

AGENDA
Inland Wetland Agency
Regular Meeting
Monday, June 7, 2010
Council Chambers, Audrey Beck Building

Call to Order: 7:00 PM

Review of Minutes of Previous Meetings and Action Thereon:
5.03.2010 - Regular Meeting

Communications:

Conservation Commission: W1453 - Gottman, Gurleyville Rd.
GM monthly business memorandum

Old Business:

PUBLIC HEARING: 7:30 p.m.

W1451 - Town of Mansfield - IWA Regulation revision per new statute

W1453 - Gottmann - Gurleyville R - deck in 150' area

New Business:

W1455 - St.Jean - Hickory Lane - above ground pool in buffer

W1456 - UConn - Notice of Utility work vic. building opposite Swan Lake

Reports of Officers and Committees:

Other Communications and Bills:

Conn. Federation of Lakes News

Adjournment:

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DRAFT MINUTES
MANSFIELD INLAND WETLANDS AGENCY
Regular Meeting
Monday, May 3, 2010
Council Chambers, Audrey P. Beck Municipal Building

Members present: R. Favretti (Chairman), M. Beal, R. Hall, K. Holt, G. Lewis, B. Pociask (7:02 p.m.),
P. Plante, B. Ryan
Members absent: J. Goodwin
Alternates present: F. Loxsom (7:05 p.m.), K. Rawn
Alternates absent: V. Stearns
Staff present: G. Meitzler (Wetlands Agent)

Chairman Favretti called the meeting to order at 7:00 p.m. and appointed alternate Rawn to act in Goodwin's absence.

Holt MOVED, Ryan seconded, to add to the agenda a communication from Algonquin Gas Company.
MOTION PASSED UNANIMOUSLY.

Minutes:

4-5-10 – Hall MOVED, Beal seconded, to approve the 4-5-10 minutes as written. MOTION PASSED UNANIMOUSLY.

4-14-10 Field Trip-Holt MOVED, Hall seconded, to approve the 4-14-10 minutes as written. MOTION PASSED with Beal, Favretti, Holt and Hall in favor and all others disqualified.

Communications:

The 4-21-10 draft Conservation Commission minutes and the 4-27-10 Wetlands Agent's Monthly Business report were noted.

Old Business:

W1450 - Town of Mansfield - Healey easement path in buffer

Holt MOVED, Ryan seconded, to grant an Inland Wetlands License under the Wetlands and Watercourses Regulations of the Town of Mansfield to the Town of Mansfield (File W1450) for construction of a 12-foot wide by 250-foot long gravel access-way, on property owned by Michael and Mary Healey, located at the rear of 476 Storrs Road, as shown on a map dated 4-15-09 and as described in other application submissions.

This action is based on a finding of no anticipated significant impact on the wetlands, and is conditioned upon the following provisions being met:

1. Erosion and sedimentation controls (as shown on the plans) shall be in place prior to construction and maintained during construction and removed when disturbed areas are completely stabilized.

This approval is valid for a period of five years (until May 3, 2015), unless additional time is requested by the applicant and granted by the Inland Wetlands Agency. The applicant shall notify the Wetlands Agent before any work begins, and all work shall be completed within one year. Any extension of the activity period shall come before this Agency for further review and comment.

MOTION PASSED UNANIMOUSLY.

W1451 - Town of Mansfield - IWA Regulation revision per new statute

Item is tabled until the June 7, 2010 Public Hearing.

New Business:

W1452 - Shifrin - Request for Modification: Mansfield Hollow Hydro Project

Sam Shifrin reviewed the modification request of an existing approval. The proposed changes will be for the relocation of the power house and a reduction of its size. Shifrin reviewed the permitting procedure and stated

that all permits from the federal government, state and town have been approved. He noted that the previously-placed property line on the plans was incorrect and it now is located accurately in the middle of the river. Based on this, the power house relocation will meet the setback requirements. The power house will have five turbines which will produce enough power to run the mill and an additional 180 homes. The mill will be used for research and development including the development of software for the project. Occasionally for the turbines will be changed to try different styles. Shifrin noted that there are 80,000 existing dams in the United States, and 4,000 of them in New England, and all have the potential to be used for a hydro electric project similar to his, therefore he hopes to broaden this use to other communities.

After a brief question period, Hall MOVED, Holt seconded, to approve modifications to an Inland Wetlands License pursuant to the Wetlands and Watercourses Regulations of the Town of Mansfield granted to Sam & Michelle Shifrin (file no. W1452), for modifications to approval of permit W1339 previously issued to Sam & Michelle Shifrin installation of Hydro-Power facilities at the Kirby Mill within regulated areas located at 114 Mansfield Hollow Road. The modifications include relocation of the structure containing the turbines, a portion of the inlet conduit, and modification to the outlet sluiceway, as shown on a revised site plan dated 4/26/2010, and in other application submissions.

This action is based on a finding of no anticipated significant impact on the wetlands, and is conditioned upon the following provisions being met:

1. The conditions of the previous approval are to remain in effect except for the following modifications.
2. Erosion and sedimentation controls shall be in place prior to construction and maintained during construction and removed when disturbed areas are completely stabilized.
3. A double row of silt fencing is to be placed along the downhill side of the construction area.

This approval is valid until April 3, 2011, at which time a renewal of the modified permit is required if work has not been completed. The applicant shall notify the Wetlands Agent before any work begins, and all work shall be completed within one year. Any extension of the activity period shall come before this Agency for further review and comment.

MOTION PASSED UNANIMOUSLY.

W1453 - Gottmann - Gurleyville R - deck in 150' area

Hall MOVED, Holt seconded, to receive the application submitted by Karen and Clifford Gottmann (IWA file #1453) under Section 5 of the Wetlands and Watercourses Regulations of the Town of Mansfield for the construction of a deck at 580 Gurleyville Road on property owned by the applicants as shown on a map dated July 22, 1999 revised to April 26, 2010 and as described in other application submissions and to refer the application to the staff and Conservation Commission for review and comment. MOTION PASSED UNANIMOUSLY.

Reports of Officers and Committees:

None noted.

Other Communications and Bills:

Meitzler summarized a communication from Algonquin Gas regarding a notification that they will need to repair the protective coating on some pipe near Woodland Road. It was agreed by consensus that there would be no significant impact and no further request for information was deemed necessary.

Adjournment:

Favretti declared the meeting adjourned at 7:34 p.m.

Respectfully submitted,

Katherine Holt, Secretary

Town of Mansfield
CONSERVATION COMMISSION
Meeting of 19 May 2010
Conference B, Audrey P. Beck Building
(DRAFT) MINUTES

Members present: Robert Dahn, Peter Drzewiecki {from 8:00p}, Quentin Kessel, Scott Lehmann, Frank Trainor. *Members absent:* John Silander, Joan Stevenson. *Others present:* Grant Meitzler (Wetlands Agent); Neil Faccinetti, John Rickards (Storrs Heights Neighborhood Assn., Agronomy Farm Committee).

1. The meeting was **called to order** at 7:32p by Chair Quentin Kessel.

2. Public Comment. Eugene Roberts has responded to questions posted by Neil Faccinetti on his website concerning production and monitoring wells at UConn's Agronomy Farm. Mr. Faccinetti distributed a map showing the locations of these wells and a handout with the questions and answers, along with follow-up questions, which he summarized for the Commission.

- It remains unclear how the two failed production wells – one (MW-2) dry, the other (PW-2) collapsed – can supply useful information as monitoring wells. Accordingly, it appears that two additional deep monitoring wells are needed.
- It remains unclear how data will be collected from the monitoring wells, as no devices appear to be installed yet.
- What is the rationale for criteria announced for curtailing pumping? If they are based on the 3-day pump test performed in October 2009, they may be too permissive, since that test lasted only 3 days and did not occur in a dry season.
- Are water levels in the production wells going to be monitored in advance of any pumping from them, so as to establish baseline water levels as a function of season?
- Concerning the monitoring program for water quality utilizing shallow wells, how often will water be tested? how will test results be made available to interested parties? which “agricultural chemicals” will be applied to the fields and which will be tested for?
- Has the Agronomy Farm developed contingency plans and SOPs for dealing with adverse situations that may arise?

