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COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DIVISION OF FISHERIES AND WILDLIFE

In the Matter of Take Determination for Surfside Crossing NHESP File No. 12-31035 Nantucket, MA	Docket No. 2018-02-RL

FINAL DECISION
IN THE ADJUDICATION OF THE APPEAL
BY PETITIONER NANTUCKET LAND COUNCIL

I adopt the attached Recommended Final Decision of the Presiding Officer.

A person who has the right to seek judicial review may appeal this Final Decision of the Division to Superior Court pursuant to M.G.L. c30A, s.14 (1). The complaint must be filed in Court within thirty (30) days of receipt of this Final Decision.

Mark S. Tisa

Mark S. Tisa
Director

12/5/19
Date

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF FISH AND GAME
DIVISION OF FISHERIES AND WILDLIFE

In the Matter of	)	
	)	
Take Determination for Surfside Crossing NHESP File No. 12-31035	)	Docket No. 2018-02-RL
	)	
Nantucket, MA	)	

RECOMMENDED FINAL DECISION IN THE ADJUDICATION OF THE APPEAL BY PETITIONER NANTUCKET LAND COUNCIL

I. SUMMARY

This appeal originally arose out of challenges by the Nantucket Select Board ("Select Board"), the Nantucket Land Council, Inc. ("NLC") and thirteen (13) individual petitioners who are residents of Nantucket ("Individual Petitioners" or "13 residents") to a October 19, 2018 determination by the Division of Fisheries and Wildlife (the "Division") that a project proposed by the Proponent, Surfside Crossing LLC ("Surfside Crossing") of sixty (60) single-family homes, ninety-six (96) condominium units, roadways and associated site work (the "Project") on a 13.5 acre property owned by the Proponent in Nantucket, MA (the "Property") will result in a prohibited Take of the Coastal Heathland Cutworm, a moth that is listed as a species of special concern for protection by the Division under M.G.L. c. 131A, the Massachusetts Endangered Species

Act ("MESA"), and 321 CMR 10.00 (the "MESA regulations") (the "Division's Take Determination" or "Take Determination").

The appeals filed by the above Petitioners on November 8, 2018 claimed that the Division's Take Determination was issued in error because the Division ignored credible evidence proffered by the Select Board and the NLC that Surfside Crossing's Project will also impact at least two other state-listed species, the endangered Northern Long-eared Bat ("NLEB") and the New England Blazing Star, a species of special concern. The Division and Surfside Crossing subsequently filed separate Motions to Dismiss the appeals for lack of standing, and with respect to certain claims, for reasons of justiciability. The Petitioners filed written Oppositions to the Motions to Dismiss.

On April 24, 2019, I issued a Recommended Final Decision granting the Division and Surfside Crossing's respective Motions to Dismiss the Petitioners' claim that the Division erred by not determining whether the Project will result in a Take of the New England Blazing Star, and the appeals of the Select Board and the 13 residents for lack of standing. On June 17, 2019, the Division Director adopted my Recommended Final Decision as to these rulings as the Final Decision of the Division.

My April 24, 2019 Recommended Final Decision also denied the Division and Surfside Crossing's respective Motions to Dismiss the NLC's appeal for lack of standing, as well as Surfside Crossing's Motion to Dismiss the NLC's appeal with respect to the NLEB for reasons of justiciability. The Decision therefore included an order establishing as the issue for adjudication in the remaining appeal by the NLC whether the Division properly applied its MESA regulatory criteria at 321 CMR 10.13 and 10.18 when it made its October 19, 2018 determination that the project will only result in a take of the Coastal

Heathland Cutworm. The parties' witnesses thereafter filed prefiled written direct and/or rebuttal testimony, which was followed by the live cross examination of certain of the witnesses.

Based on my evaluation of the evidence in the administrative record for this adjudicatory appeal by the NLC and for the reasons set forth in this Recommended Decision, I have determined that the NLC has not met its burden of showing that the Division erred in issuing its October 19, 2018 Take Determination on the Surfside Crossing Project when the Division concluded that the Project site did not meet the MESA regulatory criteria at 321 CMR 10.13 and 10.18 for mapping it as Priority Habitat for the Northern Long-eared Bat ("NLEB"), an endangered state-listed species, and therefore did not necessitate a review of the Project to determine whether it will cause a take of the NLEB.

II. FACTUAL BACKGROUND AND PROCEDURAL HISTORY

A. The MESA Regulations relevant to this Appeal

Under M.G.L. c. 131A, § 4 and 321 CMR 10.03, the Division has the authority and duty to identify and list those animals and plants in Massachusetts that the Division determines to be endangered, threatened or species of special concern. M.G.L. c. 131A, § 2 prohibits the "Take" of a state-listed species, which is broadly defined in 321 CMR 10.02 to include the killing or harming of animals as well as the disruption of their nesting, breeding, feeding or migratory activity that may result from the modification, degradation, or destruction of "Habitat"[1] of state-listed species. "Priority Habitat" is

[1] "Habitat" is defined in 321 CMR 10.02 to mean an area which, due to its physical or biological features, protects or provides important elements for the growth and survival of plants or animals such as food, shelter, or living space, and includes without limitation, breeding, feeding, resting, migratory, or overwintering areas.

defined in 321 CMR 10.02 to mean the geographic extent of Habitat for state-listed species delineated by the Division within the Commonwealth pursuant to 321 CMR 10.12. As also provided in 321 CMR 10.02, Priority Habitat is delineated by the Division based on records of state-listed species observed within the twenty-five (25) years prior to delineation and contained in its Natural Heritage and Endangered Species Program ("NHESP") database. However, 321 CMR 10.12(2) further requires the Division to delineate Priority Habitat based on the Best Scientific Evidence Available,[2] which includes an examination of individual occurrence records but also involves evaluating the nature and/or significance of such occurrence as it relates to the conservation and protection of the species.

As stated in 321 CMR 10.12(1), Priority Habitats are used by the Division for two purposes: (1) to screen proposed projects and activities that may result in a Take of state-listed species; and (2) to provide guidance to property owners regarding such projects and activities through consultation with the Division. The MESA Regulations at 321 CMR 10.18 require that, except as provided in 321 CMR 10.13 ("Sites or Projects not in Priority Habitat") and 321 CMR 10.14 ("Exemptions"), any project or activity proposed to occur in Priority Habitat must be reviewed by the Division to determine if it will cause a Take of a state-listed species. 321 CMR 10.18 further requires that prior to the commencement of any physical work in Priority Habitat, the record owner of the land where such project or activity will occur shall submit the information listed in 321 CMR 10.20 to the Division. Under the latter regulation, the Division has the discretion to

[2] "Best Scientific Evidence Available" is defined in 321 CMR 10.02 to mean species occurrence records, population estimates, habitat descriptions, assessments, peer reviewed scientific literature, documented consultation with experts and information contained in the NHESP records or other credible scientific reports or species sighting information readily available to the Director.

require additional information beyond that described in the lists set forth therein, including survey(s) for particular state-listed species.

Projects or activities proposed to take place on sites that are not delineated as Priority Habitat are not subject to review by the Division pursuant to 321 CMR 10.18, except as provided in 321 CMR 10.13(1). Relevant to this appeal, 321 CMR 10.13(1)(a)1. provides that if the Division receives new information on the occurrence of an endangered or threatened state-listed species (only) relating to a site that is not located in Priority Habitat, the Division may determine, within thirty (30) days of its receipt of such occurrence information, whether the new state-listed species occurrence meets the criteria for delineation of a Priority Habitat under 321 CMR 10.12, and whether any proposed project or activity at the site shall be reviewed under 321 CMR 10.18. Under 321 CMR 10.13(1)(b)1., the Division may request in its comments to the Massachusetts Environmental Policy Act ("MEPA") Office on an Environmental Notification Form ("ENF"), draft or final Environmental Impact Report ("EIR") or Notice of Project Change ("NPC") filed with the MEPA Office by a proponent of a project or activity that will not be located in Priority Habitat that a survey be done where the Division has credible information indicating the occurrence of a particular endangered or threatened state-listed species or its habitat within the area to be disturbed by the project or activity.

B. Procedural History

On September 20, 2018, the Division received a MESA Project Review Checklist and the required documentation associated with Surfside Crossing's Project, which proposes the construction of sixty (60) single-family homes, ninety-six (96) condominium units, roadways and related site work on a 13.5 acre property in Nantucket,

MA. At the time of the Division's review of Surfside Crossing's proposed Project pursuant to 321 CMR 10.18, the Property was mapped as Priority Habitat by the Division for seven (7) state-listed Lepidoptera (moths and butterflies) species, including the Coastal Heathland Cutworm, a state-listed species of special concern.

By letter to the Division dated September 27, 2018, the Select Board submitted a report by Avalon Consulting Group ("Avalon") that concluded that the Project site also "likely provides high quality habitat" for the NLEB and that "the deer trails and open spots within these habitat types could host populations" of the New England Blazing Star. The Select Board's September 27, 2018 letter requested the Division to review the information provided by Avalon and reevaluate its initial determination regarding the state-listed species present on the Project site. In an email dated October 2, 2019, the Division explained to the Select Board why the above information did not meet the criteria for delineating the Property as Priority Habitat for the additional state-listed species identified by the Select Board. The NLC separately sent a letter to the Division on October 4, 2018 reiterating that the information provided by the Select Board necessitates a review by the Division to determine the Project's impacts to the NLEB and other state-listed species.

The appeals filed by the Select Board, the NLC and the 13 residents on November 8, 2018, asserted that the Division's Take Determination was issued in error because the Division ignored credible evidence proffered by the Select Board and the NLC that Surfside Crossing's Project will also impact the NLEB and the New England Blazing Star, but did not require the Proponent to conduct additional surveys to determine their presence on the Project site.

As the Presiding Officer for this appeal, I conducted a Prehearing Conference ("PHC") on January 24, 2019 with counsel for the Petitioners, the Division and Surfside Crossing. The Petitioners confirmed that their position is that the information provided to the Division prior to making its Take Determination warranted additional surveys and shows that the Project will cause a Take of the NLEB and the New England Blazing Star. The Division and Surfside Crossing both identified the standing of the Petitioners as a threshold issue for adjudication. Prior to the PHC, on January 16, 2019, the Division had filed a Motion to Dismiss the appeals of all three Petitioners due to their lack of standing. At the PHC, I granted a request by counsel for Surfside Crossing to file its own motion to dismiss the appeals of these Petitioners for lack of standing, which it did on January 28, 2019. The Select Board and the NLC filed their respective Oppositions to the Motions on March 4, 2019.

