May 5, 2021
286 Tibbettstown Road
Columbia Falls, Maine 04623

Ben Godsoe
Land Use Planning Commission
22 State House Station
Augusta, ME 04333

Letter to the Maine DEP and LUPC
re: Opposition to the Apex Down East Wind Project in the Town of Columbia, Unorganized Townships 18 &24 Washington County, Maine
by Charles Robbins of Columbia Falls, Maine

My name is Charles Robbins, I have been a lifelong resident of Washington County excepting a four year absence while working in a Great Northern logging camp at T5 R11 WELS (Telos) and living in Columbia Falls for the past 44 years. I have worked here in Washington County in the sardine, blueberry, logging industries and 29 years for the Maine DOT Property office Survey Division. I am now retired and enjoy fishing, hunting and canoeing in this part of Washington County.
When I first heard of this wind powered project the location of Pea Ridge in Columbia was the only section of the array mentioned. When, a few years later, I found the project was extending into the Unorganized Townships 18 MD and 24 MD I was alarmed. This part of Maine is considered "God's Country" by many locals for many reasons...mainly because of it's native beauty, diverse wildlife, remote forests and protected wetlands/rivers.
Of all places on earth to construct such a massive windmill project I would consider this location last.

I am writing in opposed to the Apex Down East Wind Project for the following reasons:

1. The project will impact the historic **Epping East-West Baseline** which was a part of the Eastern Oblique Arc which began July 18, 1857. It is the only remaining original baseline which was to map the east coast of the United States. There should be no impact to this historic monument of national significance. This baseline is a treasure to both the State of Maine and this nation.

2. The Apex Downeast Wind Project will have possible adverse affects on the protected **Great Heath** an ecologically protected 7,000 acre peatland of statewide significance due to harboring endangered species of plants like Bog Jacob's-Ladder (Polemonium vanbruntia Britt.), and a variety of other plants, shrubs and grasses like the Bog Bedstraw and Canada Mountain-ricegrass.
The Great Heath is one of the largest multiple-unit peatlands in Maine extending into TWP18 MD BPP. "The Great Heath is unique in that it is a closed and contained system. Except for precipitation it receives no water from outside sources such as the Pleasant River, nor does it discharge water into other water bodies. Purity of water is considered high throughout the watershed with the exception of the short stretch of river just above tidewater in Columbia Falls." Draft_Pleasant River Management Plan Aug 1982 Rev Feb. 1983 Washington County Regional Planning Commission (PRMP) p7

3. The Apex Downeast Wind project will adversely visually impact the State's "Ice Age Trail" which showcases the remnants of the geographic features from the last glacier over 10,000 years ago. Features like Pineo Ridge Delta (nominated to the Maine Register of Critical Areas in 1981) is a very fine example of an ice-contact marine delta. Kames, Moraines, Eskers, Kettle Holes and glacially deposited boulders are still visible and attract tourists to this area. The trail will be overshadowed by the 500 foot wind towers and blades and significantly diminish it's scenic natural beauty which tourists from Bar Harbor come to see.

4. The project has a very severe potential to adversely impact ecologically fragile the Class AA river systems of the Narraguagus, Pleasant, Mopang/Machias Rivers. These river systems are all in the drainage of the Apex project and have the potential contamination from runoff and oil/chemical spills from the turbines. These cold water river systems are protected for their remote scenic beauty, diverse flora & fauna as well as being a few of the only river system to support a healthy population of native brook trout as well as a federally protected relic strain of wild Atlantic salmon...unique strains for each river system because they return to the river of their origin.
These river system are to be protected and remain unspoiled.
Canoeists paddle the Pleasant River for it's unique and remote beauty....trout are a bonus.
The camp owners of Schoodic Lake would have to contend with sound, flicker and any offensive impacts from the turning turbine windmill blades
"The Pleasant River drainage provides excellent habitat for brook trout. Survey findings (pre 1955)indicated that the population was maintained primarily by natural production. Additionally, the river is one of six Maine rivers supporting a self-sustained fishable run of Atlantic salmon...Good spawning areas remain on the river both above and below Saco Falls..." PRMP p9

5. Many people who live in this area appreciate this wild remote area we live in. They appreciate living here. The largest tree is the White Pine which can stand over 100 feet tall. This is the tree that represents the State of Maine. The proposed wind towers may exceed 500 feet...dwarfing out state tree. It will permanently change the skyline of our forest for many lifetimes and be seen from long distances. The scenic beauty of the Downeast Maine forest will be adversely changed and destroyed for many lifetimes.

6. Wind projects like this are know to kill birds and bats. Bats are very rare due to disease. Eagles have been killed by the turbine blades...not yet in Maine but in other states. These 30 towers proposed by Apex will be in the path of federally regulated and studied woodcock. Who will be counting the kills?
"A characteristic of the Pleasant River Study Area is its inaccessibility and varied natural environment which provides excellent habitat for an abundance of wild life. Ruffed grouse occupy the hard and mixed woods throughout the area and woodcock may be found in the alder and bushy lowlands. Commonly seen along the river are black, wood ducks, goldeneye, ringneck and teal, but also present are loon, merganser, heron and grebe. Hawks that hunt along both the river and uplands are the red shouldered, sharpshinned, broadwinged, redtailed, marsh goshawk and American kestrel."
PRMP PP8-9
" The study area (Pleasant River), especially along the edge of the blueberry barrens, is a popular bird watching site due to the attractive environment for an abundance of birds. Over 200 species are known present (over a 12 month period) along the river including summer and winter residents, those breeding

locally, and those migrating through the region. A complete list may be found in Appendex 2. (Pages 6-11)
"Typically observed are great blue heron, snowy egret, killdeer, golden plover, solitary sandpiper, mourning dove, ruby-throated hummingbird, belted kingfisher, flicker, Eastern Kingbird, gray jay, winter evening grosbeak, and white throated sparrow."
from: Pleasant River Management Plan P9
*A complete list of birds in the Pleasant River study are listed on page #

7. At the last public meeting held at the Columbia town hall (winter 2020) I asked the Apex spokesman, Paul Williamson, if he would mark on my map the locations of the towers. I took the map to him and he pulled out a maker. The map was the "Management Plan for the Pleasant River" which had identified all the Atlantic salmon spawning and resting locations. The Apex spokesman took one look at my map and put his pen back in his pocket without making one mark on it!
The public has no specific knowledge of where these towers or roads will be located. At the public meeting we heard little of road construction.
"The Pleasant River Management Plan study was undertaken because the Pleasant River was identified in two previous studies as possessing unique natural, historic and recreational values of **National and/or Statewide Importance."**

"The purpose of this study was to clearly identify those values and to recommend strategies for Protection.
The two previous studies were the **Final List of Potential Wild and Scenic Rivers**, January, 1979 by the Federal Heritage Conservation and Recreation Service and the **Maine Rivers Study**, May 1982 by the National Park Service and the Maine Department of Conservation.
The federal study identified a 30-mile segment of the Pleasant River between tidewater at Columbia Falls to Pleasant River Lake in Beddington as meeting the minimum criteria of Public Law 90-542 for further study and/or potential inclusion into the National Wild and Scenic River System.

The state study identified the Pleasant River as one of 20 "A" rivers in Maine; rivers and river corridors which "possess a composite natural and recreational resource value with greater than state significance."
The values attributed to the Pleasant River in the Maine Rivers Study were geological/hydrologic, critical/ecological, undeveloped, anadromous fishery (primarily Atlantic salmon), inland fishery, and canoe touring.
The state study was followed by executive order 1FY 82/83 by Governor Joseph Brennan on July 06, 1982. The executive order identified the Pleasant River from Seavy Point to Pleasant River Lake as one of 16 "special" rivers..."
from Draft "Pleasant River Management Plan" Aug. 1982, Sept. 1982 Rev., Feb. 1983 Rev. Washington County Regional Planning Commissioners page z2

8. Fire hazards from a burning Windmill in such remote areas as TWP 18 and 24 would be difficult to reach. Any fire in these forested townships would also be difficult to extinguish. Parts of flaming blades could be hurled many hundreds of feet since they are turning at a high rate of speed. This is a potential threat to towns and lives in Washington County.

9. With any Maine DOT highway project there is always a Project Number with each individual project. I have asked the Maine DEP for a project number or application numbers for over a year but I understand that Apex had not yet applied for a number. I find that objectionable because this project has

been in the works for many years. With the DOT all information is stored in files: property owners, costs, survey information, etc. From day one all information goes into the file. How much information does the DEP or LUPC have? Are these files open for public inspection?
Apex has been making deals and offers for years to fire departments, town officials, schools & landowners. Is any of this information on public record? It should be.

10. The Apex DownEast Wind Project will have an adverse affect on the woods, protected waters, wildlife, fauna & flora of Washington County. The concrete tower bases will need many hundreds and maybe thousands of cubic yards of concrete and steel...which will remain in the ground forever. If cleanup at termination of the project resembles the Columbia Falls Backscatter base it will be an ecological disaster. I realized funds will be set aside for the Apex cleanup but who knows just how much it will cost, how funds will be distributed and if sufficient funds will be there. The blades and towers are non-recyclable...they have a time-life and must be disposed of. Where?

In Closing:
The main reason this area was chosen was due to the access to the power grid in Columbia plus the Town of Columbia was more than willing to accept the possible financial gains for their town. Who would turn down free money? By establishing approval from the Town of Columbia the project could then easily spread to the adjacent Unorganized Townships #18MD & 24MD...maybe even 19MD and 25MD. The County Commissioners are happy to agree to jumping aboard this project.

To the DEP and LUPC
Please study this Apex Downeast Wind project carefully.
Both the Maine Dept. Of Inland Wildlife & Fisheries and the USF&W should provide input for this project in evaluating any adverse effects to the fish & game in the project area. It will change this portion of Washington County for many lifetimes. Ecological damage to the affected watersheds as well as the fauna & flora may be irreversible. These watersheds of the Narraguagus, Pleasant Mopang/Machias Rivers are the gems of our county and must be protected by out State of Maine environmental agencies ie: the Maine DEP and LUPC. I'm sure employees are under tremendous pressure by our Governor Mills to proceed with this project in order to meet energy commitments. I say please study exactly what is protected under law. Study potential hazards to the impacted watersheds plus our remaining Atlantic salmon, bats, eagles and migrating birds like the woodcock. Do the studies before you are responsible for the damage. You will be held accountable.
The Class AA freshwater river systems of our Downeast forest are our most valued natural resource. Why gamble with their purity by developing wind power in these protected areas? Develop where the clean waters may not be contaminated. The main reason for choosing this part of Maine is convenience...it is near the power grid. Project developers also choose geographic locations of low population, where town selectmen are easily won, areas of low

opposition and low income areas and where the grant funds are welcome. Wind, I believe is a low priority...you can find wind anywhere.

I hereby request a LUPC public hearing.

Respectfully submitted by Charles W. Robbins this May 3, 2021
286 Tibbettstown Road
Columbia Falls, Maine 04623
207-483-4111
207598-0546
68delta88@gmail.com

signature:  **date:** 5/12/21

Attachment #1
"Bird Check List for Pleasant River and Environs

B... Breeding
B?... Probable Breeder
M... Migrant
PRF... Permanent Resident Feeding
SF... Summer Resident Feeding Only
W... Winter
RM... Rare Migrant

B	Common Loon
B?M	Pied-billed Grebe
SF	Double-Crested Cormorant
SF	Blue Heron
B	Green Heron
SF	Snowy Egret
SF	Black-crowned Night Heron
B	American Bittern
R	Glossy Ibis
M	Canada Goose
B?M	Mallard
B	Black Duck
M	Pintail
B	Black Duck
M	Pintail
B	Green-winged Teal
B	Blue winged Teal
RM	Northern Shoveler
B	Wood Duck
B	Ring-necked Duck
B	Common Goldeneye
M	Barrow's Goldeneye
M	Bufflehaed
M	Oldsquaw
M	White-winged Scoter
B	Hooded Merganser
B?	Common Merganser
M	Red=breasted Merganser
B	Goshawk
B	Sharpshinned Hawk

Attachment #1

"Bird Check List for Pleasant River and EnvironsB...Breeding (Cont.)
B... Breeding
B?... Probable Breeder
M... Migrant
PRF... Permanent Resident Feeding
SF... Summer Resident Feeding Only
W... Winter
RM... Rare Migrant

B	Red-shouldered Hawk
B	Broad-winged Hawk
W	Rough-legged Hawk
PRF	Bald Eagle
B	Northern Harrier
B	Osprey
RM	Peregrine Falcon
M	Merlin
B	American Kestrel
B	Spruce Grouse
B	Ruffed Grouse
B	Virginia Rail
B	Sora
M	Semipaimated Plover
B	Killdeer
M	Golder Plover
M	Black-bellied Plover
M	Ruddy Turnstone
B	American Woodcock
B	Common Snipe
M	Whimrel
B	**Upland Sandpipe**r
B	Spotted Sandpiper
M	Solitary Sandpiper
M	Greater Yellowlegs
M	Lesser Yellowlegs
M	Red-knot
W	Purple Sandpiper
M	Rectoral Sandpiper
M	White-rumped Sandpiper
M	Least Sandpiper
M	Dunlin
M	Short-billed Dowitcher
M	Semipalmated Sandpiper
M	Western Sandpiper
M	Sanderling

Attachment #1 (Cont.)

"Bird Check List for Pleasant River and Environs (Cont.)

B...Breeding
B?... Probable Breeder
M... Migrant
PRF... Permanent Resident Feeding
SF... Summer Resident Feeding Only
W... Winter
RM... Rare Migrant

W	Glaucous Gull
W	Iceland Gull
PRF	Great Black-backed Gull
PRF	Herring Gull
M	Boneapart's Gull
SF	Common Tern
M	Black tern
B	Rock Dove
B	Mourning Dove
B	Yellow-billed Cuckoo
W	Snowy Owl
B	Barred Owl
M	Short-eared Owl
B	Saw-whet Owl
B	Great Horned Owl
B	Whip-poor-will
B	Common Nighthawk
B	Chimney Swift
B	Ruby-throated Hummingbird
B	Belted Kingfisher
B	Commom Flicker
B	Pileated Woodpecker
B	Yellow-bellied Sapsucker
B	Hairy Woodpecker
B	Downey Woodpecker
B	Black-backed Three-toed Woodpecker
B	Eastern Kingbird
B	Great Crested Flycatcher
B	Eastern Phoebe
B	Yellow-bellied Flycatcher
B	Alder Flycatcher
B	Least Flycatcher

Attachment #1 (cont.)

"Bird Check List for Pleasant River and Environs

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B?... Probable Breeder
M... Migrant
PRF... Permanent Resident Feeding
SF... Summer Resident Feeding Only
W... Winter
RM... Rare Migrant

B	Eastern Peewee
B	Olive-sided Flycatcher
M	Horned Lark
B	Tree Swallow
B	Bank swallow
B	Barn Swallow
B	Cliff Swallow
B	Gray Jay
B	Blue Jay
B	Common Raven
B	Common Crow
B	Black-capped Chickadee ***State of Maine Bird***
B	White-breasted Nuthatch
B	Boreal Chickadee
B	White breasted Nuthatch
B	Brown Creeper
B	Winter Wren
B	Long-billed Marsh Wren
B	Mockingbird
B	Gray Catbird
B	Brown Thrasher
B	American Robin
B	Wood Thrush
B	Hermit Thrush
B	Swainson's Thrush
M	Gray-cheeked Thrush
B	Veery
B	Eastern Bluebird
B	Golden-crowned Kinglet
B	Ruby-crowned Kinglet
M	Water Pipit
M	Bohemian Waxwing

Attachment #1 (cont.)

"Bird Check List for Pleasant River and Environs

B...Breeding (Cont.)
B?... Probable Breeder
M... Migrant
PRF... Permanent Resident Feeding
SF... Summer Resident Feeding Only
W... Winter
RM... Rare Migrant

B	Cedar Waxwing
W	Northern Shrike
B	Starling
B	Solitary Vireo
B	Red-eyed Vireo
M	Philadelphia Vireo
B?	Warbling Vireo
B	Black and White Warbler
B	Tennessee Warbler
B	Nashville Warbler
B	Parula Warbler
B	Yellow Warbler
B	Magnolia warbler
B	Cape May Warbler
B	Black-throated Blue Warbler
B	Yellow-rumped Warbler
B	Black-throated Green Warbler
B	Blackburnian Warbler
B	Chestnut-sided Warbler
B	Bay-breasted Warbler
M	Blackpoll Warbler
B	Pine Warbler
B	Ovenbird
B	Northern Waterthrush
B	Mourning Warbler
B	Yellowthroat
B	Wilson's Warbler
B	Canada Warbler
B	American Redstart
B	House Sparrow
B	Bobolink
B	Eastern Meadowlark

Attachment #1 (cont.)