Kessel reported that the Town-Gown Committee has decided that it is the most suitable forum for a Q&A session on Agronomy Farm water issues, probably at its meeting on 6/8/10. {Mr. Faccinetti & Mr. Rickards left the meeting.}

3. The draft **minutes of the 21 April 2010 meeting** were approved, with the substitution of “Can data from these defective wells really indicate whether the new production wells are mining groundwater (i.e., withdrawal rate exceeds recharge rate)?” for the garbled second sentence of the first bullet in item 2.

4. **IWA referral: W1453 (Gottman, Gurleyville Rd).** The applicants propose to add to the back of their house a large deck, which would be about 63' from a wetland at its closest point. The Commission unanimously agreed (**motion:** Dahn, Trainor) that no significant impact on the wetland is likely, provided care is taken in drilling holes for the support posts.

5. **Charter Communications box lights.** Some people apparently don't find the green LEDs on Charter Communications' pole boxes as fascinating as Gatsby found the green light that

beckoned from the end of Daisy's dock in F. Scott Fitzgerald's novel. However, among those present, there was not sufficient interest in complaining about them to Charter.

6. Communication policy. Kessel and other Commission members have been invited to a meeting of the Committee on Committees at 7:00p on June 21 to discuss the Council's request that advisory committees and commissions not communicate with outside agencies.

7. PZC referrals.

a. Invasive plant species. The Commission applauds proposed revisions to the zoning and subdivision regulations that would prohibit use of invasive species (as determined by the DEP) in landscaping.

b. Aquifer and public water supply well protection. The Commission likewise approves of proposed revisions to zoning and subdivision regulations that would give more prominence to protecting aquifers and public water supply wells.

c. Pleasant Valley rezoning. Concerning the proposed rezoning of the area south of Pleasant Valley Road, the Commission unanimously agreed (**motion:** Kessel, Dahn) to make the following comments:

- The Commission supports requiring a 500' setback from Pleasant Valley Road for development in the PVRA and PVCA zones to preserve existing agricultural land and scenic vistas.
- The Commission supports authorizing the PZC to require designating up to 50% of prime agricultural land for permanent agricultural use in developments proposed for the PVRA and PVCA zones. It urges the PZC to attempt to coordinate these designations with the 500' setback so that preserved agricultural land is, to the extent possible, not fragmented.
- The Commission notes that the only kind of development expressly prohibited in the PVCA zone is "auto salvage operations" (U.3.h). Whether we get development that does protect this area's "special agricultural, floodplain, wetland, and aquifer characteristics" and "scenic character" (U.1) will depend on how the PZC exercises its considerable discretion.

8. UConn drainage issues.

a. Mirror Lake dredging. Kessel will draft and circulate a letter to UConn, DEP, and Baystate Environmental Consultants, thanking them for responding to the Commission's questions and concerns about this project.

b. Swan Lake outfall. Yesterday Rich Miller responded to DEP's 4/20/10 request that he address concerns raised in the Commission's letter of 3/17/10. In his response to Denise Ruzicka, Mr. Miller:

- Concedes that the Swan Lake outfall to Valentine Meadow discharges into a watercourse, and corrects a contrary indication in UConn's application for a permit to undertake erosion control work at the outfall;
- Concedes that the outfall discharges within 100' of a watercourse that contributes to a public water supply, and that a DPH permit will be required for discharging runoff from "55 acres" of the Eagleville Brook watershed into the Roberts Brook watershed via Swan Lake, as proposed in UConn's storm-water management plan;
- Notes that no DEP permit was required for diverting runoff from the Swan Lake watershed into Roberts Brook by raising the Swan Lake outlet to Eagleville Brook in 1990, since the Swan Lake watershed is only 16 acres, well below the 100-acre minimum for diversions requiring DEP permits.

- Notes that no DPH discharge permit for this 1990 diversion was obtained and reports that DPH will not grant one retroactively – suggesting that discharges resulting from the 1990 diversion are (legally speaking) now so much water over the dam.
- Provides documentation to show that the Town did receive timely notice (8/17/09) of UConn's permit application to DEP for erosion control work at the Swan Lake outfall.
- Observes that the Commission received a copy of this application in its 12/16/09 meeting packet and that the permit was granted on 2/22/10, more than the legal minimum of 35 days after notice to local officials, even if the date of such notice is set at 12/16/09 rather than 8/17/09.

Kessel distributed the draft of a response to DEP, which Commission members should review before the June meeting.

c. **Eagleville Brook TMDL.** A public information session on steps to reduce pollution and sedimentation in Eagleville Brook will be held from 09:30 – 12:00 on 6/4/10. Someone from the Commission should attend, but Kessel cannot do so.

9. Adjourned at 9:25p. Next meeting: 7:30p, Wednesday, 16 June 2010

Scott Lehmann, Secretary, 21 May 2010

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Memorandum:

June 2, 2010

To: Inland Wetland Agency
From: Grant Meitzler, Inland Wetland Agent
Re: Monthly Business

W1419 - Chernushek - hearing on Order

- 3.10.09: The hearing on the Order remains open and should continue until the permit application under consideration is acted upon.
(The Order was dropped on approval of the application required in the Order.)
- 4.30.09: Former rye grass seeding is beginning to show green. I spoke with Mr. Chernushek this afternoon who indicated health problems that delayed his starting but indicated he will be working this weekend. I will update on this Monday evening.
- 5.26.09: A light cover of grass growth has come in. Mr. Chernushek indicates health problems and two related deaths have delayed his start of work since the permit approval was granted. It appears that some light work has started. He has further indicated that he will start a vacation on June 22, 2009 to finish the work.
- 6.13.09: Work is underway.
- 6.21.09: Bulldozer work has been completed - finish work remains. The additional silt fencing has been placed along the northerly wetlands crossing, and the additional pipe under the southerly crossing has been installed. Remaining work includes finish grading along edges, spreading stockpiled topsoil, and establishing grass growth.
- 7.01.09: I spoke with Mr. Chernushek who indicated he expects work to be completed by September 1, 2009. (Site photo attached).
- 9.03.09: Mr. Chernushek has been working on levelling and grading. The formerly seeded areas have become fairly thick growth surrounding the central wet areas. He has further indicated that with the combination of weather and the slower moving of earth with the payloader compared to the earlier rented bulldozer has led him to contact contractors for earth moving estimates which have not yet been received. The site is not yet finished but has remained quite stable.
- 9.12.09: I met with Mr. Chernushek today and discussed again what his plans are for stabilizing this work site.
- 10.01.09: Mr. Chernushek indicated he has not heard back from the contractor he had spoken with about removing material, and is in progress of contacting others. In discussion is removal of material from the site either within the 100 cubic yard limit or obtaining a permit for such removal.
- 10.28.09: Mr. Chernushek has indicated he has made arrangements with DeSiato Sand & Gravel to remove 750 cubic yards of material. Staff is in the process of clarifying permit requirements.
- W1445 - Chernushek - application for gravel removal from site**
- 11.30.09: Packet of information representing submissions by Mr. Chernushek, Mr. DeSiato and myself is in this agenda packet as Mr. Chernushek's request for modification.
- 12.29.09: Preparation of required information for PZC special permit application is in progress. Tabling any action until the February 1, 2010 meeting is recommended.
- 1.12.10: 65 day extension of time received.

- 2.18.10: No new information has been received.
- 2.25.10: This application has been withdrawn.