On April 24, 2019, I issued a Recommended Final Decision granting the Division and Surfside Crossing's respective Motions to Dismiss the Petitioners' claim that the Division erred by not determining whether the Project will result in a Take of the New England Blazing Star, and the appeals of the Select Board and the 13 residents for lack of standing. On June 17, 2019, the Division Director adopted my Recommended Final Decision as to these rulings as the Final Decision of the Division.[3]

My April 24, 2019 Recommended Final Decision also denied the Division and Surfside Crossing's respective Motions to Dismiss the NLC's appeal for lack of standing, as well as Surfside Crossing's Motion to Dismiss the NLC's appeal with respect to the

[3] The underlying administrative record provided to the Division Director for his review of my April 24, 2019 Recommended Final Decision included all of the parties' filings related to the issue of the petitioners' respective standing to appeal and the justiciability of certain of their claims.

NLEB for reasons of justiciability. The Decision therefore included an order establishing as the issue for adjudication whether the Division properly applied its regulatory criteria at 321 CMR 10.13 and 10.18 when it made its October 19, 2018 determination that the project will only result in a take of the Coastal Heathland Cutworm, and not any other state-listed species, including the Northern Long-eared Bat ("NLEB"). The schedule for adjudication that I thereafter established on May 10, 2019 provided for the submission of prefiled written direct and rebuttal testimony[4] by the parties' witnesses, followed by the live hearing portion of the adjudication that is limited to the cross examination of the parties' witnesses based on their prefiled testimony.

On May 17, 2019 the NLC filed a Motion for Access to the Project Site, requesting that I order Surfside Crossing to allow the NLC's experts to access the Project Site for the purpose of surveying the property for evidence of the NLEB. The Division and Surfside Crossing both filed written Oppositions to the Motion. In a ruling dated May 24, 2019, I denied the NLC's Motion for Access for the reason that any such new NLEB occurrence information would not be determinative of the issue for adjudication, which centers on whether the Division properly applied its regulatory criteria at 321 CMR 10.13 with respect to the NLEB information before it at the time of its October 19, 2018 Take Determination.

Consistent with the Schedule for Adjudication I established on May 10, 2019, the Division and the NLC filed the PDT of their witnesses on June 18, 2018. Specifically, the NLC filed PDT from two witnesses: (1) Danielle O'Dell, an Ecologist for the Nantucket Conservation Foundation and NLEB researcher; and (2) Emily Molden, the

[4] In this Recommended Decision, I hereinafter refer to a witness' prefiled direct testimony as "PDT" and their prefiled rebuttal testimony as "PRT".

Executive Director of the NLC. The Division filed PDT from two witnesses: (1) Thomas W. French, Ph.D, who at the time of the Division's Take Determination was the Assistant Director of the Division responsible for the management of the Natural Heritage and Endangered Species Program ("NHESP") that administers the MESA regulatory program; and (2) Jessie E. Leddick, Chief of Regulatory Review in the NHESP. The June 18, 2019 filing by Surfside Crossing stated that it would not be submitting PDT, but instead had retained Meghan Lout, a Certified Wildlife Biologist, to review the PDT of the witnesses of the NLC and the Division and to file prefiled written rebuttal testimony ("PRT") in accordance with the July 18, 2019 deadline in the schedule for adjudication. Surfside Crossing also confirmed that its witness, Ms. Lout, will be available for cross-examination at the hearing on August 6, 2019.

The parties filed the PRT of their respective witnesses on July 18, 2019.

On July 22, 2019, the NLC filed a "Motion to Strike Portions of So-Called Pre-Filed 'Rebuttal' Testimony of Megan [sic] Lout." As grounds for its Motion to Strike, the NLC stated that Ms. Lout's pre-filed testimony is not "rebuttal" testimony, but rather is direct testimony that was due to be submitted on or before June 18, 2019. The NLC points out that the pre-filed testimony of all witnesses has been subject to rebuttal testimony except Ms. Lout's. The NLC further contended that by failing to submit Ms. Lout's testimony when it was due and labeling it as "rebuttal" testimony, Surfside Crossing has deprived the NLC of the opportunity of filing testimony rebutting Ms. Lout's testimony and been put at a "decided and unfair advantage" in this adjudication. Accordingly, the NLC moved to strike most of the substantive content of Ms. Lout's PRT, i.e., the entire or portions of following numbered paragraphs (including any

corresponding exhibits referenced therein) - 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 30, 31, 32, 33, 34, 35, 36, 37, and 38 – and requested that such testimony not be considered by the Presiding Officer or included within the record of these proceedings.

On July 29, 2019, Surfside Crossing filed an Opposition to the NLC's Motion to Strike. As grounds for its Opposition, Surfside Crossing stated that the testimony of Ms. Lout is rebuttal to the PDT of the NLC and its witnesses; is intended to respond to the actual testimony of the NLC; is consistent with the rules for adjudicatory proceedings and the Administrative Procedures Act; and will assist the Presiding Officer in his role as the trier of fact. Concluding that Ms. Lout's PRT neither violates the rules for adjudicatory hearings nor causes prejudice to the NLC, Surfside Crossing requested that I deny the NLC's Motion to Strike.

In a Ruling dated July 31, 2019, I granted, in part, the NLC's Motion to Strike ¶¶ 17 – 20 and the sixth sentence in ¶ 31of Ms. Lout's PRT. Consistent with my May 24, 2019 Ruling denying the NLC's Motion for Access to the Project site, I determined that Ms. Lout's observations and related opinions derived from her July 2019 visit to the Project site discussed in the above portions of her PRT are not relevant evidence that would assist in my adjudication of the specific issue in this appeal. As to the other entire or portions of paragraphs in Ms. Lout's PRT identified in the NLC's Motion to Strike, I determined they are reasonably within the scope of PRT for the purposes of this appeal and would not prejudice the NLC in light of its ability to cross examine Ms. Lout on her testimony. Consequently, I denied the NLC's Motion to Strike these portions of Ms. Lout's PRT.

The cross examination of selected witnesses of the parties occurred at the hearing on August 6, 2019.[5] With the agreement of the parties, I allowed three (3) additional exhibits associated with the NLC's cross examination of the Division's witness, Jessie Leddick, to be entered into evidence.

III. ISSUE FOR ADJUDICATION

The single issue for adjudication in this appeal is as follows:

"Whether the Division properly applied its regulatory criteria at 321 CMR 10.13 and 10.18 when it made its October 19, 2018 Take Determination that the project will only result in a take of the Coastal Heathland Cutworm."

IV. FINDINGS OF FACT

Based on all of the evidence presented, reasonable inferences drawn from the evidence, and my assessment of the credibility of the witnesses, the relevance of their qualifications and the specificity of their testimony and supporting evidence, I make the following findings of fact under the topic headings below. Additional findings of fact are included in Section V. (Legal Analysis and Conclusions) of this Recommended Decision, as necessary.

A. Summary of the NLEB Natural History

1. Five (5) bat species, including the NLEB, have been listed by the Division for protection under MESA. *French PDT, ¶ 20.* In Massachusetts, all five species generally hibernate in caves, abandoned mines, and other cave-like structures such as aqueducts

[5] The NLC cross examined one of the Division's witnesses, Mr. Leddick, and Surfside Crossing's witness, Ms. Lout. The Division cross examined both of the NLC's witnesses, Ms. O'Dell and Ms. Molden, and Surfside Crossing's witness, Ms. Lout. Surfside Crossing cross examined both of the NLC's witnesses, Ms. O'Dell and Ms. Molden. In this Recommended Decision, I refer to a witness' testimony on cross examination as "Cross."

and roost in the summer on trees, rock crevices, buildings and other human-made structures. *Id.*

2. The NLEB is one of the small insect eating bats in the genus Myotis that has historically occurred in Massachusetts. *French PDT, ¶ 26.* A medium sized bat with long ears, the NLEB has a body length of 3 to 3.7 inches and a wing span of 9 to 10 inches, with pale-brown fur on its underside and darker brown fur on its back. *French PDT, ¶ 25.*

3. The NLEB has an extensive geographic range extending from northern Florida to the southern Northwest Territories in Canada, and across this range occupies a wide diversity of forested habitat types for summer foraging and roosting, including Pitch Pine oak-hickory, northern hardwoods, pine-dominated forests, and boreal forest. *French PDT, ¶ 98.* Thus, the NLEB is considered to be a habitat generalist because of the wide range of habitat types it is capable of using; its plasticity is an essential trait that allows NLEB to successfully occupy such a large and varied geographic range. *French PDT, ¶¶ 32, 76 and Exhibit 4 (Federal Register Notice of 4(d) Rule for the Northern Long-eared Bat, Vol. 81, No. 9, Thursday, January 14, 2016) at 1903.* Moreover, because the NLEB is highly plastic in their use of habitats, they will use human-made structures for day-roosts, maternity roosts, and hibernacula. *French PDT, ¶ 96; see also ¶ 29.*

4. The NLEB hibernate singly or in small groups of up to about 10-15 but tend to be generally solitary while foraging and roosting during the summer, except when females are caring for their young. *French PDT, ¶ 27.*

5. The availability of winter hibernation sites, known as hibernacula, is considered the primary driver of NLEB distribution across a wide geographic area. *French PDT, ¶*

28. Nearly all NLEBs across their range hibernate in caves and cave-like structures, and individual bats show a high level of faithfulness to a hibernation site consistently returning in successive years to the same location. *French PDT, ¶¶ 28-29.* In addition to these caves and cave-like structures, NLEBs have been documented over-wintering in human-made structures. *French PDT, ¶ 29.*

6. The NLEB also use human-made structures for day roosting, as documented in studies showing that on Martha's Vineyard, 36% of NLEB roost sites were on buildings; on Cape Cod, NLEB primarily used human structures for roosting. *French PDT, ¶ 33 and Exhibit 2 (Bat Use of an Island Off the Coast of Massachusetts, Dowling and O'Dell (2018, Northeastern Naturalist, Vol. 25, No.3) at 376; see also Exhibit 2 to O'Dell PDT.*

