in the Programmatic are traditional leases and those are areas with minimal concern for this process. This is why we're here, to make sure this document is right enough to allow current operation to operate while providing protections to the red knots during the shorebird season/migration. These are some of the items that need to be noted in this forum. Items that could majorly impact you need to be noted now. This is similar to last year, when there was great concern that USFWS was going to shut down the growers, but they gave assurances that was not the case, and they followed through on that promise. We need to make sure that these zones work. That's the shared goal- to ensure protections under the ESA and to continue to operate. There will be inconveniences and some movement. We need to get this right; we do not have much time so this is the meeting to really provide critical comments, not to all the possibilities but to what could really work based upon these initiatives.

[Dave Chanda arrived]

**CM3:** Please refer to Figure 2, which should be at the end of the document, for more details on this measure. Figures 2a and 2b- are to provide a reference for how all the measures in the document may apply. It is also providing you with words that may not be common, but are used throughout the rest of the document. For the growers, the two biggest items to note are the Protected Area and Growing Areas. The growing areas are not yet identified on these figures but will be defined in this document and included in the final Figure 2. (B. Avery) Where would this (referring to Figure 2) be located along the coast? (AW) This is a general sketch, not a specific lease or area of shore. These are to help identify areas relative to beach and high tide and low tide, not a specific location. (group) Discussion on the details of the figures, with specific mention of the creek mouth shoals and the buffers.

(DB) Which area is foraging for red knots, and which is roosting? (CT) They are the same area. The figures are basically a cartoon depiction of definitions within the document.

[Gef Flimlin (GF)] What percentage of the overall red knot habitat do these maps represent? (CT) I do not know the specific number but we could get that number. (GF) What is % of red

knot habitat area within NJ that is being used for aquaculture? [Dave Jenkins (DJ)] proposed less than 10%, DB stated less than 1%, others stated less than 5%. (GF) And that coordinates with the HSC habitat, they use the same habitat? So there are feeding places outside of where the aquaculture is occurring? (DJ) Yes, currently.

(NG) Does the 300' buffer encompass areas that are subtidal, as is depicted on Figure 2b? You see that spot right outside of the marsh area that is subtidal but still in the buffer. (DB) As it is written currently the 300' buffer is from MHW regardless of intertidal or subtidal. Is this correct? (CT) That is true. (WW) Need to think through this item because it may be that subtidal would be excluded. This instance may not even occur in the southern segment, but it may happen in northern segment areas. (DB) The concern is that grower may need to move even farther into deeper water with this buffer, but could operate in ~1' water if the buffer does not apply. (NG) Since this is a 10-year proposal, we could see the beach changing and this could quickly become a reality. (SF) This is a good comment for the group, something for them to address after the meeting.

**CM4:** This measure covers seasonal restrictions. The best way to determine the seasons is by referring to Table 1. This table outlines the timeframes for each restricted season, the reasons for the timeframes, and the applicable conservation measures associated with each season. (DB) To begin with, the timeframes are unclear. The red knot season is approx. 2-3 weeks, the horseshoe crab spawning is around that, not much longer but there is a period listed of 5 months. It's not clear why it goes to Sept. The crabs are gone; they are present in very low abundances, but nothing that would be impacted by these activities. (AW) There are restrictions or measures already in place for horseshoe crabs from May1- Sept.15, so the timeline listed here is concurrent with the timeframe used by DEP for other activities along the beach.