Mansfield Auto Parts - Route 32

- 1.16.09: Inspection - no vehicles are within 25' of wetlands.
- 2.24.09: Inspection - no vehicles are within 25' of wetlands.
- 3.06.09: Inspection - no vehicles are within 25' of wetlands.
- 4.14.09: Inspection - no vehicles are within 25' of wetlands.
- 5.11.09: Inspection - no vehicles are within 25' of wetlands.
- 6.10.09: Inspection - no vehicles are within 25' of wetlands.
- 7.16.09: Inspection - no vehicles are within 25' of wetlands.
- 8.12.09: Inspection - no vehicles are within 25' of wetlands.
- 9.14.09: Inspection - no vehicles are within 25' of wetlands.
- 10.27.09: Inspection - no vehicles are within 25' of wetlands.
- 11.30.09: Inspection - no vehicles are within 25' of wetlands.
- 12.28.09: There are two cars that need to be moved. Mr. Bednarczyk indicates their payloader is down for repairs and the cars will be moved as soon as it is repaired.
- 1.27.10: No change - the payloader is apart with parts on order to complete repairs. It is of 1986 vantage and finding parts is a major proposition.
- 2.18.10: Same - they are in the process of rebuilding the engine on the payloader.
- 3.30.10: Same - Mr. Bednarczyk indicates a contuing problem finding engine parts.
- 4.13.10: Owner indicates the payloader is operating again.
- 4.15.10: Owner indicates he will have the cars moved this week.
- 4.23.10: No vehicles are within 25' of wetlands.**
- 5.17.10: Inspection - no vehicles are within 25' of wetlands.
- 6.02.10: Inspection - no vehicles are within 25' of wetlands.

April 16, 2010 Draft

Proposed Revisions to Mansfield's Inland Wetlands Regulations Re: IWA Permit & Renewal Time Periods

(New provisions are underlined or otherwise indicated)

(Deletions are bracketed or otherwise indicated)

(Explanatory Notes are provided to assist with an understanding of the proposed revisions. These notes are not part of the proposed zoning revisions.)

A. Proposed Inland Wetlands Regulation Revisions:

1. Revise Section 7.9 to read as follows:

9. Any application to renew a permit shall be granted upon request of the permit holder unless the Agency finds that there has been a substantial change in circumstances which requires a new permit application or an enforcement action has been undertaken with regard to the regulated activity for which the permit was issued provided a) no permit issued during the time period from July 1, 2006, to July 1, 2009, inclusive, shall be valid for more than eleven years; and b) no permit issued prior to July 1, 2006 or after July 1, 2009 may be valid, including renewal periods, for more than ten years.

2. Revise Section 11.7 to read as follows:

7. Any permit issued by the Agency prior to July 1, 2006 or after July 1, 2009 for the development of land for which an approval is required under Section 8-3, 8-25 or 8-26 of the Connecticut General Statutes shall be valid for five years, provided the Agency may establish a specific time period within which any regulated activity shall be conducted. Any permit issued by the Agency prior to July 1, 2006 or after July 1, 2009 for any other activity shall be valid for not less than two years and not more than five years. Any permit issued by the Agency during the time period from July 1, 2006 or after July 1, 2009, inclusive, shall expire not less than six years after the date of such approval.

Explanatory Note:

The proposed revisions are per 2009 Legislation which amended Section 22a-42a of the Connecticut Inland Wetlands and Watercourses Act.

O'Brien and Johnson

Attorneys at Law

120 Bolivia Street, Willimantic, Connecticut 06226

Fax (860) 423-1533

Attorney Dennis O'Brien
dennis@OBrienJohnsonLaw.com
(860) 423-2860

June 1, 2010

Attorney Susan Johnson
susan@OBrienJohnsonLaw.com
(860) 423-2085

Inland Wetlands Agency
Town of Mansfield
Audrey P. Beck Building
Four South Eagleville Road
Mansfield, CT 06268-2599

Ladies and Gentlemen:

As requested by Town of Mansfield Director of Planning Gregory Padick, I have completed my review of the **Proposed Amendments to Mansfield's Inland Wetland Regulations, April 16, 2010 Draft.**

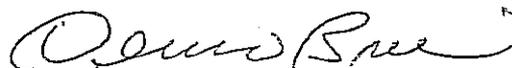
As you know, the only question for me as town counsel is whether the proposed amendments are legal. It is my responsibility to say whether the proposed amendments are within the purview of the Commission's authority under our constitutions and laws, especially Connecticut General Statutes section 22a-42a, the statute which expressly authorizes the IWA to adopt regulations controlling the regulation of inland wetlands of land, but only to the extent set forth in that law.

My review of the inland wetlands law of the State of Connecticut has revealed no legislative provision or case directly on point that provides or holds that any condition or requirement like those proposed in these amendments is beyond the scope of the legislative mandate, or unconstitutional. In fact, the proposed revisions are per 2009 legislation which amended section 22a-42a of the Connecticut Inland Wetlands and Watercourses Act

My opinion, then, is that the IWA has the legal authority to enact and to implement the subject draft amendments to the Town of Mansfield Inland Wetland Regulations.

Please contact me if there are any questions that arise, now or during the public hearing process.

Very truly yours,



Dennis O'Brien
Attorney at Law

cc: Gregory Padick

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Memorandum:

June 1, 2010

To: Inland Wetlands Agency
From: Grant Meitzler, Inland Wetland Agent
Re: W1453 - Gottmann - Gurleyville Rd - deck in buffer

plan reference: dated 4-26-2010

This application requests approval for a deck attached to the rear of the present house.

The deck is 63 feet from the closest wetlands. The wetlands location is taken from the soil scientist's mapping done in 1999 when the house itself was reviewed by the wetlands agency. This does not qualify for wetland agent approval because the separation distance from wetlands is less than 75 feet. I have discussed alternative locations with Mr. Gottmann. The placement is based on the existing interior house layout and the present rear exit from the house has been used for access to the proposed deck.

The deck is to be supported by 13 posts. The plan shows 13 posts with minimal excavation to place blocks under each. I spoke with the building department and they indicated the block support is acceptable for a deck under 600 square feet in area. The proposed deck is 324 square feet.

Assuming excavation 0.5 cubic feet to place each block base results in a volume excavated of 6.5 cubic feet or 1/4 cubic yard. The potential for impact from this volume of excavated material is virtually nil.



TOWN OF WINDHAM WATER WORKS

174 Storrs Road
Mansfield Center, CT 06250
Tel. 860-465-3075 • FAX 860-465-3085

- Inland Wetlands Commission
- Zoning Commission
- Planning & Zoning Commission
- Zoning Boards of Appeals

- TOWN:
- | | | | | | |
|--------------------------|-----------|-------------------------------------|------------|--------------------------|----------|
| <input type="checkbox"/> | Ashford | <input type="checkbox"/> | Chaplin | <input type="checkbox"/> | Eastford |
| <input type="checkbox"/> | Hampton | <input checked="" type="checkbox"/> | Mansfield | <input type="checkbox"/> | Pomfret |
| <input type="checkbox"/> | Union | <input type="checkbox"/> | Willington | <input type="checkbox"/> | Windham |
| <input type="checkbox"/> | Woodstock | | | | |

INSPECTED BY:



Troy Quick *W.W.W. Watershed Inspector*

DATE: May 7, 2010, WW File #M0110

The Windham Water Works has received notification of a proposed project per the requirements of Public Act 89-301.

PROJECT DESCRIPTION:

Bi-level deck to be placed 63' from wetlands

Applicant: Karen & Clifford Gottmann

COMMENTS:

The Windham Water Works has reviewed the proposed project and with best management practices and with proper soil and erosion control measures throughout the duration, we would have no objections, we will monitor accordingly.

Memorandum:

June 2, 2010

To: Inland Wetland Agency
From: Grant Meitzler, Inland Wetland Agent
Re: New Business for the June 7, 2010 meeting

New Application:

W1455 - St.Jean 0 Hickory lane - above ground pool in buffer

	yes	no
	-----	-----
fee paid	X	
certified receipts	X	
map dated	6.02.10	

This application requests approval for an above ground pool located within the 150' regulated area adjacent to wetlands. The actual separation distance is 55'.

Receipt and referral to the Conservation Commission is appropriate.

**W1456 - DEP application - UConn Notice of Utility work
vic. building opposite Swan Lake**

This is a referral of a permit now before the DEP for work near the Lakeside Apts. building on North Eagleville Rd next to St.Marks Church and opposite Swan Lake. The application describes installation of a 16 inch water main connecting the Lakeside water main to a water main in the Towers complex to the north. A second part of the proposed work is relocation of electrical lines to underground in this area.

The word drainage work mentioned in the title appears due to DEP requirement for standard titles. This application does not include any drainage work - it is limited to the utility work described in the application.

