



Dear Donna Chapman,

My name is Jeanne Rhein and I live at 184 Chute Road in Windham. Rosie Hartzler from the Highland Lake Project gave me your name and phone number. She said that you are concerned about the waterways in Windham. I am involved with the town concerning the Majestic Woods – Phase – 3 cluster subdivision off of Swett Road. I have a brook in my backyard which abuts the wetlands that will be impacted by that development. That brook runs directly into already endangered Cooley Wright Brook. I am also reaching to DEP's project manager, Bob Green. I have a thumbnail of the paperwork for the Site Location Permit which was submitted to the DEP by Dustin Roma, the engineer for the development. Enclosed please find the following paperwork:

- 1. A letter to Ben Smith about my concerns.
- 2. An email to DEP Project manager Bob Green about the developer's denial of my request.
- A letter to the developer Shoreland Development, LLC. Bruce Brown. He denied my
 request to have an environmental specialist evaluate the Wetlands that abut my property at
 my expense. He responded by cell phone only and refused to put his denial in an email or
 letter.
- 4. Another email expressing my concerns about information from the Site Location Permit paperwork.
- 5. A copy of the letter to the Environmental Board of Protection requesting a public hearing and that they take over jurisdiction over this project.
- Evidence from the 2016 Integrated Water Quality Monitoring and Assessment Report –
 Pages 24 and 180 that Cooley Wright Brook is on their list. Also, please notice how many
 additional waterways in Windham are on that list.
- 7. A copy of the letter from Kristen Puryear from state DEP about rare botanical features and that an environmental biologist may be needed to confirm that no rare features are disturbed.
- 8. A copy of the 2 types of soil from the Site Location Permit paperwork concerning the possibility of flooding in my yard because I abut the property with a brook that will be impacted by the stormwater retention area above and upland of the brook in my yard.

I have been in contact with Ben Smith, but I also wanted you to know about my concerns. Thank you in advance for reading over all of this. I look forward to speaking with you concerning this problem. I am grateful for any help that you can give me in this matter. My phone number is 572-4042 and my cell phone is 732-425-0604 which is always with me. As you can see from my cell, I am from away, New Jersey. I paid 55,000 for the land.

Sincerely,

Jeanne Rhein (email – Jeanne R. email@gmail.com)

Town of Windham - Planning Department

8 School Road

Windham, Maine 04062

Dear Ben Smith and Planning Board:

Thank you for permitting me to speak at the meeting on Monday, March 12, 2018. Enclosed please find a copy of my letter to the developer requesting permission to have an independent environmental specialist evaluate the wetlands that will be impacted by the development of Majestic Woods — Phase - 3.

I am very disappointed that my request for more time to achieve an independent wetlands environmentalist to reevaluate was not taken into consideration by the planning board members who were present at the meeting. I am grateful to the 2 members who voted against the waiver: 1 man was concerned about the wetlands and the other man was concerned about waivers becoming too common.

As I move forward with my case against the Planning Board, I will keep you informed about my progress.

I am grateful to Ben Smith for giving me an hour of his time and to Amanda for her cooperation in giving me copies of maps and a disk of information.

Sincerely,

Jeanne Rhein

Email: Apr. 1/13,200

in:sent

Gmail

Move to Inbox

More

COMPOSE

Regarding: Majestic Woods - Phase - 3

Inbox (39)

Jeanne Rhein <jeanner.email@gmail.com>

Starred

to Robert.Green

Less

Dear Robert Green,

Important

My request to the developer was denied not by email or letter, but by a cell phone call from him to me. He was very abrute. He feels that I am strictly a trouble maker.

Chats

After reviewing these 3 sections of the site location paper work, I still have my concerns:

Sent Mail

Drafts (30)

All Mail

Spam (6)

Click here to Reply or Forward

Trash

Categories

0.14 GB (0%) of 15 GB used

Manage

Terms - Privacy

Save

Manage labels

Create new label

folder Mom's Story T...

Shoreland Development, LLC

2320 Congress Street

Portland, Maine 04102

Dear Mr. Bruce Brown:

This request concerns your property off of Swett Road in Windham, Maine named Majestic Woods Phase - 3. The concerned citizens of Phase - 1 and Phase - 2 and I request your permission to have an environmentalist specializing in wetlands evaluate the wetlands that abut our properties. The expense of the evaluation would be paid for by me.