(NG) Understand protecting the food for the red knot, the horseshoe crab eggs, but not the horseshoe crabs. This timeframe for impingement is for horseshoe crabs, not the food source for the endangered species. (SF) This stop-over is for the red knot to gain weight before going to the arctic. Do they come the same time each year? How many weeks? Why not limit it to the absolute outside of the red knot stop over. (AW) This timeline is used for horseshoe crabs and is consistent with a timeline already in place at the State. [Lisa Calvo (LC)] & (DB) What other measures are following these timelines? (SF) There is a moratorium on the harvest of horseshoe crabs in NJ, so is the timing in relation to that? (DJ) The timing is to reflect the life cycle and presence of the horseshoe crabs. It is correct that the spawning is primarily over in that short time, and eggs may hatch, but it is the time when they can be present in Delaware Bay on Delaware beaches. They move offshore after that time. (NG) Specifically, the horseshoe crab is not the food source, the eggs are the food source. The concern for the endangered species is the eggs. (DJ) The same is true for the harvest restrictions. The restrictions on harvest are to ensure a viable horseshoe crab population that can produce sufficient eggs for the red knot population. (GF) So the prohibition on the harvest of horseshoe crabs has nothing to do with the actual stock of crabs? (DJ) No it is exactly related to the stock of crabs. (GF) Is there a stock assessment on horseshoe crabs? (DJ) There is a stock assessment at the ASMFC (Atlantic States Marine Fisheries Commission). So the moratorium (in NJ, or quotas in other states) exists to ensure a high enough population of horseshoe crabs to provide enough eggs for red knots. The timeline in Table 1 is designed as a similar safeguard.

(NG) The moratorium on the harvest of horseshoe crabs is related to the killing of crabs, because the killing of a horseshoe crab will lead to a lower production of eggs. The timeline depicted here is in relation to the harm or harassment of crabs, which is what my gear will do. This is expanding the definition of the ESA to harm or harassment of horseshoe crabs. It is the horseshoe crab eggs that are important. It's broad to say I'm harming or harassing horseshoe crabs, when we're dealing with harm or harassment of the red knot.

(SF) We will note this as an item for the group (developing the BA) to review. Maybe there is a way this can be edited to more accurately reflect the ESA needs to protect the feeding source for the red knot. Think about a way to limit the timeline. Need to protect the horseshoe crab population, but also need to consider as a grower that this is a greater ask since the red knots will be gone by that time.

(LC) This places an undue burden on this industry, when there are other industries or activities that may have a greater impact on horseshoe crabs within the Bay. In the baywide area, the grower impact of driving an ATV in a designated path out to the growing area is relatively insignificant compared to other activities and this should be taken into consideration.

(WW) The USFWS would not interpret any impact to horseshoe crabs as a harm or harassment. The USFWS and the ESA have very strict definitions that related back to the red knot. Conservation Measures can be broader and can consider the species in a number of ways, and do not need to tie directly to a harm or harassment. Ultimately that (harm/harass) is what is used in the take statement, but the measures can be broad. (NG) Appreciate the clarity as this item seems to be broadening the scope.

(DB) In USFWS jargon, the way Lisa was describing it, and my personal assessment, is that beyond July 1, these activities and their impacts to horseshoe crabs would be insignificant and discountable. I'm not sure how they arrive at that decision, but beyond June, the horseshoe crabs are around but not in abundance. The population has left the area. (WW) If the consultation was one application and small isolated area of activity, we would probably call it insignificant and discountable. That would likely not lead to harm of the red knot. In the broader context of this consultation, the longer timeframe was used to provide protections to the viability of the crab population.

[Betsy Haskin (BH)] The CM listed in 8, where did this information come from to list the measures and who are the experts consulted on horseshoe crab behavior and what impedes them and what doesn't? (AW) That will be in the BA, and we can provide you with this information through a separate document. Material was already in progress to address this item; however, the group collectively prioritized the Draft Conservation Measures document and ran out of time to complete the document with your requested information. We can work on providing this item to the growers and AAC. (LC) I would like to emphasize what it means to a grower to expand the 5 month period. If we want to deploy floating gear to reduce biofouling when biofouling is the greatest or increase growth we're restricted to 1000'. This prevents innovation or new business practices that provides for greater conservation of resources. I want to stress that this is an important point that is not to be taken lightly.

(SF) I wanted to reiterate that the items needed today are: those which need clarification, those items which the group (working on the BA) need to hear from the Council and attendees, and noting of those items which the group should provide to the Council and attendees. This document needs to be reviewed in full at this meeting, however long it takes to get through it.