There are two wetland areas that will be crossed by utility trenches:

1. Wetland A is a wetland we looked at when we reviewed parking improvements for the St.Marks Church. The area is directly behind the Lakeside Building near and under a small area of parking spaces. This is noted as a "former wetland" it having been reworked by landscaping in the past. Parking spaces, lawn and landscaping have been placed over it. Dealing with this area is of negligible consequence now.
2. Wetland B is directly east of (behind) a chain link fence along the east edge of the St.Marks parking area. The 16" waterline and electrical lines are to run along the chain link fence through this area which does retain wetland appearance. The application and the soil scientist's recommendations indicate restoration of this area, with appropriate seeding, after the water main is installed.

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APPLICATION FOR PERMIT
 MANSFIELD INLAND WETLANDS AGENCY
 4 SOUTH EAGLEVILLE ROAD, STORRS, CT 06268
 TEL: 860-429-3334 OR 429-3331
 FAX: 860-429-6863

FOR OFFICE USE ONLY
 File # W 1455
 Fee Paid \$185-
 Official Date of Receipt 6-3-16

Applicants are referred to the Mansfield Inland Wetlands and Watercourses Regulations for complete requirements, and are obligated to follow them. For assistance, please contact Grant Meitzler, Inland Wetlands Agent at the telephone numbers above.

Please print or type or use similar format for computer; attach additional pages as necessary.

Part A - Applicant

Name Mike + Patty St. Jean

Mailing Address 43 Hickory Lane, Mansfield Center CT 06250

Zip _____

Telephone-Home 860 487 2663 Telephone-Business _____

Title and Brief Description of Project
27' dia above ground used pool

Location of Project 43 Hickory Lane - back yard

Intended Start Date Actually done - didn't realize we had to have permit

Part B - Property Owner (if applicant is the owner, just write "same")

Name Same

Mailing Address _____

Zip _____

Telephone-Home _____ Telephone-Business _____

Owner's written consent to the filing of this application, if owner is not the applicant:

Signature _____ date _____

Applicant's interest in the land: (if other than owner) _____

Part C - Project Description (attach extra pages, if necessary)

1) Describe in detail the proposed activity here or on an attached page. (See guidelines at end of application - page 6.)

Please include a description of all activity or construction or disturbance:

- a) in the wetland/watercourse
- b) in the area adjacent to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is off your property

No activity in the wetland area.
27' dia above ground pool to be located 50-55' from the wetlands limit line.
Area fairly level to start with. Brought in approximately 32 wheelbarrow loads of silt as a base for the pool. Silt is completely covered by the pool (not exposed at all). 18" band of pea stone around the pool and grass around the pea stone and pool. Grass is around 100% of pool perimeter. This area was the most level area nearby the house. The land does taper off towards the wetlands but there is grass coverage and a stonewall buffer.

2) Describe the amount or area of disturbance (in square feet or cubic yards or acres):

- a) in the wetland/watercourse
- b) in the area adjacent to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is off your property

Pool covers 573 ft² of area, 50-55' from wetlands

3) Describe the type of materials you are using for the project: silt (very fine sand), pea stone

- a) include type of material used as fill or to be excavated
- b) include volume of material to be filled or excavated approx 32 wheelbarrow loads

4) Describe measures to be taken to minimize or avoid any adverse impacts on the wetlands and regulated areas (silt fence, staked hay bales or other Erosion and Sedimentation control measures).

Lawn around pool perimeter

Part D - Site Description

Describe the general character of the land. (Hilly? Flat? Wooded? Well drained? etc.)

Flat, well drained

Part E - Alternatives

Have you considered any alternatives to your proposal that would meet your needs and might have less impact on the wetland/watercourse? Please list these alternatives.

Part F - Map/Site Plan (all applications)

1) Attach to the application a map or site plan showing **existing conditions** and the **proposed project** in relation to wetland/ watercourses. Scale of map or site plan should be 1" = 40'; if this is not possible, please indicate the scale that you are using. A sketch map may be sufficient for small, minor projects. (See guidelines at end of application – page 6.)

2) Applicant's map date and date of last revision _____

3) Zone Classification _____

4) Is your property in a flood zone? Yes No Don't Know

Part G - Major Applications Requiring Full Review and a Public Hearing

See Section 6 of the Mansfield Regulations for additional requirements.

Part H - Notice to Abutting Property Owners

1) List the names and addresses of abutting property owners

Name	Address
Susan + Paul Tolis	37 Hickory Lane
Mike + Judy Spencer	42 Hickory Lane

2) **Written Notice to Abutters** . You must notify abutting property owners by certified mail, return receipt requested, stating that a wetland application is in progress, and that abutters may contact the Mansfield Inland Wetlands Agent for more information. Include a brief description of your project. **Postal receipts of your notice to abutters must accompany your application.** (This is not needed for exemptions).

Part I - Additional Notices, if necessary

1) Notice to Windham Water Works is attached. If this application is in the public watershed for the Windham Water Works (WWW), you must notify the WWW of your project within 7 days of sending the application to Mansfield—sending it by certified mail, return receipt requested. Contact the Mansfield Inland Wetlands Agent to find out if you are in this watershed.

- 2) Notice to Adjoining Town. If your property is within 500 feet of an adjoining town, you must also send a copy of the application, on the same day you sent one to Mansfield, to the Inland Wetlands Agency of the adjoining town, by certified mail, return receipt requested.
- 3) The Statewide Reporting Form (attached) shall be part of the application and specified parts must be completed and returned with this application.

Part J - Other Impacts To Adjoining Towns, if applicable

- 1) Will a significant portion of the traffic to the completed project on the site use streets within the adjoining municipality to enter or exit the site? ___ Yes No ___ Don't Know
- 2) Will sewer or water drainage from the project site flow through and impact the sewage or drainage system within the adjoining municipality? ___ Yes No ___ Don't Know
- ~~3) Will water run-off from the improved site impact streets or other municipal or private property within the adjoining municipality? ___ Yes No ___ Don't Know~~

Part K - Additional Information from the Applicant

Set forth (or attach) any other information which would assist the Agency in evaluating your application. (Please provide extra copies of any lengthy documents or reports, and extra copies of maps larger than 8.5" x 11", which are not easily copied.)

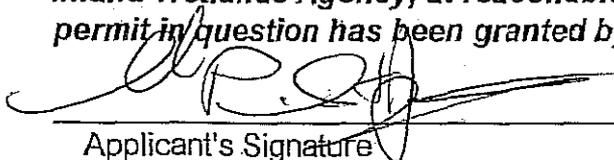
Part L - Filing Fee

Submit the appropriate filing fee. (Consult Wetlands Agent for the fee schedule available in the Mansfield Inland Wetlands and Watercourses Regulations.)

