

Town of Mansfield  
**CONSERVATION COMMISSION**  
Meeting of 20 July 2011  
Conference B, Audrey P. Beck Building  
**MINUTES**

*Members present:* Robert Dahn, Neil Facchinetti (Alt.), Quentin Kessel, Scott Lehmann, Frank Trainor. *Members absent:* Joan Buck (Alt.), Peter Drzewiecki, John Silander. *Others present:* Aline Booth, John Marth (Cumberland Farms), Grant Meitzler (Wetlands Agent), Linda Painter (Town Planner), William Shakalis.

1. The meeting was **called to order** at 7:30p by Chair Quentin Kessel. **Linda Painter**, Mansfield's new Town Planner, was introduced to the Commission.
2. The draft **minutes of the 18 May 2011 meeting**, as revised on 27 May 2011, were approved.
3. **IWA referrals.** Lehmann observed that the IWA Field Trip to three of these properties is scheduled for next week. The Commission decided to proceed with the referrals anyway, anticipating that it might be difficult to assemble a quorum for the August meeting.

a. **W1483 (Cumberland Farms, 4 Corners, NE)** John Marth sketched Cumberland Farms' proposal for a convenience store and gas station on the northeast of the Four Corners at routes 44 and 195. The vacant Kathy John's and Republic Oil buildings that now occupy the two parcels (2.6-acres total) would be demolished; DEP-required environmental remediation will remove soil contaminated by gasoline leaks at Republic Oil. Plans call for a net decrease in impervious cover (IC); runoff would be directed to a bio-retention basin near 195 to the west, and thence via underground pipe to a wetland along the west edge of the property (about 140 ft from the retention basin). A small wetland on the eastern boundary near Kathy John's is uphill from proposed work. The rear of the property would be left in its current quasi-natural state; plantings are proposed along routes 44 and 195. After some discussion, the Commission agreed unanimously (**motion:** Facchinetti, Trainor) that no significant impact on wetlands is to be expected from this project, provided standard sedimentation controls are employed during construction.

b. **W1482 (United Services, N. Frontage Rd.)** United Services proposes to construct a 2-story medical office building on North Frontage Rd. near Mansfield City Rd., for which the land is now being cleared. Conantville Brook runs along the rear boundary of the property; the northwest corner of the building and portions of the parking lot would be within 150 ft of these wetlands. The site is fairly flat, save to the east, where contours would be reformed to afford level parking. Runoff would be directed to catchment basins and into an underground storage system – tanks made from sections of large-diameter perforated culvert – behind the building and above the Brook, from which it would seep into groundwater; maintaining such a system is largely a matter of keeping sand from clogging it up. The Commission agreed unanimously (**motion:** Facchinetti, Trainor) that no significant wetlands impact from this project is likely, provided standard sedimentation controls are employed during construction, new contours are stabilized, and maintenance of the storm-water retention system is performed on a regular basis.

c. **W1484 (Kouatly, 98 Fern Rd.)** The Kouatlys propose to split a house lot from their large parcel on Fern Road, permitting their son to build a single-family home between his

parents' house and the derelict school bus garage property to the south. Portions of the building and development envelopes lie within 150 ft (60 ft at the closest point) of wetlands on the latter property. The Commission agreed (**motion:** Kessel, Trainor; all in favor save Lehmann, a friend of the applicants, who abstained) that no significant wetlands impact is to be expected, provided activity is confined to the envelopes shown on the map and standard sedimentation controls are employed during construction.

d. **W1485 (Bell, 552 Bassetts Bridge Rd.)** The applicants propose to construct a tool barn about 100 ft from a wetland; runoff at this site appears to drain away from the wetland. They also propose to convert an existing barn within 150 of wetlands into a wedding facility. After some discussion, the Commission tabled this referral until the August meeting: the map provided is incomplete and Lehmann can view the property on next week's IWA field trip.

**4. Dark Skies.** William Shakalis, an amateur astronomer, is interested in working with the Commission to reduce light pollution from UConn and other sources. He agreed to find out what light pollution regulations exist at the state or town level and what model ordinances have been proposed to address light pollution. {Section 505.6.3 of the State Building Code, which concerns "Light Pollution Controls," requires "full cut-off luminaries" except in certain cases, including outdoor sports facilities.} Before approaching the powers-that-be at UConn, it would also be a good idea to enlist support from faculty who teach astronomy and from concerned residents of Mansfield and nearby towns.