(NG) Need clarification or removal of the word “rutting”. (Group) After discussion, it was decided to remove all examples from the table.

(JB) The gear restrictions go from April to September and one of the measures listed is CM8 is no new gear, so are we limited to no new gear? (AW) No new gear is listed in CM10 (subtidal) and CM12 (intertidal), so you are not restricted in your placement of new gear by this CM. (JB) So we can install racks? (AW) Outside of April 15<sup>th</sup> -June7th, yes.

**CM5:** This measure speaks to the continuation of research and monitoring. Most of the growers are aware of the research initiated this year to examine structural aquaculture and red knot interactions. This measure speaks to continuing that coordination between growers and researchers.

**CM6:** Yearly, for the life of the PBO (the result of this process), which is 10 years, there will be a meeting to determine if changes can be made to the measures, so long as the alternatives can “(a) reduce adverse effects to red knots; (b) enhance the aquaculture industry without increasing impacts to red knots; or (c) both” (see last two lines of the CM language). (NG) I suggest changing “enhance” to “develop” so that it’s not flexible to lead to enhancement of aquaculture OR enhancement of conservation. [Comment was noted by the BA workgroup with a change to “develop”].

(NG) Please clarify the statement, “[t]he overall nature and level of Adverse Effects...will not be exceeded”. (WW)The PBO, the item we are opining on, is whether or not the activity is likely to result in Jeopardy, which has its own definition. If we are going to consider changing the Conservation Measures we need to reaffirm that even with changing measures we are still in a non-jeopardy situation, and that the level of take in the incidental take statement will not be exceeded. (DB) The level of take defined in the PBO will be constant for the 10 year period? (WW) We just had a new regulation in the Federal Register. Previously, the incidental take statement was in the PBO. The new regulations give us the option to place an incidental take statement into the PBO, or defer to the tier 2 process. Under the PBO process individual permits will come into the USACE under the tier 2 process, a greatly expedited process, and the take statement can be attached at that point. We are still working out the details, but some of the take may be at the programmatic level, some of the take could be at the permit level.

(DB) Say we look 2-3 years out and if the recovery is moving along, and populations are increasing, does that allow for an increase in the take, with take being defined as harass? So, if you could expand the footprint, does that expand the take? (WW) I think that may involve redoing the entire PBO. (DB) So it’s important to be at a level that includes expansion of aquaculture. (WW) Under the new regulations, it’s not completely clear how it would all work out, but we do not need to define all of the take right now. We can define some of the take in the PBO, but also hold off defining take until we have the permits under the tier 2. (DJ) So long as

the species is listed under the ESA, take is prohibited. If the population is increasing, that would play into the jeopardy decision, but take is still prohibited until the species is no longer listed. (DB) Except that a programmatic allows for take, so could what is permitted in the programmatic change? What is permitted take? (DJ) It is prohibited except as permitted in an incidental take statement. In my experience, population levels are considered in the process of permitting take but are not the most critical component so long as the species is still listed. How the population is doing comes in at the jeopardy assessment.

(LC) Does the 10 year period in the PBO include the current growers in the northern segment? Or are they off the table completely? (AW) The two currently active leases/operations are going to be a separate item. They will work with the USFWS, the NJDEP, and possibly the USACE to develop a plan outside of the measures contained within the document. I cannot speak to what will be discussed at those meetings as they have not occurred yet. The timeframe for the two currently active operations will be discussed during those meetings.

**CM7:** This measure is broken down into the Southern Segment and the Northern Segment. In both segments, this measure is for the phasing in of new gear. This does not include maintenance or repair of current gear. In the Southern Segment, this is new gear to any lease, riparian grant, or ADZ lease, and the phase-in time is two years. For the Northern Segment, new gear in any lease or riparian grant will be phased-in over three years. (NG) To clarify, new gear is not including the replacement of gear. If gear is damaged, it can be replaced outside of this phasing. (AW) Based upon comments from previous meetings, the last line was added to clarify previously expressed concerns. (DB) Is there a metric that defines what small gear is? (AW) That will be done during the tier 2 process because small gear will be relative to the lease, grower, area. If small gear is still in question, and someone has a specific question, that can be addressed after the meeting; however the measure was developed to not limit a specific lease or operation by defining small gear.