Here is a list of my concerns:

- Impact on groundwater I have a carbon filter on my well that I must replace every 2 months.
 However, my neighbor had to have a complete water filtration system on his well costing him
 1,200 dollars once my home was built. We are both on 2 acres and the homes that will be built
 in Phase 3 will be upland and on a half to three fourths of an acre.
- Impact on the wetlands that abut my property are down slope and are a serious environmental
 concern. There is a beautiful treeline directly above the brook that runs through my backyard
 and 2 other neighbors' backyards. That brook flows directly into already endangered Cooley
 Wright Brook.
- Impact of 3 groundwater retention areas is another important environmental concern one is located directly above the brook in my backyard that already has a 2 foot wide waterfall during heavy rains and spring snow melting. The other two stormwater retention areas are located directly above a 100 year flood plain, a stream water protection area, and already endangered Cooley Wright Brook.

Please grant us permission to have an independent environmental specialist map, evaluate the wetlands, and compare the information with your results about these concerns. We will gladly share these findings with your engineer and look forward to your cooperation in these environmentally sensitive concerns by abutters whose home will be impacted by your development Majestic Woods Phase - 3.

Please send me a letter or an email concerning your decision to grant permission. Here is my information: Jeanne Rhein 184 Chute Road Windham, ME. 04062 or JeanneR.email@gmail.com

Sincerely,

Jeanne Rhein and Concerned Citizens

Email-Aprilia,

Regarding: Majestic Woods Phase - 3

Robert.Green@maine.gov

Regarding: Majestic Woods Phase - 3

Dear Robert Green,

Send

Here are the areas of my concerns about the site location permit paper work:

- 1. An environmental specialist to map out the wetlands and determining exactly how many acres of wetlands will be impacted by the stormwater retention area above the brook that runs through my property and flows directly into already endangered Cooley Wright Brook has been denied by the developer by a cell phone call only with nothing in writing. I am a direct butter to this are.
- 2. Also, that specialist could check for rare botanical features. According to the paperwork from the site location permit from Kristen Puryear | Ecologist | Maine Natural Areas Program, paragraph 3 from that letter states,"...This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed. I did call her about this, but the state does not get involved in small projects. She suggested that I contact the Cumberland County //Water Conservation District. I will be contacting Cumberland County as she suggested. The paperwork that she included in her report stated that there are Rare and Exemplary Botanical Features within 4 miles of Project #17002, Majestic Woods Subdivision, Windham, Maine. There are 2 pages of the list from Maine Natural Area Program.
- 3. The last concern is about soil quality. The map listing the types of soil shows Scantic and Nicholville (SWP) The detailed explanation of Scantic soil is most important because it states "Hazard to Flooding: May flood occasionally on lowest fringes during spring and periods of excessive precipitation." The Nicholville (SWP) stated "Development with stormwater: "Nicholville (SWP) is somewhat poorly drained soil exhibiting a seasonal high groundwater table 1.0 to 1.5 beneath the soil surface in the spring and during periods of heavy precipitation." Again, this area is directly below the stormwater detention area which is directly above the brook that runs through my backyard and that flows directly into already endangered Cooley Wright Brook.
- 4. Since I have been denied access to having at my expense an environmental specialist by the developer, I am requesting that someone from the DEP please come out to checkout the area that abuts my property.

Please forward this to the Board of Environmental Protection and I will mail them a copy of this email.

Sincerely,

(Copy of Origina) Letter -mailed

March 21, 2018

Board of Environmental Protection

17 State House Station

Augusta, ME. 04333

Dear Board of Environmental Protection:

This letter requests a public hearing concerning the application by Shoreland Development for a 22-lot residential subdivision project with access from Swett Road in Windham, Maine. It also requests that the Board of Environmental Protection assume jurisdiction over this application. My name is Jeanne Rhein and my property abuts this project. I live at 184 Chute Road in Windham. My cell phone number is 732-425-0604 and my home phone is 207-572-4042. My email address is JeanneR.email@gmail.com. I am representing myself, as well as, my neighbors.