**5. Open Space Sale?** Anthony Kotula is asking the Town to sell him 0.15 acres of land on Maple Rd. so that he can grow rhubarb on it. Perhaps not entirely coincidentally, the sale would also give Mr. Kotula enough frontage to split off a building lot. The parcel, part of the Maplewoods subdivision open-space dedication, was to provide parking for walking on Old Bennett Road, but the sightline to the northwest is poor. After some discussion, the Commission agreed that selling this parcel to Mr. Kotula would set a bad precedent, encouraging other attempts to convert Town open space to private property. It would be preferable to retain the land but grant Mr. Kortula an agricultural easement on it. However, he appears to have plenty of unshaded space on his own property for a rhubarb plantation.

**6. The Connecticut Council on Environmental Quality** is inviting public input on environmental concerns and priorities at 5:30p, Wednesday, 27 July 2011 in the Council Chambers.

**7. Mirror Lake Dredging.** GZA GeoEnvironmental maintains, in its 07 June letter to the DEP, that use of a polymer flocculent that is not NSF-certified in the sediment dewatering process for the Mirror Lake dredging project poses no risk to public drinking water supplies. GZA notes that, according to the flocculent's manufacturer, "the concentration of acrylamide [a carcinogen] is the sole concern of NSF in certifying a flocculent used in the treatment of drinking water." GZA then maintains that, according to its analysis, residual acrylamide in water released into Roberts Brook will be diluted to safe levels by the time any is withdrawn at Windham Water Works. However, this analysis overlooks the fact that some of the acrylamide-contaminated water is likely to be withdrawn at UConn's Fenton River wellfield far upstream. Kessel's letter to the DEP, pointing out this oversight, was unanimously approved by the Commission (**motion:** Facchinetti, Trainor); see attachment 1

**8. Eagleville Brook Watershed Management Plan.** DEP has released the draft of its final plan for managing TMDL in Eagleville Brook by reducing IC in the watershed. Comments drafted by

Kessel on behalf of the Commission were unanimously approved (**motion:** Facchinetti, Dahn); see attachment 2. They express support of the plan's goals and methods for attaining them, suggest that efforts to reduce IC should focus on those parts of the UConn campus that likely contribute most to the TDL of Eagleville Brook *and* that of Roberts Brook, and argue that IC% for a given area should include any water bodies with outflows (such as Swan Lake).

**8. Adjourned** at 9:15p.

Scott Lehmann, Secretary, 21 July 2011; approved 17 August 2011.

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### **Attachment 1: Mirror Lake Dredging**

August 1, 2011

Mr. Ken Major  
CT DEEP  
Water Permitting and Enforcement Division  
79 Elm Street  
Hartford, CT 06106  
ken.major@ct.gov

RE: Mirror Lake Dredging  
Flocculent Impact Evaluation  
Wastewater Discharge Permit Application No. 200903959

Dear Mr. Major:

The Mansfield Conservation Commission reviewed the June 7, 2011 letter to you from GZA GeoEnvironmental, Inc at its July 20, 2011 meeting. This letter provided additional information regarding the use of a polymer flocculent for the Mirror Lake Dredging project on the University of Connecticut's Storrs campus. Our concern is with byproducts of the proposed flocculent, e.g., acrylamide. We have the following comments and a suggestion:

1. Acrylamide is a known neurotoxin and carcinogen.
2. The GZA letter states the NSF requires that the residual acrylamide content of drinking water should not exceed  $5 \times 10^{-4}$  ppm.
3. The letter describes the predicted successive dilution of the acrylamide as it exits the Mirror Lake area into Roberts Brook, then exits Roberts Brook (.04 ppm) into the Fenton River, then a level of  $1 \times 10^{-3}$  entering Mansfield Hollow Lake finally entering the Willimantic Reservoir with, finally, a level predicted to be approximately a factor of 10 lower than the NSF maximum.
4. However, this letter fails to comment on the fact that after passing under "Pumping Station Road," Roberts Brook follows a fairly lengthy and flat course over the portion of the aquifer just north of Well D before entering the Fenton River. During all but the wettest seasons this brook loses water into the aquifer. During dry periods, the brook "dries up" before reaching the Fenton, i.e., all of the flocculent and its byproducts would enter the aquifer! Furthermore, in their Water Supply Plan, UConn expects to upgrade (or has upgraded) Well D and to pump more from this

well than they have in recent years. There are papers available on the environmental degradation of certain flocculents. What might be the persistence of any byproducts that do enter the aquifer?

5. The GZA letter also fails to address the impact of their flocculent byproducts on private wells along Roberts Brook or the recreational users of the Fenton River, e.g. individuals swimming and fishing.

6. We suggest that you request GZA to comment on 4 and 5 and that Well D and its surrounding test wells be utilized to monitor at least the acrylamide levels in this portion of the Fenton River aquifer before and after the mirror lake dredging project.