(NG) The new structures, does this mean half of all new racks or footprint in spacing? (AW) It is half of the structures, covering no more than half of the total authorized area- so it's both. (NG) For example, I want to expand 200 racks. Do I need to place 100 racks and figure out what half of my area is that the racks can be placed within? (AW) Once you determine where you would be placing the racks, you should figure half of the racks will go into half of that space. (NG) So 200 racks per year for the next 5 years, and I want over 1000 racks total, that would be under 50% in a year. Do I have to spread out the racks among the entire area? (AW) For your entire lease, half of your site is all that is stipulated. It does not mention what areas of the lease can be used, so long as the spacing requirements in other conservation measures are followed [see CM8]. (NG) Trying to understand the measure, if I expand the number of racks, can I condense in one year and then spread out as I use more gear? (DB) I think this is getting at if you want to do a big expansion. If you do this at once, and it has a big impact, they will come back and make you reduce since you expanded too much. So essentially it's asking for incremental expansion. This isn't written as such if this is the intent. I think this needs to be rewritten to better explain the incremental expansion. (WW) I think with each proposal, we would have the conversation on the application of this measure to the lease. (DB) So you're trying to not be so prescriptive but allow some flexibility. If so, it may be better to describe the process and not the prescription. (B. Avery) What would be the allowable coverage of the lease as a percent? (DB) There is a

percent. (WW) In the southern segment there is no limit on coverage per lease. (NG) As growers we want to work within these confines we just need clarity as to the how. (SF) I think we understand what this is trying to do, but it is not clear. (Group) The increase in gear is according to the growth of the animals, such that smaller oysters may need 20 racks, but by year 2 that could be 100 racks. Essentially, the permit will be for what you think you will need/your lease can accommodate over the life of the permit- your business plan for how far you think you can expand within the life of the permit. This must be noted in the tier 2 to receive the permit. If this changes to be more gear than estimated, a new permit will need to be obtained. [Matt Williams (MW)] If a current lease needs to be moved based on these recommendations, will that move be considered new gear? (AW) If you are within the ADZ, the transition plan will be developed and considered different from the new gear in this section. (SF) Businesses think in longer than two year cycles, but there is also a limit to what is feasible (what a lease can hold).

[Jack Burke (JB)] What does this mean for the 2016 season? In this southern segment, for 2016 do we follow what we did last year. (AW) The intent is that the Conservation Measures in the PBA will be submitted in time so that the PBO will be ready and applicable for the 2016 season.

(B. Avery) Is the numbers of racks a set number or portion of the lease, some formula? (WW) In the northern segment there is a set percentage. In the southern segment there are spacing requirements, but outside of the spacing there is no set number or portion for the lease.

[Dale Parsons (DP)] There seems to be critical attention to the oyster growers who use the beach to obtain a living, but is there any attention being paid to other users of the shore? (NG) Because we are permitted, through the USACE, we have to go through this process and follow these restrictions. The person walking the beach doesn't have a permit. [Dave Chanda (DC)] The beaches where we are talking, there are restrictions to access. The jet ski users are more complicated. (DJ) Access is restricted during the stop-over season for red knots. If someone was offshore and it disturbed the red knot flock repeatedly, they could be sited under state and federal law. (DC) This is a discussion for another time, with different groups.

**CM8:** Based upon comments from previous meetings, this measure is noted as a priority. If any of the items within this measure are an issue to your bottom-line as a grower, please comment. This document was sent by DEP, Bureau of Shellfisheries(BSF) to the growers, so comment today or outside of the meeting directly to DEP.

