FINAL MINUTES

Natural Heritage & Endangered Species Advisory Committee (NHESAC)

February 14, 2019 DFW Field Headquarters, Southwest Meeting Room #103 1 Rabbit Hill Road, Westborough, MA 01581

MEMBERS:

<u>Present:</u> Mark Mello, Joseph Larson, Wayne Petersen, William Brumback, Tim Flanagan <u>Absent:</u>

ASSOCIATE MEMBERS:

<u>Present:</u> Andy Finton, Dave Small, Kevin Powers, Russ Hopping <u>Absent:</u> Bryan Windmiller

AGENCY STAFF:

<u>Present:</u> Tom French, Peter Hazelton, Marion Larson, Jesse Leddick, Jennifer Longsdorf, Mike Nelson, David Paulson, Rebekah Zimmerer

OTHERS:

Brandi Van Roo (F&W Board Member), Brad Miner (Worcester T&G), Kaitlin Kelly (MA Department of Energy Resources), Zara Dowling (UMass Clean Energy Extension), Kathleen Nolan (Wendell MA Pollinators Group), Amanda Freitas (RI Wildlife Action Plan liaison)

- The meeting was called to order at 1:30 p.m. -

1. Approval of the January Minutes

Dave Small motioned that the January minutes be accepted, Kevin Powers seconded, and members voted unanimously to approve.

2. Acting Chair's Comments – Mark Mello

Mark provided comments on a list of plants for Zara and UMass to consider as part of the SMART program's pollinator-friendly mitigation measures. This list is based on the Vascular Plants of MA checklist and details which plants are native to MA, which are beneficial to pollinators, and those that are butterfly host plants. Mark also distributed a table from the Lloyd Center for the Environment's survey of plants, which included recording nectar incidence of butterflies and the percentage of potential visits butterflies made to plants. Mark also mentioned an article from CNN about the environmental impacts of a massive worldwide insect decline, which was further detailed in the Biological Conservation journal article that Mark shared. Lastly, Mark indicated that Hopkinton, Rhode Island recently rejected a massive open space solar farm project.

3. Board Member's Comments – Joseph Larson

At the next Board meeting on February 21st, there will be an announcement of Tom French's successor.

There is a lack of communication and ongoing issues between the Division and the U.S. Fish and Wildlife Service (USFWS) with regard to the National Wildlife Refuges in Massachusetts. Public access to these lands varies widely and one refuge has not been open for 20 years. Our Natural Heritage staff has had difficulty in getting USFWS staff to treat state-listed species on federal land as is applied to the rest of the state. Where access permits and fees are applied on Refuges, they vary widely from one Refuge to another. Director Mark Tisa, the Chair and Vice Chair of the Board, and several Division staff members recently met with three staff members from the USFWS Regional Office to discuss changes on access that the Regional Office has submitted to Washington for approval. These proposed changes were not shared with our Director for advance comment and discussion.

We suggested that there was a need for better communication between the Regional USFWS Office and the Division. We noted that in the Code of Federal Regulations, there is a U.S. Department of the Interior policy statement that addresses how wildlife species will be regulated on federal refuges. In short, species like migratory birds and species on the federal endangered species list will be regulated by the USFWS. All other species will be regulated under state law.

The Interior policy statement also provides for the USFWS to enter into Cooperative Agreements with states to work out issues of shared interest. We indicated that we have an interest in establishing a Cooperative Agreement between the Division and the USFWS Regional Office that would provide a formal mechanism for timely joint discussions on matters of joint interest. The USFWS staff agreed to take this message back to their Regional Director.

4. NHESP Report – Peter Hazelton & Jesse Leddick

The Division as a whole is in an interesting position of transition. Once a new Assistant Director starts, nearly all of the leadership positions will be new within the past year.

If there are any topics you'd like to see presentations on or discuss at future Advisory Committee meetings, please let both Pete and Jen know.

There has been a lot of wind energy projects proposed off the Massachusetts and Rhode Island coasts. The wind development zones are generally south of Nantucket and Martha's Vineyard and typically in federal waters so the NHESP has no say. However, we do have concerns for listed species that may migrate through these areas, such as Piping Plovers, terns, Red Knots, Northern Right Whales, etc. We are actively reviewing these projects and providing comments through the federal process.

