

## **AGENDA**

Mansfield Conservation Commission  
Wednesday, September 15, 2010  
Audrey P. Beck Building  
CONFERENCE ROOM B  
7:30 PM

- 1. Call to Order**
- 2. Roll Call**
- 3. Opportunity for Public Comment**
- 4. Minutes**
  - a. August 18, 2010
- 5. New Business**
  - a. Election of Officers
  - b. IWA Referral: W1462 - Town of Mansfield - Laurel Lane bridge replacement
  - c. Other
- 6. Continuing Business**
  - a. Swan Lake Discharge and other UConn Drainage Issues
  - b. UConn Proposed Reclaimed Water Facility
  - c. UConn Agronomy Farm Irrigation Project
  - d. USDA Animal Health Research Facility- UConn Depot Campus (no new information)
  - e. Eagleville Brook Impervious Surface TMDL Project (no new information)
  - f. PZC Proposed Zoning Regulation Revisions (public hearing closed)  
Pleasant Valley Area Zoning (Decision expected in September)
  - g. Natchaug River Basin project (Committee work in progress)
  - h. UConn Hazardous Waste Transfer Station (no new information)
  - i. Ponde Place Student Housing Project (Request to UConn for emergency water supply is pending next Water/Waste Water Advisory Committee Meeting scheduled for 9/16/10 at 5:30 pm in the Bishop Center)
  - j. CL&P "Interstate Reliability Project" (Alternative tower locations with lines over Hawthorne Lane and section of Conservation easement is pending before PZC)
  - k. Other
- 7. Communications**
  - a. Minutes
    - Open Space (8/17/10-not available) • PZC (9/7/10) • IWA (9/7/10)
  - b. Inland Wetland Agent Monthly Activity Report
  - c. DEP Proposed Stream Flow Standards and Regulations (revised 8-17-10)
  - d. DEP Notice of Approval-Lakeside Utility Project N. Eagleville Road
  - e. 8/13/10 UConn Stage 2 Drought Watch and NEWUS Water Supply Assessment
  - f. WINCOG Regional GIS Website Notice
  - g. Other Correspondence
- 8. Other**
- 9. Future Agendas**
- 10. Adjournment**

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Town of Mansfield  
**CONSERVATION COMMISSION**  
Meeting of 18 August 2010  
Conference B, Audrey P. Beck Building  
**(DRAFT) MINUTES**

*Members present:* Robert Dahn, Peter Drzewiecki (from 8:00p), Neil Facchinetti (Alt.), Scott Lehmann. *Members absent:* Quentin Kessel, John Silander, Joan Stevenson, Frank Trainor. *Others present:* Grant Meitzler (Wetlands Agent).

1. The meeting was **called to order** at 7:32p by Acting Chair Robert Dahn.
2. The 16 August version of the draft **minutes of the 21 July meeting** was approved as written.
3. **Agronomy farm.** Gregory Wiedemann, Dean of UConn's CANR, has responded to questions from the Storrs Heights Neighborhood Association regarding the impact of Agronomy Farm turf research on groundwater. The Neighborhood Association will attempt to resolve any remaining questions with the Dean in advance of the 14 September Town-Gown Committee meeting.
4. **Ponde Place saga.** According to Meitzler, test wells have yielded only about 1/3 of the water the would-be developers of Ponde Place hoped for, enough to supply about 280 units. However, DPH regulations would allow no more than about 170 units -- the number that could be supplied, were the best well to be taken off-line for repair. Accordingly, the developers are attempting to get UConn to agree to provide water in such an emergency. Stay tuned.
5. **IWA referral W1461 (Elshakhs, Bundy La.)** An above-ground pool is proposed within 150 ft of wetlands (Roberts Brook and land between it and the pool that is low and wet, according to Meitzler). It appears that moving the pool about 30 ft toward Bundy Lane would involve less grading and reduce potential impact on wetlands during and after installation. The Commission unanimously agreed (motion: Dahn, Lehmann) to suggest this.
6. **UConn reclaimed water facility.** The University proposes to upgrade treatment at its Water Pollution Control Facility so that wastewater can be substituted for potable water in the Central Utility Plant and for irrigation. While wastewater probably cannot completely replace potable water in these uses, this project should reduce demand for water from the Willimantic and Fenton River well-fields. The Commission commends the University for this initiative to increase the efficiency of its use of water.
7. **Storrs Rd. Mobil station.** DEP has authorized an experimental attempt to clean up pollution at the old Mobil station on Rte. 195 near Willimantic by injecting neutralizing chemicals into the groundwater. If this *in situ* approach doesn't work, Exxon will have to put in a filtration system similar to the one now in operation at the 4-Corners CVS.
8. **Adjourned** at 8:24p. Next meeting: 7:30p, Wednesday, 15 September 2010

Scott Lehmann, Secretary, 19 August 2010

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Memorandum:

September 1, 2010

To: Inland Wetland Agency

From: Grant Meitzler, Inland Wetland Agent

Re: New Business for the September 7, 2010 meeting

**New Application:**

W1462 - Town of Mansfield - Laurel Lane Bridge Replacement

	yes	no
	-----	-----
fee paid .....	n.a.	
certified receipts .....	X	
map dated .....	8.02.2010	

This application is for replacement of the Laurel Lane bridge over the Mount Hope River. A new bridge will be constructed adjacent to the existing bridge in order to maintain access. These plans have been in progress with various reviewing agencies for about three years - and include numerous measures to protect wetlands and the Windham watershed.

Receipt and referral to the Conservation Commission is appropriate.

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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 1462  
 Fee Paid N.A.  
 Official Date of Receipt 9.07.10

*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 Town of Mansfield, CT

Mailing Address 4 South Eagleville Rd.

Mansfield, CT Zip 06268

Telephone-Home \_\_\_\_\_ Telephone-Business 860-429-3332

Title and Brief Description of Project  
Replacement of the Laurel Lane Bridge over The Mount  
Hope River

Location of Project Approximately 725 Feet East of CT RTE. 89.

Intended Start Date \_\_\_\_\_

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

See Project Narrative - Attached

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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

See Project Narrative - Attached

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3) Describe the type of materials you are using for the project:

See Project Narrative - Attached

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a) include *type* of material used as fill or to be excavated \_\_\_\_\_

b) include *volume* of material to be filled or excavated \_\_\_\_\_

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).

See Project Narrative - Attached

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Part D - Site Description

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

See Project Narrative - Attached

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Application for Inland Wetlands Certification  
Laurel Lane Bridge over Mount Hope River  
Part C – Project Description

The Laurel Lane Bridge as it stands today is a two- simple span structure with a maximum span of 31 feet and a total length of 56 feet. Currently posted for 10 tons, the bridge has a roadway width of 10'-10" between timber rails and carries one lane of traffic.

The most recent bridge inspection has revealed that there is heavy rusting and section loss of the steel stringers, the timber rails are discontinuous and the substructure concrete has cracks and spalls. Due to the poor condition of the existing structure, a proposed replacement has been designed in order to maintain the only access to the properties on the east side of the Mount Hope River.

During construction of the proposed bridge, it is recommended to maintain access to the properties utilizing the existing bridge. Given that the new structure is to be built off-alignment, the topography of the site dictates that the new bridge be placed approximately 25 feet north of the existing bridge. This will both maintain access to the properties as well as provide an opportunity to improve the horizontal alignment of the road.

*Construction Sequencing*

Prior to commencing construction, the contractor will supply and install turbidity curtains and sedimentation control devices as per the contract documents. Turbidity curtains are to be installed riverward of all proposed slope modifications, and the sedimentation control devices (i.e. siltation fence, hay bales) are to extend from the turbidity curtains to the limits depicted on the plans. Additionally, as recommended by the Connecticut Department of Public Health, a floating absorbent boom will be installed downstream of the construction site in order to catch floating immiscible contaminants that can potentially be released from the site. Also, a fuel spill remediation kit will be kept on-hand at the site.

All construction equipment (excavators, bulldozers, cranes, etc.) will be serviced, refueled and stored either off site (outside of the watershed boundaries if practical) or at an appropriately designated and prepared impervious servicing area with a secondary containment area. These extra precautionary measures have been implemented due to the site's location within the Windham Water Works public water supply watershed (Mansfield Hollow Reservoir Watershed).

Preceding excavation for the foundation of the proposed bridge, a temporary retaining structure will be required to support the roadway embankment between the existing and proposed structures.

Once the proposed bridge is constructed, additional turbidity curtains will be installed around the existing pier. The existing superstructure will be removed in its entirety. Substructure removal will include removing the existing abutments down to a depth between 2 and 5 feet from existing grade. In order to minimize impacts to the channel proper, pier removal will be conducted down to the top of the exposed pedestal foundation (which is dry under normal daily flow conditions). This will negate the need for cofferdam placement around the pier during construction, however turbidity curtains will be placed around the pier and work for removal of the pier stem will be conducted during periods of low flow. Debris generated from the removal of the pier will be collected and removed from the site.

The selection of the proposed bridge alternate was motivated in part by the environmental considerations associated with construction. The selected bridge consists of integral abutments with steel rolled beams and provides for a 75 foot clear span over the Mount Hope River. The use of the integral abutments and the implementation of the large span both minimizes required excavation depths and pushes the abutments as far away from the watercourse and associated wetlands as economically possible. This reduces potential impacts to the wetlands and essentially nullifies proposed construction impacts to the watercourse. The potential impacts are summarized in the following tables:

Direct Wetland Impacts – Wetland impacts are limited to the eastern shore of the Mount Hope River (North of the proposed abutment).

Description	Area	Volume
Embankment Grading	1170 S.F. 0.027 ac	+80 C.Y.

Impacts to the area adjacent to (within 150 feet) of the wetlands or watercourse:

Description	Area	Volume
Embankment Grading/travelway construction	21,190 S.F. 0.48 ac	+1320 C.Y.