(NG) To note, this is the one to follow for 5-6months. On "d" because it's for 5-6 months, it really stands out. Floating structures to remain floating over the lowest lunar tide over this extreme amount of time means that extreme low tides have a greater chance of occurring during the timeframe. Looking at tides for next year, there are 3 of these tides. (DB) It effectively eliminates the use of floating gear. (NG) The gear will touch the bottom because of the tidal cycle. And "d" conflicts with "e", such that it has to be 1-foot off the bottom in "d" but then 1-inch or less off the bottom in "e". If this is only for 6-8 weeks, then not every year will an extreme tide occur during this time. (SF) Why not say for this one item, during the shortened horseshoe crab egg-laying time? (BA) What about alleyways? (AW) A 1-foot clearance at low tide does not have any requirements, and this is for intertidal areas or areas shallower than 5' at MLW. Anything farther out would be subtidal. (DB) So is "d" saying no alleyways? It does not



read that way. (NG) This is calling for movement out to extremely deep water to avoid the extreme lunar tides during that 6 month window. (AW) Is this (concern over the lowest lunar tide) for the Southern Segment and Northern Segment? (NG/DB) Yes, this is for entire Delaware Bay. (NG) This is extreme because of the timeframe. A month long window would be workable; growers could move gear to accommodate in the rare instance this extreme tide occurred.

(BH) I question the underpinnings of this requirement for 1” to 12” for horseshoe crabs to pass. I have never seen a horseshoe crab blocked behind my racks. They hang out on the farm to get out of the sun. I would like to see more of the research and data behind this requirement. (GF) What is the data on this, how many are impinged? What is the mortality data on this? (AW) We can provide this data. (GF) Is this a critical mass? What is the portion or number that are effected? That’s really where the focus should be. (AW) To specifically address when you reference experience on a single farm, this programmatic was built for the entire industry and expansion. We do not want to only look at the industry today, because that limits to exactly what is present today, on each farm, and within the region. The premise was to build this for the expansion. As the industry expands, the likelihood of impacts increases. This is not viewing impacts of a single farmer, but a regional perspective. The questions posed about this item are understandable, and have been heard. The group is working on this item, and knows this is important to the growers. (BH) If these restrictions are for 5 months during heaviest fouling, this essentially limits innovation of gear. In terms of expansion, this restriction is a problem. (NG) Cannot float any cages with the way “d” is written, for the 6 month period. [Russ Babb (RB)] What if it was MLW, how would that change it? (NG) Then it could be workable, but it has to be in a deep slough. The 6 month window is still the issue as there are times during a 6 month window when all is dry. (LC) I question if there really is data indicating impingement. If there isn’t data to show impingement, then this entire CM can be removed. (DJ) We are using impingement, but the measure goes beyond impingement to cover anything that could interfere with the movement of the crabs to spawning. If we put a wall up, we know that they cannot get through or over. We are trying to determine, what are some reasonable measures that place the racks high enough so they are not interfering, and floating gear located so that it does not fall onto them. We’re trying to find the balance between the wall and allowing movement. At some density this gear will serve as a wall. We are hearing today guidance on how to better frame this balance. (NG) My issue is the 6 month period. You are talking about horseshoe crabs’ ability to get to the beach to spawn, but 6 months of gear restrictions is too long. The horseshoe crabs are not spawning during this entire time. This is also the 6 months when I’m not worrying about ice. I understand your statements, but they should all be followed by “during the spawning season”. (SF) I think you can accommodate it. (DJ) I think his point is valid that we can look at the spawning season and attempt to just encompass the priority time of that season. (SF) My perspective as a legislator, the legislative intent was to protect the resource during the spawning season. For this case, for this species of bird on the endangered species list, everyone who lives in this area knows that there is a season when the horseshoe crab comes up and the birds eat the eggs. You don’t need a study and incredible data points to figure this out. Everyone knows this. The watermen understand they have to respect that season; and they do. We know the time period, everyone knows it. (DJ) I think we may have to separate out some of the restrictions. Some are related to spawning whereas some other measures are more related to impacts to the

developing larvae. [Stephanie Cash (S.Cash)] Add to the request, when looking at data, look for data specifically related to aquaculture gear and horseshoe crabs.

