



Debra Lane <debra.lane@capeelizabeth.org>

Request to implement stricter wetland regulations in Cape

1 message

Suzanne McGinn <spmoginn1@gmail.com>

Sat, Jan 25, 2020 at 2:02 PM

To: cetowncouncil@capeelizabeth.org

Dear Town Councilors,

Thank you for your service to our community. I write to you today to consider implementing stricter local wetland restrictions for development in Cape where vernal pools are present. This proposed legislation would support the 2019 Comprehensive Plan key findings and recommendations, outlined below.

Key findings from the Natural Resources Chapter:

- Threats to wetlands in Cape Elizabeth have been reduced by local regulations.
- 97% of Cape Elizabeth residents support protecting environmental quality.
- 96% of Cape Elizabeth residents support protecting and preserving wetlands, ponds, and woods.

Additional language from the Natural Resources Chapter:

“Because the vernal pool depression typically includes hydric soils, any alteration to vernal pools is regulated by the Cape Elizabeth wetland regulations. Vernal pools have been identified during development reviews, and buffers have been created to preserve the area around a vernal pool utilizing the existing local wetland regulations. “

“Threats to wetlands in Cape Elizabeth have been greatly reduced by local wetland regulations that are more restrictive than state wetland protection. Unlike state regulation, when up to 4,300 sq. ft of wetland may be altered with minimal permitting, no alteration of these areas is exempt from local review. “

Comp Plan Recommendation #47: “Review and update the Resource Protection Permit standards to emphasize avoidance and minimization of wetland alterations. “

The reason I request even greater regulations is in reference to the lot recently cleared and wetland filled adjacent to Town Hall. In spring of 2019, I asked the Planning Board(PB), during a televised meeting for the environmental assessment report of the vernal pool located on that lot, because I was confident it was a significant vernal pool, worthy of preserving by state standards. [As a side note, I have over the 14 years of leading 4th grade walks in Robinson Woods, shared the salamander and wood frog egg masses and fairy shrimp with students during our spring walks from this pool.] I was told by the PB to review the report at Town Hall, which I did. It was a report completed in April, 2016 by Lauren Stockwell, Stockwell Environmental Consulting, where she reviewed the site for one day only, found a dry vernal pool with no egg masses or fairy shrimp. In speaking with her, she was not made aware of the 2014 report prior to her review of the site. Her report was submitted to IFW where it was read by Jason Czapiga, and the state determined, based on this single report, was not a significant vernal pool.

Someone watching the PB meeting that night where I spoke, tracked me down and sent me a 2014 environmental report requested by the property owner at that time, completed by Albert Frick Associates Inc, a different environmental firm. This report, completed in April, 2014 over two days, determined that this same vernal pool was considered a significant vernal pool by state standards, due to the fact that fairy shrimp were found. According to DEP state regulations, Chapter 335, page 8, any fairy shrimp, presence in any life stage, located in a vernal pool in any given year, qualifies that pool as significant, and therefore must be preserved by state standards. I have attached the DEP regulation language page and the 2014 Frick report for your review.

One more fact to be aware of was the weather pattern during these past springs. 2016 was a dry spring. According to Weather Underground for Portland Maine:

	<u>Avg Precipitation</u>	<u>Total Precipitation</u>	<u>Max Precipitation</u>	(inches/water)
April 2014	.09 in	2.77 in	.85 in	
April 2016	.05 in	1.56 in	.45 in	
April 2019	.11 in	3.29 in	.74 in	

Once I received this 2014 report in spring 2019, I spoke with Jason from IFW who made the determination the vernal pool was not significant, based on the 2016 report. He connected me to the DEP legal department, where this case was reviewed by the land use bureau director and IFW. After 4 months I learned that they concluded that they have to uphold the official determination to support the IFW report because the 2014 report was never submitted to the state by the land owner. The 2014 report technically belonged to the landowner, and it is the landowner's responsibility to submit the report to the state. I was told that our state regulations are not perfect and have loopholes which cannot protect all significant vernal pools, such as the one that was next to Town Hall.

I am requesting that the Cape ordinance committee create some type of legislation to prevent the destruction of a significant vernal pool from happening again in the future. Why you may ask is this important? Because 96% of Cape Elizabeth residents support protecting and preserving wetlands, ponds, and woods, and it would support the comp plan recommendation #47. Why should we care about vernal pools, salamanders, wood frogs and fairy shrimp? Simply, they support the overall health of woodland ecology, providing an important food source for forest creatures. The state has made great progress by writing legislation to try and protect significant vernal pools because they recognize their importance, but it's not perfect. Cape has stated that our wetlands protection is more restrictive than the states, but it didn't protect this significant vernal pool. I believe our community would support even greater restrictions to preserve what significant vernal pools we have left in Cape. Who doesn't enjoy the sound of spring peepers?