7. While the NLEB is generally solitary, aggregations of females (with their single young) come together during the breeding season in groups of typically 10-30 individuals. *French PDT, ¶ 36.* Individual female NLEBs carry their young to and from different changing groups of females, interspersed with periods of roosting singly in what has been termed a fission-fusion pattern. *Id.* This constant dynamic of group reorganization continues throughout the period in which the young are raised. *Id.* As a result, each individual adult female will use multiple maternity roost sites each year, and if followed, will be responsible for the documentation of multiple known active maternity roost trees as well as other maternity roosts on multiple human-made structures. *Id.*

8. Female NLEBs generally give birth in late May and early June, and their young are not able to fly for approximately 21 days after birth. *French PDT, ¶ 37.* Consequently, the most vulnerable time for NLEB pups is during the months of June and

July, which the Division factors in when reviewing proposed projects or activities in Priority Habitat. *Id.*; *see also* ¶ *77.*

B. The Impact of White-Nose Syndrome on the NLEB

9. White-nose Syndrome ("WNS") is a fungal disease affecting bats that was first detected in 2006 in east central New York and has since resulted in the first sustained epizootic illness in North America affecting bats in recorded history. *French PDT,* ¶ *46.* The fungus responsible for this disease is a pathogen in the genus *Pseudogymnoasucs destructans* (*Pd*). *French PDT,* ¶ *47; O'Dell PRT,* ¶ *13.* The WNS fungus is known to spread in natural hibernacula consisting of caves and cave-like structures. *O'Dell PDT,* ¶ *23.* It grows on and into the deeper layers of the bat's skin, causing enough irritation that the bat is continually aroused from winter hibernation, thereby dehydrating the bat and depleting its fat stores. *French PDT,* ¶ *48.* The initial mortality of NLEB at natural hibernacula surveyed in central and western Massachusetts was nearly 100%. *French PDT,* ¶ *51.*

10. Because of the impact of WNS on the NLEB population, most but not all of the individual NLEB occurrence records in Massachusetts over the past 10 years have come from the coast, from Newburyport south through the Blue Hills to Cape Cod and the islands of Martha's Vineyard and Nantucket. *French PDT,* ¶ *51.* While logically NLEB using small coastal hibernation sites might be somewhat isolated from infected bats using large caves and mines farther west and therefore not exposed to the fungus, WNS has been subsequently documented on Cape Cod in 2013 and on Martha's Vineyard in 2017 where a previously tagged NLEB found dead tested positive for WNS. *French PDT,* ¶¶ *51, 53.*

11. On Nantucket, out of 41 swabs collected directly from captured NLEB between 2016 and the fall 2018 only one bat returned positive for the presence of *Pd*. *O'Dell PRT, ¶ 13.* There is no evidence of progression to WNS on NLEB on Nantucket at this time. *Id.* Additionally, the one known hibernacula in a crawl space on Nantucket has been swabbed annually to test for *Pd* and all these samples have returned negative. *O'Dell PRT, ¶ 14.* The presence of a single bat with *Pd* indicates that bats on Nantucket are clearly exposed to the fungus but so far are not progressing to WNS. *O'Dell PRT, ¶ 15.* However, the fact that widespread mortalities from WNS have not yet been documented on Nantucket does not mean that Nantucket is a refuge from the disease, given that an NLEB mortality from WNS was documented on Martha's Vineyard in 2017 and, as noted above, *Pd* has already been documented on a bat on Nantucket. *French PRT, ¶¶ 94, 53-54.*

12. In response to the sudden and significant population decline experienced by the cave bats in Massachusetts from WNS, the Division listed the NLEB, Little Brown Bat, Small-footed Bat, and Tri-colored Bat as endangered state-listed species under MESA on February 12, 2012. *French PDT, ¶ 59.*

C. The Presence of NLEB on Nantucket

13. Most of what is known of the presence of NLEBs on Nantucket arises out of the research conducted from 2015-2018 by Dr. Zara Dowling and the NLC's expert witness, Danielle O'Dell. *French PDT, ¶ 39.* The Division issued the necessary scientific collection permits to allow these researchers to conduct their 2015-2016 field work in accordance with MESA, which included acoustic surveys, mist net captures, radio tracking and visual observations. *French PDT, ¶ 40.* Dowling and O'Dell published a

summary of their work from 2015-2016 in 2018. *Bat Use of an Island Off the Coast of Massachusetts, Dowling and O'Dell (2018, Northeastern Naturalist, Vol. 25, No.3), Exhibit 2 to O'Dell PDT, referenced in ¶ 13; Exhibit 2 to French PDT.*

14. As the first systematic inventory of bats on Nantucket, the work undertaken by Dowling and O'Dell from 2015-2016 resulted in the capture of thirteen (13) NLEBs, nine (9) by mist net and four (4) by hand. *French PDT, ¶ 41 and Exhibit 2 at 375.* The four (4) NLEBs captured by hand were among five NLEBs found hibernating in a crawl space. *Id.* Emergence counts at two known active maternity roost trees in large pitch pines documented eleven (11) and nine (9) NLEBs respectively. *French PDT, ¶ 42; see also Exhibit 2 at 375-376.* Additionally, when conducting spring and fall mist-netting to capture and band NLEB, swabs were collected to detect the presence of *Pd*, the fungus that causes WNS. *O'Dell PDT, ¶ 14.*

15. As a condition of their scientific collection permit, Dowling and O'Dell were required to submit reports to the Division detailing how many bats of each species were captured, handled, banded, and/or tracked with attached radio transmitters. *French PDT, ¶ 40 and Exhibit 3.* Ms. Dowling submitted two such supplemental reports to the Division on September 26, 2018. *Leddick PDT, ¶ 35 and Exhibit 4 (containing both reports: "An Exploratory Study of Northern Long-eared Bats on Nantucket," and "Roosting Habits of Northern Long-eared Bats on Nantucket.")* These reports summarized the NLEB survey work conducted by Ms. Dowling in 2016 and 2017 respectively. *Leddick Cross, p. 31, lines 16-18.*

16. Between 2015-2016, acoustic detectors were deployed by Dowling and O'Dell at 15 locations on Nantucket to listen for and record bat calls to inventory bat species and

identify seasonal activity patterns. *French PDT, ¶ 42 and Exhibit 2 at 363 and Figure 1 at 364.* The acoustic surveys detected the widespread occurrence of NLEB in 8 of 15 locations. *Exhibit 2 to both O'Dell PDT and French PDT, at 377.* Two of these locations, Ram Pasture and Lost Farm, had consistently high detection rates of NLEB and were located adjacent to mature Pitch Pine stands, but NLEB were also detected in areas of Scrub Oak (approximately 20 feet tall). *Id.* However, because the acoustic sampling was somewhat opportunistic and focused on areas deemed potential bat habitat, the study did not include acoustic surveying for the presence in more urban areas. *Id.*

17. At least some NLEBs are able to survive the winter in crawl spaces under houses, though it is not known if all of the NLEBs remain on Nantucket or if some portion leaves the island every fall. *French PDT, ¶ 45.*

18. In addition, acoustic detectors were placed by O'Dell at properties adjacent to the Surfside Crossing Project site in 2017 and 2018 in habitat and vegetation communities types that are similar to those present on the Project site. *O'Dell PDT, ¶ 17 and Exhibit 3 (showing these acoustic detector locations).* NLEB were detected at every one of these locations, and the ones surrounded by yellow circles displayed on Exhibit 3 to Ms. O'Dell's PDT detected significantly higher levels of activity by NLEB ranging from 50 to 100 calls per night, on nights with suitable weather conditions. *Id.*

D. The Division's Delineation of Priority Habitat for the NLEB

19. As a general matter, Priority Habitat is delineated by the Division through a two-step process: (1) the Division needs to have an occurrence record, which is a verified observation of an individual state-listed species that is less than twenty-five (25) years old; and (2) the Division performs a subsequent evaluation of the context and

significance of the occurrence record based the Best Scientific Evidence Available, which also involves evaluating the nature and/or significance of such occurrence as it relates to the conservation and protection of the species. *See 321 CMR 10.02 and 10.12(2); French PDT, ¶ 66; Leddick PDT, ¶¶ 19 and 20.* In short, in order for the Division to delineate Priority Habitat for a state-listed species, the Division must have an occurrence record and then determine that the occurrence meets the criteria for delineating Priority Habitat consistent with the Division's mapping guidelines (discussed in ¶ 20 below). *Leddick PRT, ¶ 13.*

20. Pursuant to its authority under 321 CMR 10.12(5), the Division has established criteria for its acceptance of state-listed species occurrence records, the purpose of which is to ensure that the NHESP database meets the highest standards of data integrity and that only verified occurrence records may be used to delineate Priority Habitats. *Leddick PDT, ¶ 22.* As required by 321 CMR 10.12(3), the Division has also established habitat mapping guidelines for each state-listed species that identify important habitat features, describe the methodology by which such Priority Habitats are delineated, and set forth the rationale, references and citations for the Best Scientific Evidence Available that support the mapping guidelines for a particular state-listed species. *Leddick PDT, ¶ 23.*

21. Projects or activities proposed to take place on sites that are not delineated as Priority Habitat are not subject to review by the Division pursuant to 321 CMR 10.18, except as provided in 321 CMR 10.13(1). Relevant to this appeal, 321 CMR 10.13(1)(a)1. provides that if the Division receives new information on the occurrence of an endangered or threatened state-listed species (only) relating to a site that is not located in Priority Habitat, the Division may determine, within thirty (30) days of its receipt of

such occurrence information, whether the new state-listed species occurrence meets the criteria for delineation of a Priority Habitat under 321 CMR 10.12, and whether any proposed project or activity at the site shall be reviewed under 321 CMR 10.18. *French PDT, ¶ 68; Leddick PDT, ¶¶ 27 and 28; Leddick PRT, ¶¶ 10 and 11.*