___ \$385. ___ \$110. ___ \$60. ___ \$25. #185

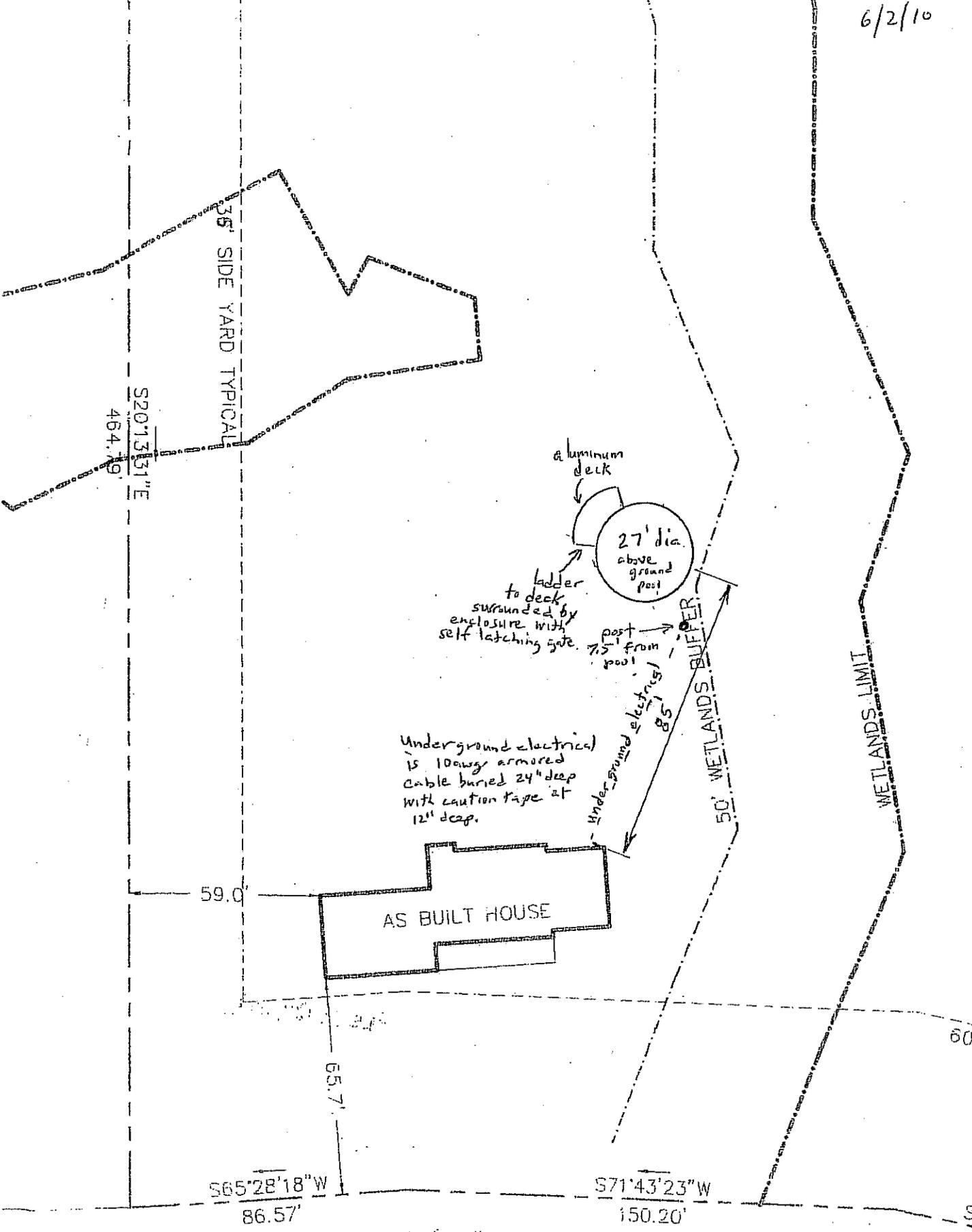
Note: The Agency may require you to provide additional information about the regulated area which is the subject of the application, or about wetlands or watercourses affected by the regulated activity. If the Agency, upon review of your application, finds the activity proposed may involve a "significant activity" as defined in the Regulations, additional information and/or a public hearing may be required.

The undersigned applicant hereby consents to necessary and proper inspections of the above mentioned property by members and agents of the Inland Wetlands Agency, at reasonable times, both before and after the permit in question has been granted by the Agency.


Applicant's Signature

5/29/10
Date

6/2/10



1" = 40'

PAGE
BREAK

IWA

DEP General Permit for Utilities and Drainage

16" Water Main and Electrical Manhole / Conduit Installation

Area Between Lakeside Apts. and Towers Dorms

PREPARED FOR:
UNIVERSITY OF CONNECTICUT

May 2010

Prepared by:
LENARD ENGINEERING, INC.
CIVIL, ENVIRONMENTAL & HYDROGEOLOGICAL CONSULTANTS
1768 STORRS ROAD, P.O. BOX 580
STORRS, CT 06268-0580

ADDITIONAL INFORMATION
PART V: Site Information

Item 7 – Existing Conditions

- a. Describe the present and intended use(s) of the property on which the subject activity is proposed?

Response: This area is part of the University of Connecticut main campus at Storrs. The project area involved in this permit can be broken down into two specific land uses, as shown in the photographs in Appendix J3. Former Wetland Area A is part of the first area, while Wetland Area B is part of the second area.

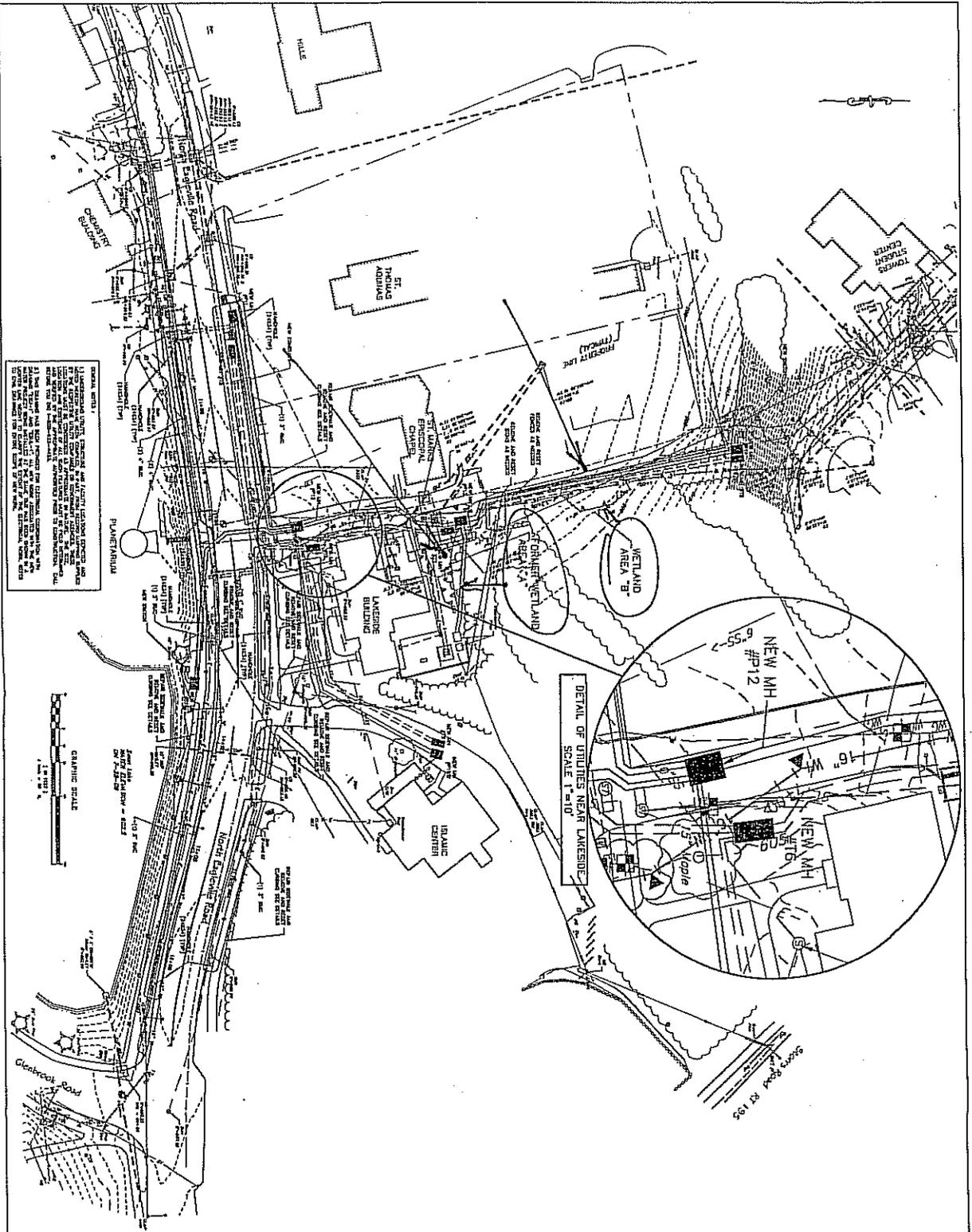
The first area is a developed area behind the Lakeside building, which consists of paved parking, a mowed lawn area, and a landscaped area which is used primarily by Lakeside building personnel. As shown on the site plan in Appendix B, and further identified in Appendix J-1, part of this area contained wetland soils, which were disturbed during the prior 2005 Lakeside Building renovation to the current state. These previous wetland locations are identified as Former Wetland Area A on the drawings and in this application. A DEP Inland Wetlands and Watercourses permit # IW-200501956 was issued for this project, a copy of which is in Appendix J-1. Refer to photos in Appendix J-3.