"Bird Check List for Pleasant River and Environs

B...Breeding (Cont.)
B?... Probable Breeder
M... Migrant
PRF... Permanent Resident Feeding
SF... Summer Resident Feeding Only
W... Winter
RM... Rare Migrant

B	Red-winged Blackbird
B	Northern Oriole
M	Rusty Blackbird
B	Common Grackle
B	Brown-headed Cowbird
B	Scarlet Tanager
W	Cardinal
B	Rose-breasted Grosbeak
B	Indigo Bunting
B	Evening Grosbeak
B	Purple Finch
W	Pine Grosbeak
W	Hoary Redpoll
W	Common Redpoll
B	Pine Siskin
B	American Goldfinch
B	Red Crossbill
B	White-winged Crossbill
B	Rufus-sided Towhee
B	Savannah Sparrow
B	Sharp-tailed Sparrow
B	Vespar Sparrow
B	Dark-eyed Junco
W	Tree Sparrow
B	Chipping Sparrow
M	Clay-colored Sparrow
B	Field Sparrow
M	White-crowned Sparrow
B	White-throated Sparrow
M	Fox sparrow
B	Lincoln's Sparrow
B	Swamp Sparrow

Attachment #2
June 28, 2019 Letter from: Robert D. Stratton Environmental Program Manager Fisheries and Wildlife Program Support Section Supervisor Maine Department of Inland Fisheries & Wildlife
To: Mr. Michael Carey Development Manager SWEB Development USA, LLC 6080 Young Street, Suite 106 Halifax, NS B3K 5L2 RE: Proposed Silver Maple Wind Project - Clifton, Maine

https://www.maine.gov/dep/ftp/projects/silver-maple/review-comments/Silver%20Maple%20Wind%2028June2019.pdf

"Fatality data from post-construction monitoring at the Bull Hill Wind facility in the Downeast coastal plain indicated the highest bird fatality estimates in northern New England. The originally reported 2013 and 2014 fatality estimates each represented approximately double the number of carcasses per turbine per study period than the next highest wind project in Maine. Subsequently, the applicant's consultant revised its findings and indicated plans to reexamine the results of all their projects based on new fatality estimate guidance. These revisions have not yet been obtained but, it is anticipated that, though the total fatality estimate numbers for all of the consultant's projects may decrease following statewide adjustments, the relative difference between the Bull Hill results in the Downeast coastal plain in comparison to other projects will likely remain."

STATE OF MAINE DEPARTMENT OF INLAND FISHERIES & WILDLIFE 284 STATE STREET 41 STATE HOUSE STATION AUGUSTA ME 04333-0041 JUDITH CAMUSO COMMISSIONER PHONE: (207) 287-8000 FISH AND WILDLIFE ON THE WEB: www.maine.gov/ifw EMAIL ADDRESS: ifw.webmaster@maine.gov June 28, 2019 Mr. Michael Carey Development Manager SWEB Development USA, LLC 6080 Young Street, Suite 106 Halifax, NS B3K 5L2 RE: Proposed Silver Maple Wind Project - Clifton, Maine Dear Mr. Carey, I am writing to follow up on our June 12, 2019, pre-application meeting for the proposed Silver Maple Wind Project in Clifton, Maine. The Maine Department of Inland Fisheries and Wildlife (MDIFW) appreciates the opportunity to meet with you and your colleagues to discuss the proposed project, relevant natural resource issues, and siting, design, and operational measures to avoid/minimize potential impacts. MDIFW and the SWEB Development USA, LLC Project Team (SWEB) have had several previous communications and MDIFW provided preliminary information on wildlife and fisheries resources in the project vicinity in a letter dated June 8, 2019. The following summary of the issues discussed at our June 12th meeting is intended to help facilitate future discussions as may be necessary and to help ensure that the issues are ultimately resolved. Based on information provided, and as discussed, the proposed Silver Maple Wind Project will consist of a 20 megawatt, 5-turbine expansion of the existing 5-turbine Mt. Pisgah Wind project in Clifton, Maine. 1. Bats. In both the letter and meeting described above, MDIFW discussed the current status of bat populations in Maine and typical turbine curtailment recommendations as referenced in MDIFW's Maine Wind Power Preconstruction Recommendations and Turbine Curtailment Recommendations to Avoid/Minimize Bat Mortality (Wind Power) Guidance (March 5, 2018). We also discussed sitespecific provisions recently enacted by two projects, one of which received an Incidental Take Permit (ITP) for bats based on its more protective measures. We explored the operational practices, post-construction monitoring scenarios, and other relevant factors for those

two projects to provide possibilities for consideration by SWEB. At the June 12th meeting, we discussed the presence of rocky outcrops, talus and steep slopes, and a potential bat maternity roost tree near the project site as described in SWEB's November 8, 2018 report. We also discussed that winter activity has been confirmed for little brown bats (Myotis lucifugus) and eastern small-footed bats (M. leibii) at Eagle Bluff in Dedham, located approximately 2.5 miles away. These bats are categorized as Endangered and Threatened Species respectively, pursuant to the Maine Endangered Species Act (12 M.R.S., §12801 et. seq.). Based on the above, MDIFW anticipates that other at-risk bat species are also likely present in the vicinity. It is MDIFW's position that the only adequate protection for bats at wind power facilities at this time is seasonal Silver Maple Wind June 28, 2019 Page 2 of 5 curtailment of turbines under appropriate conditions, though continuing research may lead to other avoidance measures in the future. As discussed, MDIFW's Wind Power Guidance describes general turbine curtailment recommendations and notes that the presence of habitats such as those described above in proximity "may increase risks and thus possibly necessitate additional safeguards, such as extended timeframes (earlier and/or later) and/or higher wind speeds" for curtailment. MDIFW's Wind Power Guidance recommends acoustic bat monitoring "to determine whether talus slopes, rocky outcrops, or similar features are in use as hibernacula or maternity roost sites by Myotis bats." As the presence of Myotis has been confirmed in nearby features, acoustic monitoring will not be necessary. However, additional protective measures, such as those described, will likely be recommended. SWEB indicated that it intends to draft a turbine curtailment strategy for MDIFW's consideration. As indicated, MDIFW is available to address additional questions related to the above issues, ITPs, etc., as necessary. 2. Migrating Songbirds. At the June 12th meeting, MDIFW noted that the proposed Silver Maple Wind Project site is within the boundaries of what has been designated as the Downeast Coastal Plain. Noting that the boundaries are general and that conditions across this region are not necessarily uniform, MDIFW intends to clarify this relationship. The significance of this issue, as noted in MDIFW's Avian Resources in Maine's Coastal Plain (Avian Resources) Guidance (March 5, 2018) is that, "The concentration of migratory birds in the coastal plain is greater than in other areas of Maine and the seasonal and daily movement patterns are unique for represented guilds, creating a very complex dynamic." Pre-construction nocturnal radar data collected at three proposed wind project sites located within a range of approximately 10-27 miles of Silver Maple Wind (Apex Downeast Wind (pre-application), Weaver Wind (recently permitted), and Bull Hill Wind (operating)), indicated that the area has among the highest spring and fall passerine migration rates in New England, as well as low migrating bird flight heights relative to turbine heights. **Further, during its initial years of operation, the nearby Bull Hill Wind reported twice the number of bird fatalities / turbine as other facilities in Maine. And, the Downeast Coastal Plain region is prone to weather conditions that push migrating birds to lower flight heights.** Based on the above factors, MDIFW expressed concerns during project review that the adjacent Weaver Wind project would likely experience relatively consistent annual avian mortality at levels at or above the highest reported in Maine, as well as the potential for occasional larger mortality events when atmospheric conditions, timing of migration, and low altitude flight place large numbers of birds in jeopardy. Longroad Energy, the developer of the Weaver Wind project, worked with the Department and designed a study to determine if these concerns could be quantified and addressed through facility operational practices. Ultimately, the Department determined that the study was unlikely to provide statistically valid results, that Longroad Energy had demonstrated due diligence in avoiding and minimizing adverse impacts to migrating songbirds, and that efforts should focus on whether suitable mitigation for potential impacts could be developed through habitat conservation. For conservation to be deemed as adequate and appropriate mitigation of anticipated and potential impacts to songbirds from Weaver Wind, MDIFW determined that it must involve land acquisition commensurate with the scale of the project, habitat development, and active

habitat management of a sufficient quality and quantity of land for stop-over and nesting habitat for land-bird migrants in the Downeast Coastal Plain. Such conditions were established and the project was permitted by the Maine Department of Environmental Protection in 2019. Silver Maple Wind June 28, 2019 Page 3 of 5 As noted in the Avian Resources Guidance, MDIFW believes that sufficient data has been collected to indicate significant use patterns and adverse risks for migrating birds in this area. Thus, the Department does not recommend additional nocturnal radar data in the coastal plain itself as revalidation at this time. However, as discussed at the June 12th meeting, given its location "on the side" of the designated Downeast Coastal Plain, it may be advantageous to Silver Maple Wind to conduct nocturnal radar monitoring to determine if the proposed project site experiences similar elevated numbers and lower flight heights of migrating songbirds. MDIFW's concerns for potential impacts to migratory songbirds from wind energy development in the Downeast coastal plain remain and, as discussed, need to be addressed by Silver Maple Wind. Both SWEB and MDIFW intend to further explore the geographic area associated with these concerns. The proposed Silver Maple Wind Project is significantly smaller than the other wind projects described and is located further west. If it is determined that mitigation is necessary to offset substantial impacts to migrating songbirds, recommendations will likely be commensurate with the scale of the project. In general, as an operational practice to minimize risk to nocturnal migrants, we recommend that the turbine lighting be flashing white strobe lights with a maximum off period between flashes. This type of lighting is far less attractive to migratory birds than continuous or pulsating, incandescent red or white lights. Consistent with recommendations for other wind projects, we also recommend the use of an Aircraft Detection Lighting System (ADLS), which maintains that turbines be unlit until the ADLS radars detect nearby aircraft, at which time the lighting system is triggered to illuminate until the aircraft is out of radar range. This will provide for the same type of lighting system as Longroad Energy has planned for the wind turbines at the recently permitted Weaver Wind project. 3. Upland Sandpiper (UPSA). As noted in MDIFW's Avian Resource Guidance, "Concerns with migratory birds in the coastal plain involve passerines and shorebirds that are migrating through Maine at different times and from different directions." "In addition to those that migrate through, other shorebirds breed in Maine's coastal plain and are present through the spring, summer and fall, with localized behavioral patterns that put them at significant risk" during the June-September breeding season. Upland sandpipers, a State Threatened species, have been documented in meaningful numbers in suitable habitats within the Downeast Coastal Plain. UPSA nest only on the ground and use both native and cultivated grasslands for nesting sites. As noted during the June 12th meeting, an approximately 50-acre blueberry field with the potential to provide UPSA habitat is located on Woodchuck Hill Road less than 0.5 miles from the proposed project site. MDIFW notes that this field may be on the edge of suitable habitat but, it needs to be investigated to determine if the habitat supports these rare grassland birds. MDIFW's Charlie Todd indicated that he hopes to visit the field to make this determination. As background, UPSA are protected under the Maine Endangered Species Act and, as such, are afforded special protection against activities that may cause "Take" (kill or cause death), "harassment" (create injury or significantly disrupt normal behavior patterns), and other adverse actions. MDIFW has significant concerns with potential direct impacts (collision, habitat loss) and indirect impacts (habitat displacement) to UPSA from wind energy facilities based on the proximity to confirmed habitats. These concerns are unique to this area of the state based on the significance of the Downeast Coastal Plain to UPSA, as well as habitat preferences and behavioral traits of this species. The blueberry barrens of Downeast Maine are widely acknowledged to support the largest numbers of breeding UPSA in the Northeast.

10/08/2021

Dear Benjamin Godsoe,

I am writing you with regard to my concerns pertaining to the Downeast Wind Farm project currently in development for Washington County Maine; Cherryfield, Columbia and nearby unorganized townships.

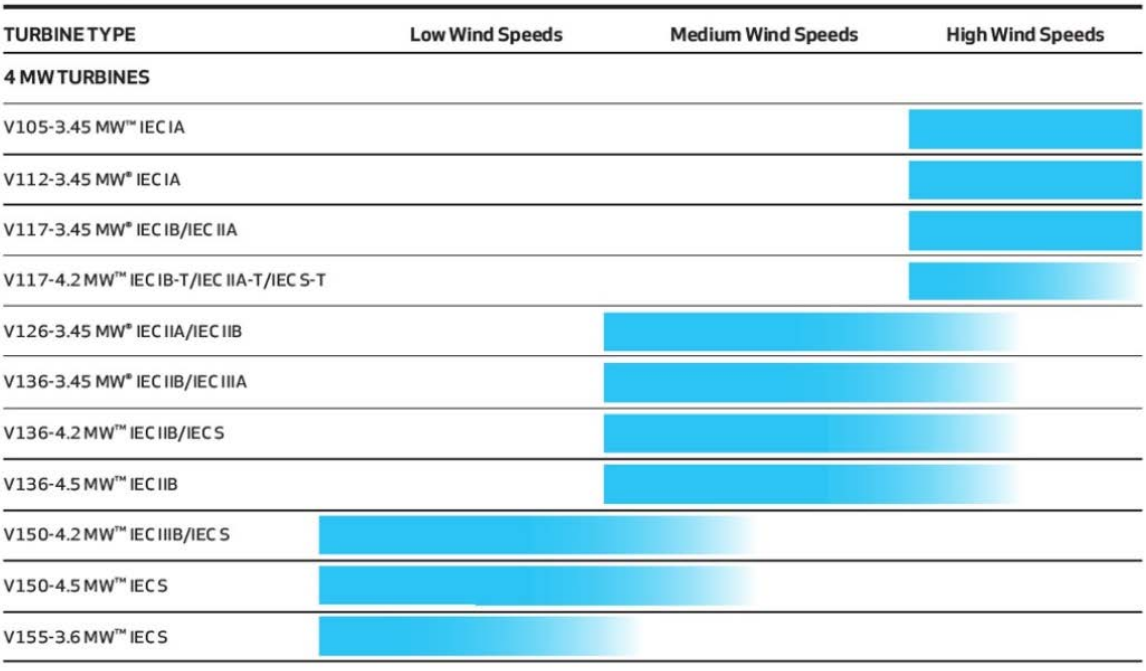
As a 1984 Engineering graduate from Maine Maritime Academy, I have been lucky to spend nearly 30 years of my career in power generation in both operations and management rolls here in Maine.

I have several concerns with regard to the proposed DEW project.

- To my knowledge, the Vestas V150 4.2 MW turbines have only been utilized by one wind farm in the world which isn't located in the USA so there is very little documented history that I have been able to locate not only for their operational reliability but also their effects on the surrounding environment and dwellings in close proximity.
- As you can see from the below, the proposed class of turbine is designed for low wind speeds. That said, you have to ask yourself, is it really necessary to place turbines of this design and size in the proposed unorganized townships in Washington county with such limited wind?

The 4 MW platform covers all wind segments enabling you to find the best turbine for your specific site.

WINDCLASSES



TURBINE TYPE	Low Wind Speeds	Medium Wind Speeds	High Wind Speeds
4 MW TURBINES			
V105-3.45 MW™ IEC IA			
V112-3.45 MW® IEC IA			
V117-3.45 MW® IEC IB/IEC IIA			
V117-4.2 MW™ IEC IB-T/IEC IIA-T/IEC S-T			
V126-3.45 MW® IEC IIA/IEC IIB			
V136-3.45 MW® IEC IIB/IEC IIIA			
V136-4.2 MW™ IEC IIB/IEC S			
V136-4.5 MW™ IEC IIB			
V150-4.2 MW™ IEC IIIB/IEC S			
V150-4.5 MW™ IEC S			
V155-3.6 MW™ IEC S			

- The size, as can be seen from the below, would make them an enormous eye sore to one of the last truly undeveloped and pristine areas in Maine.

Technical Specifications

OPERATIONAL DATA	
Rated power	4,000/4,200 kW
Cut-in wind speed	3 m/s
Cut-out wind speed	22.5 m/s
Re cut-in wind speed	20 m/s
Wind class	IEC IIIB
Standard operating temperature range	from -20°C* to +45°C with de-rating above 30°C
SOUND POWER	
Maximum	104.9 dB Sound Optimised modes dependent on site and country
ROTOR	
Rotor diameter	150 m
Swept area	17,671 m^2
Air brake	full blade feathering with 3 pitch cylinders
ELECTRICAL	
Frequency	50/60 Hz
Converter	full scale

GEARBOX	
Type	two planetary stages and one helical stage
TOWER	
Hub heights	Site and country specific
NACELLE DIMENSIONS	
Height for transport	3.5 m
Height installed (incl. CoolerTop®)	8.4 m
Length	12.96 m
Width	3.98 m
HUB DIMENSIONS	
Max. transport height	3.5 m
Max. transport width	3.7 m
Max. transport length	5.5 m
BLADE DIMENSIONS	
Length	73.7 m
Max. chord	4.2 m
Max. weight per unit for transportation	70 metric tonnes

- Without having seen the project financial proforma, only edited financial statements during the public presentations it seems as little strange that the project has failed twice to secure a State of Maine renewable energy power purchase agreement.
- I don't see DEW as a large employer for Washington county, only ten on site jobs. No support was offered at the public meetings for the 84 induced jobs. Wind farms are fairly self-sustaining as can be eluded from only needed 10 onsite jobs. These induced jobs are more than likely located outside of Maine to support the operation which won't benefit the Maine economy.

  The below "snip" was taken from one of the DEW presentations.

  - Through operations (30 years):
    - $4.2M in annual landowner payments
    - 10 onsite jobs - $500,000 annual payroll*
    - 84 induced jobs created by local revenue and spending impacts - $4.2M annual payroll *

- Generally, when project like this is in construction, the bulk of the contractors and skilled labor come from out of state or out of town thus providing no long-term financial gain for the area.

I am not against Maine having a diverse energy portfolio, I just have an issue taking a beautiful area which except for during the blueberry harvest you can hear a pin drop anywhere on the barons, has views most people can only imagine ever seeing in their life not to mention the deer, bear, turkeys, eagles and song birds that have lived in the area before man and upsetting the entire eco system for a project that is questionable at best and what's even worse, I don't feel is needed or required for electrical grid reliability/ stability.