**CM9:** This is the driving plan, from May 1-Sept. 15<sup>th</sup>. This plan is already in place for growers.

**CM10:** This measure is for subtidal aquaculture only. There are measures applicable to both the Northern and Southern Segments (a-d), as well as measures applicable to just the Northern Segment (e) and a set just for the Southern Segment (f). [Steve Carnahan (SC)] My question is for boat access restrictions “b” and “c”, and whether these would also be applicable to boaters within this area. (AW) This consultation is only applicable to structural aquaculture and does not include other activities. (Group) Discussion on boating regulations ensued and was completed when it was noted that anyone causing a “take” of a red knot would be written up, regardless of the user (e.g. a boater speeding through a creek, not bound by this PBA).

(NG) Subtidal aquaculture, does this include someone intertidal that wants to work at high tide when the water is covering the gear? (AW) No, subtidal aquaculture is gear that is always covered by water. This definition is in the glossary. (NG) Does this include the extension on the ADZ? (CT) The extensions are subtidal, if the gear is continuously submerged. (NG) The gear is not always continuously submerged but most of the time. Folks who have the ADZ extension leases, can they work the intertidal and the subtidal area? (AW) We attempted to address those wanted intertidal and subtidal in “f”, southern segment. (NG) If I go out at low tide, float out as the tide comes in, and come in at high tide to limit disturbance to 2 times per visit but get more time maintaining gear, is this allowed? Drag a boat out on ebbing tide, work intertidal until water comes up, then move into a subtidal area and come back on flood tide. (AW) This is a tier 2 question. For the ADZ, you need to express this access plan with BSF so they can include your access within the ADZ application.

Do RK feed at night? (WW) I do not think they tend to in Delaware Bay but may in other parts of the world.

At this time, a meeting break of ten minutes occurred. Prior to the break, Secretary Fisher asked Wendy Walsh if she had any further comments for the group as she had to depart. Wendy noted the USFWS’ appreciation for the USACE and the State agencies working on this process to form a balanced PBA. Secretary Fisher then noted the tanks of the he and the Council for all the USFWS and Wendy have done for the shellfish aquaculture industry since the red knot listing. It was noted that Eric Schrading from USFWS had arrive during the meeting and would remain through to the conclusion should any USFWS specific questions arise.

[Loel Muetter left at this time, still maintained a quorum.]

The next set of measures applies to intertidal aquaculture.

**CM11:** This measure is straight-forward and prohibits the stockpiling of gear in the protected areas. For reference, Figure 2B outlines the Protected Areas. Also, this measure applies from April 15-June 7.

**CM12:** In the growing areas, which will be defined better in the final CM document, there cannot be installation of new gear from the same timeframe of April 15-June 7. This does not apply to maintenance of gear that is already on the site prior to this time. (NG & JB) If gear is damaged during this time, can we replace it? (AW) Yes, that would be maintenance. (DB) This language doesn't seem to allow replacement, suggest adding "replacement" after maintenance.

**CM13:** This conservation measure is similar to the one from the December 2014 recommendations from the USFWS for the 2015 red knot season (informal consultation), except that given the difficulties with locating racks in sloughs, the wording of this measure now states that it is voluntary. The spacing and gear requirements in CM8 are the priority, with placement in sloughs when possible.

**CM14:** This measure was devised to allow for the retrieval of gear after storm events. It allows growers to access the protected areas to retrieve gear, after contacting the NJDEP and USFWS. (NG) During the extended timeframe, there is a greater chance of a storm or extreme weather event, so this process needs to be well defined. This should also state that it is for gear which is "known" to have been displaced from a lease. Sometimes gear moves but the grower may not be readily aware of it. (AW) This is for gear that enters the protected areas, and only during the May 1- June 7 timeframe. It seems a grower would know when gear moves that far onto the beach, but the wording can be changed to include "gear that is known to have moved" or something similar.