Pete discussed the contents of the Committee packets, which included the following documents:

• A copy of a past presentation by Kaitlin Kelly from the Department of Energy Resources (DOER) on the Next Generation Solar Incentive Program

- A summary from Kevin Powers which frames carbon sequestration in light of developing solar arrays (residential vs. commercial) by taking forest land to gain the carbon offset needed by the State's renewable energy goals.
- A research paper from the scientific journal Global Environmental Change titled, "Trees, forests and water: Cool insights for a hot world," by David Ellison et al.
- An article from the University of Vermont on a regenerative soils certification program, which would be the first of its kind in the United States.
- Other articles discussed: Bob Prescott from Mass Audubon's Wellfleet Bay Wildlife Sanctuary is retiring after 36 years, climate change affecting turtle strandings on Cape Cod, biologists test a promising treatment for bats threatened by White-nose Syndrome by cleaning the hibernaculum where the bats hibernate, the Rusty-patched Bumblebee has been officially added to the list of endangered species as its population has plummeted throughout its range, a NatureServe newsletter highlighting the Northeast Natural Heritage meeting that took place in October, and the regular taxpayer donations graph and tables showing that tax checkoff donations have increased in dollar value but the number of donors has remained relatively the same.

5. Assistant Director's Report – Tom French

After 34 years and 11 months, Tom's last official day is Friday, February 22nd. Tom was asked to give a 20 minute presentation at the next Board meeting on his career with MassWildlife. Tom commented that for him, he had the best job in the entire state and thoroughly enjoyed every part of it. Tom will remain involved in some capacity on contract for active litigations, revision of regulations, and organization of his extensive files.

The Committee membership process is at a standstill. We currently have four vacancies (two full members and two associate members), and we have a list of more than enough names. Once a new Assistant Director starts, this will need to be a high priority.

Tom noted that Massachusetts recently had its first case of a Bale Eagle that died from an acute case of anticoagulant rodenticide poisoning.

6. *Solar in MA: SMART Program Review* – Kaitlin Kelly, Solar Programs Manager, MA Department of Energy Resources

DOER created the Solar Massachusetts Renewable Target (SMART) Program to create a longterm, sustainable solar incentive program that promotes cost-effective solar development in the Commonwealth. Kaitlin's presentation discussed the following:

- In 2016, the state legislature told DOER that they needed to create a solar incentive program that could include declining blocks, tariffs, etc. that would reduce rates to rate payers and DOER wrote the regulations.
- The SMART Program is a 1,600 MW AC declining block tariff program that provides fixed Base Compensation Rates to qualified generators, and these rates decline as capacity blocks are filled

- Applies to all investor owned electric distribution companies; municipal light departments are not eligible. There will eventually be a rebate program 50-50 cost share between DOER and municipal light departments, only for small projects.
- Facilities ≤ 25kW AC are eligible for a 10-year term, facilities ≥ 25kW AC are eligible for a 20-year term
- Max project size is 5 MW AC per parcel
- DOER used the results of a competitive procurement to set the rate for the remainder of the program. DOER held a meeting with stakeholder groups for their input on designing the program to focus on siting.
- Eligible projects may receive compensation for energy through net metering, qualifying facility tariffs, or alternative on-bill crediting
- The program was designed to steer projects towards optimal locations based on adders and subtractors (i.e. Greenfield subtractor applied to projects on open space that do not meet criteria to receive the full incentive)
- Energy storage compensated by a variable adder that is based on the ratio of storage capacity to solar capacity as well as the duration of the storage
- How is the rate determined? Which service territory is the project in, what is the capacity block, what is the capacity of system, adder eligibility, greenfield subtractor applicability, is it a behind-the-meter or a standalone facility
- The SMART Program was designed to bring the incentives down.
- Largest projects are Eversource Energy and National Grid East
- 20-35% of the capacity in each block was reserved for small and residential projects ≤ 25 kW AC
- Four types of Compensation Rate Adders are available to eligible facilities
 - Location Based (agricultural, building mounted, brownfield, floating solar, landfill, solar canopy)
 - Off-taker (community shared solar [CSS], low income property owner, low income CSS, public entity)
 - \circ Energy storage (storage + PV)
 - Solar tracking
- Systems > 25 kW may qualify for one adder from each category, and systems \leq 25 kW may only qualify for the energy storage adder
- The adder value goes on top of the base rate, set at that rate for the first 80 MW, then declines at 4% to help bring the cost down faster
- Adder numbers are based on a report from a contractor, which DOER used to calculate the added cost for building these types of projects. Therefore, some rates are based on actual projects that have been built, while others are based on best guesses.
- Allow projects to stack the adders because wanted to encourage builders to look at all types of projects
- For tranches they're measured across the state
- Land use categories: 1) no greenfield subtractor, 2) ¹/₂ greenfield subtractor, 3) full greenfield subtractor
 - Category is based on whether the system is on land in agricultural use, what is the size of the system, is the system ground mounted, what is the existing condition of the land, what is the zoning of the land