Thank you,

John Sawyer

Godsoe, Benjamin

From: scsmills@myfairpoint.net
Sent: Sunday, October 10, 2021 4:39 PM
To: Godsoe, Benjamin
Cc: scsmills@myfairpoint.net
Subject: Downeast Wind Project 10/13/2021 #1
Attachments: Schoodic Signatures (1).pdf; Schoodic Attachment #1.png

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Godsoe,

We are writing this email as many of the camp owners on Schoodic Lake. To date our voice has been ignored. We are hoping you will treat us better; fairly. We understand DEP has already voted on this process but we do not understand how they arrived at their decision. We hope that you are put in these positions to make the best decisions based on data. The public meeting required by law did not take place because of COVID and our voice was not heard via a ZOOM meeting or comparable program. It is so frustrating knowing decisions are being made that will negatively impact us for the rest of our life without the decision makers doing their research prior to calling for a vote. Please be patient with the receipt of these emails and please give them your full attention. This is just another vote to you but it is life-changing for us.

A copy of the following letter and all attachments has been sent hard copy to your office.

Thank you in advance,

Ben Godsoe

Chief Planner

Land Use Planning Commission

22 State House Station

Augusta ME 04333-0022

Re: Downeast Wind Project: T18 MD BPP Township, T24 MD BPP Township, and Town of Columbia; Site Law Certification SLC-14 October 13, 2021 Consideration.

For several years the land owners of Schoodic Lake which is located in TS 18, the Town of Columbia Falls and the Town of Cherryfield, have been in contact with LUPC, DEP, IFW, the Maine Bureau of Health, Maine Audubon Society, Maine Historical Society, Washington County Commissioners, State Representatives, State Senators and the Governor of the State of Maine. At no point have we received any response to our concerns expressed. I have attached a representation of those letters to this request today. Unlike Downeast Wind, we do not make a statement without siting our source of supporting documentation. Please take time to research our claims.

The activity from Downeast Wind with the goal or erecting 30 turbines in our backyard continues without our concerns being addressed at all. If that is not the case, we would have no indication of otherwise given the failure of any answers to emails or letters.

The proposed turbines are the tallest in the United States and pose threats as outlined in the attached letters. Please take time to read our research and to consider your decision. What is the end result should you approve the request for this project? The answer is, you don't know. That is the reason this action should be halted. Stand up and listen to the many State of Maine landowners who have signed this cover letter and by doing so, are making a request for you to perform your due diligence. We don't have a vote; you have all the power. We just ask that you use it wisely. To just signoff on this project is the easy decision to make. To read all of this research and watch the suggested presentations is not only time-consuming but also thought provoking. It is eye-opening and should cause you to give a resounding NO to Downeast Wind.

Thank you in advance for giving of your time and attention to this very important, life-changing decision you are about to make.

Attachments (emailed and sent hard copy):

1. Letter to Senator Susan Collins, Senator Angus King, Congresswoman Chellie Pingree, Congressman Jared Golden, #137 Representative Lawrence Lockman and #138 Representative Robert Alley

2. Letter to Maine Bureau of Health (5 pages)

3. Letter to Maine Department of Environmental Protection and Maine Land Use Planning Commission (9 pages)

4. Letter to Maine Department of Inland Fisheries and Wildlife and Maine Audubon (7 pages)

5. Letter to Washington County Commissioners, Chris Gardner, Vinton Cassidy and John Crowley (4 pages)

6. Facts about Turbines, Impact and Cost; “Food for Thought”

7. Letter to State of Maine Governor Janet Mills

8. Letter to Maine Department of Environmental Protection and Maine Land Use Planning Commission

9. Map of the Proposed Turbines in Relationship to Schoodic Lake

10. A Letter to the Editor in the Machias Valley News Observer

11. “The Extraordinary History of Columbia’s Epping Baseline” from Machias Valley News Observer

12. “Visiting the Epping Base Line with Nancy Willey Columbia’s Historic and Natural Wonder” from the Machias Valley News Observer

13. “Maine Ice Age Trail Map and Guide: Down East” from University of Maine Climate Change Institute

14. National Register of Historic Places; Listings in Washington County, Maine (3 pages)

15. Letter to Maine Bureau of Health

16. Letter to Maine Department of Environmental Protection and Maine Land Use Planning Commission

The first attachment is the list of all who have signed this email and letter.

Ben Godsoe
Chief Planner
Land Use Planning Commission
22 State House Station
Augusta ME 04333-0022

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March 5, 2020

#1

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Augusta ME 04333-0003

Senator Angus King
3 State House Station
Augusta ME 04333-0003

Congresswoman Chellie Pingree
2 State House Station
Augusta ME 04333-0002

Congressman Jared Golden
2 State House Station
Augusta ME 04333-0002

#137 Representative Lawrence Lockman
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#138 Representative Robert Alley
PO Box 263
Beals ME 04611-0263

RE: Permit Request by APEX (dba Downeast Wind) for 30 Wind Turbines to be Located in Columbia (DEP Permitting Jurisdiction), TS 18, TS 19 and TS 24 (LUPC Permitting Jurisdiction)

The attached two letters express my many concerns with the proposed Downeast Wind Farm currently undergoing the permitting process through LUPC and DEP. It is my strong belief that the State of Maine needs to set the brakes on this type of clean energy until the many questions are answered. I understand that you would be for the development of clean energy and I understand that the wind companies paint a pretty picture and the money appears to be good for the area; but if you are not looking deeper into the process, behind the curtain, than you are doing the people of Maine a disservice.

Please take the time to read my letters and consider the most important question of all..."How we proceed any further with so many unanswered questions?" Notice also the legislation that currently measures sound by the dBA system only; a scientifically flawed measurement for infrasound because it measures what a person can hear only. Also the requirement that decommissioning remove only 2' underground even though turbine footings extend 30-odd feet further beneath the ground.

The turbines proposed for this area, if approved, will be the largest in the United States at 656' tall. The wind company themselves don't know the ramifications on people, wildlife or the environment. Governor LePage was right to issue a moratorium in 2018 because of the unknown. It was the responsible thing to do. Governor Janet Mills overturned the moratorium stating, "It is time for Maine to send a positive signal to renewable energy investors and innovators: We welcome you". What message is she sending to the negatively impacted Maine residents like me?

I'm sure most of you think Schoodic Lake is the one in Brownville. That's one; the larger one. Our little piece of heaven is the Schoodic Lake shared by TS 18, Columbia and Cherryfield.

The time to act responsibly is now. Thank you for your time and your consideration.

Respectfully,

Jan Mills
PO Box 26
Jonesport ME 04649

and

71 Sunrise Blvd
Schoodic Lake ME 04622

March 5, 2020

#2

Maine Bureau of Health
Maine Center for Disease Control and Protection
6 Water St
State House Station 11
Augusta ME 04333-0011

RE: Permit Request by APEX (dba Downeast Wind) for 30 Wind Turbines to be Located in Columbia (DEP Permitting Jurisdiction), TS 18, TS 19 and TS 24 (LUPC Permitting Jurisdiction)

I believe it is time we take a look at the push for wind turbine farms from a medical point of view. Following an invitation to all developers from Governor Janet Mills, it appears our zest for clean energy and our greed for the promised monies as a result, is driving something that at its best has many unanswered questions and at it worse is negatively impacting the health and wellbeing of Maine residents and will for generations to come.

Once these turbines are erected it is too late. Please step in now to make sure we have these questions answered before it is too late.

I am a third generation camp owner at Schoodic Lake in Township 18. APEX Clean Energy from Virginia proposes to erect 30 656' tall turbines in what they are calling the Downeast Wind Project.

gislation currently measures the sound that is caused by the turbines using decibels/audible or dBAs. This is a decibel measurement system developed for the measurement of sounds that a person can hear. Any data being released by wind companies is based on dBA measurement. The acoustic spectrum consists of only three categories: infrasound, audible and ultrasound. DBA measures audible. That is the nuisance sound; the swoosh, swoosh, swoosh of the blades, the mechanical noise from the gear box and the screech when the blades adjust for the wind. That noise causes anxiety, mood swings, stress, lack of sleep and all problems associated with stress and lack of sleep such as: becoming increasingly distressed and irritable, unable to relax or concentrate, have difficulty thinking logically and make decisions, depression, disorders of the digestive system, increases in blood pressure, headaches, musculoskeletal disorders, poor performance , fatigue, memory difficulties, concentration problems, motor vehicle accidents, mood disorders, alcohol and other substance abuse, cardiovascular problems, respiratory problems, renal, gastrointestinal issues, obesity, impaired immune system function, and a high reported risk of mortality. The noise can go from a nuisance to actual health problems on people with inner ear problems, autism or epilepsy.

The fact that legislation only requires turbine noise to be measured by dBA is a clear indicator that there is much unknown. Numerous studies have been done regarding the impact of the sound waves not loud enough to be heard, but sadly enough they are not driving legislation. Money comes to town, towers go up and people impacted get sick, move t of their homes but don't have the money to take on the legal battle to change things. It needs to start at the permitting level.

Dr. Mariana Alves-Pereira has degrees in physics, biomedical engineering and a PhD in environmental science. She has studied infrasound since 1980 and is involved in some of my cited studies. She has published substantial information on the negative impact on the health of humans and animals from infrasound. Her studies have proven that the dBA measurement system is scientifically invalid for measuring sound that cannot be heard. Any sound below 20 hertz falls into the infrasound category on the acoustic spectrum. When dBA is used to measure infrasound, it falls 70 decibels short. That means a dBA reading on infrasound needs to have an additional 70 decibels added to every equation. For infrasound to be measured accurately, it needs to be measured using dBLinear. Information being used by wind energy companies is giving out wrong information. In the case of Downeast Wind, they barely touched on infrasound at only one of the four meetings I attended. When I questioned them about dBA vs dBLinear, they reverted back to the state requirement of dBA only.

DBA was developed to measure impact on worker's hearing. The early goal was to determine what audible sound was doing to worker's health. An early study determined that the use of ear protectors would protect hearing. Scientists were focusing on auditory only. At that time they developed the dBA matrix. Although worker's hearing was protected, they continued to complain about other symptoms. After several more studies, it was determined that infrasound (not heard) was causing health problems. DBA measured what was heard but dBLinear measured what you are actually exposed to. Scientist Stephen Cooper of Australia did extensive studies in this field.

When a Danish Mink Farm closed after the stillborn birth of minks and then the subsequent death of the remaining minks, a team of experts were able to study the actual inside of the building where the minks were housed. The wind farm had opened in 2013, the home was abandoned in 2015 and the mink farm itself closed in January of 2018. A study of the infrasound inside the barn with the turbines turning vs not turning using dBA showed no change in the infrasound present. The same study of the turbines using dBLinear showed a substantial difference in omission when the turbines were turning vs not turning, showing again that dBA is ineffective in measuring infrasound.

Infrasound was studied by the 1960 Space Program with subjects exposed suffering from respiratory problems almost immediately. Also in the 60s the Soviet Union did a study using dogs. The exposure was high and prolonged and after the dogs died, they discovered each dog had lung hemorrhages.

In the 1970s a study was done by Scientist Alexander Cohen. He gave protective ear equipment to a group of workers complaining from health issues. As the study progressed, their complaints did not get better, they increased. Further study determined infrasound to be the problem.

Infrasound is not unique to wind turbines. It has been around for years but because wind turbines have not, studies have not been applied to the infrasound emitted by a wind farm and legislation has not been updated so wind energy companies continue to tell the same stories of safety using the wrong measurement system.

In the late 70s, the French conducted a study on infrasound on hearing and non-hearing mice measuring their swimming performance. When both were exposed to audible sound, the

performance of only the hearing mice declined. When both were exposed to infrasound, the performance of both hearing and deaf mice declined.

In 1980 Dr. Castelo Branco studied a Portuguese Air Force Base. He studied the process of inspectors walking around aircraft and watched as one began to walk aimlessly. He was informed that behavior was very common on the base. He discovered that 10% of the workforce had been diagnosed with epilepsy in an area where 0.2% was the average. He also found other health issues and when a man died at a young age, requested to do an autopsy. Permission was denied but another worker agreed that an autopsy would be performed upon his death. He did some time later and the autopsy revealed the cause was a thickening of the pericardium or the heart wall. That began the study of the pericardium in living patients as they would undergo heart surgery and the finding were the same. That appearance of the pericardium would later be seen in patients that lived near wind turbines. Today an echocardiogram can reveal the condition prior to an incident.

In addition, a thickening of the blood vessel wall has been discovered in people living near turbines. Infrasound travels through ground, penetrates buildings and enters the body not through the ears but through yourself. It sends the body into defense mode. A very common documented reaction is for the body to build up collagen in the blood vessel walls causing a cardiac event. This reaction to infrasound appears different because there is no accompanying inflammation.

In 2000, the Russian Federation did legislative changes regarding the dBA vs the dBLinear measurement of sound.

Another study done by Scientist Robert Hooke showed the effects of infrasound on rats. Their tracheas are lined with cilia which consist of brush cells made of actin. The effect on the actin was to make it fuse to itself. This meant that a cross section of the trachea revealed no cilia present. Human hair cells in ears are also made up of actin. They are meant to wave back and forth as sound enters the ears. When they are exposed to infrasound, they fuse not only to themselves but also to the top of the ear canal. When they try to move as is their job, it can be quite painful. This has led scientists to believe there is a real reason why some people appear to have a hypersensitivity to noise. It is actually causing them pain because of the fusing of the actin.

A 10-year study was done on 140 men with no prior medical history. After limited exposure to infrasound the following was revealed. It is important to note that nothing was recorded unless at least 50% or more of the subjects suffered from the issue; 70 or more subjects: mood swings, indigestion and heartburn, repeated mouth and throat infections, bronchitis, chest pain, back pain, fatigue, fungal and viral skin infections, allergies, blood in urine, inflammation of stomach lining, psychiatric disturbances, headaches, hemorrhages of nasal and digestive mucosa, duodenal ulcers, spastic colitis, varicose veins and hemorrhoids, decreased vision, severe joint pain, severe muscular pain and neurological disturbances.

Portugal received a National Public Health Award for its study showing the connection between limb deformities and reproductive problems in animals and infrasound.

In 2004 a husband, pregnant wife and their child all were diagnosed with numerous health problems because of infrasound being emitted from a silo miles away from them designed to

accept grain from ships. That was another sign that people are impacted by infrasound not just from the workplace but from the environment.

In Australia a family beside a coal power plant built a wall to keep out the impact from infrasound. Infrasound is measured by the distance between the peaks of their frequency. For example, 20 hertz infrasound has a distance of almost 56 feet. A barrier would have to be 56' thick and because infrasound travels also through ground, would still not be effective. The family left their home.

In Portugal, a wind farm started in 2007 and put up several turbines. The residents sued the company. By 2013 when the Supreme Court made the company take down the turbines, they had already put up many more even closer to the residences. Those were not involved in the lawsuit and allowed to stand.

In Germany, 20 turbines were put close to a home but the family could not afford to move. They had two children which they sent to live elsewhere and they build a bedroom in the basement of their home; a bunker. Everyone in the home tested positive for health issues.

In Huron County Canada, there are turbines scattered all over the countryside and multiple homes. The homes are surrounded on all sides with wind turbines which means all homes are infrasound contaminated. There is sickness in each and every home.

In 2020, 500' tall wind turbines in Plymouth were declared a public health nuisance by the Plymouth Board of Health.

Maine Medical Association calls for regulatory changes for the wind energy industry in order to protect human health by avoiding among other things "unreasonable noise and shadow flicker effects". September 2009 www.windvigilance.com

Preliminary findings of a controlled study (Mars Hill, Maine) being conducted by Dr. Nissenbaum to investigate potential negative health effects concludes that adults living within 1100 meters on industrial wind turbines suffer high incidences of chronic sleep disturbances and headaches, among other somatic complaints, and high incidences of dysphoric psychiatric symptomatology, compared to a control group living 5000-6000 meters away. http://windvigilance.com/mars hill.aspx

The Japanese government performed a 4-year health study with attention given to low frequency sound. www.asahi.com http://www.asahi.com/english/Herald-asahi/TKY201002280410.html

In France, Court of Appeal of Rennes, December 2009 ordered wind turbines be stopped from 10:00 p.m. to 7:00 a.m. due to the disturbance caused. http://www.ouest-france.fr/actu/actut.ocale

United Kingdom: "civil servants...suppressed warnings that wind turbines can generate noise damaging people's health for several square miles around." http://www.timesonline.co.uk/tol/news/environment/article6954565.ece

Additional reading:

Infrasound - National Toxicology Program
https://ntp.niehs.nih.gov/ntp/htdocs/chem_background/exsumpdf/infrasound_508.pdf

REPORT LINKS WIND TURBINES TO HUMAN HEALTH PROBLEMS
https://www.heartland.org/news-opinion/news/report-links-wind-turbines-to-human-health-problems •Infrasound

I could go on with many more examples of the ill health effects of wind turbines but this gives you a small sample. There is much research to be done. There are many studies and results. The wind energy companies choose to give the general public lip service on every aspect, downplaying any negative issue, any unknown. On Downeast Wind's website they state there is no negative medical impact from turbines. They cite no study, they quote no expert. Sadly, people swallow it hook, line and sinker because of the money involved. No wind turbine involved in any of these examples comes close to the 656' monsters that are requested for our area. This is just the beginning and the impacts are far-reaching and unknown. There are already too many turbines in the State of Maine given the lack of understanding of the ramifications to the health of Maine citizens.

Please, put yourself in my shoes. I am retired and just want to enjoy my camp. I have children and grandchildren who are at camp an extensive amount of time and they will be more severely impacted by this than I will be simply because of my age.