22. Relevant as background for the Division's mapping of Priority Habitat for the NLEB, the Division's 2012 listing of the NLEB as an endangered species under MESA preceded the NLEB's listing under the federal Endangered Species Act ("ESA") as a threatened species by almost three years. *French PDT, ¶ 70.* Taking into consideration the Best Scientific Evidence Available and the habitat features critical to the survival of the NLEB, the Division initially mapped Priority Habitat for the NLEB based on known use of a cave or cave-like structures for hibernation by ten (10) or more NLEBs within the preceding twenty-five (25) years. *French PDT, ¶ 72.* The Division also began to develop working habitat mapping guidelines that contemplated a 100 foot buffer zone around these known hibernacula. *Id.*

23. The United States Fish and Wildlife Service ("USFWS") thereafter promulgated what is known as a "4(d) Rule,"[6] on February 16, 2016. *French PDT, ¶ 74.* The federal 4(d) Rule established requirements for the protection of the NLEB that were more stringent than those envisioned by the Division in 2012 when it listed and mapped Priority Habitat for the NLEB pursuant to MESA. *Id.*

24. In developing its 4(d) Rule, the USFWS determined that in areas impacted by WNS, the most important conservation actions for the NLEB are to protect bats in

[6] Under section 4(d) of the ESA, the USFWS may issue regulations for any threatened species that set forth measures that are necessary and advisable to provide for the conservation of such species. *French PDT, ¶ 75 and Exhibit 4 at 1900.*

hibernacula and maternity roost trees. *French PDT, ¶ 76, Exhibit 4 at 1902.* The USFWS further noted that because of the NLEB's demonstrated plasticity in its environment, the availability of forested habitat does not now, nor will it likely in the future, limit the conservation of the NLEB. *French PDT, ¶ 76, Exhibit 4 at 1903-1904, 1909.* Accordingly, the USFWS' final 4(d) Rule for the NLEB at 50 CFR 17.40(o) prohibits the cutting of trees within .25 miles of a known hibernaculum, cutting or destroying an occupied (or unoccupied) maternity roost tree, including any other trees within a 150 foot radius from the maternity roost tree, during the NLEB pup season (June 1 through July 31). *French PDT, ¶ 76; 50 CFR § 17.40(o), Exhibit 4 at 1921.*

25. A known occupied maternity roost tree is defined in the 4(d) Rule as a tree that has had at least one female NLEB or juvenile bat tracked to it, or the presence of a female or juvenile bat that is known as a result of other methods. *French PDT, ¶ 77, Exhibit 4 at 1911.* Once documented, a tree will continue to be considered a known occupied maternity roost tree if the tree and surrounding habitat remain suitable for NLEBs. *Id.* Preserving known maternity roost trees is only necessary to protect the pups from the risk of direct mortality during the period when they are not yet able to fly, which is from June through July. *Id.* Consequently, the 4(d) Rule does not prohibit the removal of these trees outside of the pupping season. *Id.*

26. Known hibernacula are defined in the 4(d) Rule as locations where NLEBs have been detected during hibernation or at the entrance during fall swarming or spring emergence. *French PDT, ¶ 78; Exhibit 4 at 1902, 1909.* However, the 4(d) Rule separately exempts from the take prohibition the removal of NLEBs from "human structures" which are defined as houses, garages, barns, sheds, and other buildings

designed for human entry. *French PDT, ¶ 78; Exhibit 4 at 1901, 1921.* In mapping Priority Habitat for bat hibernacula, the Division has always mapped any natural geological feature and any cave-like human-made structure, such as a mine, aqueduct or tunnel, but not buildings or bridges used as maternity roosts. *French PDT, ¶ 78.* The Division does not map Priority Habitat for the occurrence of NLEB roosting on or hibernating within human-made structures (houses, buildings, bridges or towers) because the Division has no control over the maintenance, management, or future availability of these structures. *French PDT, ¶ 84.* For these reasons, the Division has determined that human-made structures such as building, bridges or towers are not the types of locations that provide quality habitat features necessary for the long-term conservation and protection of the species as required by 321 CMR 10.12. *Id.*

27. Because the 4(d) Rule established more stringent requirements for the protection of NLEB habitat than those envisioned by the Division when it listed the NLEB under MESA in 2012, the Division subsequently modified its Priority Habitat mapping guidelines to ensure compliance with the federal requirements. *French PDT, ¶ 79 and Exhibit 5 (the Division's Priority Habitat Mapping Guidelines for the NLEB).* The Division also determined that the 4(d) Rule protections adequately guard against the disruption of NLEB habitat that would rise to a Take of the NLEB under MESA. *Id.*

28. As set forth in the Division's Priority Habitat Mapping Guidelines, the Division maps Priority Habitat for the NLEB within .25 miles of known winter hibernacula (caves or cave-like structures such as abandoned mines) and within 150 feet of known maternity roost trees. *Exhibit 5 to French PDT; Leddick PRT, ¶ 14.*

29. The Division's criteria for acceptance of NLEB hibernacula or maternity roost tree occurrence records requires submittal of photographs, in-hand identification by an expert (e.g., by capturing the bat in a mist net), or radio-telemetry of identified individual bats showing the actual use of a hibernacula or maternity roost tree at a specific location. *Leddick PRT, ¶ 15; see also Leddick Cross, p. 71, lines 5-10; p.73, lines 21-24; p. 74, lines 1-6.*

30. In comparison, verifying the presence of bat species in a particular area by acoustic data is difficult and has a significant level of error. *Leddick PDT, ¶ 51; Leddick PRT at ¶16; see also O'Dell PRT, ¶10.* Acoustic bat surveys use microphones to listen for the high frequency forging calls of bats. *French PDT, ¶ 89.* Some species of bats can be identified with a reasonable level of certainty from their forging calls while others, including the species of Myotis, can be fairly reliably identified to the group but distinguishing among different species is more difficult. *Id.* As bat species travel great distances to forage within a single active season, acoustic data does not provide definitive identification of the location and actual use of a hibernaculum or maternity roost tree by NLEB. *Leddick PDT, ¶ 52; French PDT, ¶ 88; see also Leddick Cross, p. 71, lines 5-10.* Instead, acoustic data shows the potential presence of a bat or group of bats in an area at a particular time of year. *Leddick PDT, ¶ 52; French PDT, ¶ 88.* For these reasons, while the Division will archive acoustic survey data in the NHESP database as a future lead, it is not used to map Priority Habitat because it does not rise to being a verified observation of an individual bat. *Id.*

E. The Division's October 19, 2018 Take Determination

Surfside Crossing's Project Filing with the Division pursuant to 321 CMR 10.18

31. On September 20, 2018, the Division received a MESA Project Review Checklist and the required documentation associated with Surfside Crossing's Project, which proposes the construction of sixty (60) single-family homes, ninety-six (96) condominium units, roadways and related site work on a 13.5 acre property in Nantucket, MA (the "Property"). *Leddick PDT, ¶ 29 and Exhibit 2.*

32. At the time of the Division's review of Surfside Crossing's proposed Project pursuant to 321 CMR 10.18, the Property was mapped as Priority Habitat by the Division for seven (7) state-listed Lepidoptera (moths and butterflies) species, including the Coastal Heathland Cutworm, a state-listed species of special concern. *Leddick PDT, ¶ 31.* The Property's status as Priority Habitat for seven state-listed Lepidoptera species is shown in the current 14th Edition of the Massachusetts Natural Heritage Atlas (the "Atlas") (effective August 1, 2017), which was also the case in the prior 13th Edition of the Atlas (effective October 1, 2008). *Leddick PDT, ¶ 32.* The Atlas serves as the Division's authoritative delineation of the boundaries of Priority Habitats in the Commonwealth. *Leddick PDT, ¶ 24 and 321 CMR 10.17.*

Submittal of Information by or on behalf of the Select Board or the NLC in advance of the Division's Take Determination

33. In a letter dated September 27, 2018, the Select Board submitted information documenting observations of the New England Blazing Star, a state-listed plant species of special concern, on another parcel located in the vicinity of the Property. *Leddick PDT, ¶ 33 and Exhibit 3 (the Select Board's letter submitting the September 21, 2017 letter from Avalon Consulting and attachments thereto).* The Select Board indicated that

the Property may provide suitable habitat for the New England Blazing Star as well as another state-listed plant species of special concern, Sandplain Blue-eyed Grass. *Id.*

34. The Select Board further indicated that the Property may also provide suitable habitat for the NLEB based on the 2015-2016 research conducted by Dowling and O'Dell and published in *Northeastern Naturalist* in 2018 (also referred to in the Division's testimony and herein as the "Dowling and O'Dell study"). *Leddick PDT, ¶ 34 and Exhibit 3.* The Select Board's letter also stated that in the week preceding its letter, Ms. O'Dell had placed acoustic bat detectors on Town property and Nantucket Land Bank property "very close" to the Surfside Crossing Project site, and preliminary results from two evenings of observation indicated that NLEB were active at these two nearby locations. *Exhibit 3 to Leddick PDT.* A plan showing the two locations where the acoustic detectors were placed by Ms. O'Dell is Figure 1 attached to the September 21, 2018 Avalon Consulting letter. *Id.* Ms. O'Dell separately testified that these two acoustic detectors were deployed from September 19, 2018 through October 2, 2018, documenting high levels of activity of NLEB over most nights with suitable weather conditions. *O'Dell PDT, ¶ 16 and Exhibit 1; ¶ 17 and Exhibit 3 (displayed thereon as yellow and green dots); see also O'Dell PRT, ¶ 9.* Ms. O'Dell testified on cross examination that she did not thereafter submit the acoustic data collected by the two detectors from September 19, 2018 through October 2, 2018 to the Division. *O'Dell Cross, p. 254, lines 5-14.*

35. Other acoustic detectors deployed as part of a larger island-wide survey in the summer of 2017 and 2018 documented the presence of NLEB at each of those locations as well. *O'Dell PDT, ¶ 17 and Exhibit 3 (displayed thereon as red and pink dots).* The

locations surrounded by yellow circles displayed on Exhibit 3 to Ms. O'Dell's PDT detected significantly higher levels of activity by NLEB ranging from 50 to 100 calls per night, on nights with suitable weather conditions. *Id.*

36. In an email dated September 24, 2018, a Nantucket resident named Meghan Perry reported to the Division that she had assisted with acoustic studies conducted from an abutter's property within 300 feet of the Project site that documented the presence of NLEB. *Leddick PDT, ¶ 57 and Exhibit 9; French PDT, ¶ 87 and Exhibit 9.* As discussed in Finding of Fact No. 55, Ms. Perry thereafter submitted an observation report for the above referenced acoustic monitoring of NLEB to the Division through its Vernal Pool and Rare Species Information System ("VPRS") on October 26, 2018, after the Division's issuance of its Take Determination. *Id.*