Sincerely yours,

Quentin Kessel, Chair

Mansfield Conservation Commission

Please copy correspondence to me at my home address: 97 Codfish Falls Road, Storrs, CT 06268 or to [quentinkessel@earthlink.net](mailto:quentinkessel@earthlink.net)

CC: Richard Miller, University of Connecticut  
Pat Bisacky, DPH  
Eric McPhee, DPH  
Denise Ruzicka, CT DEEP  
Betsey Wingfield, CT DEEP  
Jason Coite, University of Connecticut  
Linda Painter, Director of Planning, Town of Mansfield  
James Hooper, Windham Water Works  
Robert Miller, Eastern Highlands Health District  
Tim Tussing, University of Connecticut  
Eric Thomas, CT DEEP

**Attachment 2: Eagleville Brook TMDL**

July 20, 2011

Mr. Eric Thomas  
CT DEEP  
Watershed Manager  
Bureau of Water Protection and Land Reuse  
79 Elm Street  
Hartford, CT 06106  
[Eric.Thomas@ct.gov](mailto:Eric.Thomas@ct.gov)

RE: Eagleville Brook Watershed Management Plan, June 2011

Dear Mr. Thomas:

The Mansfield Conservation Commission (CC) fully supports the goals, and the steps to reach these goals, outlined in June, 2011 Draft of the Eagleville Brook Watershed Management Plan prepared by UConn's Dietz and Arnold. We note that the Town of Mansfield has enacted and

enforced zoning regulations designed to protect Mansfield water resources for decades. The CC supports the BMP for UConn in this document, as well as the LID guidance and checklist documents suggested for Mansfield's use. The CC looks forward to the collaborative efforts between the Town and the University envisioned in this management plan.

At its July 20, 2011 meeting, the Mansfield Conservation Commission reviewed and compared the percentages of impervious coverage (IC) obtained from the University's Campus Wide Drainage Master Plan, Flood Management Certification Application and the June, 2011 Draft of the Eagleville Brook Watershed Management Plan prepared by UConn's Dietz and Arnold. We note that the former delineates each subwatershed, while the latter combines a number of subwatersheds into a larger watershed. This latter approach gives lower IC percentages (Table 1) and a less detailed picture of the true problem areas on campus. Using the designations of the drainage plan, we calculate the following IC percentages:

- IIB 62% This 16 acres (16a) is the Swan Lake watershed, which was diverted into a watercourse in a public water supply watershed and into the Fenton River Watershed many years ago. This would not have been permitted today.
- IIIB 51% This 223a is the portion of campus containing Gant Complex, Pharmacy, and Life Sciences. This 113a of IC is probably the worst offender with respect to the TMDLs of Eagleville Brook, and is therefore the area where rain gardens and other techniques to increase pervious surfaces might be the most effective, e.g. the rain garden covering a small portion of the Gant Complex.
- IIA 32% This 174a includes Mirror Lake, Fine Arts, and E.O. Smith High School. The athletic fields of E.O. Smith keep this overall IC% as low as it is.

Table 1 of the Eagleville Brook report shows the Swan Lake watershed (3100-19-1-L-1) having an IC of 38.8% in disagreement with the 62% in IIB, above. Most of this discrepancy is due to the Eagleville Brook report not including Swan Lake as an impervious surface in its calculation. It may be counter-intuitive to include the lake surface as IC; as they do in the Drainage Plan. But a lake with an outflow is almost more "impervious" than a parking lot! The peak stormwater flow from the lake is immediately and directly affected by any rain falling into the lake. It affects the peak flow more rapidly (with a greater peak flow) than would a parking lot of the same area some distance from the lake.

The Mansfield Conservation Commission agrees with the Plan's statements, "To be most effective, reductions in effective IC will likely need to be targeted at the more heavily developed UConn campus." (page 11) and "The Eagleville Brook watershed bisects the University campus (Figure 2). Although this Plan is aimed at the area of campus that is in the Eagleville Brook watershed, it is recommended that the University strive to implement these management procedures for the entire campus. It should be noted that the adjacent watershed drains to the Fenton River, which supplies the drinking water reservoir for the City of Willimantic a short distance downstream." (page 15).

The Mansfield Conservation Commission would like to reiterate: The three watersheds listed above, IIB, IIIB, and IIA have high percentages of IC and should be targeted for IC reduction. We are pleased that the authors of this report recommend applying the same remedial techniques to the Fenton River watershed, a public water supply watershed, as they are recommending for the Eagleville Brook watershed.

Sincerely yours,

Quentin Kessel, Chair, Mansfield Conservation Commission

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or to [quentinkessel@earthlink.net](mailto:quentinkessel@earthlink.net)

CC: Michael E. Dietz  
Chester, Arnold  
Richard Miller, University of Connecticut  
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Linda Painter, Director of Planning, Town of Mansfield  
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