The second area is a grassed field at the base of a gentle slope, where a small pocket of wetland soil (approximately 20' x 45') exists. This grassed area is immediately adjacent to a chain link fence which separates University property (within the field) on the east from a paved parking area on the property of St. Mark's Church to the west. During construction, underground water mains and electrical conduits will be installed, with the trench area restored to original grades, and vegetated. In the area of flagged wetlands, wetland soils will be segregated into a separate stockpile for replacement, with a special "wet meadow" grass seed mixture utilized, in order to replicate the area of disturbance as best possible.

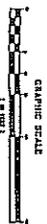
- b. Describe all natural and man-made features including wetlands, watercourses, fish and wildlife habitat, floodplains and any existing structures potentially affected by the subject activity. Such features should be depicted on the site plan (Attachment B).

Response: As described above, Former Wetland Area A (the area immediately behind the Lakeside Building) presently has paved parking, mowed lawn, and landscaped areas. This area will be restored to its present conditions, once the utility improvements are constructed.

The second area is a tall grass field at the base of a slope, with a pocket of wetlands, characterized by hydric soils, at the base of the slope and immediately against a chain link fence. The area will be restored to its current condition as much as possible, once the utility improvements are constructed. See photos in Appendix J-3.



SPECIAL NOTES:
 1. ALL UTILITIES SHOWN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY DATA. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND UTILITIES AT ALL TIMES.
 4. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND STRUCTURES FROM DAMAGE DURING CONSTRUCTION.
 5. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SURFACE FINISH AND GRADE THROUGHOUT THE PROJECT.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ALL WETLANDS AND ENVIRONMENTAL FEATURES.
 7. THE CONTRACTOR SHALL MAINTAIN THE EXISTING TRAFFIC PATTERNS AND SIGNALS THROUGHOUT THE PROJECT.
 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ALL TREES AND VEGETATION.
 9. THE CONTRACTOR SHALL MAINTAIN THE EXISTING LANDSCAPE AND PLANTINGS THROUGHOUT THE PROJECT.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ALL HISTORIC AND CULTURAL RESOURCES.



DETAIL OF UTILITIES NEAR LAKESIDE
 SCALE 1"=10'

CSU-1 CIVIL SITE ELECTRICAL UTILITY PLAN	PROJECT NO. 981422 SHEET NO. CSU-1	NEW 16" WATER MAIN AND PHASE 1 RELOCATION OF 5P3 CIRCUIT TO UNDERGROUND STORRS, CONNECTICUT UCONN PROJECT 981422	VANZELM ENGINEERS 1100 MAIN STREET STORRS, CONNECTICUT 06268 (860) 255-1111 FAX (860) 255-1112 WWW.VANZELM.COM
	DATE: 10/15/03 DRAWN BY: J. J. JONES CHECKED BY: M. J. JONES APPROVED BY: M. J. JONES		



CFL News

Volume 15, Issue 2—May 2010

2010 Membership Drive

Your membership dues and tax-deductible donations help CFL to provide educational information to our members through our web site, conferences and special mailings of books and magazines. We appreciate and need your ongoing support.

Act now to join or renew your membership in the CFL with the application found in this newsletter.

We appreciate your support of the Connecticut Federation of Lakes in 2010.

Lake Association Grants Available – Deadline Extended

The deadline for applying for the lakes capacity building grants available to Connecticut Lake Associations has been extended. Please visit our website, www.ctlakes.org, to find more information on qualifying projects and the application process. Contacts for questions or assistance in completing an application are also located on the website.



President's Message

God's Lakes. Our Hands. We are the problem and we are the solution. If it is to be, it is up to you and me. What we can conceive and believe, we can achieve. Caring for God's creation requires more than clever words. Worthy goals, careful planning, resources of time and money, a realistic strategy, passionate volunteers, public awareness, a public health problem or scare, severe economic impacts, a part-time executive director, a bigger membership and "political" clout are necessary for progress. Working effectively with the federal (EPA), the state (DEP, legislators, DPH, governor) and local town governments (boards and commissions) are critical to helping lakes. Healthier lakes result when lake association volunteers serve on their local Conservation, Inland Wetlands, Water Pollution Control Authority, Public Health, and Planning and Zoning committees.



INSIDE THIS ISSUE

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Spring is Here
Lakes Awareness Week
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Road De-Icer Alternative
Guide to Invasive Aquatic Plants
- 5** Lake Water Clarity from Satellite Imagery
- 6** Attention Lake Lovers

Beyond Walden

By Bruce Fletcher

Beyond Walden is a highly recommended book for those interested in Lakes. It was written by Robert M. Thorson, PhD, UConn Professor of Geology, a regular Hartford Courant environmental columnist, a passionate lifelong lover of lakes, and fortunately a friend of the CFL, Inc. He has a special fondness for kettle lakes; in fact, the subtitle for his book is "The Hidden History Of America's Kettle Lakes and Ponds."

This book connects Henry David Thoreau's beloved Walden Pond (a kettle) in Massachusetts to all our precious lakes even Garrison Keillor's fictional Lake Wobegon (a kettle no doubt) in Minnesota by illuminating their geological, ecological and cultural similarities. Thorson's expertise in geology, climatology, glaciology, chemistry, limnology, botany and paleozoology is apparent when he reviews the last North American ice age some 10,000 years ago which shaped the upper tier of the U.S. from New England to Montana. In this area are thousands of kettle lakes and ponds which were formed when huge masses of glacial ice buried in glacially transported earth melted. Most kettles are "sandy sinkholes" with no inlet or outlet streams. Kettle lakes were not "gouged out" by glaciers. There are one or more small ordinary kettles in just about every Connecticut town. Two of note in CT are Linsley Pond in Branford (the "birthplace of limnology and ice-age climatology in North America") and Great Pond in Glastonbury.

In the second half of the book he has a thoroughly enjoyable chapter on "Family Lake Culture" which most of us will recognize as familiar. The chapter on "How Lakes Work" is a short course on lake science presented with clarity and loaded with very useful, practical information.

Time has not been kind to lakes. As more and more people have spent more and more time on lakes with their camps, cottages, outhouses and now year-round McMansions, lakes have changed, aged and become nutrient rich. In the final chapters "Loving Lakes Too Much" and "Lake Futures" he describes the negative changes which threaten water quality, lake health and public health. He bemoans the pollution from fertilizers, pets, poor septic, excessive impervious surfaces, invasive flora and fauna, runoff sedimentation, shoreline habitat destruction, acid rain, climate change,

chemical "contamination by toxic metals and synthetic organic compounds including pharmaceuticals," farms with livestock feedlots, equestrian facilities, duck and geese feeding, etc, etc.

Thorson has suggestions for lakes that have reached the "tipping point" between healthy and unfit. One alternative is to put the lake on a "strict diet from all external sources of nutrients" – phosphorus! This approach may take decades to work he acknowledges. The more radical alternative is to remove the phosphorus in the bottom muck by powerful vacuums. He calls it "lake liposuction." Keeping jet skis and high horsepower motorboats only in deep water will "reduce the stirring up of sediment and the phosphorus flux by about half." His assessment is that 1/3 of lakes are in good shape and the rest are between "significantly compromised and poor to terrible."

In "Lake Futures" he reviews the three harmful megatrends "coming at us like freight trains" to threaten our lakes. In addition, he offers four broad lake management recommendations. He advocates top down federal and state laws that regulate "on-site wastewater disposal, minimize chemically treated lawns, insist on mandatory checks for hitchhiking invasives, require a buffer of wetland plants along the shoreline," etc. He feels each lake should have its own association and that each association become stronger, more responsible and more pro-active in its dealings with the state and local governments and in its education of its stakeholders. Outdoor classes on pontoon boats for kids and adults will produce positive results. Neighbors must pay attention and "agree on what to do" so the lake does not lose.

Of local note in his acknowledgments he thanks Chuck Lee of the DEP, our indispensable liaison to the CFL, Professor Peter Rich, PhD and limnologist George Knoecklein, PhD. Both Rich and past CFL president Knoecklein are current CFL board members.

Everyone interested in Lakes should have Beyond Walden.



