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April 21, 2006

Ms. Dale Young  
Executive Office of Environmental Affairs  
100 Cambridge St., Suite 900  
Boston, MA 02114-2119

**Re: Response to Trustee Comments Regarding 2005 Annual Monitoring Report,  
Upper ½-Mile Reach Removal Action, General Electric/Housatonic River Site,  
Pittsfield, Massachusetts**

Dear Ms. Young:

Recently, the Natural Resource Trustees (Trustees) and their representative; Woodlot Alternatives, Inc. (Woodlot) reviewed and provided comments on the *2005 Annual Monitoring Report – Upper ½-Mile Reach of the Housatonic River* (Monitoring Report) prepared by the General Electric Company (GE) and Blasland, Bouck & Lee, Inc (BBL). This letter has been prepared to provide a response to these comments.

For convenience, the comments have been presented here as they were presented in your memo dated February 9, 2006. GE responses are shown in italics following each comment.

### Comments

#### **Section 2, “Restored Bank Vegetation Monitoring”**

**Comment 1:** Information presented in the Monitoring Report is generally consistent with Woodlot’s observations during the May 23, 2005 (spring) and August 17, 2005 (summer) monitoring visits. Unless substantial replanting is required in Areas 13, 15, and 16 due to the noted disturbance from work at the Newell Street II parking lot, Woodlot concurs with the proposal to perform “Year 4” monitoring in these areas in 2006 in response to the lack of monitoring in the summer of 2005. If substantial replanting is required, it may be appropriate to define the date of initial planting in these areas following replanting after the completion of work in the Newell Street II parking lot.

**Response 1:** *Coincident with regularly scheduled restored banks monitoring, GE plans to perform “Year 4” monitoring in the Summer of 2006 in Planting Areas 13, 15, and 16. GE will notify the Trustees of the schedule for performance as the summer season approaches.*

**Comment 2:** Table 2-4 (Red-Osier Dogwood Monitoring Results) indicates that plants were noted as missing in Areas 12, 13, 14 and 15 during the May 23, 2005 monitoring visit. The referenced table lists red-osier dogwood as “all present” during the August 17, 2005 monitoring visit. Please clarify whether the deficits observed during the May 23, 2005 monitoring visit were rectified by planting prior to the August 17, 2005 monitoring visit.

**Response 2:** *The May 23, 2005 monitoring count in Table 2-4 notes that six red-osier plants were missing from among Areas 12, 13, 14, and 15. The August 17, 2005 monitoring count notes that all plants are accounted for in Areas 12 and 14 (Areas 13 and 15 were not monitored due to the Newell Street II Parking Lot Remediation). In this regard, the "All present" note for the August monitoring event refers to the fact that all the plants previously counted in May were again present in August. Both Areas 12 and 14 continue to meet the performance standard.*

**Comment 3:** Table 2-6 (Herbaceous Groundcover Monitoring Results) for the August 17, 2005 monitoring visit in Area 15 does not include the note presented for Areas 13 and 16 regarding disturbance from construction in the Newell Street II parking lot. Please confirm whether monitoring was performed in this area during the August 17, 2005 monitoring visit.

**Response 3:** *The August 17, 2005 observations in Table 2-6 for Area 15 should also include the same note in Areas 13 and 16 regarding the Newell Street II Parking Lot Remediation. This is discussed in the text but was inadvertently excluded from the table.*

**Comment 4:** Table 2-7 (Invasive Species Monitoring Results) indicates a target performance standard for invasive species of 100 percent for the August 17, 2005 monitoring visit. Woodlot understands that the applicable performance standard is less than 5 percent.

**Response 4:** *Agreed, the target performance standard noted for invasive species in the Table 2-7 for the August 17, 2005 observations should be < 5%.*

**Comment 5:** Table 2-7 (Invasive Species Monitoring Results) indicates that the target performance standard for invasive species was achieved in Area 15 during the August 17, 2005 monitoring visit. Please confirm that this area was monitored. Areas 13 and 16 contain the note "No count due to disturbance from Newell Street Parking Lot Remediation."

**Response 5:** *The August 17, 2005 observations in Table 2-6 for Area 15 should also include the same note as Areas 13 and 16 regarding the Newell Street II Parking Lot Remediation. This is discussed in the text but was inadvertently excluded from the table.*

### **Section 3, "Restored Bank Erosion Monitoring"**

**Comment 6:** Woodlot concurs with the noted areas of erosion at two locations. While the report indicates less than 0.5 cubic yards of fill could be used to cover the erosion in "Area 1," there is no discussion of the apparent cause of the bank failure at this location. Based on Woodlot's prior observations, it is suggested that the cause of the observed erosion is related to failure along the top of the slope. This condition is not necessarily amenable to correction by installation of additional material along the top of the slope. We recommend that the apparent cause of the failure be evaluated.