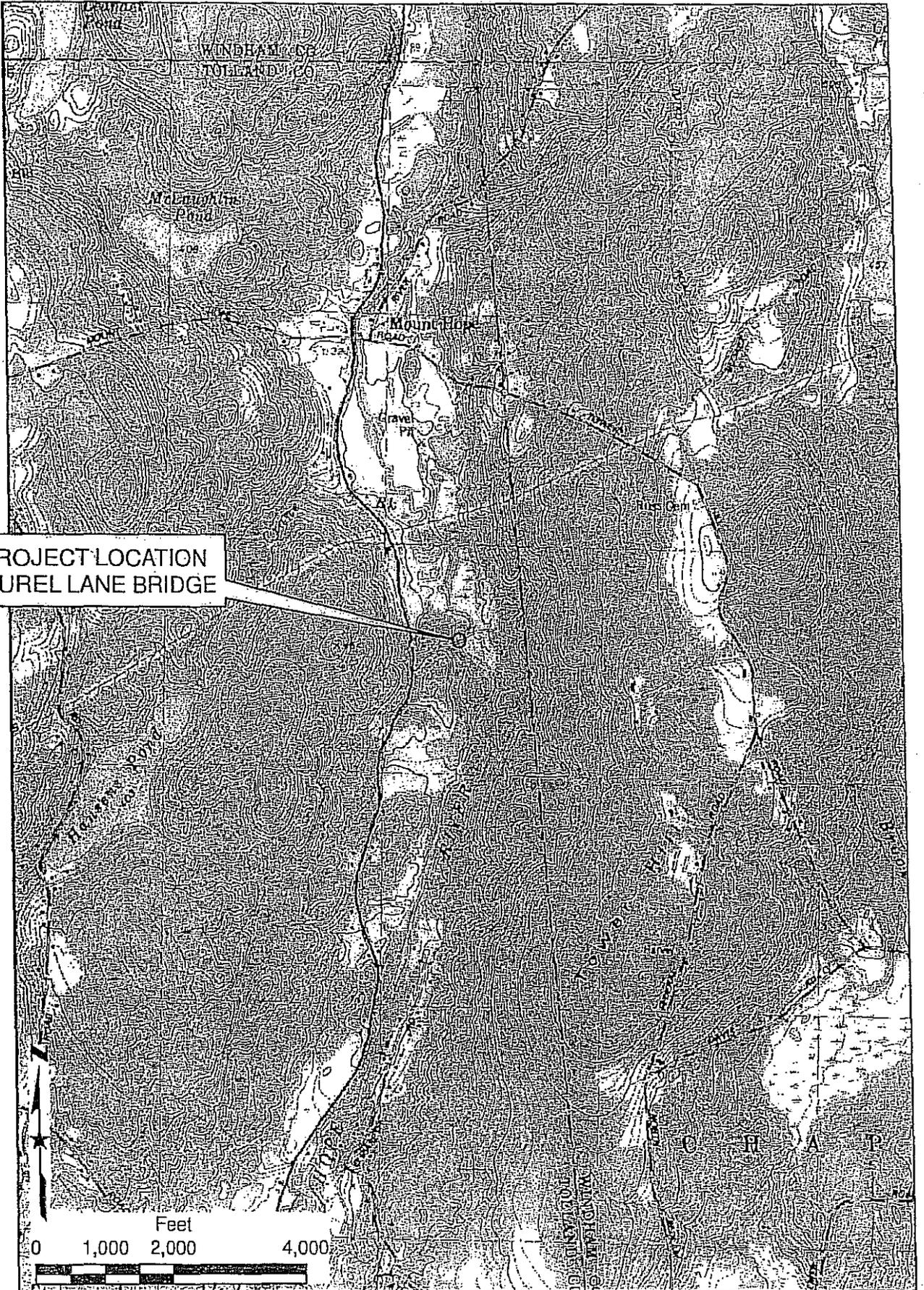
The roadway grading in as part of the subject project has been designed to maintain the dirt road surface with bituminous paving only in the immediate vicinity of the bridge. This will help with rainfall runoff management in that there will not be an appreciable increase in impervious surface, rather the existing drainage patterns will be maintained.

## Part D – Site Description

The Mount Hope River is a small stream (<100 ft wide) which flows perennially with flows generated from a 33.9 sq mi watershed (as delineated at the downstream bridge face). This waterway flows through a moderate relief valley setting with very wide low lying floodplains greater than 10 times the channel width. The drainage basin can be characterized by forested floodplains in a valley setting with scattered swamplands.

Presumably when the Laurel Lane Bridge was constructed to service the properties to the east of the river, the roadway embankment was built up to form a causeway across the floodplain. This had created an impedance to the natural floodplain flows of the river. Consequently, this area contains a great deal of water during periods of high flow, with the only outlet of this area being the bridge opening itself. The land immediately adjacent to the subject bridge is somewhat undulating with local high points falling to meet the floodplain. Attached is a portion of the Spring Hill Quadrangle Map showing topographic relief around the bridge.

SPRING HILL QUADRANGLE (0041)



PROJECT LOCATION  
LAUREL LANE BRIDGE



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.

Project Narrative - Attached  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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 8-02-2010
- 3) Zone Classification Rural Agricultural Residence Zone 90 (RAR-90)
- 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
<u>Project Narrative - Attached</u>	

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.

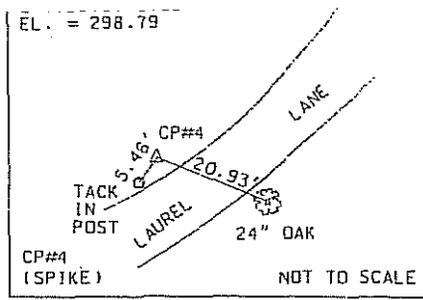
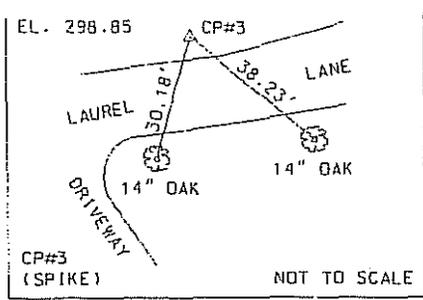
As part of the type study phase of this design project, several alternate bridge types were investigated to determine the most suited type for replacement. The factors that influenced the selection of the alternates were resulting hydraulics of the waterway, constructability of the proposed bridge in relation to the site conditions, construction cost, environmental impacts of the proposed bridge both during (short term) and after construction (long term), future maintenance of the structure and aesthetics.

The "no build" alternative, conventionally offered as an option was not included in this case due to the low tonnage rating of the existing structure (10 tons is less than many emergency vehicles) and the fact that the structure is not wide enough to carry the standard lane width and amount. Additionally, the most recent bridge inspection report had rated this bridge to be in poor condition.

The four alternate structure types were:

1. A prestressed concrete butted box beam bridge
2. Rolled beams on cantilever abutments
3. Rolled beams on integral abutments
4. Two Precast concrete rigid frames

Alternate number 3 was recommended as the proposed structure for the reasons that there will be less native soil and bedding disturbance associated with construction. This alternate would not require any piles for the wingwalls which would result in less excavation associated with construction. In addition the construction of this bridge would make possible the removal of the existing pier in the waterway, helping the river to return to a more natural condition.



(A)  
(B)  
(C)

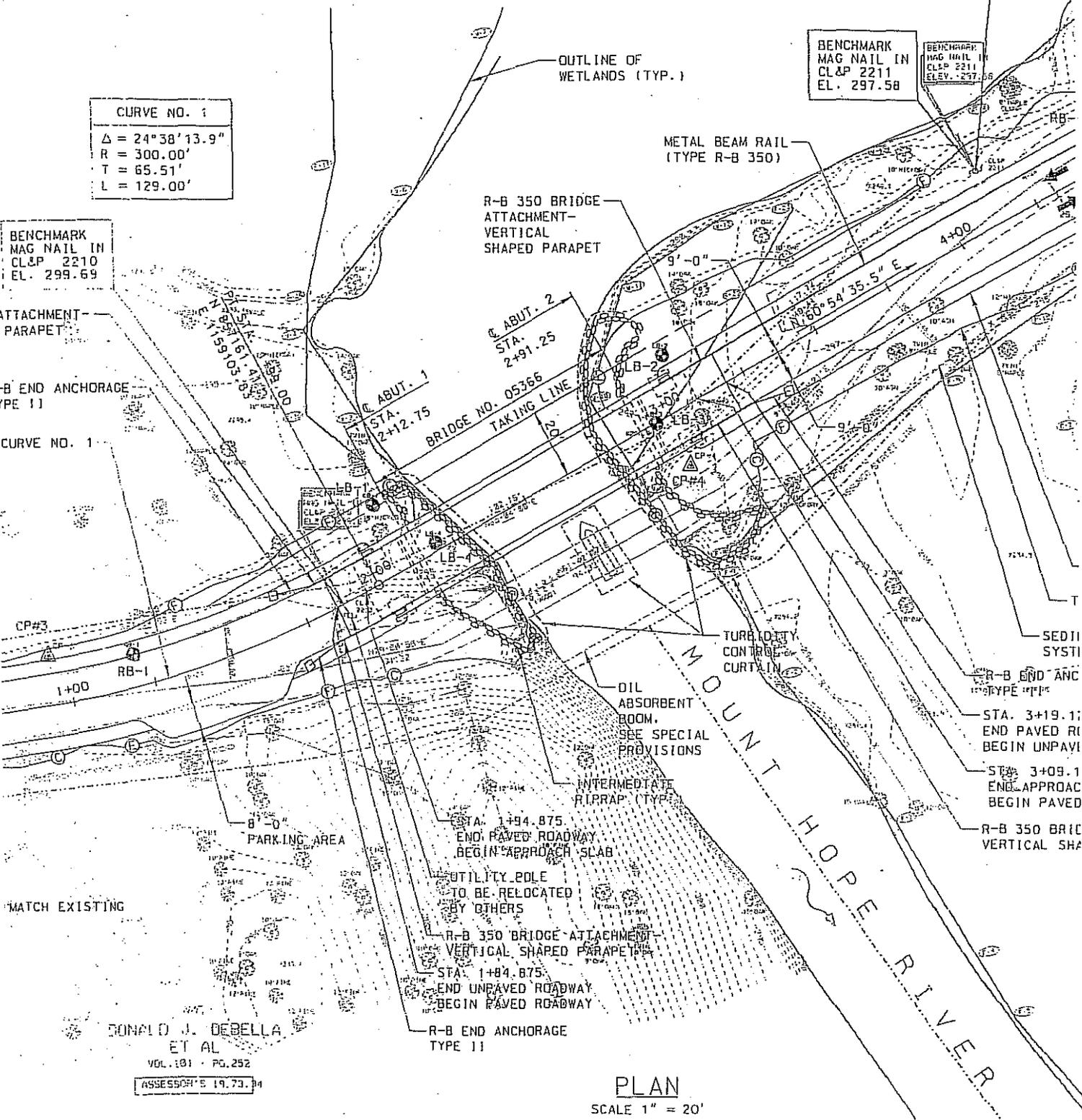
UTILITY TO BE F BY OTHE

CURVE NO. 1  
 $\Delta = 24^\circ 38' 13.9''$   
 $R = 300.00'$   
 $T = 65.51'$   
 $L = 129.00'$