The blades of these turbines contain toxic gas and fiberglass. We don't know what that will do to air quality should there be a fire or a breech in the structure. We do know the blades will have to be cut into pieces when the turbines are decommissioned. What will that do to the air quality and the watershed feeding into our lake? Large wind farms need more land than originally thought and warm average surface temperatures by 0.24 degrees Celsius.

I am asking that you recognize there is too much at stake and too many unanswered questions because infrasound has been ignored by wind companies. Please make a recommendation to both LUPC and DEP that they deny the permits until further studies are done regarding the impacts of infrasound. We already have too many wind turbines in the State of Maine given the lack of knowledge on the impact. Too many Maine residents have already moved and/or been diagnosed with health issues. These proposed turbines are larger than any before erected in the United States. Think about it~30 of them 656' tall! Please HELP!

Thank you for your time and attention to this very serious threat.

Respectfully,

Susan Mills
11 M & M Aly
Jonesport ME 04649

& 71 Sunrise Blvd
Schoodic Lake ME 04622
(207) 598-5759

cc: Maine Department of Environmental Protection
Maine Land Use Planning Commission

#5

March 4, 2020

Maine Department of Environmental Protection
17 State House Station
28 Tyson Dr
Augusta ME 04333-0017

Maine Land Use Planning Commission
22 State House Station
18 Elkins Ln
Augusta ME 03333

Re: Permit Request by APEX (dba Downeast Wind) for 30 Wind Turbines to be Located in Columbia (DEP Permitting Jurisdiction) and TS 18, 19 and 24 (LUPC Permitting Jurisdiction)

I am a camp/land owner at Schoodic Lake. I am 67 years old and have been going to Schoodic my entire life. I am now retired and spend as much time at the lake as possible. I am shocked that a company can come in and negatively impact my quality of life to this extent and I don't even get a vote. This is an emotional subject but I would like to logically address the concerns that many of us have.

Moratorium & Resulting Study:

On January 24, 2018, then Governor Paul LePage signed executive order #2018-002 stating that no permits related to wind turbines be approved until a report was issued from the newly formed Maine Wind Energy Advisory Commission. This committee concluded that "fully researching various issues was beyond the capability of the commission given the available time and resources". They recommended additional research and investigation of many issues in order to fully evaluate the concerns. They made several recommendations at that time. The following are of particular interest:

Recommendation 3: Maine should consider whether caps on the total quantity, maximum density, or cumulative visual impact assessment standards for wind projects should be implemented. This review should consider whether such limits should apply uniformly, or be tailored to certain areas based on the specific characteristics or use of the area.

The Commission agreed that, while it could not define the level, there would likely be a level of wind development, or density level, that could be unacceptable for Maine. Therefore, it would be advisable to consider whether wind generation

development caps, density caps, or cumulative visual impact assessment standards should be adopted.

Recommendation 12: Maine should consider creating an expert scientific and medical panel to review the extensive literature on wind farm noise and health issues and issue a finding for publication.

All members of the Commission support Recommendation #12. However, there were some Commission members who felt this recommendation does not go far enough to address potential health effects of wind projects, while others felt such concerns have been adequately studied in other jurisdictions.

In addition to audible noise, issues were raised by the public and Commission members regarding other reported health concerns associated with wind projects. This is a controversial subject and significant differences of opinions exist between studies and among the Commission members as to the validity of health concerns from wind projects and the weight that should be placed on various studies related to such concerns. The Commission was in agreement that this is an area that should have further study in Maine, and that this Commission did not have the expertise to undertake this analysis.

Of particular concern to those who feel Recommendation #12 does not go far enough, is that the DEP's noise rules do not specifically address the risks associated with infrasound which is viewed by some as potentially the most damaging health and environmental sound, both on land and underwater. The DEP rules currently require only "A" weighted tests. In order to measure infrasound, "C" and "G" weighted tests would be required. These members believe that the DEP's rules should be amended to establish acceptable infrasound levels and to require "C" and "G" weighted tests. Those who felt the health issues have been adequately studied felt the report should contain additional information on such studies.

The majority of the Commission did not feel adequately informed on the details of the health effects of wind projects to offer an opinion beyond recommending further study of the matter. The Commission agreed, however, that the report should include both views.

<u>Infrasound:</u>

Please refer to the attached letter written to Maine Bureau of Health.

Every concern expressed in this letter has a common thread. There are still too many unanswered questions. APEX comes in and wants to spend a large sum of money, subsidized by tax payers, and that is paired with Governor Mills invitation to wind farm developers and goal for clean energy is a devastating combination for those of us negatively impacted by the turbines.

Maine Statute:

Title 17: Crimes; Chapter 91: Nuisances; Subchapter 3: Particular Nuisances states in part:

"The erection, continuance or use of any building or place for the exercise of a trade, employment or manufacture that, by noxious exhalations, offensive smells or other annoyances, becomes injurious and dangerous to the health, comfort or property of individuals or of the public..."

Title 17: Crimes; Chapter 91: Nuisances; Subchapter 1: General Provisions states in part:

"Any person injured in his comfort, property or the enjoyment of his estate by a common and public or a private nuisance may maintain against the offender a civil action for his damages, unless otherwise specially provided."

National Register of Historic Places:

The National Register of Historic Places is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation for their significance in American history, architecture, archaeology, and culture. The National Register was established by the National Historic Preservation Act of 1966. Part of the protection of these sites is view obstruction within eight miles. (http://www.nps.gov)

There are numerous properties and a large portion of downtown Cherryfield listed on the National Register of Historic Places that are within the 8-mile limit of the proposed turbine locations. They are listed below:

Name on the Register	Location	City or town
Archibald-Adams House	State Route 193	Cherryfield
Bucknam House	Main St.	Columbia Falls
Samuel Bucknam House	Main St.	Columbia Falls
Gen. Alexander Campbell House	Campbell Hill	Cherryfield
David W. Campbell House	Main St.	Cherryfield
Frank Campbell House	U.S. Route 1	Cherryfield
Col. Samuel Campbell House	U.S. Route 1	Cherryfield
Cherryfield Academy	Main St.	Cherryfield
Cherryfield Historic District	roughly bounded by Church, Main, Park, New and High Sts., as well as River Rd. properties from U.S. Route 1 to Driscoll Island	Cherryfield
Columbia House	Main St. junction with Church Hill Circle	Columbia Falls
Columbia Union Church	Northern side of State	

	Route 29-608 (Epping Road), 0.05 miles east of its junction with State Route 29-610 (Cemetery Road) Epping	Columbia, Maine
Gallison Memorial Library	U.S. Route 1, 0.5 miles west of its junction with U.S. Route 1A	Harrington
Narraguagus Light Station	Eastern side of Pond Island	Milbridge
William M. Nash House	River Rd.	Cherryfield
Patten Building	Main St.	Cherryfield
Ruggles House	Main Street	Columbia Falls
Union Church, (former)	Main St., 0.1 miles northeast of its junction with Addison Rd.	Columbia Falls
Union Evangelical Church	Northern side of Addison Ridge Rd., 2 miles south of U.S. Route 1	Addison

The only property acknowledge by APEX is the Union Church. They explain there is no impact by taking a picture from one view point from the church behind a tree stating you won't be able to see the turbines from the church. The other locations are ignored.

<u>The Epping East-West Baseline</u>

This property is a part of the historical geographic feature known as the Eastern Oblique Arc authorized by the US Congress in 1805 and finally chosen in 1853. It was instrumental in mapping the east coast of the United States. The Epping Baseline was used to triangulate from hill to hill using the latest survey equipment for that period. Modern satellite survey technology proved the Epping baseline distance to be correct within a fraction of an inch. There is still a granite base marking the east end of the 5.5 mile long Surveying Baseline as well as the Epping Baseline Road. All other sites used in this mapping do not exist. They have either been destroyed or washed into the ocean. When asked about this area, APEX said they would have to dig it up but they would put it back. The baseline road is a historical landmark and a significant part of Maine and National history. (https://iceagetrail.umaine.edu and http:www.cherryfieldhistrical.com/ 2007/07/150th-anniversary-of-the-epping-baseline/)

<u>Maine Ice Age Trail</u>

A section of the APEX Downeast Wind complex will be located within an area recognized for its unique glacial features such as the Pineo Ridge Delta, a large glacial marine delta with meltwater stream channel. This local tourist attraction, which is noted for the many varied glacial features and recognized by the State of

Maine as The Ice Age Trail, would be visually and perhaps physically destroyed by the placement of towering windmills.
(http://www.colby.edu/geology/PineoRidge.html)

The Ice Age Trail extends from Cadillac Mountain north to Aurora and easterly along the coast to Eastport extending to Calais. The geographic glacial trail is of State of Maine significance and possible national significance.
(http://iceagetrail.umaine.edu/)

Eagles/Osprey:

Osprey have been seen in and around the Pleasant River Area. There are currently two eagles nests on Schoodic Lake. The proposed turbine location will be the required one mile from the closest. However, multiple turbines will still exist in their flight area. Eagles only fly as far as they need to in order to get food. Adults will stay in their area. Unfortunately, that is 1-6 square miles. (fws.gov) A 2013 study in The Wildlife Society Bulletin found that wind turbines killed an estimated 573,000 birds annually in the United States. That was seven years ago with fewer turbines. At the Altamont Wind Resource Area alone, more than 2,000 eagles have been killed. Eagles will be seriously impacted by wind turbines around water because fish is their main source of food. In the Great Lakes area Fish & Wildlife Services recommended no turbines be placed closer than three miles from the shoreline; the American Bird Conservancy recommended five miles, however, recent Fish and Wildlife Service studies indicated that the minimum should be extended to 10 miles from any Great Lakes shoreline. (eagles.org)

Canada Geese:

It's not just the turbine blades that pose a risk to birds; research indicates that wind developments can disrupt migration routes. What's more, foraging and nesting habitat can also be lost when turbines are erected.

Loons:

I have been an Audubon Loon counter for several decades. Schoodic Lake is home to several pairs of loons. They nest on Schoodic and they spend days there but at night they fly to neighboring Pike Brook Pond and Horseshoe Pond. There will be numerous wind turbines in their path if this project is allowed to proceed.

Bats:

Several years ago, a large percentage of the bat population at Schoodic died because of White Nose Syndrome. We have noticed an increase in the number of bats for the last two years. Maine Inland Fisheries and Wildlife lists three different species of bats as protected. The Little Brown Bat and the Northern Long Eared Bat are endangered and the Eastern Small Footed Bat is threatened.

APEX has indicated the turbines will be inactive during the bats more active time. Who will monitor that? They say they have studied the bats at Schoodic but they gave us no specifics about their patterns or their numbers. It is estimated that hundreds of thousands of bats die at the blades of turbines in the United States each year. Bats and small birds do not need to hit or be hit by the turbines. Many more are killed by the drop in air pressure around turbines which can cause their lungs to rupture. It is also possible that bats misperceive turbines to be trees or even bodies of water. (earthier.gizmodo.com)

Upland Sandpiper:

The Upland Sandpiper is listed as threatened by Maine Inland Fisheries and Wildlife. This project has the potential to impact the 7,000 acre peatland in the Town of Columbia and TS 18 known as The Great Heath, home to the Upland Sandpiper. (http://www.topozone.com/maine/washing-me/swamp/great-heath-4/)

Bird Detecting Radar:

In 2010, David Newstead, a U. S. Fish and Wildlife Service field biologist visited a wind
farm in Texas. While he was there, a flock of 15 American White Pelicans caught his eye as they approached the nearby wind farm. As he watched, a pelican was swiped by a massive turbine blade and "literally" erased from the air. That wasn't surprising until he discovered that the farm was equipped with radar that could detect approaching birds and halt the blades. The radar had failed to do its job. (Audubon.org)

Mayflies:
Most mayflies can be seen at Schoodic Like from mid-May to very early July. Mayflies are also listed by Maine Inland Fisheries and Wildlife as threatened.

Atlantic Salmon:

How deep will the footings have to be to support these massive 656' tall turbines? What will that do to the stability of the area and the ground water quality from drainage? Schoodic sits in a bowl and as such any activity above will impact both the integrity of the hills around the lake and the watershed. Any contaminants used above will go into the ground water and eventually find their way to Schoodic Lake. Schoodic feeds into the Narraguagus River which is a breeding ground to the endangered Atlantic Salmon.

AA Water Classification:

The Pleasant River and Schoodic Brook are both classified by the State of Maine as AA for their quality of water, remote scenic beauty and as habitat of relict stains of wild Atlantic Salmon which are listed as endangered species by the USFWS. (http://www.mainelegislature.org/legis/statutes/38/title38sec467.html)

Great Heath:

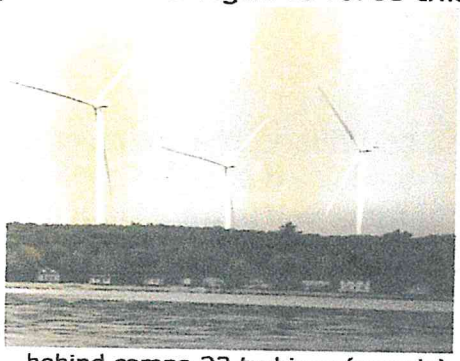
The Great Heath mentioned before as home to the Upland Sandpiper is also home to endangered Atlantic Salmon. Rare and extremely rare plants in this protected area include the Bog Bedstraw, Canada Mountain rice-grass and Jacobs Ladder which is found in only two Maine towns, both within the Great Heath! (http://www.maine.gov/dacf/mnap/reservesys/greatheath.htm)

Geological Dig Sites:

Although the sites are not publicized, I do know there are several around Schoodic and over the years many artifacts have been found in the area.

People Impact-View:

This is the simulation behind our camps and across the lake at Schoodic. Remember these are 656' high and as close as .8 of a mile from us. Why would anyone have a right to force this on us? At least let us vote on it!



behind camps-23 turbines (sample)

across the lake-7 turbines (just a sample)

In addition to looking at them both in front and behind our camps, we will get glare and flicker including every corner of our camp. Shadows and light going across our furniture, our walls and our ceiling in a strobe light effect. How would you like that in a place where you have gone to relax?

Sound:

The sound you can hear will be the swoosh, swoosh, swoosh of the blades, the constant humming of the gear box and the screeching of the mechanics when the turbine reacts to the wind direction. That is sound that you can hear. The impacts of that have been addressed thoroughly in the attached letter to the Maine Bureau of Health. Please read carefully the concerns with infrasound, the sound you cannot hear. It is the most dangerous to our health and it has not been addressed at all by APEX. Again, too many unanswered questions. Here's one for you...would you want to expose your grandkids to potential health risks because those not impacted had the voting power and couldn't take just a couple more years to make sure we weren't making a mistake?

Health (covered in the attached letter) and Miscellaneous Risks:

What if a turbine catches fire? They are sometimes hit by lightning and there is also a gear box on each one that will build up grease and catch fire. Because of the layout of the camps around the northern shore at Schoodic, if one camp catches fire, they will all go.

What about falling ice and snow from the blades in the winter or early spring? Many campers go in for ice fishing or a day trip. Stay away from them may be a solution except there are 30 of them and they stretch for miles and miles and the blades spin 250 miles an hour. How close do you think I need to be to get hit by a chunk of ice that comes free and is given a 250 mile an hour push?

We have been told that the top of the turbines will be equipped with motion sensing lights. How well will those work when covered with ice and snow?

Turbine blades are made of fiberglass and contain toxic gas. What happens if they are damaged and that is released into the air? What happens when they are decommissioned and have to be cut up because of their size?

Animal Health:

Some animal/bird health has already been addressed but more and more is being discovered. There have been numerous whales wash up dead on the shore in the United Kingdom. They were all deaf and are now being studied to confirm a link between their deafness and the offshore wind farm in the area.

Construction:

There are multiple roads to get to Schoodic Lake but they are all dirt and anywhere from 6-8 miles long. APEX will need to widen the existing roads and also add new roads. We will be sharing the road with oversized equipment, driving near turbine assembly and subject to whatever blasting they decide to do. Vern Schaefer, Professor CCEE states that vibrations can cause damage or settlement of nearby structures. That may be a normal part of the construction of a wind farm, but it should not be allowed where there is such a negative impact.

Sustainability:

No wind farm analysis exists to date that can show a wind farm has gone beyond an immediate benefit and has become a net or self-sustaining benefit for a host community. The immediate benefit would be the payout to a few land owners and a small number of local people hired. Usually, and APEX has proven to be no exception, local jobs are promised but they use their own people in the end. Sales of food and gas increase in the area during construction but rarely more than that. Energy that is generated goes into the grid, not to the house beside the turbine or in this case, Maine.

Decommission:

That is another area where the state falls short on its requirements. Although it is mandated that monies be set aside at the beginning of a project for decommissioning, they are rarely enough. Additionally, APEX is only required to remove down to 2' underground. Unacceptable considering the footings of concrete and rebar go down in excess of 30'. There are currently abandoned wind turbines all over the world because they are huge and it is difficult to dispose of them. That means APEX can walk away, although they will have sold the farm by then because that is the history of their company. They do not spend the money set aside and abandon the project. No one will be able to afford to take any legal action at against them.

Please take the time needed to understand the ramifications of approving the Downeast Wind Farm. Visit us at Schoodic and see what we have and visualize the impact. You may not have agreed with Governor Lepage's decision to place a moratorium on permitting for wind farms, but you should recognize the smart, responsible action to take if you don't have all the answers is to take no action. Once this is done, there will be no turning back and people like me, my children and my grandchildren will be guinea pigs and suffer the consequences.

I thank you for your attention to this and your efforts to do the right thing.

