

September 25, 2020

Planning and Zoning Commission  
c/o Gary Goeschel, II, Director of Planning  
East Lyme Planning and Inland Wetlands Agency  
P.O. Drawer 519  
Niantic, CT 06357

Re: Review of the draft Town of East Lyme POCD Update

Dear Commissioners:

Thank you for the opportunity to review the draft East Lyme POCD Update (Plan). Acting as the Commissioner's staff, our office has reviewed the draft Plan update for consistency with the policies and standards of the Connecticut Coastal Management Act (CCMA) in accordance with section 22a-104(e) of the General Statutes.

As a result of its review of the current draft of East Lyme's Plan, the Land and Water Resources Division (LWRD) has the following comments:

- The Plan should address additional statutory planning requirements for coastal resources. On page 7-8, the list of planning requirements for a local POCD as set forth in section 8-23(d) of the General Statutes is presented, but it does not include a mention or analysis of sea level change scenarios published by the National Oceanic and Atmospheric Administration (NOAA) in Technical Report OAR CPO-1 (as amended by P.A. 18-82), nor does it discuss the planning requirements of section 8-23(e)(2) of the General Statutes. Since East Lyme is contiguous to Long Island Sound, "The plan shall be:
  - Consistent with the municipal coastal management program requirements of sections 22a-101 to 22a-104, inclusive;
  - Made with reasonable consideration for restoration and protection of the ecosystem and habitat of Long Island Sound; and,
  - Designed to reduce hypoxia, pathogens, toxic contaminants, and floatable debris in Long Island Sound."

An analysis of these planning requirements for coastal resource areas of the community was not evident in the current draft of the Plan. This analysis is important and beneficial to both Long Island Sound as well as the community for the preservation, enhancement, and protection of its valuable coastal resources.

The most significant of the coastal planning elements for consistency with the goals and policies of the CCMA is sea level rise (SLR). Given East Lyme's vulnerability to rising sea levels and its experience in recent coastal storms, coastal hazards, and sea level rise should be a major focus of this plan update. For additional assistance, East Lyme may wish to contact the Connecticut Institute for Resilience and Climate Adaptation (CIRCA) for assistance with compliance for the required sea level change scenarios planning element at

<https://circa.uconn.edu/municipal-resilience-planning/>. Similarly, coastal area infrastructure, such as roads, is increasingly susceptible to flooding in a rising sea.

LWRD may also be of technical assistance to the town with respect to the application of Sea Level Affecting Marshes Model (SLAMM) developed by DEEP and its partners. SLAMM is a computer model that can help predict how SLR may affect Long Island Sound's coastal marshes, beaches, and coastal infrastructure. Coastal marshes and beaches are dynamic ecosystems that provide significant ecological and economic value. Located at the margin between land and water, they are also among the ecosystems most susceptible to the effects of climate change, especially SLR. Connecticut DEEP and its partners have now used new data in a recent application of SLAMM to Connecticut's shoreline, and the resulting GIS data is available for download. Early results indicate that low-lying coastal areas in or adjacent to coastal marshes and roads that currently flood infrequently - often only during coastal storms - will begin to flood more regularly during monthly extreme high tides, even when there isn't a storm cloud in the sky. Such "sunny-day" tidal flooding is expected to convert dry uplands to coastal marsh, as well as increasingly limiting dry access to parts of Connecticut's shore that now flood only during storms.

More information regarding the available GIS data layers available for town use, please visit the SLAMM website: <http://cteco.uconn.edu/projects/SLAMM/layers.htm#slamm>.

The SLAMM viewer can be access by the following website:  
<https://cteco.uconn.edu/viewer/index.html?viewer=slamm>.

Further application of SLAMM to East Lyme's coastal resource management planning efforts could include:

- Examination of different combinations of model input values and analysis for the results of these simulations; and
- Prediction and visual presentation of future conditions by using specific model input values at a given time (e.g., the amount of sea level rise, the rate of change in marsh surface elevation, the amount of storm surge, etc.).

The SLAMM modeling results, FEMA FIRM data, and USACE SLOSH mapping will also assist the town in improving its transportation analysis located within the Transportation Chapter. In addition, the incorporation of FEMA FIRM data and USACE SLOSH modeling and mapping should also be included as part of the analysis of coastal resource and hazard areas within the community.