BENCHMARK  
MAG NAIL IN  
CL&P 2210  
EL. 299.69

BENCHMARK  
MAG NAIL IN  
CL&P 2211  
EL. 297.58

BENCHMARK  
MAG NAIL IN  
CL&P 2211  
ELEV. 297.58



ATTACHMENT-PARAPET

-B END ANCHORAGE TYPE 11

CURVE NO. 1

MATCH EXISTING

DONALD J. DEBELLA  
ET AL  
VOL. 101 - PG. 252  
ASSESSOR'S 19.73.34

PLAN  
SCALE 1" = 20'

SHEET NO.	DESIGNER:	J. NES	PROJECT TITLE: <b>REPLACE LAUREL LA</b> CADD FILE: 05366
	DRAWER:	J. NES	
	CHECKED BY:	L. PIPPIN	
	DATE CHECKED:	8/20/10	
SCALE IN FEET 0 20 40 SCALE 1" = 20'		TOWN OF MANSFIELD	
		ENGINEER: G&M ASSOCIATES, INC	
		APPROVED BY:	DATE:

Part H – Notice to Abutting Property Owners

John O. Berg	52 Laurel Lane Mansfield, Connecticut 06250
Donald J. and Joan K. DeBella	720 Warrentville Road Mansfield, Connecticut 06250
Algonquin Gas Transmission Company (Parent Company – Spectra Energy)	890 Winter Street Suite 300 Waltham, Massachusetts 02451

A written notice to all abutting property owners will be sent by certified mail stating that a wetland application is in progress, and that the abutters may contact the Mansfield Inland Wetlands Agent for more information.

**TOWN OF MANSFIELD**  
**DEPARTMENT OF PUBLIC WORKS**



Lon R. Hultgren, Director of Public Works

AUDREY P. BECK BUILDING  
FOUR SOUTH EAGLEVILLE ROAD  
MANSFIELD, CT 06268-2599  
(860) 429-3331  
Fax: (860) 429-6863  
hultgrenlr@mansfieldct.org

August 25, 2010

Abutters of Laurel Lane Bridge:

Ladies and Gentlemen:

The Town is proceeding with the design for the replacement of the Laurel Lane Bridge over the Mt. Hope River.

We have filed an application with the Mansfield Inland Wetland Agency for a permit to reconstruct the bridge. The Agency will be receiving the application at it's September 6, 2010, meeting; however, we don't expect it to act on the permit until it's October 4, 2010 meeting.

If you have any questions, please call me at 429-3332 or e-mail me at [HultgrenLR@mansfieldct.org](mailto:HultgrenLR@mansfieldct.org).

Sincerely,

Lon R. Hultgren  
Director of Public Works

Encl: permit excerpts  
Cc: File





CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION  
79 Elm Street  
Hartford, CT 06106-5127

GIS CODE # \_\_\_\_\_  
For DEP Use Only

Arthur J. Rocque, Jr., Commissioner

## Statewide Inland Wetlands & Watercourses Activity Reporting Form

Please complete this form in accordance with the instructions. Please print or type.

### PART I: To Be Completed By The Inland Wetlands Agency Only

1. DATE ACTION WAS TAKEN: Year \_\_\_\_\_ Month \_\_\_\_\_

2. ACTION TAKEN: \_\_\_\_\_

3. WAS A PUBLIC HEARING HELD? Yes \_\_\_\_\_ No \_\_\_\_\_

4. NAME OF AGENCY OFFICIAL VERIFYING AND COMPLETING THIS FORM: \_\_\_\_\_

(print) \_\_\_\_\_ (signature) \_\_\_\_\_

### PART II: To Be Completed By The Inland Wetlands Agency Or The Applicant

5. TOWN IN WHICH THE ACTION IS OCCURRING: Mansfield, Connecticut

Does this project cross municipal boundaries? Yes \_\_\_\_\_ No X

If Yes, list the other town(s) in which the action is occurring: \_\_\_\_\_

6. LOCATION: USGS Quad Map Name: Spring Hill AND Quad Number: 41

Subregional Drainage Basin Number: 3206

7. NAME OF APPLICANT, VIOLATOR OR PETITIONER: Town of Mansfield, Connecticut

8. NAME & ADDRESS/LOCATION OF PROJECT SITE: Laurel Lane Bridge over Mount Hope River

Briefly describe the action/project/activity: Full Replacement of Bridge Structure

9. ACTIVITY PURPOSE CODE: E

10. ACTIVITY TYPE CODE(S): 1 2 9 12

11. WETLAND / WATERCOURSE AREA ALTERED [must be provided in acres or linear feet as indicated]:

Wetlands: 0.027 acres Open Water Body: 0 acres Stream: 0 linear feet

12. UPLAND AREA ALTERED [must be provided in acres as indicated]: 0.48 acres

13. AREA OF WETLANDS AND / OR WATERCOURSES RESTORED, ENHANCED OR CREATED: 0 acres  
[must be provided in acres as indicated]

DATE RECEIVED: \_\_\_\_\_ PART III: To Be Completed By The DEP DATE RETURNED TO: \_\_\_\_\_

Notification to the Windham Water Works  
Of Application for a Project Within the  
Willimantic Reservoir Watershed – Required by Public Act 89-301

P.A. 89-301 "An Act Implementing the Recommendations of the Water Lands Task Force and Concerning Water Diversions and Notification to Water Companies of the Storage of Hazardous Materials," requires applicants to provide a water company written notice of an application, petition, request or plan if the proposed project is located within the watershed of the wetland, zoning or planning and zoning commissions and zoning boards of appeal. The applicant must mail such notice within seven (7) days of the date of the application, by certified mail, return receipt requested. This form is furnished by the Windham Water Works to such boards and commissions in its watershed to be used by applicants to meet this requirement. Other forms or letters, as approved by each commission, may be used, but must contain the same information. To determine if a project is within the Willimantic Reservoir Drinking Water Supply Watershed, please consult the map(s) on file with the Commission or Town Clerk. Failure of an applicant to comply with this law may be grounds for a legal appeal of a decision rendered on the application due to a procedural error. Do not jeopardize your application, send your notification!

Application Submitted to:  Inland Wetlands Commission  
(Check one or more)  Zoning Commission  
 Planning & Zoning Commission  
 Zoning Board of Appeals

Project is in the Town(s) of:  Ashford  Pomfret  
(Check one or more)  Chaplin  Union  
 Eastford  Willington  
 Hampton  Windham  
 Mansfield  Woodstock

Type of Application:  Zone Change  Special Exception/Permit  
 Subdivision  Other: (Describe) Mansfield Inland Wetlands Permit  
 Variance For The Replacement of the Laurel Lane Bridge

Name & Address of Applicant Town of Mansfield, Connecticut  
4 South Eagleville Road, Mansfield, Connecticut 06268

Project Street Location/Nearest Utility Pole Laurel Lane Between Pole CL&P 2210 and  
CL&P 2211

Contact Person Lon Hultgren, Town Engineer Phone No. (860) 429-3332

Brief description of application: (For example: 30 lot subdivision of single family homes on 60,000 square foot lots with on-site septic systems and wells in North Windham)

Replacement of the Laurel Lane Bridge over the Mount Hope River

Public Hearing Date: \_\_\_\_\_ Commission Meeting Date 10/04/2010

Enclose a copy of the application submitted to the Town and a full set of project plans. Mail this completed form or substitute by certified mail, return receipt request to:

Windham Water Works – Superintendent  
174 Storrs Road  
Mansfield Center, CT 06250

*Received  
9/11/10  
D. Smith*

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## DRAFT MINUTES

MANSFIELD PLANNING AND ZONING COMMISSION  
Regular Meeting, Tuesday, September 7, 2010  
Council Chamber, Audrey P. Beck Municipal Building

Members present: R. Favretti (Chairman), M. Beal, J. Goodwin, K. Holt, G. Lewis, P. Plante,  
B. Pociask, B. Ryan,  
Members absent: R. Hall,  
Alternates present: F. Loxsom, K. Rawn, V. Stearns  
Staff Present: Gregory J. Padick, Director of Planning

Chairman Favretti called the meeting to order at 7:19 p.m. and appointed Rawn to act in Hall's absence.

### Minutes:

8-2-10-Plante MOVED, Ryan seconded, to approve the 8/2/10 minutes as written. MOTION PASSED with all in favor except Pociask who disqualified himself.

### Zoning Agent's Report:

Noted.

Hirsch noted that Live Music permit renewals will be on the next agenda and suggested that the public hearing be scheduled for the October 4<sup>th</sup> meeting. He also noted that he and Chairman Favretti signed-off on a groundwater testing facility at 611 Middle Turnpike.

### Old Business:

1. **Request to authorize overhead utility lines over conservation easement area dedicated in association with the Hawthorne Park Subdivision, PZC File # 1177**

Tabled, awaiting response from CL&P.

### New Business:

3. **Request to Revise Building Area Envelope, 156 Coventry Rd, PZC File #1214**

Walter Keenan, property owner, stated that he is in agreement with the Director of Planning's recommendation.

Holt MOVED, Pociask seconded, that the Planning and Zoning Commission approve a Building Area Envelope revision for Lot 2 in the Smith Farms Subdivision as proposed subject to revising the BAE to more uniformly parallel the easterly property line at a distance of ten feet. This action shall be noticed on the Land Records. MOTION PASSED UNANIMOUSLY.

1. **New Special Permit Application, Proposed Efficiency Unit Apartment at 147 Stafford Rd., D. Rice o/a, PZC File #1293**

Goodwin MOVED, Holt seconded, to receive the Special Permit application, File #1293 submitted by Daniel Rice, for an efficiency unit within a non-conforming single family residence, on property located at 147 Stafford Road, owned by the applicant, as shown on plans dated 8-30-10, and as described in other application submission, and to refer said application to the staff for review and comments, and to set a public hearing for October 4, 2010. MOTION PASSED UNANIMOUSLY.

2. **Request for Tree Removal, 24 Adeline Place, PZC File #1187-2**

Holt MOVED, Ryan seconded, that the PZC grant the property owner's request to remove the two subject trees as the trees have no significant features in need of protection and/or could present safety issues to persons and property if left in their current condition. MOTION PASSED UNANIMOUSLY.

4. **Town Council Referrals:**

a. **Open Space Acquisition Funding**

Goodwin MOVED, Holt seconded, the following RESOLUTION, which was UNANIMOUSLY ADOPTED.