The following are the reasons for the request:

- 1. There is a discrepancy over the total acreage for the project. This is based upon 2 maps provided by the developer's engineer. The final approved map for Phase 1 which was for my home states 35.57 acres, but the preliminary map of 12/18/17 stated 39.09 acres. In addition to that, the preliminary map had only net wetlands acreage. There is no wetlands acreage Specifically for Phase 3.
- 2. The impact on ground water of homes in Phase 1 and Phase 2 that are down slope from that project is a major concern. Currently, I have a carbon filter that I must replace every 2 months on my well; however, my neighbor had to have a \$1,200 water filtration system put in his home after my home was built. What will be the impact on the homes already existing in Phase 1 and Phase 2 if the developer is permitted to build 22 homes with 22 septic systems leechfields giving off nitrogen and phosphorus, as well as, landscaping chemicals, and road salt from the winters?
- 3. The impact on the wetlands, wildlife, fauna that surround that project is another serious concern. There are 2 vernal pools on the project land.

4. The final concern is about the impact of 3 stormwater retention areas - 2 above the hundred year flood plain, stream protection area and the already endangered Cooley Wright Brook. There is also a stormwater retention area above the stream directly behind my home that has a run-off of a 2 foot waterfall during spring when the snow melts or during heavy rains. That stream flows direct into Cooley Wright Brook. That brook is on the endangered list in the 2016 Final Draft Integrated Water Quality Monitoring and Assessment Report. See pages 24 and 180 of that 187 page document. Other homes will be impacted and are located in the flood plain and some of those homes are backed up to that already endangered brook.

Thank for considering this letter as a request for a public hearing and for considering our request for the Board of Environmental Protection to assume jurisdiction over this application by Shoreland Development for the 22 – lot residential subdivision with access from Swett Road in Windham, Maine. We look forward to hearing from the Commissioner and the Board concerning this project.

Sincerely,

Jeanne Rhein and the Concerned Neighbors

priority for water quality planning efforts (Table 3-2). Following a public comment opportunity and further internal review, DEP accepted the document as final in May 2016 (Appendix VI). This list of priority waters may be periodically revised as plans progress and new information emerges. In the relevant tables in Chapter 8 and in Appendices II-V, Vision waters are indicated in italics.

Table 3-2 Priority Waters Included in Maine's Vision

Assessment Unit ID	ent Unit ID Segment Name		Impairment Cause		
ME0106000304_625R01	Adams Brook	Berwick	Benthic- Macroinvertebrate Bioassessments		
ME0106000103_607R01	Black Brook	Windham/	Oxygen, Dissolved		
ME0103000308_325R02	Brackett Brook	Palmyra	Oxygen, Dissolved		
ME0102000510_224R01	Burnham Brook	Garland	Oxygen, Dissolved		
ME0105000305_528R06	Carlton Brook	Whitefield	Oxygen, Dissolved		
ME0105000305_528R08_01	Chamberlain Brook	Whitefield	Oxygen, Dissolved		
ME0106000102_603R02	Chandler River	Pownal	Oxygen, Dissolved		
ME0105000305_528R07	Choate Brook	Windsor	Oxygen, Dissolved		
ME0106000103_607R03	Colley Wright Brook	Windham 2	Oxygen, Dissolved		
ME0101000413_146R02	Coloney Brook	Fort Fairfield	Benthic- Macroinvertebrate Bioassessments		
ME0101000413_146R02	Coloney Brook	Fort Fairfield	Periphyton (Aufwuchs) Indicator Bioassessments		
ME0102000510_224R07	Crooked Brook	Corinth	Periphyton (Aufwuchs) Indicator Bioassessments		
ME0105000305_528R03	Dyer River	Newcastle	Oxygen, Dissolved		
ME0101000412_143R01	Everett Brook	Fort Fairfield	Oxygen, Dissolved		
ME0106000103_607R06	Hobbs Brook	Cumberland	Oxygen, Dissolved		
ME0106000103_607R07	Inkhorn Brook	Westbrook	Oxygen, Dissolved		
ME0103000311_334R03	Jock Stream	Wales	Oxygen, Dissolved		
ME0103000311_334R03	Jock Stream	Wales	Nutrient/Eutrophication Biological Indicators		
ME0105000305_528R05	Meadow Brook	Whitefield	Oxygen, Dissolved		
ME0101000412_143R02	412_143R02 Merritt Brook		Benthic- Macroinvertebrate Bioassessments		
ME0101000412_143R02	Merritt Brook	Presque Isle	Periphyton (Aufwuchs) Indicator Bioassessments		
ME0103000309_327R01	Mill Stream	Albion	Oxygen, Dissolved		
ME0106000103_607R08	Mosher Brook	Gorham	Oxygen, Dissolved		
ME0103000308_325R03	Mulligan Stream	St. Albans	Oxygen, Dissolved		
ME0104000210_418R02	No Name Brook	Lewiston	Oxygen, Dissolved		
ME0106000103_607R09	Otter Brook	Windham (3)	Oxygen, Dissolved		