- Need for a thorough analysis of coastal resource areas and the community's coastal management plan: For a coastal community, Chapter 4, Coastal Resources, did not present a thorough and necessary in-depth analysis for these areas, including a discussion of the community's existing coastal management plan. In addition, there was no connection made to any subsequent analysis located in other chapters that would impact coastal resource areas, such as development, housing and demographics, transportation and utility infrastructure, etc. This analysis should be included in the Plan and appropriate references to the location of this analysis should be referenced in the applicable chapters to allow the reader to locate this analysis. For an adequate analysis of coastal resource areas and consistency with the CCMA and other state POCD planning requirements regarding coastal resources, each chapter's subject matter needs to be analyzed with respect to potential impact, good or bad, to all coastal resource areas located within the community.

- Status and discussion of 2009 planning recommendations: The plan should include a thorough assessment of the 2009 POCD recommendations and identify the specific results of any implementation of these actions/activities, especially as they relate to conformance with the CCMA and the preservation, enhancement, and protection of coastal resources. This includes floodplain management activities located within coastal resource areas. Accordingly, since this Plan update will take the place of the 2009 POCD, it should incorporate best available data, which should include all the data and information from the 2009 plan that is still relevant and any updated data and analysis since the development of the 2009 Plan.
- Compliance with section 8-23(c): It was not readily evident as to compliance of the plan with section 8-23(c), of the General Statutes that provides public participation requirements for the local POCD planning process. This may be due to the missing Appendix data and information. This is important for both the overall Plan and especially for the neighborhoods and specific planning issues that are associated with coastal resource management and protection.
- Proposed recommendations require more detailed information: The broad recommendations, especially in association with coastal resource management issues, should include a more detailed description to answer the questions of:
  - Who would be responsible for implementation;
  - Where would the activity take place;
  - What are the specific of the proposed activity;
  - How will said activity be funded and implemented; and,
  - When during the next 10-year period is it recommended that a proposed activity be implemented by the community? This should be done for at least each recommendation that affects the community's identified and delineated coastal resource areas.
- Missing Information: Several pieces of information were missing from the copy of the draft Plan available for DEEP's review. These pieces of missing data and information include: tables, charts and maps throughout the plan (placeholders were noted), Chapter 1, (from the forward the Plan skipped to Chapter 2; is the Foreword or Introduction actually Chapter 1?), and the Plan's entire Appendix. This missing information did not allow for a thorough review to determine the consistency of the Plan to the goals and objectives of the CCMA. DEEP encourages the Town to continue to refined this new format to develop a stronger interconnection within the plan between these two perspectives, and to develop a more complete and comprehensive analysis for the town, especially with respect to the management of coastal resources. This connection should allow for referencing between general topic chapters in the plan and specific neighborhood chapters which should create a stronger comprehensive plan that the town will be well-served by over the next 10 years.

The maps that were presented within the plan, especially those developed for coastal resource and hazard areas and for discussion of coastal resource areas, should include additional detailed information. In addition to maps generated by the SLAMM model as discussed earlier in this review, additional maps and information should include any/all critical facilities located within or adjacent to sensitive coastal resource areas within the community areas, including tidal wetlands and FEMA delineated floodplain areas, and an overlay of USACE's SLOSH map for the community. Furthermore these maps should include assessor's data and noted areas of open space, vacant but developable lots, and identification of privately versus publically owned property in coastal resource areas of the community. This information

would help in the town's spatial analysis of these coastal resource areas and help to inform a more thorough needed analysis for these areas. Again, the inclusion of this type of analysis would benefit the town greatly, not only in compliance with the CCMA, but in assisting East Lyme with the implementation of future actions. This inclusion of additional data and information will help to create a more complete community approach towards the protection, enhancement, and preservation of its vital coastal resource areas.

In addition to the missing information and data noted above, the following pieces of information, as they relate to the analysis of coastal resource areas, were also missing or not readily found:

- Name of the plan developer, Planning Steering Committee and Plan contributors, including plan contributors associated with the analysis of impacts to coastal resources;
- How the work of Sustainable CT, as stated on page 11 was incorporated into the Plan's analysis of coastal resource area and future recommendations of the preservation and protection of these resources; and
- Work completed by students from Wesleyan University, as noted on page 11, and how their work was incorporated into the analysis of impacts to coastal resources.

Once again, I would like to thank the Town for the opportunity to review and comment on their draft POCD update. I believe the comments noted in this letter will help to both strengthen the plan to make it a more comprehensive guide in effectively managing East Lyme's coastal resources and, help the town successfully implement all the specific actions it will undertake to preserve, enhance and protect the community's coastal resources for its current residents and for generations to come.

Should you have any questions regarding this letter, please feel free to contact me at (860) 424-3779 or by email at karen.michaels@ct.gov.

Sincerely,



Karen A. Michaels  
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Land and Water Resources Division

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cc: David Kozak, DEEP  
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East Lyme Coastal File