Respectfully Submitted,

Susan Mills
PO Box 26
Jonesport ME 04649

and

71 Sunrise Blvd
Schoodic Lake ME 04622

#4

March 4, 2020
Maine Department of Inland Fisheries and Wildlife
41 State House Station
Augusta ME 04333-0041

Re: Permit Request by APEX (dba Downeast Wind) for 30 Wind Turbines to be Located in Columbia (DEP Permitting Jurisdiction) and TS 18, 19 and 24 (LUPC Permitting Jurisdiction)

I am a camp/land owner at Schoodic Lake. I am 67 years old and have been going to Schoodic my entire life. I am now retired and spend as much time at the lake as possible. It seems surreal to me that a company can come in and negatively impact my quality of life and I don't even have a vote. These 30 turbines are going to be 656' high. That will make them the tallest turbines in the United States. We are very concerned because we feel no one even knows the ramifications from this windfarm. We feel that more information needs to be considered prior to proceeding with this project.

Moratorium & Resulting Study:

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Recommendation 3: The Commission agreed that, while it could not define the level, there would likely be a level of wind development, or density level, that could be unacceptable for Maine. Therefore, it would be advisable to consider whether wind generation development caps, density caps, or cumulative visual impact assessment standards should be adopted.

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All members of the Commission support Recommendation 12. However, there were some Commission members who felt this recommendation does not go far enough to address potential health effects of wind projects, while others felt such concerns have been adequately studied in other jurisdictions.

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The Epping East-West Baseline

This property is a part of the historical geographic feature known as the Eastern Oblique Arc authorized by the US Congress in 1805 and finally chosen in 1853. It was instrumental in mapping the east coast of the United States. The Epping Baseline was used to triangulate from hill to hill using the latest survey equipment for that period. Modern satellite survey technology proved the Epping baseline distance to be correct within a fraction of an inch. There is still a granite base marking the east end of the 5.5 mile long Surveying Baseline as well as the Epping Baseline Road. All other sites used in this mapping do not exist. They have either been destroyed or washed into the ocean. When asked about this

area, APEX said they would have to dig it up but they would put it back. The baseline road is a historical landmark and a significant part of Maine and National history. (https://iceagetrail.umaine.edu and http:www.cherryfieldhistrical.com/ 2007/07/150th-anniversary-of-the-epping-baseline/)

Maine Ice Age Trail

A section of the APEX Downeast Wind complex will be located within an area recognized for its unique glacial features such as the Pineo Ridge Delta, a large glacial marine delta with meltwater stream channel. This local tourist attraction, which is noted for the many varied glacial features and recognized by the State of Maine as The Ice Age Trail, would be visually and perhaps physically destroyed by the placement of towering windmills.
(http://www.colby.edu/geology/PineoRidge.html)

The Ice Age Trail extends from Cadillac Mountain north to Aurora and easterly along the coast to Eastport extending to Calais. The geographic glacial trail is of State of Maine significance and possible national significance.
(http://iceagetrail.umaine.edu/)

Eagles/Osprey:

Osprey have been seen in and around the Pleasant River Area. There are currently two eagles nests on Schoodic Lake. The proposed turbine location will be the required one mile from the closest. However, multiple turbines will still exist in their flight area. Eagles only fly as far as they need to in order to get food. Adults will stay in their area. Unfortunately, that is 1-6 square miles. (fws.gov) A 2013 study in The Wildlife Society Bulletin found that wind turbines killed an estimated 573,000 birds annually in the United States. That was seven years ago with fewer turbines. At the Altamont Wind Resource Area alone, more than 2,000 eagles have been killed. Eagles will be seriously impacted by wind turbines around water because fish is their main source of food. In the Great Lakes area Fish & Wildlife Services recommended no turbines be placed closer than three miles from the shoreline; the American Bird Conservancy recommended five miles, however, recent Fish and Wildlife Service studies indicated that the minimum should be extended to 10 miles from any Great Lakes shoreline. (eagles.org)

Canada Geese:

It's not just the turbine blades that pose a risk to birds; research indicates that wind developments can disrupt migration routes. What's more, foraging and nesting habitat can also be lost when turbines are erected.

Loons:

I have been an Audubon Loon counter for several decades. Schoodic Lake is home to several pairs of loons. They nest on Schoodic and they spend days

there but at night they fly to neighboring Pike Brook Pond and Horseshoe Pond. There will be numerous wind turbines in their path if this project is allowed to proceed.

Bats:

Several years ago, a large percentage of the bat population at Schoodic died because of White Nose Syndrome. We have noticed an increase in the number of bats for the last two years. Maine Inland Fisheries and Wildlife lists three different species of bats as protected. The Little Brown Bat and the Northern Long Eared Bat are endangered and the Eastern Small Footed Bat is threatened. APEX has indicated the turbines will be inactive during the bats more active time. Who will monitor that? They say they have studied the bats at Schoodic but they gave us no specifics about their patterns or their numbers. It is estimated that hundreds of thousands of bats die at the blades of turbines in the United States each year. Bats and small birds do not need to hit or be hit by the turbines. Many more are killed by the drop in air pressure around turbines which can cause their lungs to rupture. It is also possible that bats misperceive turbines to be trees or even bodies of water. (earthier.gizmodo.com)

Upland Sandpiper:

The Upland Sandpiper is listed as threatened by Maine Inland Fisheries and Wildlife. This project has the potential to impact the 7,000 acre peatland in the Town of Columbia and TS 18 known as The Great Heath, home to the Upland Sandpiper. (http://www.topozone.com/maine/washing-me/swamp/great-heath-4/)

Bird Detecting Radar:

In 2010, David Newstead, a U. S. Fish and Wildlife Service field biologist visited a wind
farm in Texas. While he was there, a flock of 15 American White Pelicans caught his eye as they approached the nearby wind farm. As he watched, a pelican was swiped by a massive turbine blade and "literally" erased from the air. That wasn't surprising until he discovered that the farm was equipped with radar that could detect approaching birds and halt the blades. The radar had failed to do its job. (Audubon.org)

Mayflies:
Most mayflies can be seen at Schoodic Like from mid-May to very early July. Mayflies are also listed by Maine Inland Fisheries and Wildlife as threatened.

Atlantic Salmon:

How deep will the footings have to be to support these massive 656' tall turbines? What will that do to the stability of the area and the ground water

quality from drainage? Schoodic sits in a bowl and as such any activity above will impact both the integrity of the hills around the lake and the watershed. Any contaminants used above will go into the ground water and eventually find their way to Schoodic Lake. Schoodic feeds into the Narraguagus River which is a breeding ground to the endangered Atlantic Salmon.

AA Water Classification:

The Pleasant River and Schoodic Brook are both classified by the State of Maine as AA for their quality of water, remote scenic beauty and as habitat of relict stains of wild Atlantic Salmon which are listed as endangered species by the USFWS. (http://www.mainelegislature.org/legis/statutes/38/title38sec467.html)

Great Heath:

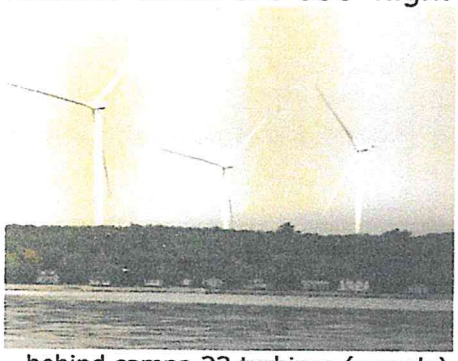
The Great Heath mentioned before as home to the Upland Sandpiper is also home to endangered Atlantic Salmon. Rare and extremely rare plants in this protected area include the Bog Bedstraw, Canada Mountain rice-grass and Jacobs Ladder which is found in only two Maine towns, both within the Great Heath! (http://www.maine.gov/dacf/mnap/reservesys/greatheath.htm)

Geological Dig Sites:

Although the sites are not publicized, I do know there are several around Schoodic and over the years many artifacts have been found in the area.

Simulation:

This is the simulation behind our camps and across the lake at Schoodic. Remember these are 656' high.



behind camps-23 turbines (sample)

across the lake-7 turbines (just a sample)

Sound:

The sound you can hear will be the swoosh, swoosh, swoosh of the blades, the constant humming of the gear box and the screeching of the mechanics when the

turbine reacts to the wind direction. That is sound that you can hear. The impacts of that have been addressed thoroughly in the attached letter to the Maine Bureau of Health. Please read carefully the concerns with infrasound, the sound you cannot hear. It is the most dangerous to the health humans, birds and wildlife and it has not been addressed at all by APEX. Again, too many unanswered questions.

Health (covered in the attached letter) and Miscellaneous Risks:

What if a turbine catches fire? They are sometimes hit by lightning and there is also a gear box on each one that will build up grease and catch fire. Because of the layout of the camps around the northern shore at Schoodic, if one camp catches fire, they will all go. What impact on the wildlife if the trees in the area catch?

What about falling ice and snow from the blades in the winter or early spring? Stay away from them may be a solution except there are 30 of them and they stretch for miles and miles and the blades spin 250 miles an hour. How close do you think a moose needs to be to get hit by a chunk of ice that comes free and is given a 250 mile an hour push?

We have been told that the top of the turbines will be equipped with motion sensing lights. How well will those work when covered with ice and snow?

Turbine blades are made of fiberglass and contain toxic gas. What happens if they are damaged and that is released into the air? What happens when they are decommissioned and have to be cut up because of their size?

Animal Health:

Some animal/bird health has already been addressed but more and more is being discovered. There have been numerous whales wash up dead on the shore in the United Kingdom. They were all deaf and are now being studied to confirm a link between their deafness and the offshore wind farm in the area.

Construction:

There are multiple roads to get to Schoodic Lake but they are all dirt and anywhere from 6-8 miles long. APEX will need to widen the existing roads and also add new roads. All living things in the area will be sharing the road with oversized equipment, near turbine assembly and subject to whatever blasting they decide to do. Vern Schaefer, Professor CCEE states that vibrations are strong enough to cause damage or settlement of nearby structures. That may be a normal part of the construction of a wind farm, but it should not be allowed where there is such a negative impact.

Decommission:

That is another area where the state falls short on its requirements. Although it is mandated that monies be set aside at the beginning of a project for decommissioning, they are rarely enough. Additionally, APEX is only required to remove down to 2' underground. Unacceptable considering the footings of concrete and rebar go down in excess of 30'. There are currently abandoned wind turbines all over the world because they are huge and it is difficult to dispose of them. That means APEX can walk away, although they will have sold the farm by then because that is the history of their company. They do not spend the money set aside and abandon the project. No one will be able to afford to take any legal action at against them.

Please take the time needed to understand the ramifications of approving the Downeast Wind Farm. Visit us at Schoodic and see what we have and visualize the impact. You may not have agreed with Governor Lepage's decision to place a moratorium on permitting for wind farms, but you should recognize the smart, responsible action to take if you don't have all the answers is to take no action. Once this is done, there will be no turning back.
I thank you for your attention to this and your efforts to do the right thing.

Respectfully Submitted,

Susan Mills
PO Box 26
Jonesport ME 04649

and

71 Sunrise Blvd
Schoodic Lake ME 04622

cc: Maine Audubon
20 Gilsland Farm Rd
Falmouth ME 04105

January 6, 2020

Chris Gardner, Chairman, Washington County Commissioners
Vinton Cassidy, Commissioner
John Crowley, Commissioner

Re Concerns: Apex Clean Energy Wind Project

My name is Susan Mills and I am 67 years old. I have been going to Schoodic Lake since birth. In the early 50s, my father, Robert Smith and his cousin, Lewis Kirby approached then owner Homer Worcester. Mr. Worcester owned land on the northern side of the lake and was asked if he would be willing to lease lots for the purpose of private camps. He agreed and thus began the process of the population of Schoodic Lake. An annual lease was paid until the opportunity arose for campers to buy their land. Because of the nature of this population, most of the campers in these approximately 77 camps were and still are related or friends. I currently own the camp that belonged to my grandparents as well as share ownership with my three siblings for my deceased parent's camp. My oldest son owns the camp that belonged to my aunt and uncle. I tell you this to hopefully give you some idea as to how embedded in this property we all are. It is our childhood, our memories and today, still our paradise. The lake is occupied beginning in April and ending in October, but November through March visited often by campers for fishing, hunting and day trips. Although we pay our taxes to the State of Maine because that part of the lake is in Township 18, a majority of the camp owners are residents of Washington County. We elected you to represent us and ask that you do your due diligence before Downeast Wind is allowed to proceed, for us and for the many owners around the lake in the towns of Cherryfield and Columbia Falls.

In 2018, then Governor Paul LePage issued a moratorium halting permits for new wind-turbine projects. Now Governor Janet Mills overturned the moratorium stating, "It is time for Maine to send a positive signal to renewable energy investors and innovators: We welcome you", there still remain many unanswered questions as to the impact these turbines have on the environment, wildlife and humans. At that time a DEP spokesman said her order would allow the state to "conduct a transparent vetting of all wind projects, onshore and offshore, to ensure they respect Maine communities and our environment while helping to reduce our reliance on fossil fuels." Apex states they have worked with local camp owners. They have contacted only those whose land might be of value to them. Each camp owners should have been notified in writing with full disclosure up front. I fear that our hasty efforts to embrace renewable energy has the potential to ruin an area near and dear to me and I am extremely upset that we were not informed of our options. I am requesting as a tax payer to Washington County and the State of Maine clear

instructions of steps available to camp/land owners who wish to delay this project for more unbiased information and stop the project if these concerns are not addressed sufficiently.

This is a lot for a layperson to wrap their head around. I have read studies and reports, listened to lectures, turbine pros and cons and testimonials and have the following concerns as they relate to me and my family.

We work hard and look forward to spending as much time at Schoodic as possible during our down time. Now we lay on the beach and look at a pristine landscape with lake and the hills beyond. You would ask us to think it is okay to accept that backdrop will now consist of 15 wind turbines over 600 feet tall with another 15 behind us when we look in the other direction.
I would question if Maine's nuisance law comes into play. A nuisance is defined as, "a condition that substantially interferes with the use and enjoyment of land by causing unreasonable discomfort or annoyance to persons of ordinary sensibilities." Generally, nuisance lawsuits involve invasion of a plaintiff's property by light, sound, odor, something that distracts from the natural scenery, can be injurious to the comfort and happiness of individuals and the public, injurious to property rights and value or other foreign substance.

We travel eight miles of dirt road to get to our camps. Those road conditions vary throughout the year from impassable to washed out to rutted to well graded. The necessary road widening, additional roads, heavy equipment, parts transport, blasting, secondary path to carry power to existing lines to the grid, etc. will cause more than inconvenience to camp owners. It will also cause safety problems and potentially add wear and tear to our vehicles.

The turbine infrasound is an air born pressure wave that varies in frequency and time. It may not be audible to most but doesn't enter the body through the ears. It travels through ground and penetrates buildings. It enters the body through skin. Although not heard, the body reacts to this air born pressure wave in a defensive manner. It can result in respiratory issues (I already have Sarcoidosis), digestive problems, thickening blood vessel walls when the body fights back by building up collagen to combat against the barrage that we can't even hear, fatigue, pericardium thickening which can lead to heart disease, anxiety and a host of other problems.

The audible sounds of the gear box and the swooshing of the blades can cause anxiety, mood swings, lack of sleep and other associated problems. The shadows and the sun glare from the blades effects some people as well. It can go from a nuisance to actual health impact on people with inner ear problems, autism or epilepsy. Without realizing it, you are getting a strobe light variation of light and shade.

What about a fire hazard? Schoodic Pond sits in a bowl and thunder and lightning storms have always been intense. You can see numerous trees split as you walk around the lake from storms in the past. In addition to numerous lightning rods in the form of turbines now being erected, they have gear boxes that build up and cause their own fires. Although there have been 11 fires this year, there have only been two in Maine. The camps at Schoodic are such that if one camp catches, most of the properties will burn. So I guess those two for the State of Maine would be sufficient to completely wipe out our camps. People are concerned about our property values going down. I have no intention of selling my camp. It will go to my youngest son when I am done with it. I am concerned of the value now...of my camp, my view and my quality of life! There is no question that it will plummet substantially!

How deep will the concrete footings have to be to support these massive turbines? What will that do to the stability of the area and the ground water quality from drainage? As mentioned before, Schoodic is in a bowl and as such, any activity on the grounds above, eventually find their way to the watershed that supports Schoodic. Schoodic feeds into the Narraguagus River which is a breeding ground for Atlantic salmon.

We currently have eagles at our lake and several nests. What happens to them? What happens to our loon population? They nest at Schoodic and spend their days there, but at night they travel to area Horseshoe Pond and Pike Brook. What impact with turbines have on that path?

Turbines have changed the migratory corridor of birds and ducks. How will these impact the Canada Geese that use our lake in the spring and fall? Some birds will change their path to avoid the turbines, altering their natural habitat. Small birds and bats don't even need to hit the blades. Because of the speed, they are killed simply by being too close to the downwash of the blades.

The Downeast Wind turbines will be located a short distance from bodies of water classified by the Maine DEP as Class AA for their quality of water, remote scenic beauty and a habitat of relict strains of wild Atlantic salmon; the Pleasant River and Schoodic Brook, a tributary of the Narraguagus River.

This project has the potential to impact the 7,000 acre peatland in the Town of Columbia and TS18 known as The Great Heath, home to rare animals such as the Upland Sandpiper. Rare plants include the Bog Bedstraw, Canada Mountain-rice grass and Jacobs Ladder.