Assessment Unit ID	AU Name	Location Description	Cause	Project Status	TMDL Submittal Target Date/ Priority
ME0106000103_607R01	Black Brook (Windham)	Tributary to Presumpscot River	Oxygen, Dissolved	9/28/09). 10/7/2016: DO impairment excluded from Statewide NPS TMDL (approved 8/9/2016); DEP expects to include this impairment in a future update to this TMDL.	2017
ME0106000103_607R03	Colley Wright Brook (Windham)	Tributary to Presumpscot River	Oxygen, Dissolved	10/7/2016: DO impairment excluded from Statewide NPS TMDL (approved 8/9/2016); DEP expects to include this impairment in a future update to this TMDL.	2017
ME0106000103_607R07	Inkhorn Brook (Westbrook)	Tributary to Presumpscot River	Oxygen, Dissolved	10/7/2016: DO impairment excluded from Statewide NPS TMDL (approved 8/9/2016); DEP expects to include this impairment in a future update to this TMDL.	2017
ME0106000103_607R08	Mosher Brook (Gorham)	Tributary to Presumpscot River	Oxygen, Dissolved	10/7/2016: DO impairment excluded from Statewide NPS TMDL (approved 8/9/2016); DEP expects to include this impairment in a future update to this TMDL.	2017
ME0106000103_607R09	Otter Brook (Windham)	Tributary to Presumpscot River	Oxygen, Dissolved	10/7/2016: DO impairment excluded from Statewide NPS TMDL (approved 8/9/2016); DEP expects to include this impairment in a future update to this TMDL.	2017
ME0106000103_607R12	Pleasant River (Windham)	Mainstem of Pleasant River from Thayer Brook to confluence with Presumpscot R	Oxygen, Dissolved	10/7/2016: DO impairment excluded from Statewide NPS TMDL (approved 8/9/2016); DEP expects to include this impairment in a future update to this TMDL.	2017

4 Windham



PAUL R. LEPAGE GOVERNOR

STATE OF MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY

93 STATE HOUSE STATION AUGUSTA, MAINE 04333

WALTER E. WHITCOMB COMMISSIONER

March 7, 2018

JP Connolly DM Roma 59 Harvest Hill Road Windham, ME 04062

Via email: jp@dmroma.com

Re: Rare and exemplary botanical features in proximity to: #17002, Majestic Woods Subdivision, Windham,

Dear Mr. Connolly:

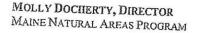
I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request received February 20, 2018 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Windham, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.





PHONE: (207) 287-8044 FAX: (207) 287-8040 WWW.MAINE.GOV/DACF/MNAP Letter to DM Roma Comments RE: Majestic Woods Subdivision, Windham March 7, 2018 Page 2 of 2

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Kit Ping

Kristen Puryear | Ecologist | Maine Natural Areas Program

207-287-8043 | kristen puryear@maine.gov

Rare and Exemplary Botanical Features within 4 miles of Project: #17002, Majestic Woods Subdivision, Windham, Maine