RESOLVED, that the Planning and Zoning Commission of the Town of Mansfield approves the following projects pursuant to Section 8-24 of the General Statutes of Connecticut:

Acquisition by the Town of one or more parcels of land or interests therein for open space, municipal, or passive or active recreational uses, or any combination thereof, after referral of any such proposed acquisition to the Planning and Zoning Commission of the Town for review pursuant to Section 8-24 of the Connecticut General Statutes, Revision of 1958, as amended, and approval by the Town Council following a public hearing held on not less than five days' published notice; and capital maintenance to facilities on any parcel of land currently owned by the Town or acquired by the Town pursuant to this resolution for such uses, or any combination thereof, as to be determined by the Town Council, after referral of any such work to the Planning and Zoning Commission of the Town for review pursuant to Section 8-24 of said Connecticut General Statutes;

provided that this resolution is for approval of conceptual plans only. Each project is subject to and shall comply with all applicable zoning, site plan, subdivision, inland wetland and other laws, regulations and permit approvals, and this resolution shall not be a determination that any such project is in compliance with any such applicable laws, regulations or permit approvals.

b. **Laurel Lane and Stone Mill Road Bridge Repairs**

Goodwin MOVED, Holt seconded, the following RESOLUTION, which was UNANIMOUSLY ADOPTED.

RESOLVED, that the Planning and Zoning Commission of the Town of Mansfield approves the following projects pursuant to Section 8-24 of the General Statutes of Connecticut:

Replacements to the Stone Mill Road and Laurel Lane bridges, and related work and improvements;

provided that this resolution is for approval of conceptual plans only. Each project is subject to and shall comply with all applicable zoning, site plan, subdivision, inland wetland and other laws, regulations and permit approvals, and this resolution shall not be a determination that any such project is in compliance with any such applicable laws, regulations or permit approvals.

c. **Town Facilities Projects**

Goodwin MOVED, Holt seconded, the following RESOLUTION, which was UNANIMOUSLY ADOPTED.

RESOLVED, that the Planning and Zoning Commission of the Town of Mansfield approves the following projects pursuant to Section 8-24 of the General Statutes of Connecticut:

Various town facilities improvements including acquisition and installation of ventilation units for the locker room at the Community Center, and town park improvements including playground equipment, picnic areas, ball fields, trails and facility improvements as to be determined by the Town Manager,

provided that this resolution is for approval of conceptual plans only. Each project is subject to and shall comply with all applicable zoning, site plan, subdivision, inland wetland and other laws, regulations and permit approvals, and this resolution shall not be a determination that any such project is in compliance with any such applicable laws, regulations or permit approvals.

d. **Transportation Improvement Projects**

Goodwin MOVED, Holt seconded, the following RESOLUTION, which was UNANIMOUSLY ADOPTED.

RESOLVED, that the Planning and Zoning Commission of the Town of Mansfield approves the following projects pursuant to Section 8-24 of the General Statutes of Connecticut:

Various transportation facilities improvements including road drainage capital maintenance, large bridges capital maintenance, and transportation and walkway improvements such as bus stops, walkways and bikeways, all as to be determined by the Town Manager;

provided that this resolution is for approval of conceptual plans only. Each project is subject to and shall comply with all applicable zoning, site plan, subdivision, inland wetland and other laws, regulations and permit approvals, and this resolution shall not be a determination that any such project is in compliance with any such applicable laws, regulations or permit approvals.

**Old Business:**

**2. Rezoning of Industrial Park Zone and Associated Regulation Revisions, PZC File 907-33**

Members discussed moving forward with the proposed regulation revision. Lewis, Beal, Loxsom, Pociask and Rawn each commented on the proposal and in general supported it, noting that the current Industrial Park Zoning is no longer feasible for this area. They believe that the proposed regulations are the best compromise given access to water and sewer. Holt raised concern about the lack of a guarantee to preserve farmland. Goodwin expressed concern that the required farmland dedication could be appealed in court. Rawn volunteered to work with staff to draft an approval motion for the next meeting. Padick reminded the Commission that a majority vote is required due to the Hussey's attorney submitting a 6-7-10 Notice of Protest to Proposed Zoning Revision.

**Reports of Officers and Committees:**

Chairman Favretti reminded members of the 9/16/10 Field Trip scheduled for 1:30pm. Beal invited all members to the Regulatory Review Committee meeting on 9/15/10 at 1pm.

**Communications and Bills:**

Noted.

**Adjournment:**

Chairman Favretti declared the meeting adjourned at 8:18 p.m.

Respectfully submitted,

Katherine Holt, Secretary

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BREAK

**DRAFT MINUTES**  
MANSFIELD INLAND WETLANDS AGENCY  
Regular Meeting  
Tuesday, September 7, 2010  
Council Chambers, Audrey P. Beck Municipal Building

Members present: R. Favretti (Chairman), M. Beal, J. Goodwin, K. Holt, G. Lewis (7:04), P. Plante, B. Pociask, B. Ryan,  
Members absent: R. Hall,  
Alternates present: F. Loxsom, K. Rawn, V. Stearns  
Staff present: G. Meitzler (Wetlands Agent)

Chairman Favretti called the meeting to order at 7:01 p.m. and appointed alternate Loxsom to act in Hall's absence.

**Minutes:**

8-2-10 – Plante MOVED, Ryan seconded, to approve the 8-2-10 minutes as written. MOTION PASSED with all in favor except Pociask who disqualified himself.

8-9-10 Field Trip- Beal MOVED, Ryan seconded, to approve the 8-9-10 field trip minutes as written. MOTION PASSED with Beal, Holt, Favretti, Plante, Ryan and Rawn in favor and all others disqualified.

**Communications:**

The 8-18-10 draft Conservation Commission minutes and the 9-1-10 Wetlands Agent's Monthly Business report were noted. Favretti asked Meitzler for an update on the Mirror Lake Dredging that was scheduled to be completed this summer. Meitzler reported that certain issues related to CT-DEP approval have yet to be resolved; hence the delay.

**Old Business:**

W1461 - Elshakhs - 23 Bundy La – above-ground pool in buffer

Holt MOVED, Ryan seconded, to grant an Inland Wetlands License under the Wetlands and Watercourses Regulations of the Town of Mansfield to Hisham Elshakhs (File no. W1461), for the installation of an above-ground pool, on property owned by the applicant, located at 23 Bundy Lane, as shown on a map dated 7/12/10 and as described in other applications 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 stated in the plans) shall be in place prior to construction and maintained during construction and removed when disturbed areas are completely stabilized.
2. The pool shall be shifted at least 5 feet further away from the wetlands, or more if practical, within the restrictions of the side yard setback.
3. Before installation, the applicant shall consult with the Wetlands Agent for final placement.
4. No brush or construction debris shall be placed any closer to the wetlands than the pool itself.

This approval is valid for a period of five years (until September 7, 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 with all in favor except Pociask who disqualified himself.

**New Business:**

**W1462 - Town of Mansfield - Laurel Lane bridge replacement**

Goodwin MOVED, Holt seconded, to receive the application submitted by the Town of Mansfield (IWA File W1462) under the Wetlands and Watercourses Regulations of the Town of Mansfield for the replacement of the Laurel Lane bridge over the Mount Hope River, located approximately 725 feet east of Route 89, on property owned by the applicant as shown on a map dated 8/2/10 and as described in other application submissions, and to refer said application to the staff and Conservation Commission for review and comment. MOTION PASSED UNANIMOUSLY.

**Reports of Officers and Committees:**

Chairman Favretti set a Field Trip for 9/16/10 at 1:30 p.m.

**Other Communications and Bills:**

Noted.

**Adjournment:**

Favretti declared the meeting adjourned at 7:18 p.m.

Respectfully submitted,

Katherine Holt, Secretary

Memorandum:

September 1, 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**.
- 6.30.10: As viewed from the adjacent property, the upstream and downstream areas have grown to a decent protected surface. I did not see indication of sediment movement.

**Mansfield Auto Parts - Route 32**

- 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.
- 6.23.10: Inspection - no vehicles are within 25' of wetlands.
- 7.15.10: Inspection - no vehicles are within 25' of wetlands.
- 9.01.10: Inspection - no vehicles are within 25' of wetlands.  
Mr. Bednarczyk has started removing tires from the westerly part of his site using roll-off containers. With this arrangement a moderately steady rate of removal of the tires should be possible to maintain until the tires are completely removed.



DEPARTMENT OF  
ENVIRONMENTAL PROTECTION



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## Proposed Stream Flow Standards and Regulations

Revised August 17, 2010

### WATER

- » WATER RESOURCES
- » WATER QUALITY
- » WATER QUANTITY
- » WATERSHED MANAGEMENT
- » WETLANDS
- » REGULATING WATER
- » ENVIRONMENTAL PROTECTION BEGINS WITH YOU
- » WATER MAIN PAGE
- » DEP MAIN MENU

The Connecticut Department of Environmental Protection is proposing Stream Flow Standards and Regulations in response to PA 05-142, enacted in 2005. This statute directed DEP to develop regulations, which would expand the coverage of the stream flow standards and regulations to include all rivers and streams, rather than only those stocked with fish, as was the case previously. The statute further directed DEP to develop standards that balance the needs of humans to use water for water supply, fire protection, irrigation, manufacturing, and recreation, with the needs of fish and wildlife, that also rely upon the availability of water to sustain healthy natural communities.

Highlights of the proposed Stream Flow Standards and Regulations include:

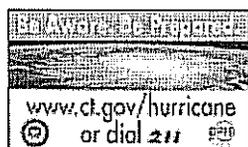
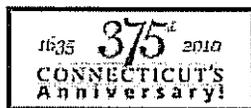
- Classification of all rivers and streams in Connecticut with public input,
- Use of best science to provide a framework based on the classification of all rivers and streams to balance the human needs for water supply, fire protection, irrigation, manufacturing, and recreation with the needs of fish and wildlife, that also rely upon the availability of water to sustain healthy, natural communities,
- An extended implementation timeframe for regulatory requirements to allow for any necessary infrastructure improvements and to encourage and support water planning and conservation efforts.

In short, the proposed Stream Flow Standards and Regulations are protective of Connecticut's river and stream systems, and promote better, more efficient management of our water resources and supplies, so that needs, both human and ecological, can be met today and in the future.