**Response 6:** *GE will continue to monitor these areas during the course of regular 2006 monitoring activities, and will consider appropriate remedial measures, if necessary, at that time. Further, as communicated to the Environmental Protection Agency (EPA), "Area 1" was noted to have been covered with recent depositional materials (i.e., deposited since the erosion was first noted) and that natural vegetation appeared to have been established, protecting this area from further erosion.*

**Comment 7:** Woodlot also noted substantial erosion along the west (right) bank immediately downstream of the Newell Street Bridge and along the east (left) bank at the approximate middle of the ½-Mile Reach. This erosion was particularly apparent following the high flows in the Housatonic River during October 8, 9, and 10 of 2005. Woodlot staff visited this area by canoe on October 12, 2005 following an inspection on the 1.5-Mile Reach. Photo 1 shows observed erosion along the west bank downstream of the Newell Street Bridge. Photo 2 shows observed erosion along the east bank in the middle of the ½-Mile Reach. It is recommended that the cause of the observed erosion be determined and appropriate remedial measures be implemented.

**Response 7:** *GE appreciates being notified of these areas of potential erosion within the ½-Mile Reach. During the course of regular 2006 monitoring activities, GE will monitor these areas, and in consultation with EPA, will consider appropriate remedial measures, if necessary, at that time.*

**Comment 8:** Woodlot does not concur with the following statement from Section 3.3.1 of the Monitoring Report:

*“The cause of erosion appeared to be related to the sustained high water in the Upper ½-Mile Reach due to the presence of the EPA dam at the Lyman Street Bridge, which was installed as part of EPA’s 1 ½ Mile Reach Removal Action.”*

The backwater effect created by the dam likely increased upstream water depths, resulting in diminished flow speeds. Section 3-6, “*Design Considerations*” of the United States Army Corps of Engineers Engineer Manual No. 1110-2-1601, “*Engineering and Design, Hydraulic Design of Flood Control Channels*” states “Stone size computations should be conducted for flow conditions that produce maximum velocities at the riprapped boundary.” Based on this reference, Woodlot suggests that the presence of the dam would tend to result in decreased erosion potential within the backwatered section of the ½-Mile Reach.

**Response 8:** *GE concurs that typical backwater effects, and related high water levels, may result in reduced flow speeds. However, this argument fails to consider that the sustained backwater conditions created by the dam have kept water within the ½-Mile at elevations well above that of the normal conditions. The areas of erosion being noted in the Monitoring Report are well above the normal water surface in the ½-Mile, and as such, are not typically within the wetted perimeter nor do they exhibit behaviours of saturated soils. Because of these high waters, the upper portions of banks within the ½-Mile, including this particular area, are exposed to routine flow of water, and increased opportunity for erosion. Nevertheless, during the course of regular 2006 monitoring activities, GE will monitor these areas, and will consider, in consultation with EPA, appropriate remedial measures, if necessary, at that time.*

#### **Section 4, “Aquatic Habitat Enhancement Structures and Armor Stone Layer Monitoring”**

**Comment 9:** Woodlot concurs with the information presented in this section of the Monitoring Report. Due to the presence of sediments over the stone armor layer and the depth of water in the downstream section of the ½-Mile Reach, however, visible inspection of the armor integrity was not possible.

**Response 9:** *GE agrees that the bottom of the ½-Mile reach has been covered in naturally deposited materials making the armor stone layer difficult to visually inspect. However, the fact that sedimentation*

*is occurring is an indication of the stability of the armor stone and the success of the overall remedial design. GE will make note of the difficulties associated with visually inspecting the armor stone in future monitoring visits.*

#### **Section 5, "Water Column Monitoring"**

**Comment 10:** Woodlot recommends that this section include a discussion of when water quality samples were taken relative to the identified precipitation events, (e.g., "monitoring was performed x-hrs following the high flow"). In general, maximum pollutant concentrations will occur during the "first-flush" of runoff, after which dilution may occur.

*Response 10: As described in the Work Plan, GE is required to collect water samples during those times when river conditions are considered to represent storm-, low-, and high-flow events. GE makes every effort to collect storm-flow samples such that the storm-flow samples adequately capture the response in river conditions related to precipitation events. The Work Plan does not specify a time frame within which storm-flow samples must be collected and does not require GE to collect "first flush" runoff. GE plans to continue to follow the monitoring requirements as described in the Work Plan.*

#### **Appendix B, "Proposed Modifications to Restored Bank Vegetation Monitoring Program"**

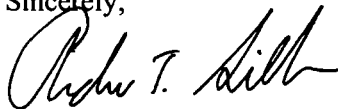
**Comment 11:** The proposed revisions to the vegetation monitoring program, which are based on the approach currently applied on the 1.5-Mile Reach, may be appropriate. Woodlot recommends the following revisions to the proposed plan:

1. The location of fixed monitoring plots be determined with input from the Trustees or their representatives to provide for concurrence on "representative" plots within each monitoring area; and
2. The Trustees reserve a similar right to that requested by GE in Section 4.0 of the proposed plan. That is, that the Trustees can request a resurvey of the entire planting area to verify results if the calculated survival rate for trees and shrubs shows a significant positive variance from the performance standard in comparison to the last full monitoring event.

*Response 11: GE will solicit Trustee input regarding the location of fixed monitoring sub-plot areas, and will continue to hold open communications with the Trustees as it relates to the performance and relative success of the proposed modified monitoring program, allowing both GE and the Trustees the opportunity for verification of results if the need arises.*

We trust that the responses provided above adequately address the Trustees' comments and concerns regarding the Monitoring Report. Please feel free to contact me with any questions.

Sincerely,



Andrew T. Silfer, P.E.  
GE Project Coordinator

*Ms. Dale Young*  
*April 21, 2006*  
*Page 5 of 5*

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