						, , , , , , , , , , , , , , , , , , , ,
Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	e Habitat
Broad Beech Fern				1 E 2 /521	rumber	ARCOTOGY
	SC	S2	G5	1872-08	15	Hardwood to mixed forest (forest, upland)
Clothed Sedge	SC	S2	G5	2001-08-28	28	Hardwood to mixed forest (forest, upland)
Ebony Spicenwort	E	S1	G5	2000-0G-06	5	Dry barrens (partly forested, upland)
Proof Spicenwort	sc	S2	G 5	1910-06-06	10	Rocky summits and outcrops (non-forested, upland), Hardwood to
Engelmann's Spike	rush					mixed forest (forest, upland)
	PE	SH	G4G5	1916-08-31	2	Open wetland, not coastal nor rivershore (non-forested, wetland)
Enriched Northern Hardwoods Forest						(non-forested, wetland)
	<null></null>	S3	GNR	2001-08-28	34	Hardwood to mixed forest (forest, upland)
Fern-leaved False F	oxglove					torese, upiniu)
	sc	S3	G5	1902-09-02	13	Dry barrens (partly forested, upland), Hardwood to mixed forest
Great Blue Lobelia					(forest, upland)	
Horned Pondweed	PE	SX	G5	1905-09	3	Forested wetland, Non-tidal rivershore (non-forested, seasonally wet)
normed Fondweed	22.2					(Not solded, seasonally well)
Marsh Milkwort	SC	S2	G5	1913-09-13	9	Tidal wetland (non-forested, wetland)
	PE	SH	G5T4	1903-08-18	1	Dry barrens (partly forested, unland) Open wetlend and
Missouri Rockcress			ינ	rivershore (non-forested, wotland)		
	Т	S1	G5	1905-06-11	5	Rocky summits and outcrops (non-forested, upland), Hardwood to
Mountain Honeysuckle				.1	mixed forest (forest, upland)	
Maine Natural Areas Progra	am		Page 1 of 2			www.maine.gov/dacf/mnap

Rare and Exemplary Botanical Features within 4 miles of Project: #17002, Majestic Woods Subdivision, Windham, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
	E	S2	(15	2007-10-05	11	Dry harrens (partly forested, upland), Hardwood to mixed forest
Pitch Pine Woodla	nd					(forest, upland)
	<null></null>	S8	G2	2005-12-08	28	Rocky summits and outcrops (non-forested, upland)
Small Reed Grass						176 May 175-20 €8888880 €
	SC	S3	G5	2011-08-28	18	Old field/roadside (non-forested, wetland or upland)
Small Whorled Pop	gonia					• ,
	E	S2	G2?	2015-07-22	18	Hardwood to mixed forest (forest, upland)
Spicebush						Comment on places and desired desired desired (10 € 20 desired (10 €))
	SC	83	G5	2006-06-11	11	Forested wetland
Spotted Pondweed						
	T	S1	Gō	1995-10-01	4	Open water (non-forested, wetland)
Vasey's Pondweed						Size
	SC	82	G4	1901-08-04	7	Open water (non-forested, wetland)

STATE RARITY RANKS

- SI Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or S2 because of other factors making it vulnerable to further decline.
- **S3** Rare in Maine (20-100 occurrences).
- **S4** Apparently secure in Maine.
- **S5** Demonstrably secure in Maine.
- Under consideration for assigning rarity status; more information needed on threats or distribution. SU
- SNR Not yet ranked.
- SNA Rank not applicable.
- Current occurrence data suggests assigned rank, but lack of survey effort along with amount of S#? potential habitat create uncertainty (e.g. S3?).
- State Rarity Ranks are determined by the Maine Natural Areas Program for rare plants and rare Note: and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

GLOBAL RARITY RANKS

- G1 Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
- Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or G2 because of other factors making it vulnerable to further decline.
- G3 Globally rare (20-100 occurrences).
- Apparently secure globally. G4
- Demonstrably secure globally. G5
- GNR Not yet ranked.
- Note: Global Ranks are determined by NatureServe.

STATE LEGAL STATUS

- State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's Endangered and Threatened plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.
- ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or E federally listed as Endangered.
- THREATENED; Rare and, with further decline, could become endangered; or federally listed as T Threatened.

NON-LEGAL STATUS

- SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to SC be considered Threatened or Endangered.
- Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last PE known occurrence has been documented.