37. On September 26, 2018, Zara Dowling separately provided the Division with a copy of the Dowling and O'Dell study as well as the two supplemental reports summarizing her NLEB research on Nantucket in 2016 and 2017. *Leddick PDT, ¶ 35 and Exhibits 3 and 4.*

38. Consistent with Ms. O'Dell's testimony, the record also shows that Zara Dowling previously submitted observations of NLEB in 2016 and 2017 to the Division through VPRS. *O'Dell PRT, ¶ 3.* A summary of the full scope of Ms. Dowling's submittals through VPRS is set forth in a December 3, 2018 email from Tara Huguenin, a Conservation Data Specialist in the NHESP, to Danielle O'Dell. *Leddick Cross Examination Exhibit #2; see also Leddick PRT, ¶ 33 and Exhibit 1 regarding the 5 NLEB observations submitted by Ms. Dowling through VPRS on January 29, 2018.*

39. In response to the information submitted to the Division regarding the potential presence of other state-listed species on the Project site, the Select Board requested the Division to reevaluate its determination that the Property only provided habitat for state-listed Lepidoptera species, and that the Division review Surfside Crossing's Project for its impacts to NLEB and the New England Blazing Star. *Leddick PDT, ¶ 36.*

The Division's October 2, 2018 Response to the Select Board

40. Jessie Leddick, Chief of Regulatory Review in the Division's NHESP, reviewed the above summarized information and consulted with Dr. Thomas French, the Assistant Director of the Division in charge of the NHESP, and responded to the Select Board in an email dated October 2, 2018. *Leddick PDT, ¶ 40 and Exhibit 5; French PDT, ¶ 86 and Exhibit 8.*

41. In summary, Mr. Leddick's October 2, 2018 response confirmed for the Select Board that because Surfside Crossing's Property did not meet the MESA regulatory criteria for mapping new Priority Habitat for the New England Blazing Star, Sandplain Blue-eyed Grass or the NLEB, the Division would not review the proposed Project relative to these state-listed species. *Exhibit 5 to Leddick PDT.* Noting that WNS is the reason that the NLEB was listed under the ESA and MESA, Mr. Leddick explained that the Division reviews projects or activities for their impacts to NLEB consistent with the USFWS' 4(d) Rule – i.e., when they are within .25 miles of known winter hibernacula (caves and mines) and within 150 feet of known roost trees. *Id.* He further noted that the 4(d) Rule does not apply to hibernacula or roosts that occur in structures, where NLEB overwinter on Nantucket. *Id.* His email stated that the Division had not received "any verified observations" of the NLEB within 150 feet of the Surfside Crossing Property and

that there were no known winter hibernacula within .25 miles of the Property, or elsewhere on Nantucket. *Id.* The Division therefore determined that the Property does not meet the criteria for mapping as Priority Habitat for the NLEB, and that the Division cannot review the Project or require Surfside Crossing to conduct a survey for this species. *Id.*

42. Mr. Leddick's October 2, 2018 response to the Select Board further stated that "based on recent verbal consultations with the proponent's representatives, it is our understanding that the proponent is willing to proactively include this time of year restriction [no tree removal between June 1st through July 31st] as part of any future, permitted projects or actions that may occur on the property." *Exhibit 5 to Leddick PDT.* However, neither the prefiled testimony of the Division's witnesses nor the testimony of Mr. Leddick on cross examination documented or confirmed that Surfside Crossing had thereafter memorialized in writing its commitment to abide by the above TOY restriction. *See, e.g., Leddick Cross, pp. 106-108; pp. 118-120, 123.* Consequently, the record only supports a finding that, consistent with the Division's October 2, 2018 email response to the Select Board, Surfside Crossing's commitment not to remove any trees on the Property during the NLEB pup season was verbal in nature only. *Leddick Cross, pp. 121, 123.*

43. Mr. Leddick testified on cross examination, however, that in his experience verbal commitments are fulfilled by project proponents and "end up being captured in the review of project…[and] then incorporated into project permitting." *Leddick Cross, p. 134, lines 20-21, p. 135, lines 15-18.*

44. Regarding the Division's October 2, 2018 response that it cannot require Surfside Crossing to conduct a survey for NLEB, the MESA regulations provide one situation where the Division may *require* a survey, and one situation where it may *request* a survey. *Leddick PRT, ¶ 23.* Where a property is mapped as Priority Habitat for a particular state-listed species, the Division has authority under 321 CMR 10.20 to require a project proponent who has filed for MESA review pursuant to 321 CMR 10.18 to conduct a survey for that state-listed species. *Leddick PRT, ¶ 24.* When the property is not already delineated as Priority Habitat for the species in question, the Division has authority under 321 CMR 10.13(1)(b)1 to request in its comments on an ENF, draft or final EIR or NPC filed with the MEPA Office that the project proponent conduct a survey be done where the Division has credible information indicating the occurrence of a particular endangered or threatened state-listed species. *Leddick PRT, ¶ 25.*

45. In the instant case, because Surfside Crossing's Project site is not mapped as Priority Habitat for the NLEB, the Division did not have the authority under 321 CMR 10.18 and 10.20 to require Surfside Crossing to conduct a survey for the NLEB. *Leddick PRT, ¶ 24.* Because at the time of the Division's review of Surfside Crossing's MESA filing there was no ongoing review of the Project under MEPA, the Division's authority to request the MEPA Office to require a survey for NLEB was not applicable. *Leddick PRT, ¶ 26.*

46. At the August 6, 2019 hearing, I allowed into evidence a July 29, 2019 letter from Surfside Crossing notifying the Housing Appeals Committee that Surfside Crossing intends to file an ENF under MEPA for the Project by September 1, 2019. *Leddick Cross Examination Exhibit #3.* The Division testified that even if there had or will be a MEPA

filing for the Surfside Crossing Project, the Division would not request that a survey for NLEB be done because the NLEB acoustic survey data provided to it by Dowling and O'Dell does not constitute credible information of an occurrence record within the meaning of 321 CMR 10.13(1)(b)1. *Leddick PRT, ¶ 28.* To be considered such credible information, the Division would require evidence of NLEB using a hibernaculum or maternity roost tree at a specific location on or within .25 miles or 150 feet, respectively, of the Surfside Crossing Property. *Leddick PRT, ¶ 28.*

47. During his cross examination, Mr. Leddick reiterated and elaborated on the several reasons why the Division did not and would not request the MEPA Office to have Surfside Crossing do an NLEB survey of its Property. First, he testified that there is no data indicating the presence of maternity roost trees or hibernaculum in the vicinity of the Property that would result in the Division mapping it as Priority Habitat. *Leddick Cross, p. 88, lines 2-8.* Second, he pointed to the fact that over several years the island-wide surveys by Dowling and O'Dell found only eight (8) maternity roost trees in two specific locations means that the chances of maternity roost trees being found on the Project site are "small." *Leddick Cross, p. 90, line 16 (as corrected by Leddick errata sheet); see also p.88, lines 10-16.* Finally, he testified that as a matter of practice, the Division has requested surveys to be done through the MEPA process in situations where it anticipated significant harm to or a resulting take of the species. *Leddick Cross, p.88, lines 19-24; p.89, line 1.* Even if maternity roost trees were identified on or in the immediate vicinity of Surfside Crossing's Property that lead to the Division's mapping the Property as Priority Habitat for the NLEB and review of the Project, the Division would condition the Project to avoid a take of the NLEB through the TOY restriction prohibiting the removal

of trees during the June through July NLEB pup season. *See Leddick Cross, p.89, lines 3-7.* Thus, as testified by Mr. Leddick on cross examination, for the Division to request NLEB surveys through the MEPA process "would at most result in the finding of maternity roost trees, and, at most, result in a timing restriction, which is already…going to be implemented as part of any future work." *Id. at p.89, lines 8-12.*

48. The Division therefore determined that based on its review of all information relative to NLEB on Nantucket submitted to Division prior to or since its October 19, 2018 Take Determination, the Division would not request that Surfside Crossing conduct a survey for NLEB pursuant to 321 CMR 10.13(1)(b)1. *Leddick PRT, ¶ 28.*

49. On October 4, 2018, the NLC separately sent a letter to the Division referencing the information submitted by the Select Board and reiterating that such information necessitates a review by the Division to determine the Project's impacts to the NLEB and other state-listed species. *Leddick PDT, ¶ 41 and Exhibit 6.*

Information reviewed by the Division prior to making its October 19, 2018 Take Determination

50. Mr. Leddick testified that prior to issuing its Take Determination, the Division conducted a thorough review of the information submitted to the Division by the Select Board, which included the Dowling and O'Dell study, the two supplemental reports by Dowling and the five (5) NLEB observations (four mist-net and one roost site in a building) submitted by Dowling on January 29, 2018 through VPRS as identified in Exhibit 1 to his PRT. *Leddick PRT, ¶¶ 33 and 34; see also Leddick PDT, ¶ 54 and Exhibits 4, 8 and 9.*

51. Mr. Leddick confirmed on cross examination that the information reviewed by him and Dr. French, the Division's taxonomic expert, were the Dowling and O'Dell study

and the two supplemental reports by Dowling (both of which included information on acoustic surveys), documenting the "general locations" of mist net and maternity roost tree occurrence records, and other "unverified records" in NHESP's database. *See Leddick Cross, p. 47, lines 1-7, 23-24 and p. 48, lines 1-2.* Mr. Leddick's reference to the latter "unverified" information, when read together with his ¶ 33 of his PRT, supports a finding that he was referring to the five (5) NLEB observations submitted by Dowling on January 29, 2018. *See also Exhibit 1 to Leddick PRT.*