It is my understanding that no wind farm analysis exists to date that can show a wind farm has gone beyond an immediate benefit and has become a net or self-sustaining benefit for a host community. The immediate benefit would be the payout to a few land owners and a small number of local people hired. Usually, and Apex is no exception, local jobs are

promised but they use their own people in the end. Sales of food and gas increase in the area during construction but rarely more than that. Energy generated goes into the grid, not to the house beside the turbine!

What happens when the turbines are no longer viable and need to be decommissioned? They are abandoned and become more dangerous, more of an eye sore or they are dismantled and disposed of. Because of the sheer size, the blades need to be cut to transport and to place in a landfill. Turbine blades contain glass and toxic gas. Who has the expense of this...taxpayers? Although a percentage of the capital cost should be set aside for decommissioning, it is often insufficient. Let's not pass over the fact that the blades contain toxic gas and glass. What happens to these hazards if there is a breech in the integrity of the blade structure?

I am for change and I am for improvement. I am also against staggering blindly into the unknown. The agenda-driven "facts" being supplied by Apex are designed to make everyone all warm and fuzzy about this project. This is a great opportunity for the Washington County Commissioners to indeed represent their taxpayers. There are too many unanswered questions as to the health concerns of this project. For every study they cite, I can cite another with opposing view and historical data for proof. It is time to do the responsible thing. I have to have faith that you will do what we elected you to do. Sometimes the decisions are hard. Come to Schoodic and visit with some of us. Walk our property, sit on our docks and look and our view, breath our fresh air and listen to loons, whippoorwills and kids swimming. You will see how precious this is to so many of us and how quickly it would be destroyed by Downeast Wind. They are not "Downeast"; they are a Virginia-based company that needs to spend more time looking for an alternative area where many concerns would be eliminated. Maine, and indeed Washington County has so much unpopulated land. If this is truly a good idea, you can still bring this to Washington County but not at the expense of our quality of life.

I thank you for your time and your consideration and I hope your continued due diligence in thoroughly vetting this process and the potential fallout.
I will see you at the meeting on January 9th.

Susan S Mills
PO Box 26
Jonesport ME 04649

cc: Mark Stebbins, DEP Bureau of Land
Kelly Cyr, LUPC Environmental Specialist II
Marianne Moore, Senator/Washington County

INDUSTRIAL WIND TURBINES
Health complaints:

* sleep disturbances
* headaches
* dizziness
* nausea
* tinnitus
* irritability
* exhaustion
* learning impairment

Industrial Wind Turbines are too close to peoples' homes. Right now corporations are permitted to place turbines of *any size* as little as 550m, *or less*, away from where people live.

Not everyone who lives next to an Industrial Wind Turbine gets sick. Not everyone who smokes gets cancer. A person can choose whether or not to smoke.

Not only do people living next to these massive electrical generators not have a choice, the provincial government has stripped the rights of your local government to do anything about it.

WCO

Bringing Sanity to
Wind Development in Ontario

What can YOU do?

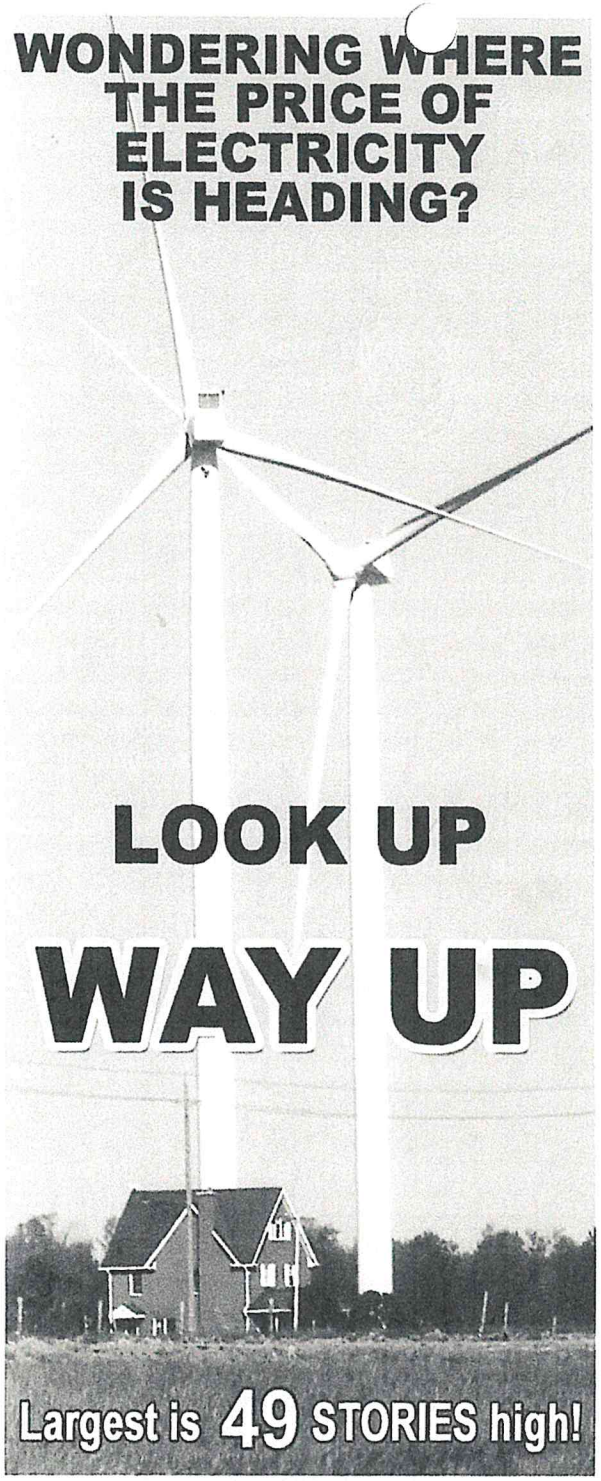
Get informed:
www.windconcernsontario.org
www.windvigilance.com

Has your health and quality of life already been affected by a wind turbine installation?
Call 1-888-7000-5655 or email
vow2help@gmail.com

Considering an option for a wind turbine installation on your property?
Contact a lawyer before you sign.
See "30 Suggestions on Wind Power Leases for Farmers" by the Ontario Federation of Agriculture:
www.ofa.on.ca

If you'd like an information meeting in your community or would like to get more involved, contact:

WONDERING WHERE THE PRICE OF ELECTRICITY IS HEADING?



#6

Green Economy?

"Sometime around the election in 2011, Ontario's residential power price will blow past the doubling point relative to the 2003 price consumers paid when McGuinty was first elected."

- *Tom Adams*

"A consumer in Southern Ontario may well anticipate the power cost increase over $4,000 per year."

- *William K.G. Palmer P. Eng.*

"$814 MILLION...paid since 2006 for wind power in the province. Every dime from your bills."

- *Ontario Wind Performance*

Should we subsidize:

* Vesta (Denmark)
* Samsung (Korea)
* International Power, RES (Britain)
* Acciona (Spain)
* Invenergy, Nextera, Pattern Energy (USA)
* Enercon, Siemens, Schneider Power, Natenco (Germany)

ACTUAL PRICE OF ELECTRICITY:

3.9c/kWh

What we pay MULTINATIONALS:

13.50c/kWh onshore
19.00c/kWh offshore

The Green Energy Act was supposed to be a "Path to a green economy and cleaner environment."

Cleaner Environment?

Here's what Industrial Wind Turbines have done for the environment so far:

* Thousands of trees cut down to make hydro poles
* Thousands of bats and birds killed by their massive blades
* Thousands of tons of carbon dioxide emitted to produce these colossal structures
* Prime farmland filled with concrete
* Evidence of worms driven from fields, harming soil ecology
* Allowed big oil companies to continue polluting using IWTS as carbon offsets
* Negatively impacts livestock

DOESN'T WIND ENERGY DECREASE OUR DEPENDENCY ON FOSSIL FUELS?

"We need...natural gas fired power plants to generate during peak times or when the wind doesn't blow."

- *Terri Steeves, Project Manager of the Oakville Gas Generating Station*

Without storage capacity, wind energy does little to lessen dependence on fossil fuels. Power generation must meet demand, and as wind energy is intermittent by nature, back up natural gas generation must be built to load follow wind.

For every industrial wind turbine that gets built, we are more dependent on fossil fuels. *Not less.*

Wind energy does not significantly reduce carbon emissions. There is no proof anywhere in the world that CO2 has been materially reduced or that any coal plant has been shut down due to wind power added to the grid. Intermittent wind power needs full backup generation capabilities.

Power rates have been partly due to the hidden charges for "clean green power" and natural gas generators (remember, coal isn't being replaced by wind energy it's being replaced by natural gas). It truly is a hidden cost. Transmission upgrades will cause further price hikes.

We support responsible, technically-sound solutions to our energy demands and environmental challenges. However, the Green Energy Act proposes to locate industrial wind power plants at an accelerated schedule, with little planning oversight, tearing apart the very fabric of rural Ontario.

Over 100 people affected by industrial wind turbines in Ontario are now suffering. Many more suffer silently, having signed contracts ensuring they never speak out. Meanwhile the mounting evidence worldwide of published reports from scientists, engineers, physicians, economists and environmentalists demonstrates that wind energy is not economically viable, nor is it a harmless technology.

The Ontario government has already given a contract to a wind company to erect off-shore wind turbines, and there are proposals for several wind projects in the Great Lakes. ***Do we want to destroy our natural heritage for a small amount of unreliable power?***

Neighbour against neighbour in a divided community is an UNHEALTHY ENVIRONMENT.

#7

84 Eastern Promenade, #2
Portland, Maine 04101

27 February 2020

The Office of Governor Janet T. Mills
1 State House Station
Augusta, Maine 04333

Dear Governor Mills:

First, I would like to extend a belated congratulations to you on your election as Governor of the State of Maine. I am sure your job is very difficult and at times pulls you in a variety of directions. But I trust you are enjoying the challenge and are handling it well.

As background, I first came to Maine as a college freshman in 1966. I attended UMP at that time and later transferred to Orono where I graduated in 1970. Maine had a tremendous impact on me in those years. I married a true Mainer from Jonesport (I can never be a true Mainer as I was born in Massachusetts 😊) and proceeded to build a family and career in the state. If you are ever in Westbrook and want to see my little business creation, please visit LANCO Integrated, Inc. I can set that up for you if you wish (even though I have been retired for some years now).

But the real reason I am writing is to share some of my thoughts about windmills coming into the state. I know you campaigned on the development of renewable energy resources. As a graduate engineer I am all in favor of your focus. I believe it is critical that we reduce our dependency on fossil fuels for a variety of reasons. So, I applaud your effort here.

Like you, I have spent enough years in Maine to gain a deep appreciation of its beauty and what that provides to its citizens and tourists who visit. I have also traveled a great deal in my career throughout Europe and Asia and have even driven across country through the farmlands of Nebraska. It was there that I saw my first grouping of windmills upfront and personal, stretching throughout the farms along my route. I am sure they are creating electricity and providing some well-needed rent to the farmers. Where I am troubled, is picturing that sight along the mountains and lakes and streams of Maine.

I was saddened to learn that multiple windmills are being proposed to be built near pristine Schoodic lake in Washington County. That area represents Maine at its finest. It is truly unspoiled with beautiful ponds and streams, and rivers winding through the wild blueberry barrons. The Narraguagus river has its roots there – a place where Arthur Godfrey (remember him? 😊) used to find peace and solitude fly fishing along its banks. Many Downeaster families have built camps around the lake enjoying its natural beauty and quiet draw.

I am sure you are also aware that windmills provide only a marginal contribution, sometimes at great cost to the environment. Maine is already among the cleanest energy producing states in the nation (#3) with over 90% of its electricity generated from clean sources. Experts estimate that windmills will

at best generate a quarter of their nameplate capacities due to the intermittent and unpredictable nature of wind. It just seems to be too much cost for too little gain. In fact, I read that the entire Maine goal of generating 2,700 MW's of electricity could be attained by a single moderately sized generator at 85% less cost. These economic facts combined with the various health issues already being seen in Maine where windmills are located near populated areas (noise and shadow flicker being the primary causes) increase the risk of this technology to the state and to its people.

Governor, I am sure you have heard all of this. It is up to you and your staff to decide if it is worth the risk to Maine's land and to its people. That will be your legacy.

I know this is a very difficult balance for you because of the energy promise that you made during your campaign. But you know there are other ways to fight this battle with less environmental impact and perhaps with better returns. A good example is what New Jersey is doing with electric cars.

I therefore respectfully ask you to consider moving more slowly here, making sure that we do not create a view that Mainers will regret for generations to come. Like the decision years ago to place a waste treatment plant in downtown Biddeford, once this is done there is no turning back for a long time.

As such, I kindly ask you to reconsider the project for Washington County and to at least look for a more suitable location to use of this technology.

Respectfully yours,

Tom and Carol Zack

Cc: Gerald Reid, Commissioner of The Maine Department of Environmental Protection
Judy East, Commissioner of The Land Use Planning Commission

8

Maine Department of Environmental Protection
17 State House Station
28 Tyson Dr
Augusta ME 04333-0017

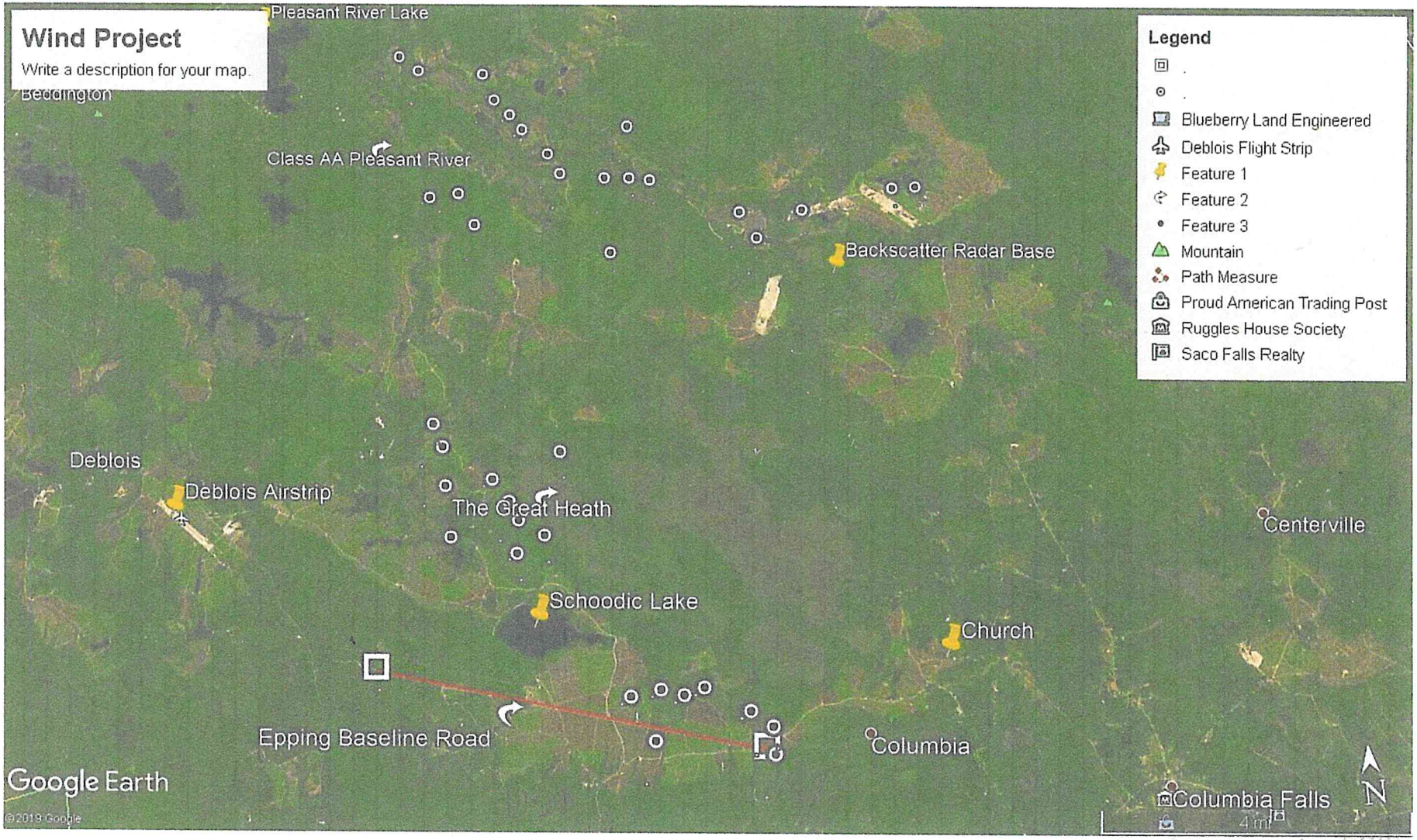
Maine Land Use Planning Commission
22 State House Station
18 Elkins Ln
Augusta ME 03333

Re: Permit Request by APEX (dba Downeast Wind) for 30 Wind Turbines to be Located in Columbia (DEP Permitting Jurisdiction) and TS 18, 19 and 24 (LUPC Permitting Jurisdiction)

I am a camp owner at Schoodic Lake and I oppose the Downeast Wind Farm Project. I am requesting that this permit request be rejected for the following reasons:

- destruction of 22,000 acres of historic and scenic Maine
- impact on critical habitat
- impact rare and extremely rare fauna and flora
- historic landmarks protections
- 7,000 acres of peatland known as the Great Heath
- nationally protected Atlantic salmon found only in Downeast Maine
- visual impact
- noise (both audible and infrasound)
- associated health problems
- eagles, loons, endangered bats, threatened Upland Sandpiper, threatened mayflies,
- AA certified Pleasant River and Schoodic Brook
- geological dig sites
- migratory routes
- roads (widened and added), land (30 feet footings)
- watershed

Thank you for your consideration.
Respectfully Submitted,


Wind Project
Write a description for your map.
Pleasant River Lake
Beddington
Class AA Pleasant River
Backscatter Radar Base
Deblois
Deblois Airstrip
The Great Heath
Centerville
Schoodic Lake
Church
Epping Baseline Road
Columbia
Columbia Falls
Google Earth
© 2019 Google
4 mi
N
Legend
Blueberry Land Engineered
Deblois Flight Strip
Feature 1
Feature 2
Feature 3
Mountain
Path Measure
Proud American Trading Post
Ruggles House Society
Saco Falls Realty

#9

H 10

Letters to the Editor

Wind turbines threaten Downeast wildlife

I scrutinized the Downeast Wind (DEW) website, especially the Environmental Impact Statement (EIS) of their proposed project in Columbia and adjacent unorganized townships. During more than 60 years in my natural resource/wildlife profession, I have participated (prepared and/or reviewed) many EIS's and Environmental Assessments (EA).