### Progress on Regulation Development

Thus far CT DEP has:

- Initiated a stakeholder process through 3 workgroups (Science & Technical Workgroup; Policy & Implementation Workgroup; and Commissioner's Advisory Group) that developed the framework of the regulations over a 3 ½ year period;
- Drafted proposed Stream Flow Standards and Regulations;
- On October 13, 2009, issued a Public Notice of Intent to Adopt Regulations and to Hold a Public Hearing;
- Provided numerous public information meetings from October 13, 2009 – January 21, 2010;
- Held a public hearing on January 21, 2010. The public comment period was held open until February 4, 2010. 68 individuals provided oral testimony and 380 provided written comment.
- The extensive public comment has been taken into consideration, and revisions were made to the proposed regulations.
- The revised regulations were submitted to the Attorney General for a legal sufficiency review,
- A Notice of Availability of the revised regulation and the hearing report was issued on August 17, 2010. The hearing report contains a statement of the principal reasons in support of the Department's action, and the principal considerations in opposition to the Department's intended action



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as urged in written or oral comments on the proposed regulation and its reasons for rejecting such considerations.

These documents are available below. Submission of the revised regulations to the Legislative Regulation Review Committee is anticipated in early September, 2010.

### **Post-Hearing Regulatory Process Documents NEW**

[Notice of Availability](#) (PDF) (August 17, 2010)

[Summary of the Major Revisions to the Regulations in Response to Comments](#) (PDF) (August 17, 2010)

[Final Proposed Regulations](#), (PDF) (August 26, 2010 – Includes minor modification correcting clerical error – for explanation, see 8/26/10 Addendum in Hearing Report)

[Hearing Report](#), (PDF) (August 16, 2010)

[Revised Table Summary of Stream Flow Regulations](#) (PDF) (August 17, 2010)

[Questions and Answers About the Proposed Streamflow Regulations](#) (PDF) (August 17, 2010)

### **Pre-Hearing Regulatory Process Documents**

[Public Notice of Intent to Adopt Stream Flow Standards and Regulations and to Hold a Public Hearing](#) (October 13, 2009)

[Proposed Regulations](#) (PDF) (October 13, 2009)

[Fiscal Impact Statement](#) (PDF) (October 13, 2009)

[Small Business Regulatory Impact and Regulatory Flexibility Analysis](#) (PDF) (October 13, 2009)

### **Data Links NEW**

["Regional Regression Equations to Estimate Flow-Duration Statistics at Ungaged Stream Sites in Connecticut," U.S. Geological Survey Scientific Investigations Report 2010-5052, by Elizabeth A. Ahearn.](#)

### **Background Documents**

[Stream Flow: The Next Two Decades](#) (PDF) (January 29, 2009)

[Balancing Water Use for Future Generations](#) (PDF) (October 13, 2009)

[Stream Flow Proposal Timeline](#) (PDF) (October 13, 2009)

[Guidelines for Evaluating Streamflow Depletion from Groundwater Withdrawals](#) (PDF) (December 17, 2009) Groundwater withdrawals do not necessarily impact nearby streamflow at a rate equivalent to the well withdrawal rate. Although directly connected, a number of factors influence where along the stream, when, and by how much streamflow will be reduced by pumping groundwater. These draft guidelines were developed to assist water users in evaluating how their individual groundwater withdrawal impacts streamflow.

### **Comments Received on Proposed Regulations**

# Revised Stream Flow Regulations - August, 2010

Classification	Presumptive Compliance	Special Compliance																														
<b>Starts After Regulation Adoption</b>	<b>River Segment Compliance 10 Years Post Classification Adoption</b>																															
Existing Release Under Regulations																																
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;"><b>Consider Factors Indicative of the Degree of Human Alteration of Natural Stream Flow</b></p> </div> <div style="font-size: 2em;">→</div> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;"><b>Develop Draft Stream Flow Classes in Consultation with DPH</b></p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;"><b>Adopt Stream Flow Classifications</b></p> </div> <div style="font-size: 2em;">↓</div> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;"><b>Propose Stream Flow Classification, Public Notice, and Solicit Comment</b></p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p style="text-align: center;"><b>If Classification Change Proposed, 60 Day Comment Period</b></p> </div> <div style="font-size: 2em;">↻</div> </div>	<p><b>Impoundments</b></p> <p>Class 2 - Release 75% of Natural Inflow Class 3 - Release According to Rule Below:</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <thead> <tr> <th rowspan="2">Bioperiod</th> <th rowspan="2">Effective Dates</th> <th colspan="2">Minimum Required Release</th> </tr> <tr> <th>Antecedent Period Day</th> <th>Antecedent Period Met</th> </tr> </thead> <tbody> <tr> <td>Overwinter</td> <td>Dec 1 - Feb 28/29</td> <td>Dispersed Q85</td> <td>Dispersed Q85</td> </tr> <tr> <td>Shad/Bat Fawning</td> <td>Mar 1 - Apr 30</td> <td>Dispersed Q85</td> <td>Dispersed Q85</td> </tr> <tr> <td>Chupele &amp; Spawning</td> <td>May 1 - May 31</td> <td>Dispersed Q85</td> <td>Dispersed Q85</td> </tr> <tr> <td>Resident Spawning</td> <td>June 1 - June 30</td> <td>Dispersed Q85</td> <td>Dispersed Q85</td> </tr> <tr> <td>Rearing and Growth</td> <td>July 1 - Oct 31</td> <td>Dispersed Q85</td> <td>Dispersed Q85</td> </tr> <tr> <td>Salmonid Spawning</td> <td>Nov 1 - Nov 30</td> <td>Dispersed Q85</td> <td>Dispersed Q85</td> </tr> </tbody> </table> <p>Class 4 - Release Rearing and Growth Bioperiod Q80 or Natural Inflow, whichever is less</p>	Bioperiod	Effective Dates	Minimum Required Release		Antecedent Period Day	Antecedent Period Met	Overwinter	Dec 1 - Feb 28/29	Dispersed Q85	Dispersed Q85	Shad/Bat Fawning	Mar 1 - Apr 30	Dispersed Q85	Dispersed Q85	Chupele & Spawning	May 1 - May 31	Dispersed Q85	Dispersed Q85	Resident Spawning	June 1 - June 30	Dispersed Q85	Dispersed Q85	Rearing and Growth	July 1 - Oct 31	Dispersed Q85	Dispersed Q85	Salmonid Spawning	Nov 1 - Nov 30	Dispersed Q85	Dispersed Q85	<p style="text-align: center;"><b>Data Reporting</b></p> <p>Dams with Watersheds &lt; 3 square miles, Reservoirs in Series, Reservoirs with Usable Storage &lt; 100 MG, Dams without Consumptive Diversions</p> <p style="text-align: center;"><i>Release Rearing and Growth Bioperiod Q80 or Natural Inflow, whichever is less</i></p>
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<b>Other Structures</b>	<p style="text-align: center;"><b>Operate Structure in a Manner that Minimizes the Impact on Streamflow while Still Providing for Legitimate Needs</b></p>	<p style="text-align: center;"><b>Order Authority by the Commissioner for River Segments Not Meeting the Narrative Standard</b></p>																														
<b>Alternative Compliance</b>	<p>Approved Flow Management Compact, Diversion Permit, Variance Procedure Requests</p>																															
<b>Public Water Supply System Variance</b>	<p>Drought Conditions - Reduce Releases in Step Fashion - Consistent with Water Supply Triggers</p> <p>Systems with Margin of Safety &lt; 1.15 - Can Request Additional Time for Compliance</p>																															
<b>Exempted</b>	<p>Diversions Not Requiring Permit, Large Tidal Rivers, Public Safety Withdrawals</p>																															

PAGE  
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# **Department of Environmental Protection: Final Proposed Stream Flow Regulations**

## **Why Are New Stream Flow Regulations Needed?**

The Connecticut Department of Environmental Protection (DEP) is proposing revisions to the state's stream flow regulations in response to requirements in legislation approved by the General Assembly and signed into law by the Governor in 2005 (PA 05-142).

This law directed the agency to develop regulations that would expand the coverage of existing stream flow standards to include all rivers and streams – rather than only those stocked with fish by DEP as is the case under current regulations. The statute also directed DEP to develop standards that allows the state to meet its needs for water in a manner that balances human and ecological needs.

## **What is the Process for Adopting the Regulations?**

DEP issued draft proposed stream flow regulations on Oct. 13, 2009. The agency held numerous public information sessions on this draft, and held a formal public hearing on Jan. 21, 2010, accepting public comment on the draft regulations until early February. Sixty-eight individuals provided oral testimony and three hundred eighty provided written comment. After thorough consideration of the public comment, revisions were made to the regulations and a hearing report was prepared.

DEP is now proposing final regulations. The regulations must be approved by the General Assembly's Regulations Review Committee before taking effect.

## **How Will the Stream Flow Regulations Work?**

The regulations establish four categories, or classes, of rivers and establish management standards for each category. The process for classifying streams includes public input and consultation with the Department of Public Health. The key considerations for determining class appropriate to specific waters are detailed in the regulations.

The categories of rivers and streams are:

- Class 1 waters are considered “natural,” characterized as a resource having little current development in the watershed and having not been affected by the removal of water for human uses.
- Class 2 waters are be considered “near natural,” sharing many characteristics with Class 1 systems. The flow standards for this class, however, allow for some levels of human alteration.
- Class 3 waters are defined as “working rivers,” where human uses may have a significant influence on steam flow patterns. These rivers and streams are expected to have adequate water resources available to support viable aquatic communities. Some changes in use may be necessary to restore flow patterns needed to ensure these conditions.

- Class 4 waters are characterized as systems where past practices have resulted in a significant deviation from the natural stream flow pattern and restoring these rivers and streams to a natural condition would be impractical. In order to prevent additional water quantity degradation, the regulations now require the use of “best management practices” in the taking of water along Class 4 rivers.

In Class 1 waters, priority would be given to protecting the ecological health of a river or stream. In Class 4 waters, support of human activities would be weighted most heavily. In Class 2 and Class 3 waters, activities would strike a balance between ecological and human needs. The regulations include exemptions for minor water uses and simplified rules for certain categories of dams. Provisions for proposing alternate flow standards that meet the classification goals can be made through development of a Flow Management Compact. Finally, provisions are made for limited-term variances to address unusual climatic or temporary operational circumstances and for drought relief are included.

### **How Do the Final Proposed Regulations Differ from the Initial Draft?**

The scientific foundation of the regulations originally proposed remains intact – but DEP listened carefully to a wide range of stakeholders during the comment period and at the public hearing and as a result made significant adjustments in the final proposed regulations.

Five themes were established to guide the changes to the regulations: (1) increasing the predictability of the classification of stream and river systems and segments; (2) reducing the overall complexity of the regulations; (3) reducing the cost of complying with the regulations; (4) increasing the time for compliance; and (5) focusing on impaired stream and river systems.