52. The Dowling and O'Dell study and the two supplemental reports by Dowling documented the general locations of eight (8) known occupied maternity roost trees on Nantucket. *French PDT, ¶ 83 and Exhibit 7; see also Leddick Cross, p. 47, lines 4-7.* In reviewing this information prior to making its Take Determination, the Division determined that the general locations of these roost trees indicated that they are almost two (2) miles away from the Property. *Leddick PDT, ¶ 54 and Exhibit 8.* Furthermore, although maternity roosts and hibernacula on man-made structures do not meet the Division's guidelines for mapping Priority Habitat (see the Finding of Fact No. 26), all maternity roosts and hibernacula documented by Dowling and O'Dell on man-made structures were also located over one (1) mile away. *Id. and Exhibit 9.* Finally, for the reasons summarized in Finding of Fact No. 30, the acoustic survey data provided by Dowling and O'Dell is not considered by the Division to be an occurrence record because it is not a confirmed observation of an individual bat and does not document a maternity roost tree or hibernacula. *See also O'Dell Cross, p. 257, lines 12-16 (O'Dell agreeing with the Division that acoustic data is not used to map Priority Habitat).*

53. The Division therefore determined that none of the information that it reviewed prior to the October 19, 2018 Take Determination met the Division's guidelines for mapping Surfside Crossing's Property as new Priority Habitat for the NLEB. *Leddick PRT, ¶¶ 17-23; French PDT, ¶ 101; see Leddick Cross, p. 48, lines 16-24, p. 49, lines 1-4, and p. 73, lines 3-7.*

54. On October 19, 2018, the Division issued its Take Determination, which concluded that the proposed Surfside Crossing Project would only result in a Take of the Coastal Heathland Cutworm, state-listed Species of Special Concern. *Leddick PDT, ¶ 42 and Exhibit 7.*

55. On November 8, 2018, the Select Board, and the NLC and 13 residents of Nantucket, filed separate Notices of Claim challenging the Division's October 19, 2018 Take Determination, which resulted in this remaining appeal by the NLC.

Information submitted to and Actions taken by the Division subsequent to its October 19, 2018 Take Determination

56. On October 26, 2018, about a week after the Division's issuance of its Take Determination for the Surfside Crossing Project, Meghan Perry followed up on her September 24, 2018 email to the Division by submitting a report through VPRS that referenced acoustic records of NLEB within 300 ft. of the Property but did not indicate if the acoustic records had been vetted by a qualified biologist. *Leddick PDT, ¶ 57 and Exhibit 9; French PDT, ¶ 87 and Exhibit 9.* In Ms. Perry's VPRS report, she provided no documented experience with the NLEB, nor did she make it clear who the actual observer was or if the acoustic data had been vetted by an experienced bat biologist. *French PDT, ¶ 87 and Exhibit 9.* As a result, the Division accepted these records into the NHESP

database as a future lead but they were not used to delineate a new Priority Habitat. *Id., Leddick PDT, ¶ 57.*

57. Ms. O'Dell testified that following the issuance of the Division's Take Determination, she requested clarification from the Division as to why none of the Nantucket NLEB observations had been updated by NHESP. *O'Dell PRT, ¶ 4; see also O'Dell Cross, p. 241, lines 19-24, p.242, lines 1-14.* In a November 13, 2018 email from Jennifer Longsdorf, a NHESP Program Coordinator, to Ms. O'Dell and Ms. Dowling, Ms. Longsdorf stated that she had recently took over responsibility for bat record acceptance and mapping and was slowly going through data submitted via VPRS, acknowledging that prior to this, NHESP did not have anyone accepting bat data since 2016. *Leddick Cross Examination Exhibit #2.* Ms. Longsdorf then requested further information from Dowling and O'Dell regarding NLEB observations on July 21st and October 20th, 2017. *Id.*

58. At the conclusion of an exchange of emails on November 14, 2018 regarding the above and other NLEB observations previously submitted by Dowling and O'Dell through VPRS, Ms. Longsdorf asked Ms. O'Dell in an email on that date to send a "shapefile" of the maternity roost locations (i.e., to allow the Division to determine their precise locations), explaining that:

> "As of right now, the VPRS reports only indicated mist-net locations, which don't have mapping associated with them. Therefore, we'd need locations of any maternity colony trees, maternity roost trees, and hibernacula."

Leddick Cross Examination Exhibit #2.

59. In a November 16, 2018 email to Ms. Longsdorf, Ms. O'Dell transmitted the shapefiles for Nantucket's 2016 and 2017 maternity roost tree and hibernaculum

locations to the Division. *Leddick Cross Examination Exhibit #2; see also O'Dell PRT, ¶ 5.* There followed an exchange of emails between Ms. Longsdorf and Ms. O'Dell on November 26th and November 30th, 2018 respectively responding to the Division's questions on the shapefile data. *Leddick Cross Examination Exhibit #2.*

60. In a December 3, 2018 email from Tara Huguenin, a Conservation Data Specialist in the NHESP, to Danielle O'Dell, Ms. Huguenin summarized the full scope of Ms. Dowling's submittals through VPRS and the extent to which they matched the shapefile data, noting, however, that the Division "could not find matches to most of the shapefile points." *Leddick Cross Examination Exhibit #2.* Ms. Huguenin also asked Ms. O'Dell to submit a single VPRS record for all of the shapefiles provided by Ms. O'Dell, which she sent by email on the same day (December 3, 2018). *Id.*

61. Following the receipt and review of the shapefiles from Ms. O'Dell on November 16, 2018, the Division confirmed that the precise locations of eight (8) known occupied maternity roost trees are all well beyond the boundaries of the Project site, the nearest tree being located approximately 9,900 feet away from the Property. *Leddick PDT, ¶ 56 and Exhibit 9; see also O'Dell Cross, p.200, lines 15-23 (agreeing that of the eight known maternity roost trees, the one closest to the Project site is almost two miles away).* The Division subsequently mapped new NLEB Priority Habitat for these eight (8) known maternity trees on Nantucket west of the Property. *Leddick PDT, ¶ 56; see also O'Dell Cross, p.257, lines 2-5 (agreeing that nothing in addition to those eight maternity roost trees has been found by O'Dell).* Finally, while the occurrence of NLEB roosting on or hibernating in a human-made structure does not meet the criteria for mapping Priority Habitat, the Division determined from the shapefiles that the nearest known roost

documented on a structure was 7,825 feet from the Property and the only documented location where bats were hibernating was in a house crawl space 8,100 away from the Property. *French PDT, ¶ 83.*

62. At the request of the NLC, Ms. O'Dell set an acoustic detector on private property directly abutting the Surfside Crossing site from May 15th to May 28th 2019 and NLEB calls were detected at all sites. *O'Dell PRT, ¶ 9.* Ms. O'Dell testified on cross examination that no follow-up actions, such as mist-netting, were conducted with respect to the above May, 2019 acoustic survey data due to an assumption that the NLC would not be allowed to introduce it as relevant evidence in this appeal as well as the lack of funding for such activities. *See O'Dell Cross, p. 255, lines 9-16, p.256, lines 1-6.*

V. LEGAL ANALYSIS AND CONCLUSIONS

A. Standard of Legal Review Governing this Adjudicatory Appeal

As provided in the MESA regulations[7] and affirmed in final MESA adjudicatory decisions, the standard of legal review governing this appeal clearly place the burden of proof on the party aggrieved by the Division's final determination. *In the Matter of 16 Medouie Creek Road, Docket No. 11-30084-2012-01-RL, NHESP File No. 11-30084, Recommended Decision at 25-26 (March 14, 2013), adopted as the Division's Final Decision (April 4, 2013);In the Matter of Plymouth Long Beach Management Plan, Docket No. 08-24100-10-DH, NHESP File No. 07-21460, Recommended Decision II, at 30 (December, 2010), adopted as the Division's Final Decision (June, 2011);see also In the Matter of South Road, Lots 11 and 12, NHESP File No. 07-21460, Recommended Decision,*

[7] Under 321 CMR 10.25(3)(b), a notice of claim for an adjudicatory hearing must include a "clear and concise statement of facts which are grounds for the proceeding, the specific objections to the actions of the Division and the basis for those objections."

p. 15 (July, 2009), adopted as the Division's Final Decision (August, 2009). The burden of proof in an adjudicatory proceeding does not shift but rather remains with the same party throughout. *In the Matter of 16 Medouie Creek Road, at 26.*

A petitioner in an MESA adjudicatory proceeding is required to establish by a preponderance of the evidence that the petitioner is entitled to a favorable decision. *In the Matter of 16 Medouie Creek Road, at 26; In the Matter of Plymouth Long Beach Management Plan, at 31-32.* "'The burden of persuasion through the introduction of evidence is upon the petitioner…to show by a preponderance of the evidence entitlement to the favorable administrative determination sought from the agency,'" *Pepin v. Div. of Fisheries & Wildlife, 467 Mass. 210, 227 (2014), citing A.J. Cella, Administrative Law and Practice § 243 (1986).* While a petitioner has the burden of proving a particular fact by a preponderance of the evidence, the petitioner does not have to establish that fact as an absolute certainty; it is sufficient to show the fact has the greater likelihood, the greater probability. *See In the Matter of FTO Realty Trust, 2018 MA LEXIS 33, 11; In the Matter of Paul J. Armstrong, 2012 MA LEXIS 65, 21-22.*

The party initiating the adjudicatory appeal must produce competent evidence from a credible source sufficient to meet their burden of proof. *In the Matter of 16 Medouie Creek Road, at 27.* Credible evidence must come from a competent source in support of each claim of factual error, including any relevant expert reports, plans or photographs. *See In the Matter of Christopher N. Colby, 2018 MA LEXIS 63, 25.* "A competent source is a witness who has sufficient expertise through education, training, or experience to render testimony on the factual issues on appeal." *In Matter of Margaret Reichenbach, 2014 MA ENV LEXIS 52 at 23.*

Proof by substantial evidence is the standard generally applicable to administrative proceedings. *In the Matter of 16 Medouie Creek Road, at 27; In the Matter of South Road, Lots 11 and 12, at 15.* As provided in M.G.L. c. 30A, §11(2), substantial evidence requires that agency findings rest on such evidence as a reasonable mind might accept as adequate to support a conclusion. *Id.*

When challenging an agency action, a petitioner must do more than simply speculate, make unsupported allegations, and rely on unsubstantiated arguments; "speculation, even by an expert witness, is not proof from a competent source" to support an allegation. *In the Matter of 16 Medouie Creek Road, at 27; In the Matter of Plymouth Long Beach Management Plan, at 32.*