I approached the PB with this information and Matt Sturgis at year end, and I was told to present this information to you, and that new ordinances would need to be written to potentially prevent this situation from occurring in the future. A possible solution would be to require a wetland analysis be completed multiple points in spring time over multiple years. The 2016 Stockwell report was done on a single day during a very dry spring. Perhaps Cape should require landowners to submit any reports to the town, or require environmental consulting firms to submit any completed report to the town. There are probably other solutions that could work to prevent this tragedy in Cape in the future. I'm confident that the Ordinance committee could come up with a solution, or maybe another town in Maine has already developed a regulation that could help us, without reinventing the process.

You may be wondering why I am even bothering to bring this topic to your attention? The pool is filled and the amphibians are dead. I've given it a lot of thought and I feel I have a moral and civic responsibility to preserve the areas of Cape that have ecological importance and to try and maintain the critical and fragile balance of the natural world within our community.

Thank you for considering this proposal.

Suzanne McGinn

Attachments:

DEP 06-096 – Maine.Gov, Chapter 335, Page 8, section B. Significant vernal pool habitat identification criteria.

Albert Frick Associates, Inc. vernal pool report dated 4/23/14 on the Ocean House Rd lot.

2 attachments



Cape Elizabeth Mohr and Seredin Ocean House Road 14-0235.pdf
2661K



filename-1.pdf
651K



Albert Frick Associates, Inc

Environmental Consultants

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Albert Frick, SS, SE
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Brady Frick, SE
Bryan Jordan, SE
William O'Connor, SE
Noel Dunn, Office Manager

April 23, 2014

Stephen Mohr
Mohr & Seredin
18 Pleasant Street
Portland, ME 04101

Re: Peter Haffenreffer, Ocean House Road, Cape Elizabeth

Dear Stephen:

Attached is the vernal pool field data sheet for the Peter Haffenreffer lot, as requested.

Your client retains sole possession of information.

Please contact me if you have any questions or additional matters for discussion regarding the property.

Respectfully,

A handwritten signature in cursive script that reads "Albert Frick".

Albert Frick
Certified Soil Scientist # 66
Licensed Site Evaluator #163
AF/nd

Enc. Vernal Pool Field Identification data sheet
Photographs

N/F HAFFENREFFER
Ocean House Road
Vernal Pool
April 21 & 22, 2014



Photo 1: View of vernal pool area.



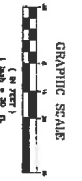
Photo 2: Fairy shrimp taken from pond.



Photo 3: Fairy shrimp.




Photo 4: Fairy shrimp observed in vernal pool.



PROGRESS PRINT

DATE	REVISIONS

SITE PLAN
 PREPARED FOR
 N/F HAFFENREFFEN
 OCEAN HOUSE ROAD
 (ROUTE 77)
 CAPE ELIZABETH, MAINE


Albert Rick Associates, Inc.
 Environmental Consultants
 Gorham, Maine

Date: 8.11.11
 Scale: A.F.
 Job: 4/22/11
 Size: 1"=30'



LINE	LENGTH	BEARING	CRD. BEARING	CRD. DIST.
10	348.32	S 81° 49' 52"	277.6	214.04

N/F
 OWN OF
 ELIZABETH
 1/25/74



Maine State Vernal Pool Assessment Form



INSTRUCTIONS: Complete all 3 pages of form as thoroughly as possible. Most fields are required for pool registration.

Observer's Pool ID: Haffenreffer, Ocean House Road MDIFW Pool ID: _____

1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Albert Frick
- b. Contact and credentials previously provided? No (submit Addendum 1) Yes

2. PROJECT CONTACT INFORMATION

- a. Contact name: same as observer other _____
- b. Contact and credentials previously provided? No (submit Addendum 1) Yes
- c. Project Name: Haffenreffer, Ocean House Road

NOTE: Clear photographs or digital images of a) the pool and b) the indicators (one example of each species egg mass) are required for nonprofessional observers and encouraged for all observers.