An overview of the most significant changes in the final proposed regulations shows that they:

- Double the timeframe for compliance – from five to 10 years – for rules governing releases from dams
- Simplify rules governing releases from dams
- Streamline requirements governing groundwater to focus on diversions that are determined to contribute to the low flow of rivers and streams

In more detail, the final proposed regulations include the following changes compared to the proposed regulations issued in October, 2009:

#### **(1) Increase Predictability of Classification of stream and river systems and segments:**

- (a) Consult with the Department of Public Health (DPH) prior to preparing the map of proposed classifications to provide certainty that public water supply needs will be represented;
- (b) Add language to classification factors clarifying that existing conditions will be taken into account;

- (c) Modify the definition of Class 4 to make it clear that while these river and stream segments have been substantially altered by human activity, reasonable efforts must still be made to minimize impact while meeting societal needs;

**(2) Reduce the Overall Complexity of the Regulations:**

- (a) Delete intermediate compliance with presumptive standards five years post-classification; instead, require full compliance ten years after the effective date of classification for the relevant river or stream system or segment;
- (b) Eliminate the variable wet/dry release for all bioperiods except the rearing and growth bioperiod, which simplifies operation, makes more water available for storage, and reduces the impact on drinking water system margin of safety while continuing to protect aquatic organisms during that period of the year when they are most vulnerable;
- (c) Include additional circumstances (e.g., watersheds under three square miles, impoundments with minimal storage) where a dam does not need to periodically adjust the release of water as long as an ecologically protective minimum flow release is made (i.e., release the rearing and growth bioperiod Q80 or natural inflow, whichever is less);
- (d) Exclude owners and operators of “other structures” (e.g., wells and intake structures) from meeting numeric criteria, and include provisions allowing such owner or operator the flexibility to determine how best to minimize stream flow impacts while meeting legitimate water needs;
- (e) Promote flexibility by allowing a subset of all diverters or a single diverter within a river or stream system to propose a flow management compact to address impairments, so long as other diverters that are not a party to the compact are taken into consideration;

**(3) Reduce the Cost of Complying with the Regulations:**

- (a) Include longer time for compliance with a one-step compliance for dam owners and operators ten years post-classification rather than a two-step compliance schedule. This gives dam owners eleven or more years to invest in the infrastructure necessary to make the required releases;
- (b) Eliminate the need to calculate a minimum release of water twice per month during the eight months outside the four month rearing and growth bioperiod (July 1 through October 31), which reduces operating cost;
- (c) Include provisions, such as the elimination of wet-release requirements outside of the rearing and growth bioperiod, that allow more water to be stored, thereby reducing the need to develop new drinking water sources;
- (d) Include the ability for dam owners or operators to request additional time to comply with the minimum release requirements when the water supply system’s supply of water may not be enough to meet the demand for water (determined to be a 1.15% margin of safety by the DPH);

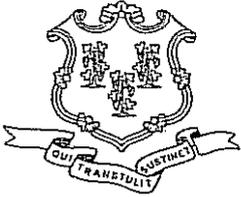
- (e) Eliminate requirement for owners and operators of other structures to demonstrate compliance with presumptive standards (i.e., the numeric criteria);

**(4) Increasing the Time for Compliance:**

- (a) Include longer time for compliance with the release standards for dam owners and operators – ten years post-classification rather than five years;
- (b) Include ability for dam owners or operators to request additional time to comply with the minimum release requirements when the water supply system's supply of water may not be enough to meet the projected demands for water (at or below 1.15% margin of safety as determined by the DPH);

**(5) Focusing on Impaired Stream and River Systems:**

- (a) Expand the Class 4 narrative standard to make clear that river and stream systems or segments that have been assigned a Class 4 designation, because of substantial impact on stream flow due to human alteration, will be subject to a requirement that best management practices be applied to work towards achieving consistency with the Class 3 narrative standard while meeting societal needs;
- (b) Include provisions where, when narrative standards are not met in a stream or river system or segment, the commissioner may order owners and operators of other structures in such systems or segments to evaluate the impairment and implement site-specific measures to reduce the impact and meet the narrative standard; and
- (c) Allow those proposing a flow management compact to also propose best management practices that are appropriate to the specific impairment situation, for the commissioner's approval.



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Approval of Authorization

University of Connecticut  
31 LeDoyt Road, U-3055  
Storrs, CT 06269-3055

Attn: Mr. Richard Miller

Re: Approval of Authorization  
Utilities and Drainage

File No.: IW-201003632GP  
Town: Storrs  
Wetland / Watercourse: Unnamed Inland Wetlands

Dear Mr. Miller:

Your request for Authorization under the General Permit for Utilities and Drainage to install new underground utilities and trenching for the new water mains and electrical systems in the wetland area of the University of Connecticut in the Town of Storrs in accordance with your request and plans which are part thereof filed with this Department on May 27, 2010 signed by David S. Bjorklund, P.E. and dated August 19, 2005 ("the plans") has been approved.

The authorized activity will take place in the wetland area behind the Lakeside and Floriculture buildings of the University of Connecticut main campus in the town of Storrs ("site"). This authorization is being issued to the University of Connecticut (the "permittee") pursuant to the General Permit for Placement of Utilities and Drainage issued June 6, 2002 pursuant to Conn. Gen Stat. Section 22a-39 (the "general permit").

If you have not already done so, you should contact the U.S. Army Corps of Engineers to determine federal permit requirements on your project, if any. Write the Corps' New England Division, Regulatory Branch 696 Virginia Road, Concord, MA 01742-2751 or call at telephone number (978) 318-8388.

If you have any questions concerning this authorization, please contact staff in the Inland Water Resources Division at (860) 424-3019.

**Permittee's failure to comply with the terms and conditions of this authorization and those of the general permit shall subject permittee and permittee's contractor(s) to enforcement actions and penalties as provided by law.**

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This authorization is subject to the conditions described below.

**SPECIAL CONDITIONS - None**

**CONDITIONS OF THE GENERAL PERMIT**

**(a) Operating Conditions**

The permittee shall assure that each action with respect to which authorization has been sought and obtained under the general permit is, as applicable, constructed and maintained in accordance with the authorization and the following conditions:

1. Time of Year Restrictions on In-water Construction

- (A) Between September 30<sup>th</sup> and May 31<sup>st</sup> the permittee shall not place fill, excavate material, or conduct any other construction activity in any watercourse unless such activity is confined by a cofferdam or other device which isolates such activity from the watercourse.
- (B) The permittee shall not place fill, excavate material, or conduct any activity in any watercourse stocked with fish by the commissioner or any other person, or in any tributary to such watercourse, from 12:01 a.m. on Monday preceding the third Saturday in April through 12:00 midnight on the Sunday preceding the fourth Saturday in April.
- (C) The permittee shall not place fill, excavate material or conduct any other construction activity in or adjacent to any watercourse, which activity may adversely affect anadromous fish, during the time period when anadromous fish are known or reasonably believed to be migrating in the watercourse.

2. Pollution Prevention/Best Management Practices

The permittee shall not cause or allow the authorized activity, including any construction associated therewith, to result in pollution or other environmental damage and shall employ best management practices to prevent such damage. The permittee shall, in addition to employing any other best management practices necessary to prevent such damage, do the following:

(A) Controlling Erosion

The permittee shall install and maintain in optimal condition erosion and sedimentation controls to prevent and control erosion and discharge of material into any waters of the state, including wetlands, as a result of the authorized activity or any construction associated therewith. Such controls shall be installed and maintained in conformity with

the *Connecticut Guidelines for Soil and Sediment Control*, as revised, published by the Connecticut Council on Soil Water Conservation pursuant to Section 22a-328 of the General Statutes.

(B) Proper Disposal of Material

All material and solid waste generated during any construction associated with such activity shall be disposed of in accordance with applicable federal, state, and local law.

(b) **Reporting and Record Keeping Requirements**

(1) Notice to Commissioner upon Initiation and Completion of Authorized Activity

No later than two weeks after initiating and after completing the authorized activity, the permittee shall give written notice of same to the commissioner.

(2) Record Keeping and Reporting of Drainage Maintenance Activities

With respect to a drainage maintenance plan described in subsection 3(a)(3) of this general permit and authorized hereunder, the permittee shall maintain a record of each action undertaken pursuant to such plan. Such record shall include the date(s) each such action was undertaken, a brief description thereof, the quantities of any material placed or removed in connection therewith, and the location of such activity. The permittee shall submit a copy of such record to the commissioner on January 30<sup>th</sup> of the year after the date the commissioner approved permittee's request for authorization, and shall continue every January 30<sup>th</sup> thereafter to submit to the commissioner a copy of such record as it applies to the preceding twelve months.

(3) Contractor Notification

If the authorized diversion will be constructed by a person(s) under contract to the permittee, the permittee shall (A) give a copy of the general permit and of the permittee's approval of authorization hereunder to such contractor(s) prior to the start of construction, and (B) for one year after completion of the authorized activity, retain a written receipt for such copy, signed and dated by such contractor(s).

(c) **Recording and Reporting Violations**

Within 48 hours after the permittee learns of a violation of the general permit, the permittee shall report same in writing to the Commissioner. Such report shall include the following information:

(1) the provision(s) of the general permit that has been violated;

- (2) the date and time the violation(s) was first discovered and by whom;
- (3) the cause of the violation(s), if known;
- (4) if the violation(s) has ceased, the duration of the violation(s) including exact date(s) and time(s) it was corrected;
- (5) if the violation(s) has not ceased, the anticipated date when it will be corrected;
- (6) steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented;
- (7) the signature of the permittee and of the individual(s) responsible for actually preparing such report, each of whom shall certify as follows:

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53-157b of the General Statutes, and in accordance with any other applicable statute.”

(d) **Modification of Authorized Activity**

In constructing the operating the activity authorized by the general permit, the permittee shall not make any alternation, except a de minimis alteration, to such activity without first obtaining the written approval from the Commissioner of such alteration. For the purposes of the general permit, a de minimis alternation means a change in the design or operation of the authorized activity that does not increase its adverse environmental or other impacts and does not significantly change its location.

(e) **Initiation and Completion of Authorized Activity**

The permittee may not initiate the authorized activity any sooner than sixty (60) days after filing a request for authorization. If the permittee does not complete the authorized activity within three (3) years after the date of the applicable approval of authorization, said approval shall be null and void.