A regulation is interpreted in the same manner as a statute, according to the words of a regulation in their usual and ordinary meaning. *In the Matter of City of Pittsfield Airport Commission, 2010 MA ENV LEXIS 89 at 16, footnote 6, citing Ten Local Citizen Group v. New Eng. Wind, LLC, 457 Mass. 222, 229 (2010).* "Normally, the application of a regulation to the particular facts of a case is within the agency's discretion and we accord an agency's interpretation of its own regulations substantial deference," and "apply all rational presumptions in favor of the validity of the administrative action." *Biogen IDEC MA, Inc. v. Treasurer & Receiver Gen., 454 Mass. 174, 184, 187 (2009), citing Purity Supreme, Inc. v. Attorney Gen., 380 Mass. 762, 782 (1980), Consolidated Cigar Corp. v. Department of Pub. Health, 372 Mass. 844, 855 (1977).* "An agency's interpretation of its own regulation is ordinarily accorded considerable deference unless it is arbitrary, unreasonable, or inconsistent with the plain terms of the regulations themselves." *In the Matter of City of Pittsfield Airport Commission at 16, footnote 6,*

citing Rasheed v. Commissioner of Correction, 446 Mass. 463, 476 (2006). "The party challenging an agency's interpretation of its own rules has a 'formidable burden' of showing that the interpretation is not rational." *Ten Local Citizen Group at 228.* "A construction...that would lead to an...unreasonable conclusion should not be adopted, where the language is fairly susceptible to a construction that would lead to a logical and sensible result." *In the Matter of Blackinton Common LLC, 2009 MA ENV LEXIS 5 at 53, citing Bell v. Treasurer of Cambridge, 310 Mass. 484, 489 (1941).*

B. Legal Analysis and Conclusions

The issue for adjudication in this appeal by the NLC is whether the Division properly applied its regulatory criteria at 321 CMR 10.13 and 10.18 when it made its October 19, 2018 Take Determination that Surfside Crossing's Project will only result in a take of the Coastal Heathland Cutworm. Stated more specifically, this appeal is about whether the Division erred when it determined that the information on the occurrence or general presence of NLEB on Nantucket and in the vicinity of the Surfside Crossing's Property does not meet the MESA regulatory criteria for mapping the Property as Priority Habitat for the NLEB and therefore does not necessitate a review of the Project to determine whether it will cause a take of the NLEB.

As discussed in Section V. A. above, the burden is on the NLC to show by a preponderance of the evidence that it is entitled to a favorable decision on its appeal of the Division's October 19, 2018 Take Determination. In addition, to the extent that the NLC's appeal is predicated on challenging the Division's interpretation of its own regulations, the NLC has a formidable burden of showing that the Division's interpretation is not rational.

I begin my legal analysis by recapping the MESA regulatory framework particularly relevant to the issue for adjudication, which comes into play when the Division receives new state-listed species information relating to a site that is not mapped as Priority Habitat for that species.

In order for the Division to map property as Priority Habitat for a state-listed species, it must first have an occurrence record, and then determine that the occurrence meets the Division's regulatory criteria and guidelines for mapping Priority Habitat for that species. *Findings of Fact No. 19 and 20.* As a general rule, a project proposed to take place on property that is not mapped as Priority Habitat for a particular state-listed species is not reviewed by the Division to determine whether the project will result in a take of that state-listed species. *Finding of Fact No. 21.* The relevant regulatory exception at 321 CMR 10.13(1)(a)1. provides that if the Division receives new information on the occurrence of an endangered or threatened state-listed species relating to such an unmapped site, it "may" determine, within thirty (30) days of its receipt of such occurrence information, determine whether the new state-listed species occurrence meets the criteria for delineation of a Priority Habitat under 321 CMR 10.12.[8] *Id.* If the Division determines that the new state-listed species occurrence meets the criteria for mapping the site as Priority Habitat, the Division has the authority to review the project to determine whether the project will result in a take of that state-listed species. *Finding of Fact No. 21.*

[8] 321 CMR 10.13(1)(a)1. does not expressly address a situation where the Division fails to make such a determination within 30 days. However, Mr. Leddick's testified on cross examination that the Division does not interpret this regulation as requiring it to respond to the person submitting the information within 30 days. *See Leddick Cross, p.40, lines 4-14.* While the Division's interpretation of its own regulation is reasonable and entitled to deference, whether the Division responded to Ms. Dowling and/or Ms. O'Dell within 30 days of when NLEB information was first submitted by them through VPRS or otherwise is not determinative of the merits of the NLC's appeal for the reasons discussed in this Section V.B.

Thus, the determinative, two-part factual inquiry for this appeal is whether the Division, in making its October 19, 2018 Take Determination: (1) had information in its possession that constitutes an NLEB "occurrence" on or affecting the Property, and if so, (2) did that NLEB occurrence meet the Division's criteria for mapping the Property as NLEB Priority Habitat.

Danielle O'Dell, the NLC's expert witness on the NLEB,[9] acknowledged on cross examination that she is familiar with the issue for adjudication, but agreed that nowhere in her prefiled testimony did she specifically describe her familiarity with the provisions of 321 CMR 10.13(1)(a)1. or how they are applied by the Division under the MESA regulations. *O'Dell Cross, p.188, lines 8-24, p.189, line 1.* Ms. O'Dell also agreed on cross examination that her prefiled testimony does not specifically explain why the Division misapplied the provisions of 321 CMR 10.13(1)(a)1. when it determined that acoustic data does not rise to the level of being an occurrence record for the purposes of mapping Priority Habitat. *O'Dell Cross, p.189, lines 2-11.* Instead, a core argument of the NLC's direct case is that the Division erred by not requiring Surfside Crossing to conduct an NLEB survey of its Property to definitively determine the presence of NLEB thereon, particularly in response to the high number of bat calls recorded in close proximity of the Project site. *See, e.g, O'Dell PDT, ¶¶ 15-18* (discussing her advice to the Select Board that such a survey is warranted based on the acoustic survey data of nearby properties and the 2018 Dowling and O'Dell study).

However, the testimony of Jessie Leddick, who serves as the Chief of Regulatory Review in the NHESP, sets forth substantial evidence supporting the Division's

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[9] Emily Molden, the NLC's other witness, serves as its Executive Director. Ms. Molden agreed on cross examination that she is not an expert on the NLEB. *Molden Cross, p. 208, lines 4-13.*

determination that requiring Surfside Crossing to survey its Property for NLEB was neither contemplated by the MESA regulations nor warranted by the information provided by Dowling and O'Dell.

First, Mr. Leddick testified that because Surfside Crossing's Project site is not mapped as Priority Habitat for the NLEB, the Division did not have the authority under 321 CMR 10.18 and 10.20 to require Surfside Crossing to conduct a survey for the NLEB. *Findings of Fact No. 45.* In addition, because at the time of the Division's review of Surfside Crossing's MESA filing there was no ongoing review of the Project under MEPA, the Division's authority under 321 CMR 10.13(1)(b) 1. to request the MEPA Office to require a survey for NLEB was not applicable. *Id.* Moreover, even if there had or will be a MEPA filing for the Surfside Crossing Project, the Division would not request that a survey for NLEB be done because the NLEB acoustic survey data provided to it by Dowling and O'Dell does not constitute credible information of an occurrence record within the meaning of 321 CMR 10.13(1)(b)1. *Findings of Fact No. 46 and 47.*

As both Dr. French and Mr. Leddick testified, verifying the presence of a specific bat species (e.g., the NLEB as distinguished from other Myotis bats) in a particular area by acoustic data is difficult and has a significant level of error. *Finding of Fact No. 30; see also O'Dell, PRT, ¶ 10* (O'Dell also acknowledging that "analysis of bat acoustic calls is a difficult and imprecise science.") Furthermore, because bat species travel great distances to forage, acoustic data does not provide definitive identification of the location and actual use of a hibernaculum or maternity roost tree by NLEB. *Finding of Fact No. 30.* Instead, acoustic data only shows the potential presence of a bat or group of bats in

an area at a particular time of year. *Id.* Thus, Mr. Leddick testified, "credible information" for the purpose of 321 CMR 10.13(1)(b) 1. would require evidence of NLEB using a hibernaculum or maternity roost tree at a specific location on or within .25 miles or 150 feet, respectively, of the Surfside Crossing Property - which the Division did and does not have in its possession. *Findings of Fact No. 47 and 48; see also Finding of Fact No. 28.*

Mr. Leddick further opined that the chances of maternity roost trees being found on the Project site are small due to the fact that the island-wide surveys conducted by Dowling and O'Dell over several years found only eight (8) maternity roost trees in two locations that are almost two miles away from the Project site. *See Finding of Fact No. 47; see also Finding of Fact No. 52.*

Finally, Mr. Leddick testified that as a matter of practice, the Division has requested surveys to be done through the MEPA process in situations where it anticipated significant harm to or a resulting take of the species. *Finding of Fact No. 47.* Even if maternity roost trees were identified on or in the immediate vicinity of Surfside Crossing's Property that lead to the Division's mapping the Property as Priority Habitat for the NLEB and review of the Project, the Division would condition the Project to avoid a take of the NLEB through the TOY restriction prohibiting the removal of trees during the June – July NLEB pup season.[10] *Id.* As Mr. Leddick testified on cross examination, for the Division to request NLEB surveys through the MEPA process "would at most result in the finding of maternity roost trees, and, at most, result in a

[10] On cross examination, Mr. Leddick emphasized that the Division's ability to impose the TOY restriction was not the sole reason for determining that an NLEB survey of Surfside Crossing's Property was and is not warranted. *See, e.g., Leddick Cross, p. 74, lines 7-18.*

timing restriction, which is already…going to be implemented as part of any future work." *Id, citing Leddick Cross, p.89, lines 8-12.*

As to Mr. Leddick's latter point, I find that the record only supports a finding that Surfside Crossing's commitment not to remove any trees on the Property during the NLEB pup season was verbal in nature. *See Finding of Fact No. 42.* Mr. Leddick testified on cross examination, however, that in his experience verbal commitments are fulfilled by project proponents and "end up being captured in the review of project…[and] then incorporated into project permitting." *Finding of Fact No. 43.* In the instant case, the effect of the Division's October 19, 2018 Take Determination is that Surfside Crossing will need to apply for a Conservation and Management Permit ("CMP") from the Division pursuant to 321 CMR 10.23 (to authorize the take of the Coastal Heathland Cutworm) in order to move forward with its Project. Consequently, the Division has a reasonable expectation that Surfside Crossing's verbal commitment will thereafter be embodied as a written condition in any future CMP issued by the Division for the Project.