3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner? Yes No If no, was landowner permission obtained for survey? Yes No
- b. Landowner's contact information (required)
 Name: Peter Haffenreffer c/o Stephen Mohr Phone: 207 871-0003
 Street Address: Mohr & Seredin, 18 Pleasant Street City: Portland State: ME Zip: 04101
- c. Large Projects: check if separate project landowner data file submitted

4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Cape Elizabeth

Brief site directions to the pool (using mapped landmarks):

Go to Cape Elizabeth Town Hall at 325 Ocean House Rd (Route 77). Parcel is adjacent on South side Ocean

b. **Mapping Requirements:** At least 2 of the 3 must be submitted (check those submitted):

- USGS topographic map with pool clearly marked.
- Large scale aerial photograph with pool clearly marked.
- GPS data (complete section below).

GPS location of vernal pool

Longitude/Easting: N43 deg. 35' 40.45" Latitude/Northing: W 70 deg. 13' 35.46"

Check Datum: NAD27 NAD83 / WGS84 Coordinate system: lat/long

- Check one: GIS shapefile
 - send to Jason.Czapiga@maine.gov; observer has reviewed shape accuracy (best)
- The pool perimeter is delineated by multiple GPS points. (excellent)
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (good)
- The center of the pool is approximately _____ m /ft in the compass direction of _____ degrees from the above GPS point. (acceptable)

Maine State Vernal Pool Assessment Form

5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): _____

b. Wetland habitat characterization

- Choose the best descriptor for the landscape setting:
 - Isolated depression
 - Floodplain depression
 - Pool associated with larger wetland complex
 - Other: _____
- Check all wetland types that best apply to this pool:

<input checked="" type="checkbox"/> Forested swamp	<input type="checkbox"/> Wet meadow	<input type="checkbox"/> Slow stream
<input type="checkbox"/> Shrub swamp	<input type="checkbox"/> Lake/Pond	<input type="checkbox"/> Floodplain overflow / oxbow
<input type="checkbox"/> Peatland (fen or bog)	<input type="checkbox"/> Abandoned beaver flowage	<input type="checkbox"/> Headwater seepage
<input type="checkbox"/> Emergent marsh	<input type="checkbox"/> Active beaver flowage	<input type="checkbox"/> Other: _____

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural Natural-Modified Unnatural Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

ii. Pool Hydrology

- Select the pool's estimated hydroperiod AND provide rationale for opinion.

<input type="radio"/> Permanent	<input type="radio"/> Semi-permanent (drying partially in all years and completely in drought years)	<input type="radio"/> Ephemeral (drying out completely in most years)	<input checked="" type="radio"/> Unknown
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Explain:

- Maximum depth at survey: 0-12" (0-1 ft.) 12-36" (1-3 ft.) 36-60" (3-5 ft.) >60" (>5 ft.)
- Approximate size of pool (at spring highwater): Width: 65' m ft Length: 108' m ft
- Predominate substrate in order of increasing hydroperiod:

<input checked="" type="radio"/> Mineral soil (bare, leaf-litter bottom, or upland mosses present)	<input type="radio"/> Organic matter (peat/muck) shallow or restricted to deepest portion
<input type="radio"/> Mineral soil (sphagnum moss present)	<input type="radio"/> Organic matter (peat/muck) deep and widespread
- Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

<input type="checkbox"/> Terrestrial nonvascular spp. (e.g. haircap moss, lycopodium spp.)	<input type="checkbox"/> Wet site ferns (e.g. royal fern, marsh fern)
<input type="checkbox"/> Dry site ferns (e.g. spinulose wood fern, lady fern, bracken fern)	<input checked="" type="checkbox"/> Wet site shrubs (e.g. highbush blueberry, maleberry, winterberry, mountain holly)
<input type="checkbox"/> Moist site ferns (e.g. sensitive fern, cinnamon fern, interrupted fern, New York fern)	<input type="checkbox"/> Wet site graminoids (e.g. blue-joint grass, tussock sedge, cattail, bulrushes)
<input type="checkbox"/> Moist site vasculars (e.g. skunk cabbage, jewelweed, blue flag iris, swamp candle)	<input type="checkbox"/> Aquatic vascular spp. (e.g. pickerelweed, arrowhead)
<input type="checkbox"/> Sphagnum moss (anchored or suspended)	<input type="checkbox"/> Floating or submerged aquatics (e.g. water lily, water shield, pond weed, bladderwort)
	<input checked="" type="checkbox"/> No vegetation in pool
- Faunal indicators (check all that apply):