(f) **Reliance on Request for Authorization**

In evaluating the permittee's request for authorization, the Commissioner has relied on information provided by the permittee. If such information proves to be false or incomplete, the permittee's approval of authorization may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

**(g) Duty to Correct and Report Violations**

Upon learning of a violation of a condition of this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results, prevent further such violation, and report in writing such violation and such corrective action to the commissioner within five (5) days of the permittee's learning of such violation. Such report shall be certified in accordance with subsection 5(i) of this general permit.

**(h) Duty to Provide Information**

If the commissioner requests any information pertinent to the authorized activity or to compliance with this general permit or with the permittee's approval of request for authorization, the permittee shall provide such information in writing within thirty (30) days of such request. Such information shall be certified in accordance with subsection 5(i) of this general permit.

**(i) Certification of Documents**

Any documents, including but not limited to any notice, which is submitted to the commissioner under the general permit shall be signed by, as applicable, the registrant or the permittee in accordance with Section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53-157b of the General Statutes, and in accordance with any other applicable statute."

**(j) Date of Filing**

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word "day" as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day.

**(k) False Statements**

Any false statement in any information submitted pursuant to this general permit or the request for authorization may be punishable as a criminal offense, in accordance with Section 22a-6, under Section 53a-157b of the General Statutes.

**(l) Correction of Inaccuracies**

Within fifteen days after the date a permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be certified in accordance with subsection 5(i) of this general permit. The provisions of this subsection shall apply both while a request for approval of request for authorization is pending and after the commissioner has approved such request.

**(m) Transfer of Authorization**

An approval of Request for Authorization under this general permit is transferable only in accordance with the provisions of Section 22a-60 of the General Statutes.

**(n) Other Applicable Law**

Nothing in the general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state, and local law, including but not limited to the obligation to obtain any other authorization required by such law.

**(o) Other Rights**

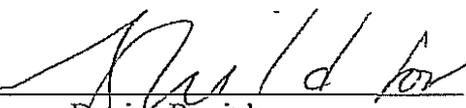
The general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal state and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water or other natural resources of this State. The issuance of the general permit shall not create any presumption that the general permit should or will be renewed.

Authorization for Coverage  
University of Connecticut  
IW-201003632GP  
UConn Main Campus, Town of Storrs

Page 7 of 7

This document consists of the approval of authorization as mandated by Section 3(b)(1) of the general permit. This approval shall expire on June 6, 2012 unless the general permit is extended past such date or within (3) years after the date of this approval, whichever comes first.

8/16/10  
Date

  
\_\_\_\_\_  
Denise Ruzicka  
Director  
Inland Water Resources Division

cc: Lenard Engineering, Inc., P.O. Box 580, Storrs, CT 06268, attn: James E. Ericson, P.E.  
Inland Wetlands Agency, 4 South Eagleville Rd., Mansfield, CT 06268  
Conservation Commission, 4 South Eagleville Rd., Mansfield, CT 06268  
Planning and Zoning Commission, 4 South Eagleville Rd., Mansfield, CT 06268

## Sara-Ann Chainé

---

**From:** Roberts, Eugene [eugene.roberts@uconn.edu]  
**Sent:** Friday, August 13, 2010 11:11 AM  
**To:** Gregory J. Padick; Matthew W. Hart; Sara-Ann Chainé; Elizabeth Paterson; Lon R. Hultgren; Robert L. Miller  
**Cc:** Coite, Jason; Thomas Callahan (Health Center); PPezanko@ctwater.com; Richard Miller; Gene Roberts; Tussing, Timothy; Barry Feldman  
**Subject:** Uconn Stage 2 Drought Watch and NEWUS Water Supply Assessment  
**Attachments:** Aug 13 2010 Drought Letter.pdf; uconn water supply assessment 8-8-10.pdf

All,

Since we have had very little rain, the river levels have caused us to move to a Stage 2 of our drought response plan which includes mandatory water conservation.

Attached are Connecticut Water's Water Supply Assessment and the Stage 2 Drought Watch Advisory.

If you have any questions please contact me.

Thanks  
Gene



University of Connecticut  
*Administration and Operations Services*

Facilities Operations

August 13, 2010

Dear Members of the University of Connecticut Community and UConn Water System Users:

Low streamflows in our local rivers have necessitated that the UConn water system advance to the next stage of drought response. The Stage II Drought Watch includes mandatory water conservation measures described below. We also recommend several ways in which water users can continue to voluntarily conserve water.

In early July, the University issued a Water Supply / Drought Advisory, asking all of its water system users to voluntarily conserve water. The Advisory was based on unique triggers in the University's protocols to curtail consumption during dry weather conditions, based entirely on environmental factors and not our system's inability to meet current or projected demand.

The University and its professional water system operator, New England Water Utilities Services (NEWUS), have continued to closely monitor and assess all relevant information (daily consumption, wellfield production and storage; environmental conditions; precipitation forecast) and have determined it is now prudent to move to a Stage II Drought Watch effective Friday, August 13, 2010.

*The following Stage II Drought Watch Advisory mandatory conservation measures are effective immediately:*

- ✓ Lawn watering for all University and non-University users is limited to four hours or less per day and only between the hours of 5 a.m. to 9 a.m. and 7 p.m. to 9 p.m. Athletic fields will be allowed up two hours of water per day during the same hours.
- ✓ Filling of public or private pools must be provided via water delivered from another source.
- ✓ Washing of motor vehicles is banned. The University's wash bay will be closed until further notice.
- ✓ The use of ornamental or display fountains is banned.
- ✓ The use of water for washing and wetting down streets, sidewalks, driveways or parking areas is banned unless required by the local public health authority.
- ✓ The use of UConn water for dust control at construction sites is banned. Contractors are required to provide water for dust control from off-site.
- ✓ The use of hydrant sprinkler caps is banned.
- ✓ Water main flushing will only be used to address water quality issues.

*An Equal Opportunity Employer*

25 LeDoyt Road Unit 3252  
Storrs, Connecticut 06269-3252  
web: [www.uconn.edu](http://www.uconn.edu)

The University expects to take additional voluntary steps to curtail consumption in its dining facilities, central utilities, and irrigation requirements.

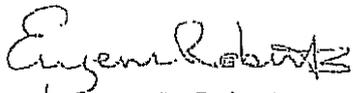
The voluntary conservation measures called for in our July 6<sup>th</sup> Water Supply/Drought Advisory remain in effect. As a reminder, these measures call on students, faculty, staff and other UConn water system users to:

- ✓ Take shorter showers.
- ✓ Run dishwashers and washing machines with full loads.
- ✓ Use water only as needed when washing dishes, shaving, and brushing teeth.
- ✓ Avoid power washing buildings and washing vehicles with public water.
- ✓ Raise the thermostat in UConn buildings, particularly when leaving at night.
- ✓ Immediately report any leaky fixtures in UConn buildings to Facilities Operations (486-3113).

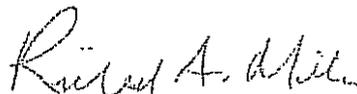
We ask for and appreciate your continued support and cooperation. By reducing consumption during these dry weather conditions, you can help us reduce groundwater withdrawals and protect local streams and the aquatic life they support.

We are continuing to actively monitor conditions and will provide regular updates through communications such as these and our website: <http://www.facilities.uconn.edu/wtr-swr.html>. Please contact me ([eugene.roberts@uconn.edu](mailto:eugene.roberts@uconn.edu); 486-3185) or NEWUS' Pete Pezanko ([PPezanko@ciwater.com](mailto:PPezanko@ciwater.com); 486-1081) with any comments, suggestions or questions you may have.

Sincerely,



Eugene B. Roberts  
Director of Facilities Operations



Richard A. Miller  
Director of Environmental Policy

cc: P. Austin  
B. Feldman  
J. Hathaway  
P. Nichols

New England Water Utility Services, Inc  
93 West Main Street  
Clinton, Connecticut 06413-1600

860.669.8636 FAX 860.669.9526



NEW ENGLAND WATER UTILITY SERVICES

*MEMORANDUM*

To: Eugene Roberts, Director, Office of Facilities Management  
Date: August 8, 2010  
Subject: UConn Water System Analysis  
CC: Thomas Callahan, Tim Tussing, Jason Coite

*The following is an assessment of the University of Connecticut's water supply system as of August 8, 2010. It assesses available supply, demand and environmental conditions, and identifies possible response actions pursuant to the University's Water Supply Emergency Contingency Plan. This Assessment was last provided on July 2, 2010 and will be updated as necessary to reflect changing conditions.*

Supply Status:

- The Willimantic wells have an available supply of 1,350 gallons per minute (gpm), or some 1.94 million gallons per day (mgd). At 1,350 gpm, the Willimantic wells are operating near their modeled sustainable yield (as identified through Level A Mapping), and within the wells' individual and combined registration limits.
- The Fenton River Wells were taken off-line on June 28, 2010. The wells were taken off-line in response to seasonal low flows in the Fenton River. Prior to going off-line, total well production was maintained in conformance with triggers identified in the Fenton River Study, which recommends certain management strategies, including a phased reduction in total wellfield production when river flows drop below 6 cubic feet per second (cfs).

Demand/ Margin of Safety:

- The University notified customers by letter dated July 6, 2010 of the need to conserve water and requested that system users voluntarily limit their water use. This action was triggered by the onset of seasonally low surface water flows in both the Fenton and Willimantic Rivers, consistent with the University's Water Supply Emergency Contingency Plan and Willimantic River Report.
- System production is currently averaging a little over one million gallons per day (1.14 mgd average day during July, 2010). While roughly consistent with historic values, this represents an 11% increase from June's average daily production of 1.02 mgd.

- The slight uptick in production occurred in spite of the request for conservation and is believed at least partially attributable to unaccounted-for water leakage in the main transmission line from the Willimantic wellfield. During the first week of August, 2010, a significant water main leak was repaired in this area and production numbers are expected to decline in response.
- Based on demand patterns realized over preceding years, average daily demand for the latter part of August is likely to increase to around 1.5 mgd and peak at or around 1.8 mgd, following early student arrival on or about August 15.
- Projected Water Usage<sup>1</sup> is expected to remain below Projected Available Supply<sup>2</sup>, although with the Fenton Wells remaining off-line, peak demands could approach remaining source available supply. Because of the significant storage capacity in the High Head reservoir, however, the system has a demonstrated ability to draft off the tank for several days without compromising safety or ability to satisfy system demands.