- If a project is compliant with the town's solar bylaws, then it falls into category 1 of no greenfield subtractor even if the project is in forested land
 - The Committee agreed that this is not good because 100% of the local projects are being built on forested lands)
 - Category 2 of ½ greenfield subtractor of \$0.0005/acre: Is that really a disincentive? Need to relook at the disincentives because they are not as high as they should be. Currently, the disincentive of a greenfield subtractor isn't a big deal.
 - For smaller towns, the whole town may be in solar zoning, so there would be no subtractors, which is problematic for local jurisdictions. If a town has a bylaw that specifically addresses solar and the project complies with those bylaws, then they don't qualify for a greenfield subtractor. The smaller town's intent was not to incentivize this.
 - If a project is built on agricultural land, then the only way to not get a greenfield subtractor is if it's an agricultural solar tariff generation unit, building mounted, or sized to no greater than 200% of the annual operation load
- A project falls under category 2 if it is on land that has not been previously developed and is zoned for commercial and industrial development.
- A project falls under category 3 if it does not meet the criteria for categories 1 or 2. Category 3 is only applicable to facilities with capacities > 500 kW and ≤ 5 MW.
- Project segmentation and capacity expansion limitations: no more than one building mounted generation unit on a single building or one ground-mounted unit on a single parcel or contiguous parcels of land.
 - Higher incentives for smaller projects
 - Trying to ensure people can't abuse the system to receive higher incentives than deserved
- Qualification process: all projects are required to submit an initial online application to reserve their rate and secure their space, but projects must be pretty far along in the development process and must have all permits in hand before they can even submit their application to DOER. Incomplete applications are given an opportunity to hold their position in the queue for a defined period of time until deficiencies are resolved. Initial reservations for non-operational projects are for 12 months, but can be extended. If a project does not meet deadlines, the reserved capacity is added to the block that is currently open.
- Builders can't receive incentive payments until they are fully up and running
- The SMART Program opened on November 26, 2018. In Eversource West, there's been a waitlist for large projects since week 1.
 - Also an incentive run by the Massachusetts Clean Energy Center in 2008-2009, SREC program incentive, and another recovery incentive in 2009
 - 2.3 GW of solar currently installed (about 90,000 projects) in MA, 2.25 GW receive some type of incentive
 - Solar is currently about 4% of daytime base load in state, once the SMART Program goes through it'll be about 9%
- Received about 650 MW of projects, about 3,500 applications. The applications are heavy on the residential and small side, but the capacity is heavy on projects.
- DOER will conduct a review of the program when 400 MW of preliminary statements of qualification have been issued. The review will seek stakeholder input around siting, low

income, and the diversity of projects. The review will be public, and public comments will be reviewed by DOER, but they will try to connect with other agencies during the review process. The review may turn into an extension of the program. DOER will continue to qualify projects under the existing rates and incentives, as any proposed changes will have to go through the regulatory process.

- The SMART Program is a tariff, not a grant. It's a rate that's being paid by power generated from utility to power generator owners; There is no broker.
 - There was a cap set on the number of projects that can be qualified under the program, but no cap set on the amount of money.
- No state siting regulations because the siting is the responsibility of cities and towns. Some towns are imposing solar moratoriums because their power substations are filling up.
- UMass's certification process is completely separate for now, but DOER will talk about how to incorporate UMass's process during the 400 MW review.
- The data layer created by DOER and EEA IT will be a public tool

7. Member's and Associate Member's Comments

Bill Brumback – Bill will be retiring on March 1st.

Dave Small – Dave spent the morning at the Harvard Forest seminar on the unexpected impacts of land-based solar arrays, focusing on habitat heterogeneity formation and its influence on plant-soil interactions. Dave commented that all sites examined were less than three years in place, but the study looked at what is using the solar fields and what vegetation is growing under and around the solar panels.

Kevin Powers – To date, there have been six right whale calves born this year off the Georgia/Florida coast, which is an improvement from zero last year.

Russ Hopping – Russ attended the UMass Spotted Lanternfly preparedness conference, noting that one had been found in Massachusetts, but it was a dead adult that came in on a plant from Pennsylvania. This is a non-native, invasive insect that is easily dispersed and can have huge impacts on agriculture.

– The meeting adjourned at 4:00 P.M. –

Drafted & Submitted by: Jennifer Longsdorf, NHESP Program Coordinator