State Water Quality Revision

By Rick Canavan

The CT DEP is in the process of revising the state Water Quality Standards. The Water Quality Standards are required by the Clean Water Act and include Standards, Criteria and Mapping. In the preface to the revisions the CT DEP summarizes the function and goals of the Water Quality Standards as follows:

- Protect surface and ground waters from degradation.
- Segregate waters used for drinking from those that play a role in waste assimilation.
- Restore surface waters that have been used for waste assimilation to conditions suitable for fishing and swimming.
- Restore degraded ground water to protect existing and designated uses.
- Provide a framework for establishing priorities for pollution abatement and State funding for clean up.
- Adopt standards that promote the State's economy in harmony with the environment.

A public comment period has just been completed. The proposed revisions to the standards and public comments are posted on the internet http://www.ct.gov/dep/cwp/view.asp?a=2719&Q=452434&depNav_GID=1654

There are several parts of the revisions relevant for lakes, including potentially changing the term 'eutrophic' to 'cultural enrichment' and changes to the phosphorus standard. A narrative standard for Phosphorus in freshwater is proposed. This narrative standard develops a process where an acceptable phosphorus load to a waterbody can be calculated based on the 2002 land use cover of the watershed and the application of loading rates for each area.

There is debate among those submitting comments about the narrative phosphorus standard. Some commenters, including US EPA, call for a single numeric standard, which is an approach used in the Standards for many other elements. The CT DEP writes that the wide range of naturally occurring phosphorus concentrations makes it difficult to establish a defensible single numeric value. Personally, I think the watershed approach has promise because it can account for regional and

historic differences between waterbodies to allow for realistic water quality goals. A major drawback of a watershed approach is that it is complex and introduces many other components that must be estimated. In this process highly variable conditions such as 'how much phosphorus is exported from urban land' or 'how much phosphorus removal can be expected by adding BMPs' are estimated as single numbers. Phosphorus recycling from lake sediment, often referred to as internal loading, can also confound a watershed loading approach.

Additional revisions and clarifications may be made to the Water Quality Standards before they are officially revised by CTDEP.



Spring is Here and the Lakes Are Ice-free!

By Chris Mayne

It's time to start collecting Secchi disk data again! The CFL and I would like to thank all of those volunteers who provided data over the past six years. The program could not succeed without your participation and your support. I am asking that you send in your 2009 Secchi disk data so that I may write the 2009 report. I will also incorporate data from previous years as well. Data should include the name of the waterbody, the sampling date, and depth with units (inches, feet, or meters). You can find previous Secchi disk reports on the CFL website (www.ctlakes.org) under current projects. We are always looking for more volunteer lakes to participate in this program. All lakes and ponds in Connecticut are welcome to participate in this program. If you have any questions, please do not hesitate to ask me. Thank you very much!

Please forward all data to my e-mail address: goodworkspmc@sbcglobal.net.



Lakes Awareness Week July 11-17

Lakes Awareness Week in Connecticut is July 11-17. We encourage you to work with your lake association to proclaim the same in your town or on your lake.

Organic Land Care Is Lake Smart

NOFA, the Northeast Organic Farming Association, defines organic land care as that without synthetic pesticides, synthetic fertilizers or synthetic soil amendments thereby protecting the local ecosystem and benefitting the whole web of life. Just as in health care, the primary principle is "DO NO HARM."

Consider using compost and compost tea, doing soil tests, choosing the "right plant in the right place," using water properly and rethinking lawns.

For more information contact NOFA at 203-888-5146, P.O. Box 135, Stevenson, CT 06591. www.organiclandcare.net



Road De-Icer Alternative

Hartford Courant Spring 2010

Middletown's Public Works Commission will consider changing the way the city treats snow-covered roads.

Cargill's "Clean Lane" product, a de-icer made of calcium magnesium acetate, is being used in West Hartford and other towns because it, unlike salty sand, doesn't corrode car bodies and doesn't require spring sweeping and catch basin cleanouts. Although slightly more expensive, it should be studied for your lake community.



Save The Date

When: Friday September 17, 2010, 5-7pm

What: CFL Road Show Conference

Where: Jacques Cartier Club on Wilson Street in the Jewett City section of Griswold CT. This facility known as the "French Club" sits on the edge of Ashland Pond (as impoundment of the Pachaug River) which contains fanwort and two milfoil species. An excellent program is being planned with refreshments, snacks and a cash bar.



Just Released - Must Have Guide to Invasive Aquatic Plants in Connecticut

The Connecticut Agricultural Experiment Station (CAES) has just released a wonderful identification guide to Connecticut's invasive aquatic and wetland plants. It can be downloaded via the below link (.pdf format, 8.8 MB). A limited number of printed copies are available from CAES on request (Email: Martha.Balfour@ct.gov).

http://www.ct.gov/caes/lib/caes/invasive_aquatic_plant_program/pdf_reports/aquatic_and_wetland_guide_2010_gregrev.pdf

http://www.ct.gov/caes/lib/caes/invasive_aquatic_plant_program/pdf_reports/aquatic_and_wetland_guide_2010_gregrev.pdf

This is a must have publication for any CFL newsletter reader concerned about aquatic invasive plants. It provides crisp clear photos and keys to the identification of all invasive plants found by the CAES scientists as part of their statewide survey of invasive aquatic plants in Connecticut lakes and ponds. So far the CAES scientists have studied 162 Connecticut lakes and ponds as part of an intensive Statewide invasive aquatic plant study.

The guide identifies the origins of each plant and shows where these plants have been found or reported in Connecticut lakes. Prepared by Experiment Station Scientists Greg Bugbee and Martha Balfour it also explains what you should do if you find a plant in your lake.

It is very important for all lake residents and lake users to become familiar with the invasive aquatic plants that threaten the habitat and recreational values of our lakes. Download this guide and use it. It should be an essential part of your local invasive aquatic plant educational and prevention program.

The following from the introduction to the guide explains why it is important to prevent the spread of these plants, summarizes the CAES findings to date and key provisions of the State Invasive Plant law.

"Because invasive species are not native, they have few natural enemies. Their dramatic growth rates can clog water intakes, decrease recreational opportunities, reduce local real estate values, and alter

native ecosystems (Connecticut Aquatic Nuisance Species Working Group, 2006, Fishman et al. 1998).

Recent vegetation surveys of 162 lakes and ponds, by the Connecticut Agricultural Experiment Station Invasive Aquatic Plant Program (CAES IAPP), found one or more invasive plants in nearly two-thirds of the water bodies (CAES IAPP, 2010). Approximately three-quarters of the invasive aquatic plant species in southern New England were introduced as cultivated plants (Les and Mehrhoff, 1999).

These introductions come from recreational boating (Couch and Nelson, 1985), dumping of unwanted plants in aquariums, water gardening, and plant fragments mixed with live bait used by fishermen. Spread of invasive plants from one lake to another also occurs naturally by wildlife and downstream flow.

Once established, eradication of invasive aquatic plants is extremely difficult. Preventing introductions by inspections, early detection and rapid response is critically important. This guide is intended to provide information on the identification and distribution of the 22 aquatic plants listed as invasive or potentially invasive (Table 1) by the Connecticut General Statute (Sec. 22a-381d). The sale of these plants, with the exception of common waterhyacinth (*Eichhornia crassipes*) and water lettuce (*Pistia stratiotes*), is also banned by State Statute and their transport is limited to activities associated with control and education. Fines of up to \$75.00 can be imposed for each violation."



Connecticut Lake Water Clarity Estimation from Satellite Imagery

By James D. Hurd, Research Associate

Center for Land use Education And Research (CLEAR) Laboratory for Earth Resources Information Systems (LERIS) Department of Natural Resources and the Environment The University of Connecticut

As reported in the January 2010 Newsletter, the Center for Landuse Education and Research (CLEAR) at the University of Connecticut has started a research project to estimate lake water clarity from Landsat

satellite imagery for the state of Connecticut. This project is being led by James Hurd and Daniel Civco from UConn's Department of Natural Resources and the Environment. Similar projects have been conducted successfully in other parts of the country, particularly in the northern plains states of Minnesota, Wisconsin and Michigan. The primary goal of the year long project will be to develop historical estimates of lake water clarity from existing lake transparency data and Landsat satellite imagery dating back to the early 1970s.