Surface Water Flows:

- As of the date of this Assessment, stream flow in the Fenton River (as recorded at USGS gage no. 01121330) is 2.8 cfs and trending downward following a recent series of precipitation events; stream flow in the Willimantic River (as recorded at USGS gage no. 01119382) is 14 cfs and likewise trending downward. Recent flow values are shown on Figures 1.0 and 2.0. Absent continued precipitation, flows can be expected to recede to at or below key Willimantic River flow thresholds. At that point, the University would be expected to enter a Stage II Water Supply/Drought Watch.

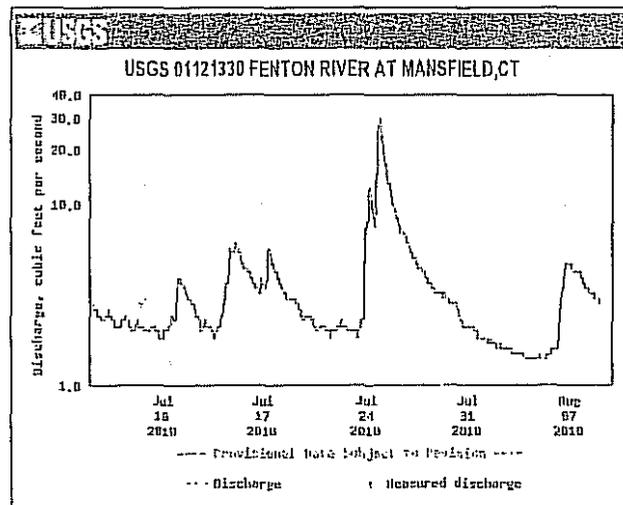


Fig 1.0

<sup>1</sup> Projected Water Usage is the expected production for the particular time of year for which the assessment is made, and includes any reductions or increases in demand due to historical variation or known significant changes.

<sup>2</sup> Projected Available Supply is the expected capacity of the system's sources operating concurrently, and adjusting for any losses due to well maintenance or repair; transmission or pumping limitations due to depressed groundwater levels at the Willimantic wells; anticipated reductions in Fenton well withdrawal based on flow recession equations developed in the Study Report; or other supply-reducing events.

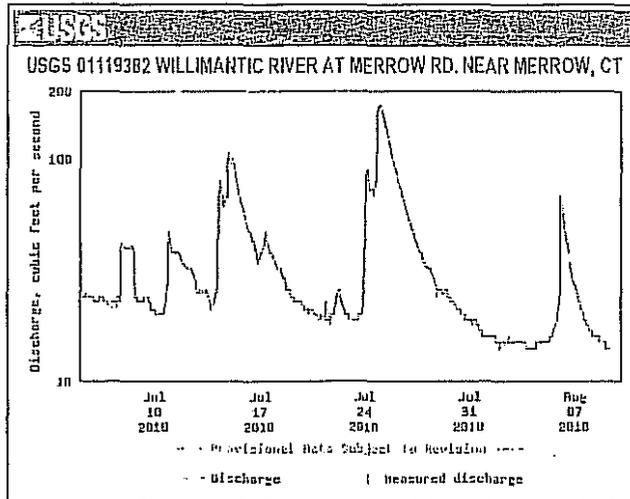


Fig 2.0

Conclusions and Recommendations:

- Projected Available Supply is forecast to be greater than or equal to Projected Water Usage. As a result, the University should continue to have adequate water to serve UConn's water system customers' needs, both on and off-campus. With students beginning to return mid-month, system demands will begin to peak. As in the past, such peaks will likely coincide with periods of seasonally low streamflow.
- Absent appreciable precipitation, flows in the Willimantic River are projected to recede to at or below 12 cfs. This will trigger a Stage II Water Supply/Drought Watch, in accordance with the University's Water Supply Emergency Contingency Plan and Willimantic River Report (see Fig. 3.0). This unique trigger is based on environmental considerations, rather than typical water system operations/demand factors.
- A Stage II Drought Watch will require that system users be asked to continue to voluntarily conserve water. In addition, mandatory water use restrictions will be implemented for certain activities. The University should be prepared to issue such a Watch and communicate its request for water conservation/restriction to system users, as well as contact the Departments of Public Health and Environmental Protection and other state and local agencies, as outlined in the Plan, concerning the initiation of a Stage II Drought Watch.
- Following issuance of a Watch, efforts should be made to monitor daily production, storage and consumption to quantify any demand reductions and assess the need for additional response actions.
- With the pending resumption of full campus activities and increased student population, all sources should be assessed and readied for possible temporary and/or emergency use, should conditions warrant. Any such use would be undertaken in accordance with the University's Water Supply Emergency Contingency Plan, and includes the activation of Fenton Well D, consistent with its recommended abbreviated pumping plan, and the issuance of temporary or emergency authorization allowing rebalancing of registered diversion rates to allow increased withdrawals from Willimantic Wells 1 and/or 3.

- A request for mandatory conservation is the third stage of the University's comprehensive five step emergency contingency plan. The triggers are based on a combination of operational factors including projected available supply, projected water usage, and tank storage levels.

Additionally, the University's Willimantic River Study recommends the initiation of conservation measures when certain flow-based thresholds are reached in the Willimantic River. Because such thresholds are based on both instantaneous flow (e.g., <12 cfs) and low flow duration (e.g., <15 cfs for 13 or more days), close attention should be paid to daily flow in the Willimantic River as well as the persistence of any low flows.

- With the completion of the Willimantic River Study, the University should reassess its Water Supply Emergency Contingency/Drought Response Plan, and revise as necessary, coincident with its ongoing water supply plan update.

Drought Response Stage	Willimantic River at Wellfield Trigger Discharge	Habitat Stressor Threshold	Examples of Conservation Measures
Prepare for implementation of Stage IA	Discharge $\leq$ 27 cfs	Common (Upper Sub-Region)	None / Plan for Stage IA
Stage IA (Two potential triggers)	Discharge < 27 cfs for 19 or more days	Persistent Duration of Common (Upper Sub-Region)	Voluntary: Shorter showers, condensed washing loads, elimination of non-essential consumption, raise thermostats on centrally chilled buildings.
	Discharge < 19 cfs	Common (Lower Sub-Region)	
Stage IB	Discharge < 15 cfs	Critical	
Stage II (Two potential triggers)	Discharge < 15 cfs for 13 or more days	Persistent duration of Critical	Voluntary items above become mandatory, and include (but are not limited to) the following mandatory items: No flushing of hydrants, pipes, or sewer lines; no vehicle fleet washing; no use of water for street sweeping; reduce irrigation by 50%; reduce operation of research equipment cooled with domestic water; Import water needed for construction dust control; no pool filling; raise thermostats of centrally chilled buildings.
	Discharge < 12 cfs	Rare	
Stage III (Two potential triggers)	Discharge < 12 cfs for 12 or more days	Persistent duration of Rare	
	Discharge < 7.8 cfs	Extreme	
Stage IV	Discharge < 7.8 cfs for 7 or more days	Persistent duration of Extreme	

Fig. 3.0

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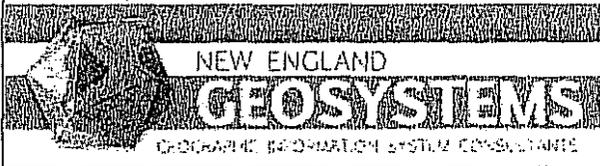
[www.wincog-gis.org](http://www.wincog-gis.org)

Website features

- Search property information by region or town using Owner, Address, Map-Block-Lot, and more.
- Access property cards and parcel data and view an air photo of a property.
- Create an abutters list for surrounding parcels and generate a mailing list.
- Access a variety of different map layers including Air Photos, Wetlands, and Zoning maps.

[www.wincog-gis.org](http://www.wincog-gis.org)

Webhosting and design by:



# WINDHAM REGION COUNCIL OF GOVERNMENTS

*Working together for the future of the Windham Planning Region*

Chaplin Columbia Coventry Hampton Lebanon Mansfield Scotland Wallington Southham

## Questions?

Jana Butts, AICP

Senior Planner & GIS Coordinator, [planner@wincog.org](mailto:planner@wincog.org)

and

Michael Cipriano

GIS Analyst, [gis@wincog.org](mailto:gis@wincog.org)

## WINDHAM REGION

## GIS & CADASTRAL DATA CENTER



## WINCOG

700 Main Street  
Willimantic, CT 06226  
860-456-2221

# WINDHAM REGION GIS & CADASTRAL DATA CENTER

In June 2009, WINCOG received a grant from the CT Office of Responsible Growth to create the Windham Region GIS & Cadastral Data Center. The Center's mission is to facilitate coordinated planning across municipal boundaries by improving access to municipal mapping information.

## The Windham Region GIS & Cadastral Data Center

has two main objectives:

- to provide efficient, ongoing support for municipal tax parcel data development and all forms of GIS mapping, and
- to provide a regional website to host geographic information online in an easy-to-use format.

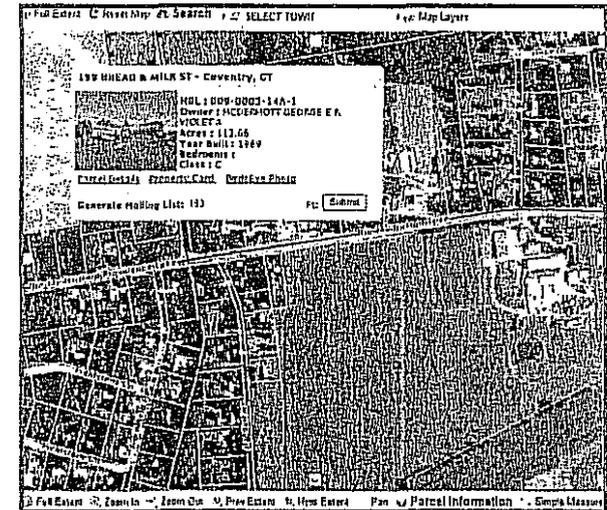
## Municipal GIS Support

The Windham Region GIS & Cadastral Data Center staff work primarily with municipal tax assessors, but also with planners, economic developers, public works, engineering, and other municipal officials in the Windham Region to create, update and standardize municipal geographic information. Staff will provide local, personalized service with a particular understanding of intra-disciplinary needs and planning goals.

## Regional GIS Website

[www.wincog-gis.org](http://www.wincog-gis.org)

The Windham Region GIS & Cadastral Center offers a website where municipal staff and the general public may access geographic information for any town in the region. This portal will help provide information necessary for integrated planning efforts.



*Website detail*

The online regional inventory of tax parcels and assessment data can be combined with economic and demographic information; transportation, transit and community resources; and natural resource information in an easy-to-use, searchable online interface.

All communities in the Windham Planning region are welcome to participate and benefit from this regional service.