This EIS or EA (or whatever it is) appears to have been done by somebody who knew little about wildlife, their habitats, or this area. It is biologically insufficient, contains false statements, inadequate data, and was done in an extremely short time frame. This EIS was cute but missed its required purpose by a country mile.

A false statement that sticks out like a sore thumb is, "As of 2018, 55 bald eagle carcasses via 57,000 windmills in the USA." The American Bird Conservancy (ABC) has documented (actual carcasses) of 2,200 bald eagles, 2,000 golden eagles and 34,000 carcasses of other birds. ABC notes that 300-500 eagles are killed each year. To my knowledge, no windmill company has been prosecuted for these killings. Then there is unknown the number of birds who are struck by windmills, fly away, and die off-site.

The Great Heath is part of a Maine Ecological System. Windmills will compromise views from a scenic resource of state significance (a reserve). This development will have an unreasonable adverse effect on the scenic character of the Great Heath, surrounding areas, and people. This area is an important migration route for passerines and other birds; many of which have experienced major population declines. Whimbrels, upland sandpipers, bob-o-links, meadowlarks, kingbirds, nighthawks and others are significant birds using this area. Windmills must pose NO threat to bird movements and nesting.

The wildlife/bird surveys conducted by DEW were totally inadequate to properly assess the wildlife situation. The surveys should be done year-round for three years. They were done in a two to three month period- totally unscientific.

DEW speaks of mitigation of wildlife habitat for the birds. That is a cop-out. Mitigation is a false assumption. The mitigation areas are already there. Will DEW do habitat enhancement to make the site(s) more useful to wildlife? Also, they falsely speak of "... conservation easement will create net benefit for wildlife..." and that "... sites will benefit birds." How?? Please describe in detail. What damage will be done to Great Heath and local bogs? Any rare plants? DEW probably did not look.

Perusing the 115 internet pages of the DEW project material for Columbia and adjacent unorganized townships plus newspaper items, it is quite apparent that they are on a propaganda campaign. There's an old saying - if you say the propaganda often enough people will think it's the truth. Plus, they wave big bucks (bribes) in front of everyone to make people think DEW is a 'good' guy.

Let us be honest. What does the average citizen in Washington County get from this boondoggle? Nothing! Generated electricity is sent out of state. Electric rates do not decrease. And our taxes go up. Let us hope that the powers to be and regulators see the foolishness in this fiasco. Where are the private and public conservation groups on this windmill thing? Or do they speak with forked tongues? Why in the world would Maine's Department Inland Fisheries and Wildlife (IF&W) support this fiasco? Did they get money for habitat management on IF&W lands? IF&W is there to work *for* our wildlife.

Fred Hartman
Whiting

#11

The extraordinary history of Columbia's Epping Baseline

Community continued on page 20

Editor's note: This concise history of the Epping Baseline is excerpted from an article written by Burni Andres for the 150th anniversary of the baseline in 2007. It is reprinted here with permission of the Cherryfield Narraguagus Historical Society. The full text can be found on their website, www.cherryfieldhistorical.com.

In the early 1800s the accuracy of existing nautical charts was poor.

In 1807 Congress authorized the U.S. Coast Survey to map the Atlantic seaboard from Maine to Louisiana to aid in both navigation and national defense. To determine exactly how this could best be done, Albert Gallatin, Secretary of the Treasury under Thomas Jefferson, asked leading scientists for proposals, and the successful proposal came from a Swiss immigrant, Ferdinand Rudolph Hassler. He "proposed a survey based on a chain of triangles stretching from mountaintop to mountaintop down the Appalachians" and he became the 1st Superintendent of the U.S. Coast Survey.

Known as the Eastern Oblique Arc, the chain would serve as the framework for linking individual harbor surveys. It was an ambitious proposal, a major scientific undertaking at a time when geodetic surveying was in its infancy. However, according to Nelson, "in the 1800s, the United States was at the leading edge of this technology."

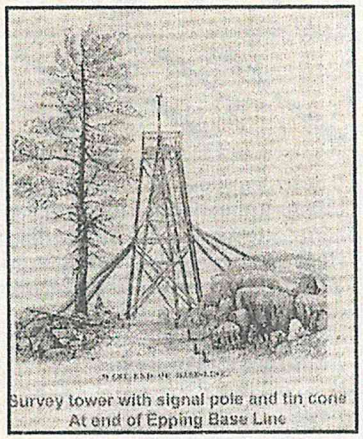
Six lines, measured with extreme accuracy, were built to facilitate Hassler's plan. They were in southwest Alabama, northwest Georgia, the Chesapeake Bay area, off Long Island, NY, in Massachusetts, and Downeast Maine. It was most common for baseline sites to be selected on open coastal beaches, because a line of about eight miles was needed, along with visibility at the ends to mountaintops. The rugged coast of Maine made it necessary to site the last baseline well inland and that has proved to be its salvation, for whereas the Epping Baseline Road is extant, no remnants remain of the other five baselines.

Once a baseline was constructed it became the one "known" side of a triangle. The principle of triangulation used in surveying over great distances is, "that if one side of a triangle is of known length and at least two of the three angles in the triangle have been determined, a length for the remaining two sides can be calculated. The three now known sides may then each become the only known side for other triangles, and the system expands." (Nelson)

The site for the last of the baselines, the Epping Plains from Columbia to Deblois, ME, was chosen in 1853, preliminary surveys were made in 1854 – 1856 and towers for heliotropes constructed. In May 1857, local farmers and lumbermen were hired to grade a 12-foot-wide path along the proposed line. Where necessary, the path was cut into banks or raised by stone cribbing so that the incline or decline never exceeded one foot in six meters.

On July 15, 1857, Benjamin Franklin's great-grandson, Alexander Dallas Bache, 2nd Superintendent of the U.S. Coast Survey, arrived to oversee the measurement of the baseline. Jefferson Davis, then Secretary of War and later President of the Confederacy, visited the survey party while they were camped on the barrens. In his memoirs, his wife Varina writes, "On a plateau near the top were white tents pitched, one for each of us, an excellent cook, tenderloin steaks from Bangor, vegetables from the neighboring farms and to all this comfort was added the newest books, and an exquisite and very large musical box which played "Ah, che la morte," and many other gems of the then new operas of Verdi."

A tour led by "baseline lady" Nancy Willey was probably the last group to see the southwesterly marker in its original setting, for in October 2004, the Maine State Museum removed the marble monument to its facilities in Augusta. Even though it was in an obscure setting, it had become the target of vandalism over the years and showed damage from target practice and other abuse. Despite that, one could still clearly read the carved lettering "U.S. Coast Survey," "A.D. Bache Sup't," "Base No. 9," and "1857" and fortunately, most of the road itself is still intact, stretching the eye and the imagination to the horizon. The Cherryfield-Narraguagus Historical Society is home to what is left of the eastern marker.



Survey tower with signal pole and tin cone
At end of Epping Base Line

Visiting the Epping Base Line with Nancy Willey

Columbia's historic and natural wonder

#12

Saturday, Sept. 29 started with a foggy morning with the fog soon burning off. Sixteen folks got on a bus to hear Nancy Willey speak about the Epping Base Line in Columbia. The bus tour started at the Union Hall in Columbia Falls at 9 a.m. and we traveled up to Centerville to begin learning about kames, kettle holes and to ride across a natural bridge.

Mrs. Willey told us that during the ice age a glacier that was two miles high came through and took our topsoil. As it went it left

Nancy Willey's plaque at the western end of the Epping Base Line.

boulders and rocks along the way and deposited the topsoil in New Jersey, which is why New Jersey is called the Garden State.

We were told that kames are a glacial landform that is an irregularly shaped hill made up of sand, and in Centerville it is found on a ridge that stretches from Cutler to the White Birches in Ellsworth.

We stopped in several places to enjoy the view from the hill where and views to the east.

We were told that the cemetery stones at the little cemetery that we stopped at were made of Italian marble and were called sugar stones as they dissolve over time and look like sugar in a heap. These stones were used as ballast on ships as they came to the new world. Not many were left in this little cemetery.

We then stopped on the natural bridge to hear that the glacier had dropped ice that broke off on both sides of the road forming a natural bridge through the woods.

We were told that the kettle holes we saw were made from the receding glacier by forming a hole where the ice from glaciers had broken off. One such kettle hole was too far down for our group to try to get to the bottom and to be able to get back out of it.

We then headed to the Station Road in Columbia to begin another point of interest in our tour.

Here we saw rock trains made up of erratic boulders that were left by the glacier that came through here. We learned that the Great Heath was the largest heath in the United States and that lemmings reside there.

We traveled to the Eastern Monument spot and got out to hear that we were on a ridge where thousands of years ago the ocean came up this far. We could look off in the distant and see the Atlantic Ocean. The barrens in front of us had turned different colors of red, in the distant that had started to turn colors, too.

Mrs. Willey informed us that the two markers that were at the beginning of the base line road were the only two left. The others over the years had disappeared.

If you looked ahead you could see an old tree stump looming alongside the base line. We were told that was called the lunch tree as blueberry farmers from the earlier days who were working on their land took their lunch break by this tree.

As we traveled along the road we stopped at Frog Rock to stretch our legs and get a group picture. We were lucky that two folks that were out riding on the barrens stopped and became our photographer.

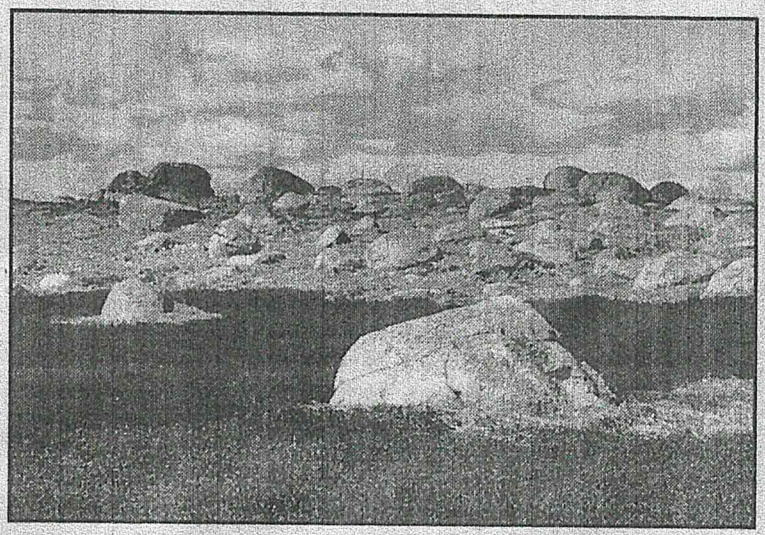
As we rode along we could see that the barrens were coming into their glory with the blueberry bushes turning red, and because there are so many different kinds of blueberry clones, the different shades made it look like a patchwork quilt.

We came upon the area where the base line continues through the woods and a detour has been made to go out around that section. Further ahead we parked the bus and got out to eat our lunches. Here we could see the base line road coming out of the woods and making its way towards us.

After we had our lunch we traveled down the road to another spot where we all got out to hear Mrs. Willey tell us to sing a song about purple mountains majesty and fruited plains. Off in the distance we could see the purple mountains and, of course, the fruited plains were the blueberry barrens.

We then continued to the area where again the road goes into the trees where a few able-bodied folks ventured to walk the rest of the way to the western monument. I, of course, drove the bus to the entrance and parked. Here we learned that the Western Monument

Visiting Frog Rock. Back Row: Dawn Bragg, Tony Santiago, Jean Santiago, Shirley Livingstone, Laura Strout, Helene Hammond, Malinda Worcester, Grace Falzarano, Charlene Gray, Valerie Worcester, Nancy Willey, Philip Worcester, Jean Porter. Front Row: Ronie Strout, Robin Santiago, Nancy Stewart, Sonja Grant. Matthew Stoddard on top of the rock.



Big Rock Ridge with erratic rocks. Photos by Ronie Strout

Augusta for safekeeping from vandals. Many photos were taken with Mrs. Willey and her plaque that was placed nearby on an erratic rock.

Our trip was not over as Mrs. Willey took us to Cherryfield Ridge Road to see the Big Rock Ridge with all of the erratic rocks that we were told will never be removed and will stay as a historical example of where the glacier dropped these they stood out where the blueberry company had hayed this area to get ready to burn in the spring. In this area harvesters will not be able to use their machines and hand rakers will be used instead to pick the area.

Our journey over the barrens with Mrs. Willey had now come to an end. We all enjoyed learning about the ice age that came through and about the last remaining base line

#13

THE UNIVERSITY OF MAINE CLIMATE CHANGE INSTITUTE

MAINE ICE AGE TRAIL MAP AND GUIDE: DOWN EAST

Stop #21: Historical Survey Marker - East Base








Click the thumbnails to view larger images.

Go to the trail listing

Click to go to the next stop

Click to go to the previous stop

Location:
Northeast of Cherryfield on Pea Ridge Road. Approach from either Cherryfield or Columbia Falls.

N 44°40'08" W 67°49'57"

Geology:
Historical Survey Marker: This is the outer seaward edge of the ice-contact delta, at its eastern end. Just to the north, the line of trees and scattered large boulders mark the ice-contact position. From this location, the delta was built to a sea level approximately 250 feet above the present level. This edge of the delta displays one of the best examples of an elevated shoreline in the United States. The prominent shoreline is composed of the 20-foot wave-cut bluff and terrace, visible just below the road. The boundary between the two approximates the storm high-tide level. Below this is a descending series of beach ridges, offshore bars and subtle wave-eroded scarps formed as the sea level dropped. The landforms seen here are exceptionally well preserved. High, prominent shoreline exists on similar deltas along coastal Maine and New Brunswick.

Just off the roadway is a square granite base. This is a remnant of the 1853 monument marking the east end of the 5.5 mile-long Surveying Base Line Number Nine, at Epping. The 4.5-foot-tall marble obelisk that rested on this base has been destroyed. The other obelisk, marking the West Base of the line, is preserved in the Maine State Museum in Augusta. This line, measured within a fraction of an inch between two precisely located horizontal markers, was established in 1853 by the U.S. Coast Survey under the directorship of Alexander Dallas Bache, Benjamin Franklin's grandson. Once accurately determined, the line served as the basis for establishing benchmarks for the mapping of the region by the triangulation surveying method.

The black and white image, featured left, is a scene during the survey of the base line in 1873. The distance of the line was measured with calibrated steel rods which were kept at a near constant temperature by insulation material seen in this lithograph.

Note: This is private property. These are commercial blueberry fields, do not walk on the blueberry fields, or pick berries. You are fully responsible for your own safety and for any damage to your property, and that of the owner by you while on site. Dirt roads are not suitable for large RVs.