Why use satellite imagery to estimate lake water clarity? The simple answer is that it provides the ability to systematically assess lake water clarity for all sizable lakes (typically larger than 5-10 acres in surface area) for a given date throughout the state. It is cost prohibited to conduct in situ sampling of every lake in Connecticut over time, let alone on a regular basis. By sampling a few lakes, a relationship can be derived between the transparency measurements of those lakes with the reflectance characteristics of the lake water surface and water column in the Landsat satellite imagery. This relationship can then be extrapolated to other lakes within the satellite image to provide statewide estimates of lake water clarity which serves as an indicator of lake water quality.

In addition to producing historical estimates of lake water clarity, a secondary goal of the project will be to conduct a statewide estimate for 2010. To be successful, however, in situ samples of lake water transparency from 20-30 lakes will need to be collected during the mid-July through mid-September 2010 time period. To accomplish this, we will need the help of volunteers to collect transparency data about once a week during the two month period. As such, we are hoping to develop an "informal" collaboration with the CFL to help with the transparency data collection. In addition, it is hoped that during this two month period a usable (cloud free) Landsat satellite image will be acquired. Currently there are two Landsat satellites collecting data providing the ability to acquire an image of Connecticut every seven to eight days.

James is planning on attending the May meeting of the CFL to provide additional information about the project. If you are interested in learning more, we hope you can attend the meeting. Funding for this project is provided by the Connecticut Institute of Water Resources. James can be reached at: james.hurd_jr@uconn.edu.

To learn more about CLEAR, visit:
<http://clear.uconn.edu/>

To learn more about similar projects in the northern plains states, visit:

Minnesota:

<http://www.dnr.state.mn.us/lakefind/index.html>

Wisconsin: <http://www.lakesat.org/statewide.php>

Michigan:

<http://mi.water.usgs.gov/splan1/sp00301/remotesensing.php>

About the Connecticut Federation of Lakes

By Bruce Fletcher

Everyone agrees that healthy lakes are highly valued natural assets whose beauty and recreational offerings make them irresistible to so many each season of the year. Towns with attractive lakes annually collect higher property tax revenues and benefit each year from months of "trickle down economics". These precious resources are fragile, and need constant monitoring and preventive and corrective programs. So it is no wonder that individuals, families, lake associations, towns and states proactively work to help their lakes and recognize that unprotected lakes may become damaged beyond repair.

The Connecticut Federation of Lakes (CFL) was formed in 1995 to help individuals, steering committees and established lake associations with needed guidance, advice and support. In addition, the CFL fosters an alliance of Connecticut's many pond and lake protective organizations so that Connecticut lakes can speak with a unified voice.

The CFL board members are dedicated volunteers who have first hand experience in dealing with lake and association issues. Since some board members are professional lake managers and others have masters & doctorate credentials in the science of limnology, the CFL can and does help. Recently the CFL helped pass legislation geared to curb the establishment of invasive aquatic plants in Connecticut. Boat launch monitoring, on site waste water management guidelines, and model municipal

regulations and ordinances for watershed protection are current initiatives.

The CFL publishes newsletters for members full of technical information, lake profiles, management tips and news from the Connecticut Department of Environmental Protection (CT DEP). Chuck Lee of the DEP, an environmental analyst in the Bureau of Water Protection and Land Reuse, 860-424-3716, attends all the CFL Board meetings. The CFL works with the Governor to designate the annual Lakes Awareness Week and hosts educational conferences for CFL members and friends. In addition the CFL is an active full participant in NEC-NALMS (the New England Chapter of the North American Lake Management Society). We participate in their programs annually and host the 3 day conference on a rotating basis.

Lakes in Connecticut need to receive more preventive medicine. In other New England states the citizenry and legislators have pushed through bigger and better programs for lakes. If you treasure your lake, please join the CFL. With your help the CFL will continue to make a difference locally and statewide.



Contact the CFL

For more information regarding the Connecticut Federation of Lakes, visit our web site at www.ctlakes.org, contact Penny@Ctlakes.org, or write to P.O. Box 216, Windsor, CT 06095.



Attention Lake Lovers

By: Larry Marsicano & Robin Zitter

According to the US EPA's recently released Draft National Lakes Assessment Report (see www.epa.gov/owow/lakes/lakesurvey/) poor habitat conditions along the lakeshore is one of the two most significant stressors of lakes. The other was high levels of the nutrients nitrogen and phosphorus. Translated... riparian buffers play an important role in maintaining the ecological well-being of your lake or pond. What does your buffer look like these days... lawn with an ornamental plant here and there or a mix of trees, shrubs and groundcovers that contribute to good habitat conditions that reduce the amounts of

nutrients, sediments and other pollutants from reaching the water?

There are native plants that will accommodate whatever site conditions you may have. Check your site conditions and consider the following recommendations:

1. For **shady, but dry shorelines** consider Sweetshrub, Honeysuckle, Witchhazel, or the Blue Blaze Viburnum (otherwise known as Arrow-wood viburnum,). Mix and match just as nature intended.
2. For **average soil conditions with ample sun** we suggest Red Chokeberry, Summer Wine Ninebark (#31), American Cranbury Viburnum, or Blueberries. You may consider several set of blueberries to improve both pollination and harvest for blueberry pancakes!
3. For **moist to wet soils** we would like to offer two concepts. The first has a red theme which will look terrific especially in winter against a white background – Bailey's Red Twig Dogwood and the Winterberries. The other concept promises to please your sense of smell – Sparkler Azalea and Bayberry. Like the blueberries, planting several of the winterberry or bayberry greatly improves the probabilities of these plants bearing fruit.

We also recommend that you check out the UCONN Plant Database for information and pictures of the plants you are considering at www.hort.uconn.edu/plants/index.html. For more information on riparian buffers, a list of trees, shrubs and other plants to consider for your buffer, and how to install them, see the Candlewood Lake Authority's Buffer Guidelines by going to www.candlewoodlakeauthority.org, clicking on *Publications and Documents* under *Information Resources*, and then clicking on *Buffer Garden Publication*.

Robin Zitter is a landscape designer with expertise in native plants and serves on Sherman, CT Inland Wetlands and Watercourse Commission.

Larry Marsicano is the Executive Director of the Candlewood Lake Authority, serves on the Board of the Connecticut Federation of Lakes as Vice President, and serves on the Board of the Northwest Conservation District.

CFL Board

Bruce Fletcher, President – Bashan Lake
Larry Marsicano, Vice President – Candlewood Lake
Penny Hermann, Secretary, – Lake Williams
Chick Shifrin, Treasurer, - Columbia Lake
George Benson
John Burrell, -Columbia Lake
Richard Canavan – CME Associates
Mary Ellen Diluzio - Bashan Lake
George Knoecklein – Limnologist
Bruce Lockhart, - Certified Lake Manager
Larry Marsicano, - Director, Candlewood Lake
Chris Mayne, - Certified Lake Manager
Tom McGowan, - Lake Waramaug
Peter Rich - Limnologist
Mieke Schuyler
George Walker - Lake Lillinonah

Newsletter Committee

The Newsletter Committee welcomes your input and your articles. Please send suggestions or articles to CFL, P.O. Box 216, Windsor, CT 06095 or e-mail to Penny@Ctlakes.org.

The newsletter committee includes:

Bruce Fletcher
Penny Hermann
George Knoecklein

CFL Application - 2010

Yes! I want to be a member of the CFL!

(Please make check payable to Connecticut Federation of Lakes)

Individual (\$25/year)

Lifetime - for individuals only (\$500)

Lake Association (\$150/year)

Tax Deductible Donation

Name _____

Address _____

Telephone _____

e-mail _____

Who may we thank for your referral?

Mail to: CFL, P.O. Box 216, Windsor, CT 06095

Connecticut Federation of Lakes
PO Box 216
Windsor, CT 06095

Address Service Requested

Inland Wetlands
Beck Municipal Bldg.4 South Eagleville
Rd.
Storrs, CT 06268

Calendar

Upcoming Board Meetings – 3rd Wednesday of April, May, June, September, October, January and March 7PM at Northeast Utilities

Lake Awareness Week – July 11-17

CFL Road Show - an educational seminar open to the public – September 17, 2010

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