<input type="checkbox"/> Fish	<input type="checkbox"/> Bullfrog or Green Frog tadpoles	<input type="checkbox"/> Other: _____
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iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet
- Intermittent inlet or outlet
- Permanent inlet or outlet (channel with well-defined banks and permanent flow)
- Other or Unknown (explain): _____

Maine State Vernal Pool Assessment Form

6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/21 and 4/22 2014

b. Indicator abundance criteria

- Was the entire pool surveyed for egg masses? Yes No; what % of pool surveyed? _____
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

INDICATOR SPECIES	Egg Masses (or adult Fairy Shrimp)				Tadpoles/Larvae	
	#	Confidence Level ¹	Egg Mass Maturity ²		Observed	Confidence Level ¹
Wood Frog						
Spotted Salamander						
Blue-spotted Salamander						
Fairy Shrimp ³	X	X	3	3		

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%

2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (looser matrix, curved embryos), H= Hatched or hatching

3-Fairy Shrimp: X = present

c. Rarity criteria

- Note any rare species associated with vernal pools. Check the method(s) of verification and fill in the confidence level (CL) for each species observation. Observations should be accompanied by photographs (labeled with observer name, pool location, and date).

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

*Method of verification: P = Photographed, H = Handled, S = Seen

**CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

d. Optional observer recommendation:

- SVP Potential SVP Non Significant VP Indicator Breeding Area

e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: Maine Dept. of Inland Fisheries and Wildlife
Attn: Vernal Pools
650 State Street, Bangor, ME 04401

NOTE: Digital submission (to Jason.Czapiga@maine.gov) of vernal pool field forms and photographs is only acceptable for projects with 3 or fewer assessed pools; larger projects must be mailed as hard copies.

For MDIFW use only Reviewed by MDIFW Date: _____ Initials: _____

This pool is: Significant Potentially Significant but lacking critical data Not Significant due to: does not meet biological criteria. does not meet MDEP vernal pool criteria.

Comments: _____

- (8) Vernal pool depression or vernal pool. This area includes the vernal pool depression up to the spring or fall high water mark, and includes any vegetation growing within the depression.

B. Significant vernal pool habitat identification criteria. Vernal pool habitat significance must be determined and documented by a qualified individual.

- (1) Abundance. Any one of or combination of the following species abundance levels, documented in any given year, determine the significance of a vernal pool habitat.

Species	Abundance Criteria
Fairy shrimp	Presence in any life stage.
Blue spotted salamanders	Presence of 10 or more egg masses.
Spotted salamanders	Presence of 20 or more egg masses.
Wood frogs	Presence of 40 or more egg masses.

- (2) Rarity. A pool that has documented use in any given year by a rare species, or state-listed endangered or threatened species that commonly requires a vernal pool to complete a critical portion of its life-history is part of a significant vernal pool habitat. Examples of vernal pool dependent state-listed endangered or threatened species include, but are not limited to, Blanding's turtles, Spotted turtles, and Ringed Boghaunter dragonflies. The rare species that must be considered are limited to: Ribbon Snakes, Wood Turtles, Swamp Darner Dragonflies and Comet Darner Dragonflies.
- (3) Identification period. Egg masses must be counted just past the peak breeding period of pool-breeding amphibians. Abundance of pool-breeding amphibians can only be used to determine the presence of a significant vernal pool during the identification period. The presence of fairy shrimp, rare species listed in paragraph (2), or a state-listed endangered or threatened species may be used to determine the presence of a significant vernal pool at times of the year other than the identification period.

NOTE: Optimal times for counting egg masses of pool-breeding amphibians vary according to geographic location and weather. For instance, during cold springs, breeding can begin as much as 2 weeks later than it does in warm, wet springs. The optimal time to count masses is just past the peak breeding period. For wood frogs, this occurs approximately 2 weeks after they start full choruses. Wood frog egg masses hatch very quickly and are difficult to count much past peak breeding. Salamanders have a more extended breeding period and their eggs do not hatch as quickly as those of wood frogs. Therefore, surveys to count salamander egg masses should be conducted slightly later in the breeding season, generally 2-3 weeks following wood frog egg mass counts. The following are rough guidelines for optimal times for counting egg masses:

Geographic Region	Wood Frogs	Spotted & Blue Spotted Salamanders
Northern Maine	May 5 – May 20	May 15 – June 5
Central Maine	April 25 – May 10	May 5 - May 25
Southern Maine	April 10 – April 25	April 20 – May 10

Note that optimal egg mass counting dates for high elevation localities are likely to be delayed by up to one or two weeks from the suggested dates provided within each geographic region above.