**CM15:** This measure is outlining the areal extent of aquaculture within each segment. It is divided to have measures for the Southern Segment and a separate set for the Northern Segment. Subsection "a. Southern Segment" speaks to a total area within the whole region to be used for aquaculture, while "b. Northern Segment" outlines a specific percentage within each lease to be allowed for aquaculture. The total area within the Southern Segment has yet to be defined by the group working on this document, with the placeholder of "XXX" still present in the document. To avoid rushing to make a decision on this critical item, and so as to not place a number in this section and need to change it, the group decided it was best to provide the Draft Conservation Measures document without a number for the total acreage in the South. This item will be defined prior to completion of the PBA.

(LC) In the Southern Segment, it states that expansion can only occur in an ADZ, but I thought that when the regulations changed to allow the ADZ it also allowed for independent leases in this area. (RB) The Area 1 mentioned here, the area below the Clam Line, was originally reserved for traditional shellfish harvest. When the ADZ program was being developed, we needed to change the regulations to allow us (BSF) to place the ADZ south of the Clam Line. The intent of the rule language, and the way the ADZ program has always been operated, was to only allow for state zoned aquaculture within this area. (LC) The rule doesn't state that it has to be an ADZ. (RB) Right, but I highly doubt the Shellfish Councils will approve an independent lease in this area. If someone wanted to try though, they could. Would it be better if we remove "only" from this measure? (LC) Yes, because I don't think it's entirely out of the question and it allows someone to move forward with leasing in this area without the State.

(NG) The ADZ expansion does not make sense in that it has to occur from April 15-June 7. Why would expansion of the ADZ only occur or exist during this timeframe? (DJ) The ADZ expansion priorities listed here show the areas, in order of preference, where the current ADZ4 could be expanded to provide space for growers with the least impact to red knot habitat. So, for instance, the infill between ADZ4a and ADZ4b would be the best since it is in-between the two current areas of use and disturbance.

(DB) Does the area footprint for the Northern Segment apply to the current operations in the north? (AW) No, those two are handled differently. (RB) The two current operations in the north are going to have a meeting with NJDEP and USFWS to determine their permit conditions, which will include the percent coverage.

**CM16:** Conservation Measure 16 is a travel plan during the red knot season. The first paragraph, on the bottom of page 8 is explaining the difference between this travel plan and the one required in CM9. For CM9, the plan is to limit impacts to horseshoe crabs and extends from May 1-September 15. CM16 only applies from May 1- June 7. This means that both CM9 and CM16 apply from May 1- June 7, but after that, from June 8- September 15, only CM 9 applies. A single travel plan may be submitted to satisfy both of these measures. On the next page, this CM is delineated into the Southern Segment and the Northern Segment with separate measures for each segment.

#### ***a. Southern Segment***

(NG) Looking at the Southern Segment, will this prohibit me from floating out to access an intertidal site? It doesn't seem to allow it, but does it effectively prohibit me from doing this? (AW) I think that would be a tier 2 decision, but we can discuss as a group to see if we need to change the language. I cannot specifically answer that question today. (LC) What about allowing access 3 hours before and after low tide? This could allow floating out, which reduces the beach disturbance by floating a boat out to the site before the tide gets too low. This is better than driving during the lower tide level.

(MW) How will the entry points and entering the site be coordinated? I have a southern lease in the ADZ and I use a boat to get out to my site. Will I have to use a single entry point that's farther away from my lease? (AW) There will be specific entry points for the ADZ, but you're not the only one in the southern portion of ADZ4, so there will likely be at least two access points for the ADZ. (NG) Will everyone need to be at the entry points at the same time, and head out to the farms together? This seems ridiculous for the ADZ. (AW) It will need to be coordinated around the same time for access, and everyone will be limited to the timing in this measure. The 5-day schedule will be coordinated so that everyone will only be allowed to access on those days.