1865 THE UNIVERSITY OF MAINE

NSF

#14 Places Listings in Washington County, Maine (3 pages)

Current listings[edit]					
[	Name on the Register[4]	Image	Date listed[5]	Location	City or town
2	Archibald-Adams House	Archibald-Adams House	13-Mar-87	State Route 193	Cherryfield
			(#87000429)	44°36′21″N 67°55′38″W / 44.605833°N 67.927222°W / 44.605833; -67.927222 (Archibald-Adams House)	
10	Bucknam House	Bucknam House	28-Apr-75	Main St.	Columbia Falls
			(#75000113)	44°39′15″N 67°43′33″W / 44.654167°N 67.725833°W / 44.654167; -67.725833 (Bucknam House)	
11	Samuel Bucknam House	Samuel Bucknam House	19-Oct-78	Main St.	Columbia Falls
			(#78000203)	44°39′09″N 67°43′46″W / 44.6525°N 67.729444°W / 44.6525; -67.729444 (Samuel Bucknam House)	
17	Gen. Alexander Campbell House	Gen. Alexander Campbell House	13-Apr-77	Campbell Hill	Cherryfield
			(#77000088)	44°35′53″N 67°55′18″W / 44.598056°N 67.921667°W / 44.598056; -67.921667 (Gen. Alexander Campbell House)	
18	David W. Campbell House	David W. Campbell House	19-Jul-84	Main St.	Cherryfield
			(#84001545)	44°36′02″N 67°55′19″W / 44.600556°N 67.921944°W / 44.600556; -67.921944 (David W. Campbell House)	
19	Frank Campbell House	Frank Campbell House	29-Oct-82	U.S. Route 1	Cherryfield
			(#82000426)	44°35′52″N 67°55′23″W / 44.597778°N 67.923056°W / 44.597778; -67.923056 (Frank Campbell House)	
20	Col. Samuel Campbell House	Col. Samuel Campbell House	4-Feb-82	U.S. Route 1	Cherryfield

			(#82000785)	44.598333°N 67.921667°W / 44.598333; -67.921667 (Col. Samuel Campbell House)	
25	Cherryfield Academy	Cherryfield Academy	19-Feb-82	Main St.	Cherryfield
			(#82000786)	44°36′06″N 67°55′29″W / 44.601667°N 67.924722°W / 44.601667; -67.924722 (Cherryfield Academy)	
26	Cherryfield Historic District	Cherryfield Historic District	1-Oct-90	Roughly bounded by Church, Main, Park, New and High Sts., as well as River Rd. properties from U.S. Route 1 to Driscoll Island	Cherryfield
		More images	(#90001467)	44°35′54″N 67°55′32″W / 44.598333°N 67.925556°W / 44.598333; -67.925556 (Cherryfield Historic District)	
27	Columbia House	Columbia House	12-Oct-00	Main St. at its junction with Church Hill Circle	Columbia Falls
		More images	(#00001203)	44°39′15″N 67°43′43″W / 44.654167°N 67.728611°W / 44.654167; -67.728611 (Columbia House)	
28	Columbia Union Church	Upload image	20-Jun-97	Northern side of State Route 29-608 (Epping Road), 0.05 miles east of its junction with State Route 29-610 (Cemetery Road)	Epping (Columbia, Maine)
			(#97000607)	44°40′59″N 67°46′48″W / 44.683056°N 67.78°W / 44.683056; -67.78 (Columbia Union Church)	
36	Gallison Memorial Library	Gallison Memorial Library	11-Jan-01	U.S. Route 1, 0.5 miles west of its junction with U.S. Route 1A	Harrington
			(#00001632)	44°37′09″N 67°48′45″W / 44.619167°N 67.8125°W / 44.619167; -67.8125 (Gallison Memorial Library)	
51	Indian River Baptist Church	Upload image	23-Jun-88	State Route 187 at Indian River	Addison
			(#88000893)	44°34′22″N 67°38′36″W / 44.572778°N 67.643333°W / 44.572778; -67.643333 (Indian River Baptist Church)	
69	Narraguagus Light Station	Narraguagus Light Station	20-Nov-87	Eastern side of Pond Island	Milbridge
			(#87002022)	44°27′15″N 67°49′44″W / 44.454167°N 67.828889°W / 44.454167; -67.828889 (Narraguagus Light Station)	

70	Nash House	Nash House	4-Jan-83	River Rd.	Cherryfield
			(#83000477)	44°36'02"N 67°55'42"W / 44.600556°N 67.928333°W / 44.600556; -67.928333 (William M. Nash House)	
72	Patten Building	Patten Building	22-Dec-78	Main St.	Cherryfield
			(#78000207)	44°35'54"N 67°55'30"W / 44.598333°N 67.925°W / 44.598333; -67.925 (Patten Building)	
80	Ruggles House	Ruggles House	26-Jan-70	Main Street	Columbia Falls
			(#70000080)	44°39'08"N 67°43'49"W / 44.652222°N 67.730278°W / 44.652222; -67.730278 (Ruggles House)	
86	Union Church, (former)	Union Church, (former)	5-Jul-00	Main St., 0.1 miles northeast of its junction with Addison Rd.	Columbia Falls
			(#00000759)	44°39'12"N 67°43'46"W / 44.653333°N 67.729444°W / 44.653333; -67.729444 (Union Church, (former))	
87	Union Evangelical Church	Upload image	7-Jun-96	Northern side of Addison Ridge Rd., 2 miles south of U.S. Route 1	Addison
			(#96000654)	44°36'59"N 67°45'20"W / 44.616389°N 67.755556°W / 44.616389; -67.755556 (Union Evangelical Church)	

strobe light effect caused by the shadow flicker all contribute to major sleep disturbance. As I stated earlier one can only imagine the effect these factors would have on wildlife and their habitats. In California the Alameda County Community Development Agency points to 10,000 bird deaths from the Altamont wind turbines there; the Audubon Society refers to the turbines as "bird cuisinarts"!! The above mentioned 14,000 wind turbines are abandoned, rusting, and slowly decaying. When it is time to clean up after a failed idea, no green environmentalists are to be found. An alarming hazard associated with wind turbines is fire caused by lightning strikes or grease buildup in the gear box. There were eleven turbine fires last year in the U.S. with two occurring in the state of Maine. With the ill effects of global warming upon us, it is also alarming to note that if large scale wind farms were built, the average surface temperatures would warm over the continental US by 0.24 degrees C. (source: The Harvard Gazette 10/4/2018 Science and Technology). This is another downside to wind power! Lastly, the wear and tear on the eight-mile dirt road around Schoodic Lake from the construction work necessary to build these turbines will be substantial.

In summary, I am adamantly opposed to the proposed Apex wind farm in Columbia and adjacent townships especially the area of Schoodic Lake where my father built our family camp in 1960. This area has been enjoyed and treasured for decades and by generations of families. We are compromising the very definition of our state: Maine, the way life should be. The cost to our state does not outweigh the benefits. The wind generated energy will be sent out of state and our taxes and/or electric bills will increase to subsidize the cost of the wind turbines. Our property values in the region will decrease and what we will get is an eyesore that will alter the landscape and quality of life in Downeast Maine forever. Those who will benefit financially from this project are raping the local economy and environment, and do not live in this area. I urge you to consider your legacy to our state and consider other ways to bring in clean energy with less environmental and health impacts! The time to rein in this project and examine its ill effects is not after the wind turbines are built, but before!

Thank you for your consideration of this important matter.

Carol Zack
84 Eastern Promenade, #2
Portland, ME 04101

And camp owner at
Schoodic Lake, ME 04622

#15

March 10, 2020

Maine Bureau of Health
Maine Center for Disease Control and Protection
286 Water Street
State House Station 11
Augusta, ME 04333-0011

Dear Members:

I am writing this letter due to grave concern regarding the proposed erection of wind turbines in downeast Maine, specifically in township 18 near Schoodic Lake. The proposed turbines, if approved, will be the largest in the United States at 656 feet tall, the size of a small skyscraper! This area is a piece of heaven and exemplifies the natural beauty of the state of Maine and its finest recreational opportunities. The lake water is clear, loons are present along with turtles, fish and eagles, and the night sky is dark enough to see the Milky Way. The quality of lake life as experienced by hundreds of camp owners as well as the wildlife in the area would be adversely affected were these wind turbines to be constructed. Bird populations have already been found to be declining and these turbines would impact their migration route. Smaller creatures such as bats and bees who pollinate the blueberry plants in the area would be adversely affected. Additional ill effects would occur on the land and ecosystems. Specific areas of concern would be the effect on the Pleasant River nearby which has a viable self-sustaining Atlantic salmon population as well as an established brook trout fishery, and 7000 acres of peatland in this area known as the Great Heath. The alterations to the topography that lead to runoff effecting water quality and salmon habitat is alarming. Years ago the runoff was polluted by pesticides being used by the blueberry companies as well as lake water being taken for irrigation of the blueberry crop and these issues had to be addressed.

This project does not make economic or environmental sense because the costs and impacts of building wind turbines far outweigh the tiny benefits. The net result will not leave our state in a better place. Our landscape will be forever visibly changed and polluted, if you will, and our scenic beauty will be lost. There is no shortage of electricity in the state of Maine. Maine is already the third cleanest state for CO2 emissions from electricity production. Wind power is intermittent and unpredictable. Electricity produced from wind cannot replace the base load generators from nuclear, biomass, natural gas, or hydropower. This project is too costly with too little to gain. The wind turbine construction project would ruin the vistas of and from Maine mountains and would be environmentally devastating. Maine's 2709 MW goal could be achieved by the construction and operation of a SINGLE, moderately sized, high quality conventional generator, at 85% less cost! Wind-generated electricity will not guarantee lower electricity rates because it cannot compete with low natural gas prices. Demand for wind-generated electricity is created by government policy, not by demand. Without favoritism from government policies that force ratepayers to pay the bill, the wind industry could not survive. Wind plants create very few permanent jobs. The facts in this paragraph come from the article "Friends of Maine's Mountains: The Secret's Out" published 2/27/2020.

The negative ill effects of this proposed project in the town of Columbia and the adjacent unorganized townships far outweigh the benefits. Alarming headlines and news stories abound such as "14,000 Abandoned Wind Turbines Litter the US "(source: The Elephant's Child 7/7/2013) and "Wind Turbines in Plymouth, MA Declared a Public Health Nuisance" (source: CBSN Boston 2/14/2020). Let's learn from experience here, people! The noise and sound from the gearbox, the swoosh from the blades, and the

#16

March 10, 2020

Maine Department of Environmental Protection
17 State House Station
28 Tyson Dr
Augusta ME 04333-0017

Re: Permit Request by APEX (dba Downeast Wind) for 30 Wind Turbines to be Located in Columbia (DEP Permitting Jurisdiction) and TS 18, 19 and 24 (LUPC Permitting Jurisdiction)

I am a camp owner at Schoodic Lake. I am very concerned about the negative impact on Schoodic and the surrounding area if this project is permitted to proceed. I write this letter because I have questions regarding Chapter 315, Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses from the Maine Department of Environmental Protection permitting process.

This chapter describes the process for evaluating impacts to existing scenic and aesthetic uses resulting from activities in, on, over or adjacent to protected natural resources subject to the National Resources Protection Act, pursuant to 38 M.S.R.A. 480-D (1) and reads in part:

1. **Introduction:** In the Natural Resources Protection Act (NRPA), 38 M.R.S.A. 480-A through Z, the Legislature has found and declared that Maine's rivers and streams, great ponds, fragile mountain areas, freshwater wetiands, significant wildlife habitat, coastal wetlands, and sand dune system are resources of state significance. Section 480-A states that these resources have great scenic beauty and unique characteristics, unsurpassed recreational, cultural, historical, and environmental value of present and future benefit to the citizens of the State and that uses are causing the rapid degradation and, in some cases, the destruction of these critical resources. The Legislature's recognition of the scenic beauty of these protected natural resources through statute distinguishes the visual quality of those resources and its value to the general population.

Applicants for permits under the NRPA are required to demonstrate that a proposed activity meets the standards of the NRPA that have been established by the Legislature. Standard 1 in Section 480-D of the NRPA requires an applicant to demonstrate that a proposed activity will not unreasonably interfere with existing scenic and aesthetic uses.

2. **Purpose:** This rule specifies State regulatory concerns, defines visual impacts, establishes a procedure for evaluating visual impacts generated from proposed activities, establishes when a visual assessment may be necessary, explains the components of a visual assessment hen required, and describes avoidance, mitigation, and offset measures that may eliminate or reduce unreasonable adverse impacts to existing scenic and aesthetic uses.

Applicability: Permit by Rule unless the Department exercises its discretionary authority to require an individual permit as described in Chapter 305, Section 1 (D). In the review of an application for a permit, the Department must evaluate the potential for unreasonable adverse visual impacts resulting from a proposed activity located in, on, over, or adjacent to a protected natural resource.

4. **Scope of Review:** The potential impacts of a proposed activity will be determined by the Department considering the presence of a scenic resource listed in Section 10, the significance of the scenic resource, the existing character of the surrounding area, the expectations of the typical viewer, the extent and intransience of the activity, the project purpose, and the context of the proposed activity. Unreasonable adverse visual impacts are those that are expected to unreasonably interfere with the general public's visual enjoyment and appreciation of a scenic resource, or those that otherwise unreasonably impair the character or quality of such a place.

10. **Scenic Resources:** The following public natural resources and public lands are usually visited by the general public, in part with the purpose of enjoying their visual quality. Under this rule, the Department considers a scenic resource as the typical point from which an activity in, on, over, or adjacent to a protected natural resource is viewed. This list of scenic resources includes, but is not limited to, locations of national, State, or local scenic significance. A scenic resource visited by large numbers who come from across the county or state is generally considered to have national or statewide significance. A scenic resource visited primarily by people or local origin is generally of local significance. Unvisited places either have no designated significance or are "no trespass" places.

A. National Natural Landmarks and other outstanding and cultural features (e.g., Orono Bog, Meddybemps Heath);

B. State or National Wildlife Refuges, Sanctuaries, or Preserves and State Game Refuges (e.g., Rachel Carson Salt Pond Preserve in Bristol, Petit Manan National Wildlife Refuge, the Wells National Estuarine Research Reserve);

C. A State or Federally designated trail (e.g., the Appalachian Trail);

D. A property on or eligible for the inclusion in the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended (e.g., Fort Knox);

E. National or State Parks (e.g., Acadia National Park);

F. Public natural resources or public lands visited by the general public, in part for the use, observation, enjoyment and appreciation of natural or cultural visual qualities. (e.g., great ponds, the Atlantic Ocean).

In the 22,000 acre footprint of this project you will find the following:

A. The 7,000 peatland known as the Great Heath, home to rare animals such as the Upland Sandpiper and rare plants that include Bog Bedstraw, Canada Mountain-rice grass and Jacobs Ladder.

C. Maine Ice Age Trail, the historical survey marker-East Base. It is the outer seaward edge of the ice-contact delta. The delta displays one of the best examples of an elevated shoreline in the United States.

D. The Epping Baseline. This 5.5 mile line, measured within a fraction of an inch between two precisely located horizontal markers, was established in 1853 by the U. S. Coast Survey. It served as the basis for establishing benchmarks for the mapping of the eastern seaboard. All other baselines used for this process have either been destroyed or washed into the sea. People from all over have toured this area.

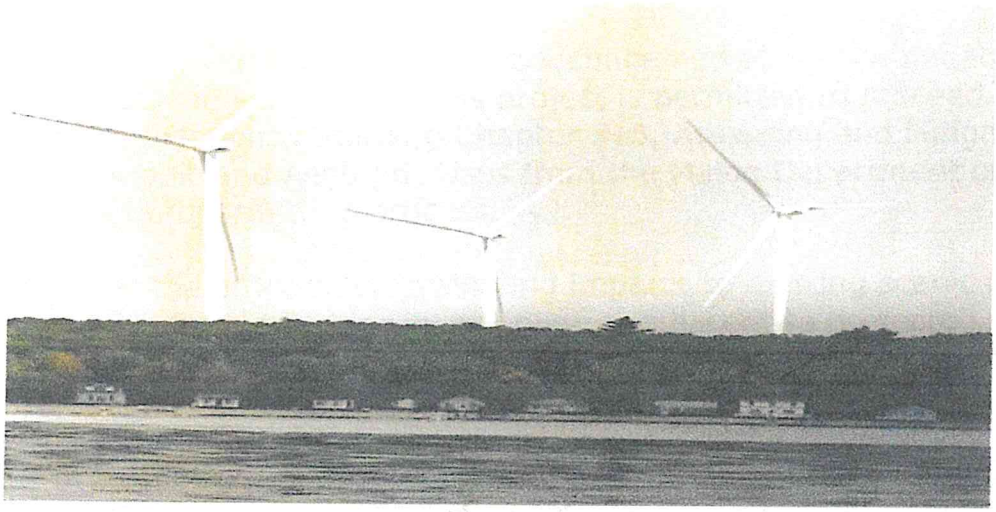
In addition, the following properties are within the 8-mile limit of the proposed wind farm and currently listed on the National Register of Historic Places:

Name on the Register	Location	City or town
Archibald-Adams House	State Route 193	Cherryfield
Bucknam House	Main St.	Columbia Falls
Samuel Bucknam House	Main St.	Columbia Falls
Gen. Alexander Campbell House	Campbell Hill	Cherryfield
David W. Campbell House	Main St.	Cherryfield
Frank Campbell House	U.S. Route 1	Cherryfield
Col. Samuel Campbell House	U.S. Route 1	Cherryfield
Cherryfield Academy	Main St.	Cherryfield
Cherryfield Historic District	roughly bounded by Church, Main, Park, New and High Sts., as well as River Rd. properties from U.S. Route 1 to Driscoll Island	Cherryfield
Columbia House	Main St. junction with Church Hill Circle	Columbia Falls
Columbia Union Church	Northern side of State Route 29-608 (Epping Road), 0.05 miles east of its junction with State Route 29-610 (Cemetery Road) Epping	Columbia, Maine
Gallison Memorial Library	U.S. Route 1, 0.5 miles west of its junction with U.S. Route 1A	Harrington
Narraguagus Light Station	Eastern side of Pond Island	Milbridge
William M. Nash House	River Rd.	Cherryfield
Patten Building	Main St.	Cherryfield
Ruggles House	Main Street	Columbia Falls
Union Church, (former)	Main St., 0.1 miles northeast of its junction with Addison Rd.	Columbia Falls
Union Evangelical Church	Northern side of Addison Ridge Rd., 2 miles south	

of U.S. Route 1 Addison

F. In addition to tours of the Base Line, Pleasant River is an attraction for those interested in kayaking, canoeing and fishing; Schoodic Lake attracts visitors who put their boat in for the day to enjoy fishing, birdwatching and floating on the lake enjoying the natural beauty; the surrounding barrens attract day trips of leaf peepers, people riding their ATVs for enjoyment and those hoping to spot a moose or a bear.

Finally, Chapter 315 uses the word "unreasonable" a lot. Does this seem reasonable to you?



This is a simulation of just three of the proposed 30 wind turbines, 7 across the lake, 23 behind us like these, with the closest one being .8 of a mile. These monsters are 656' tall and if erected will be the tallest wind turbines in existence in the United States. Even APEX admits they don't know much about them.

Please deny this permit until we know the ramifications of such a project. Please deny this permit based on your own standards for impacting existing scenic and aesthetic views.

Sincerely,

Howard B Mills, Jr.
PO Box 26
Jonesport ME 04649

and

71 Sunrise Blvd
Schoodic Lake ME 04622

cc: LUPC