In any event, the record is clear that Surfside Crossing's verbal commitment to abide by the TOY restriction was not the sole reason for the Division's position that an NLEB survey of the Project Site is unwarranted. Independent of any verbal commitment, I find that the Division's other reasons at the time of the Take Determination constitute substantial evidence supporting its position regarding the need for a survey. In a nutshell, the MESA regulations did not provide an avenue for the Division to require or request that an NLEB survey of the Property be done, and the acoustic data documenting the general presence of bats in the vicinity of the Property does not rise to adequate evidence

of a potential NLEB occurrence justifying such a survey. For all of the above reasons, I conclude that the NLC has not met its burden of showing that the Division erred by not requiring an NLEB survey of the Property.

The NLC's focus on the need for a NLEB survey of Surfside Crossing's Property is directed at confirming whether there is any evidence of an actual NLEB occurrence on the Property, not whether the NLEB information before the Division at the time of its October 19, 2018 Take Determination met the MESA regulatory criteria for mapping the Property as Priority Habitat for the NLEB. To address this latter issue for adjudication, I turn next to the question of whether the record shows there was NLEB information before the Division at the time of its October 19, 2018 Take Determination that met the criteria in 321 CMR 10.13(1)(a) 1. for mapping Surfside Crossing's Property as new Priority Habitat for the NLEB.

Prior to the Division issuing its October 19, 2018 Take Determination, the following NLEB information was reviewed by Mr. Leddick and Dr. French: (1) the Dowling and O'Dell study; (2) the two supplemental reports on the NLEB survey work conducted by Dowling in 2016 and 2017; and (3) the five (5) NLEB observations (four mist-net and one roost site in a building) submitted by Dowling on January 29, 2018 through VPRS, as identified in Exhibit 1 to Mr. Leddick's PRT.[11] *See Findings of Fact No. 50 and 51.* The Dowling and O'Dell study and the two supplemental reports by Dowling documented the general locations of eight (8) known occupied maternity roost trees on Nantucket. *Finding of Fact No. 52.* The Division determined from this

[11] I determined that Mr. Leddick's reference on cross examination to reviewing other "unverified records" in NHESP's database, when read together with his ¶ 33 of his PRT, supports a finding that he was referring to the five (5) NLEB observations submitted by Dowling on January 29, 2018. *See Finding of Fact No. 51.*

information that these maternity roost trees are almost two (2) miles away from Surfside Crossing's Property. *Id.* Given that considerable distance, it was reasonable for the Division to rely on this more general location information in determining that there was no basis for mapping Surfside Crossing's Property as Priority Habitat for the NLEB.[12] The Division also determined that all of the maternity roosts and hibernacula documented by Dowling and O'Dell on man-made structures are located over one (1) mile away from the Property.[13] *Finding of Fact No. 52.* Finally, the Division determined - consistent with its Priority Habitat mapping guidelines - that the acoustic survey data reviewed by the Division prior to the Take Determination is not evidence of an NLEB "occurrence" within the meaning of the MESA regulations because it is not a confirmed observation of an individual bat and does not document a maternity roost tree or hibernacula. *Findings of Fact No. 52 and 30.* Ms. O'Dell herself agreed on cross examination that the Division's Priority Habitat Guidelines do not consider acoustic data to be an occurrence record. *See O'Dell Cross, p. 257, lines 12-16.* I therefore conclude that none of the above NLEB information reviewed by the Division at the time of its October 19, 2018 Take Determination meets the MESA regulatory criteria for mapping the Property as Priority Habitat for the NLEB. Furthermore, substantial evidence in the record supports my determination that the NLC failed to show that the Division's interpretation of the relevant provisions of its MESA regulations and Priority Habitat mapping guidelines is not entitled to deference.

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[12] Under the Division's Priority Habitat mapping guidelines, Priority Habitat for the NLEB is mapped within *150 feet* of known maternity roost trees. *See Finding of Fact No. 28.*

[13] For the reasons stated in Finding of Fact No. 26, NLEB maternity roosts and hibernacula on man-made structures do not meet the Division's guidelines for mapping Priority Habitat. *See also O'Dell Cross, p. 189, lines 16-23* (O'Dell agreeing that the only two NLEB habitats mapped by the Division as Priority Habitat are maternity roost trees and natural caves or abandoned mines similar to natural caves.)

The parties' PRT, the cross examination of Mr. Leddick, and the related Cross Examination Exhibits No. 1 and 2 highlight the other main argument of the NLC – i.e., the Division's October 19, 2018 Take Determination is deficient because it was not based on a review of the full scope of the NLEB information previously submitted to the Division by Ms. Dowling and/or Ms. O'Dell. This issue was first surfaced for the NLC when following the issuance of the Take Determination Ms. O'Dell requested clarification from the Division as to why none of the Nantucket NLEB observations had been updated by NHESP. *Finding of Fact No. 57.* It is reasonable to infer from Ms. O'Dell request that she was seeking to determine why the Division had not yet mapped Priority Habitat for the eight (8) maternity roost tree locations identified in the Dowling and O'Dell study and the two supplemental reports by Dowling, which were reviewed by the Division at the time of its October 19, 2018 Take Determination.

In a November 13, 2018 email to Ms. O'Dell (and Ms. Dowling), Jennifer Longsdorf informed them that she had recently took over responsibility for bat record acceptance and mapping for the NHESP and was slowly going through data submitted via VPRS. *Finding of Fact No. 57.* Prior to this, Ms. Longsdorf acknowledged, NHESP did not have anyone accepting bat data since 2016. *Id.* As a follow-up to her review, Ms. Longsdorf stated in a November 14, 2018 email to Ms. O'Dell that the reports submitted through VPRS "only indicated mist-net locations, which don't have mapping associated with them." *Finding of Fact No. 58.* Ms. Longsdorf therefore requested Ms. O'Dell to send a shapefile of the maternity roost locations (i.e., to allow the Division to determine their precise locations), explaining that for the purposes of mapping Priority Habitat the Division would "need the locations of any maternity colony trees, maternity

roost trees, and hibernacula." *Id.* In short, for the purpose of mapping new Priority Habitat, it was efficient and reasonable for the Division to respond to Ms. O'Dell's concern by asking her to submit shapefile(s) documenting the precise locations of NLEB occurrences previously identified by her and/or Ms. Dowling.

On November 16, 2018, Ms. O'Dell transmitted the shapefiles for Nantucket's 2016 and 2017 maternity roost tree and hibernaculum locations to the Division. *Finding of Fact No. 59.* Tara Huguenin, a Conservation Data Specialist in the NHESP, responded to Ms. O'Dell in a December 3, 2018 email that included a summary of the full scope of Ms. Dowling's submittals through VPRS. *Finding of Fact No. 60.* As outlined in Ms. Huguenin's email, Ms. Dowling provided information through VPRS on mist-net or house roost locations, neither of which is used by the Division to map Priority Habitat. *Leddick Cross Examination Exhibit No. 2.* Furthermore, Ms. Huguenin noted that the Division could not find matches between Ms. Dowling's VPRS submittals and most of the shapefile points submitted by Ms. O'Dell at the request of the Division. *Finding of Fact No. 60.*

The Division thereafter mapped new NLEB Priority Habitat for the eight (8) known occupied maternity trees on Nantucket west of the Property. *Finding of Fact No. 62.* In doing so, Division confirmed that the precise locations of these maternity roost trees are all well beyond the boundaries of the Project site, the nearest tree being located approximately 9,900 feet away from the Property. *Id.* Ms. O'Dell, in turn, agreed on cross examination that of the eight (8) known maternity roost trees, the one closest to the Project site is almost two miles away and that, to her knowledge, there are no other known maternity roost trees within 150 feet of the Surfside Crossing Project site. *O'Dell*

Cross, p.200, lines 15-23. Finally, while the occurrence of NLEB roosting on or hibernating in a human-made structure does not meet the MESA regulatory criteria and guidelines for mapping Priority Habitat,[14] the Division determined from the shapefiles that the nearest known roost documented on a structure was 7,825 feet from the Property and the only documented location where bats were hibernating was in a house crawl space 8,100 away from the Property. *Finding of Fact No. 61.*

Thus, the Division's determination of the precise locations of the NLEB occurrences on Nantucket based on its review of the shapefiles thereafter submitted by Ms. O'Dell confirm the basis for the Division's position that there is no NLEB information that was before the Division at the time of or subsequent to its October 19, 2018 Take Determination that met the criteria for mapping the Surfside Crossing Property as Priority Habitat for the NLEB.

VI. CONCLUSION

Based on my Findings of Fact in Section IV and for the reasons discussed in Section V and elsewhere in this Recommended Decision, I conclude that the NLC has not met its burden of showing that the Division's October 19, 2018 Take Determination is based on an improper application of the regulatory criteria at 321 CMR 10.13 and 10.18 when the Division found that the Surfside Crossing Project will only result in a take of the Coastal Heathland Cutworm.

[14] For the reasons summarized in Finding of Fact No. 26, I find the NLC has not met its burden of showing that Division's interpretation of its MESA regulations on this point is unreasonable.

Accordingly, I hereby recommend that the Director issue a Final Decision affirming the validity of the Division's October 19, 2018 Take Determination.

Dated: 10/4/19

By: Richard Lehan

Richard Lehan, Esquire
Presiding Officer
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Notice

This decision is the Recommended Final Decision of the Presiding Officer. It has been transmitted to the Director of the Division of Fisheries of Wildlife, Department of Fish and Game, for his final decision in this matter. This decision is therefore not a final decision of the agency, and may not be appealed to the Superior Court pursuant to M.G.L. c. 30A. The Division Director's final decision is subject to court appeal and will contain a notice to that effect.

Because this matter has now been transmitted to the Division Director, no party shall file a motion to renew or reargue this Recommended Final Decision or any portion of it, and no party shall communicate with the Director regarding this decision, unless the Division Director, in his sole discretion, directs otherwise.

SERVICE LIST

Take Determination for Surfside Crossing, NHESP File No. 12-31035
Docket No. 2018-02-RL

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