#### ***b. Northern Segment***

(Group) This measure is overly restrictive and effectively prohibits aquaculture within this segment. This will move all aquaculture out of the region and could limit future growth of the industry.

(LC) The zero access days in addition to the percent coverage in CM15 seems overly protective. Why couldn't there be access of two days during this time? This is the access that was allowed for some of the locations this year. (NG) The limitation on days here seems like this is trying to close down the Northern Segment. Is this the objective of the zero days access for a month? (SF) These comments seem reasonable, why couldn't a day or two be added to the north? What would that do? (AW) These suggestions and comments can be considered, but since the north is balanced by the south, increasing access in the north may change access for the south. It can be considered by the group developing the BA; I don't know exactly what a change would mean for the BA.

(DB) Do these measures apply to riparian grants? (AW) Yes, this is applicable to any lease or riparian grant within the defined area of the Northern Segment. (DB) Ok, so my question is whether the zero days of access are in effect a "take" of property from the government by removing the owner's access to land. I know riparian grants are different from terrestrial deeded lands, but on land this could be considered a take of private land. (RB) We have reviewed this information, and riparian grants are not exactly the same as other deeded properties. They are subjective to all other rules and permits necessary to conduct aquaculture and so this isn't a take like it would be on land.

***Incentives:*** The remainder of the document contains incentives for following the Conservation Measures just reviewed. These will not be covered at length, but include ADZ lease prioritization and financial assistance programs from NRCS and NJDEP.

(JB) A suggestion for future ADZ leasing, it may be good to provide different sized leases. Maybe have one acre leases in addition to the larger leases so small or experimental folks can try out aquaculture on a smaller space.

(NG) I want the Council to recognize that this is essentially saying that expansion of shellfish aquaculture will only or predominantly occur through the development of ADZs. As a Council, it is our responsibility to review and comment on these items. This has a direct impact on the future of aquaculture in the State.

Secretary Fisher reviewed the agenda items again to ensure the main topics had been covered. At this time, Dave Bushek noted that the Council did not decide on a contact procedure for the subcommittee. A motion was made by Dave Bushek to allow for approval of the subcommittee items via email or conference call of the Council. Motion was seconded by Gef Flimlin, approved by full council, and passed.

The Council moved onto Old Business. Gef Flimlin asked to revisit the Shellfish AMP for NJ. Referencing the July informational meeting agenda and notes, he noted that the Council was going to make a motion to adopt the ECSGA BMP manual as the AMP for NJ and wondered why this could not occur at this meeting. Secretary Fisher asked Monique Purcell to clarify this situation for the Council. Monique Purcell stated that the motion which was to be made in July was to adopt the ECSGA BMP Manual as BMPs for NJ shellfish growers, but it was not to serve

as the AMP since the BMP manual is too broad to serve the role of AMP. Material from the BMP will be used in the AMP; the BMP is a great resource, but it cannot serve the role of AMP. The AMP is in the process of revisions which had to be placed on hold once the red knot consultation process began. The red knot work has become top priority for the NJDA and there has not been time to concurrently work on the AMP.

To complete the process which began in July, a motion was passed through full Council to adopt the ECSGA BMP as the BMP for NJ shellfish growers. The ECSGA BMP Manual will now serve as the standard level of BMP for all shellfish growers within the State and will be used as a key resource in the final development of the Shellfish Aquaculture AMP.

In New Business, Ned Gainé asked if the Food Safety Modernization Act would have any implications for aquaculture and if this item could be addressed. Secretary Fisher stated that it could be on the agenda for the next meeting, if that would address Ned's concern. Ned agreed to move the discussion to the next meeting.

Dale Parsons asked during the public comment on the status of the new rules being developed in the NJDEP Bureau of Marine Water Monitoring. Amanda Wenczel responded that the rules are slated for the NJ Register in November, with an Administrative Order to be issued in the interim between the register and effective date of the rules. There was no definite date for release of the AO, however, it would be sent out to all shellfish growers once it was received.

There were no further comments from the Council or public and the meeting was adjourned at approximately 1:15pm.