ELEMENT OCCURRENCE RANKS - EO RANKS

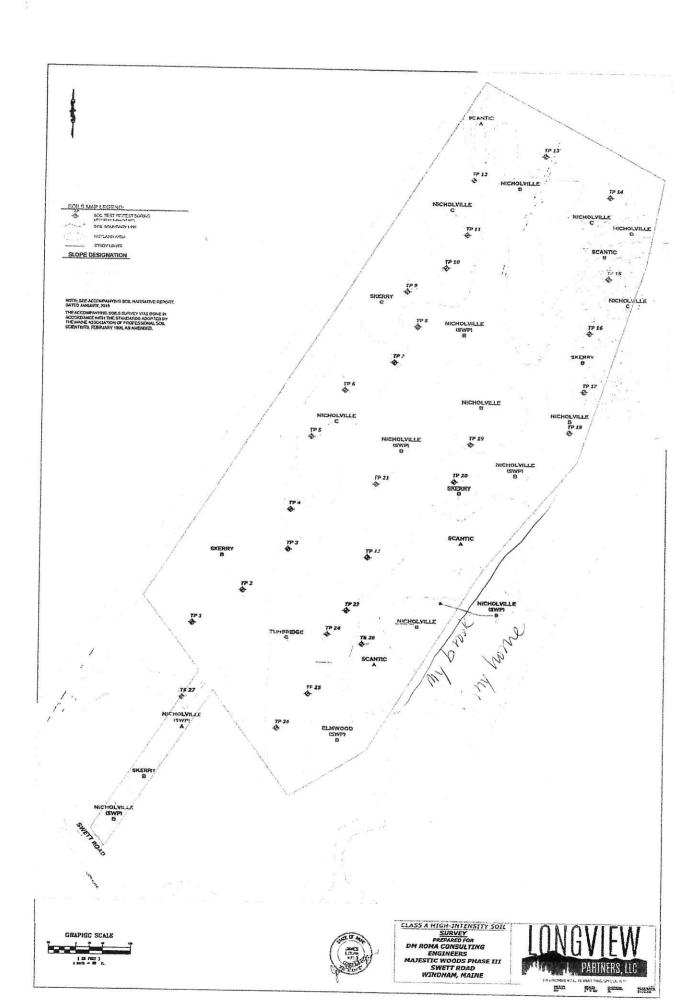
Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- <u>Size</u>: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- <u>Condition</u>: For communities, condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- Landscape context: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of A, B, C, or D, where A indicates an excellent example of the community or population and D indicates a poor example of the community or population. A rank of E indicates that the community or population is extant but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

Note: Element Occurrence Ranks are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species! http://www.maine.gov/dacf/mnap



SCANTIC (Typic Haplaquepts)

SETTING

Parent Material:

Marine or lacustrine sediments.

Landform:

Level or gently sloping marine or lake plains.

Position in Landscape:

Lower to intermediate positions.

Slope Gradient Ranges:

(A) 0-3% (B) 3-8%

COMPOSITION AND SOIL CHARACTERISTICS

Drainage Class:

Poorly drained, with a perched water table 0.5 to 1.0 feet beneath the soil surface.

Typical Profile Description:

Surface layer: Subsurface layer: Subsoil layer:

Dark grayish brown silt loam, 0-9" Olive gray silt loam, 9-11"

Subsoil layer: Substratum: Olive gray, silty clay loam, 11-16" Olive gray clay, 16-65"

Hydrologic Group:

Group D

Surface Run Off:

Slow

Permeability:

Moderate or moderately slow in upper profile, slow to very slow in dense substratum.

Depth to Bedrock:

Very deep, greater than 60".

Hazard to Flooding:

May flood occasionally on lowest fringes during spring and periods of excessive precipitation.

INCLUSIONS (Within Mapping Unit)

Similar:

Lamoine, Enosburg (Swanton)

Dissimilar:

Naskeag, Biddeford, Whately

USE AND MANAGEMENT

Development with subsurface wastewater disposal: The limiting factor for building site development is wetness due to the presence of a shallow water table throughout most of the year. Proper foundation drainage or site modification is recommended for construction. Scantic soil does not meet the minimum requirements for subsurface wastewater disposal, as defined by State of Maine Rules for Subsurface Wastewater Disposal. Scantic soil may be classified as wetlands, based on the combined consideration of hydrology, hydric conditions, and vegetation.

Development for stormwater: Scantic soils are poorly drained with a high perched water table 0.5 to 1.0 feet beneath the soil surface and exhibit permeabilities of 0.2 to 2.0 inches/hr. in the upper 10 inches, and less than 0.2 inches/hr. below 10 inches.

NICHOLVILLE (S.W.P.)

SETTING

Parent Material:

Lacustrine material having a high content of silt and fine sand.

Landform:

Commonly found on lake plains and upland till plains that have a mantle of

water-deposited silt or very fine sand.

Position in Landscape:

Intermediate portion of landscape feature.

Slope Gradient Ranges:

(A) 0-3% (B) 3-8%

COMPOSITION AND SOIL CHARACTERISTICS

Drainage Class:

Nicholville (S.W.P.) is somewhat poorly drained, with a perched water table

0.5 to 1.5 feet below the soil surface from November through May and during periods of heavy precipitation.

Typical Profile Description:

Surface layer:

Very dark grayish brown silt loam, 0-10" Dark yellowish brown silt loam, 10-13"

Subsurface layer: Subsoil layer:

Yellowish brown and grayish brown very fine sandy

loam, 13-18"

Substratum:

Grayish brown loamy very fine sand, 18-70"

Hydrologic Group:

Group C

Surface Run Off:

Medium

Permeability:

Moderate throughout profiles.

Depth to Bedrock:

Very deep, greater than 60".

Hazard to Flooding:

None

INCLUSIONS (Within Mapping Unit)

Similar:

Nicholville, Naumburg (S.W.P.), Lamoine, Elmwood (SWP)

Dissimilar:

Roundabout, Scantic, Naskeag

USE AND MANAGEMENT

Development with subsurface wastewater disposal: The limiting factor for building site development is wetness due to the presence of a high groundwater table. Proper foundation drainage or site modification is recommended. Nicholville (S.W.P.) may be suitable for subsurface wastewater disposal when the seasonal groundwater table is 12" or greater below the existing soil surface, outside shoreland zone areas.

Development with stormwater: Nicholville (SWP) is a somewhat poorly drained soil exhibiting a seasonal high groundwater table 1.0 to 1.5 feet beneath the soil surface in the spring and during periods of heavy precipitation. Nicholville (SWP) soils exhibit permeabilities of 0.6-2.0 inches/hr throughout the profile.

NICHOLVILLE (Aquic Haplorthods)

SETTING

Parent Material:

Lacustrine material having a high content of silt and fine sand.

Landform:

Commonly found on lake plains and upland till plains that have a mantle of

water-deposited silt or very fine sand.

Position in Landscape:

Intermediate and upper portions of landscape feature.

Slope Gradient Ranges:

(B) 3-8% (C) 8-20% (D) 20+%

COMPOSITION AND SOIL CHARACTERISTICS

Drainage Class:

Moderately well drained, with a perched water table 1.5 to 2.0 feet below the

soil surface from November through May.

Typical Profile

Surface layer:

Very dark grayish brown silt loam, 0-10"

Description:

Subsurface layer:

Dark yellowish brown silt loam, 10-13"

Subsoil layer: Yelle

Yellowish brown and grayish brown very fine sandy

loam, 13-18"

Substratum:

Grayish brown loamy very fine sand, 18-70"

Hydrologic Group:

Group C

Surface Run Off: Medium

Permeability:

Moderate throughout the profile.

Depth to Bedrock:

Very deep, greater than 60".

Hazard to Flooding:

None

INCLUSIONS (Within Mapping Unit)

Similar:

Skerry, Dixfield, Elmwood

Dissimilar:

Nicholville (S.W.P.), Buxton, Tunbridge, Naskeag

USE AND MANAGEMENT

Development with subsurface wastewater disposal: The limiting factor for building site development is wetness due to the presence of a water table. Proper foundation drainage or site modification is recommended for construction. Nicholville soil meets the minimum criteria for subsurface wastewater disposal in accordance with State of Maine Rules for Subsurface Wastewater Disposal. This soil requires a 12-inch separation from the bottom of the disposal area and the seasonal high groundwater table. This soil requires 4.0 and 2.0 sq.ft/gpd for disposal beds and chambers, respectively.

Stormwater design: Nicholville is a moderately well drained soil, exhibiting a seasonal high groundwater table 1.5-2.0 feet beneath the soil surface in the spring and during periods of high precipitation. Nicholville soils exhibit permeabilities of 0.6-2.0 inches/hour, through the profile.