Mass Audubon
Protecting the Nature of Massachusetts

May 20, 2008

Susan Svirsky
Rest of River Project Manager
U.S. Environmental Protection Agency
10 Lyman Street
Pittsfield, MA 01201

Re: Comments on General Electric Corrective Measures Study for Housatonic "Rest of River"

Dear Ms. Svirsky:

On behalf of the Massachusetts Audubon Society I submit the following comments on the Corrective Measures Study (CMS) for the Housatonic River – Rest of River released by General Electric in March 2008. As the second largest landowner within the Primary Study Area (PSA) we appreciate the willingness of the Environmental Protection Agency (EPA) to accept informal public comments as well as to extend the period for public comment to sixty days to allow for a more detailed "informal" review of the CMS.

The following is a summary of the key points that are raised in our comment letter below, and which we request be addressed in a Supplemental CMS:

1. Mass Audubon has a direct and substantial interest in the proposed cleanup both as the second largest affected landowner within the PSA and as a conservation organization whose mission is protecting the nature of Massachusetts for people and for wildlife. Mass Audubon strongly supports the clean up of the Housatonic River in order to reduce PCB concentrations to acceptable levels for humans and wildlife.

2. The CMS contains insufficient information to evaluate the feasibility and cost of restoration of remediated areas. Given the sensitivity of the habitat along the Housatonic River and its floodplain, GE must be held to accordingly high standards for this clean up, which should begin with avoidance and minimization of adverse impacts to critical habitats. Where there is no alternative but to destroy habitats, restoration of affected areas to fully functional habitats must be required by EPA. Further information and analysis of restoration options through a Supplemental CMS is needed prior to identification of a recommended clean up alternative by EPA.

3. Proposed armoring of the riverbank in Reach 5 will have permanent, unacceptable impacts on critical habitat features such as wildlife dens and mature trees, and will fundamentally alter the riverine/floodplain system. More creative remediation and restoration alternatives should be identified and evaluated by GE in a Supplemental CMS.

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4. EPA should ensure that appropriate financial and institutional mechanisms (e.g. escrow or other guaranteed funds) are in place to ensure that all restoration activities are fully implemented and monitored in perpetuity.

5. Adaptive management should be applied to the Housatonic River clean up, with flexibility to adjust remediation and restoration methods over time based on experience and evolving techniques. GE and EPA should give consideration to permitting a "demonstration phase" of the clean up south of the confluence which would employ state of the art restoration techniques and provide time for evaluation of the results before proceeding with the remainder of the clean up.

6. Further evaluation of compliance with state regulations is needed, particularly in relationship to the Massachusetts Endangered Species Act and Wetlands Protection Act.

7. Additional site-specific information is needed regarding floodplain remediation at Canoe Meadows Wildlife Sanctuary, remediation of vernal pools, construction of access roads and staging areas, use of the rail line for hauling materials and alternatives to the permanent landfilling of PCBs in proximity to the River.

8. GE should compensate affected landowners for the short and long-term harm to public recreational use of lands and waters that will be affected by the clean up as well as for any long term resource damage that will result. In addition, we expect GE to provide compensation for the significant direct costs incurred by Mass Audubon for staff and consultant review and oversight of this project.

I. Mass Audubon's Land Interests within the Primary Study Area

Mass Audubon owns and operates the 262-acre Canoe Meadows Wildlife Sanctuary, located in the City of Pittsfield within reach 5A, approximately one mile downstream from the confluence of the East and West branches of the Housatonic River. Mass Audubon's property is located primarily to the south of the Holmes Road Bridge, although a small portion of the sanctuary is located north of the bridge along the River. Canoe Meadows contains approximately 3,000 linear feet of frontage on the Housatonic River and includes approximately 2.6 acres of land under the Housatonic River.

Since its establishment in 1975, Canoe Meadows has been dedicated to wildlife habitat conservation and public education. Trails in the sanctuary are used extensively by the public for passive recreation and wildlife appreciation and for group programs, including the Sacred Way Trail which is located partially in the floodplain in proximity to the Housatonic River. Mass Audubon regularly conducts canoe programs for children and adults along the River. Because of concerns about PCB contamination in these areas, Mass Audubon has posted signs at the sanctuary that warn visitors about the presence of PCB contamination and provide advice about limiting exposure to PCB contamination.

The ecological characteristics of Canoe Meadows Wildlife Sanctuary are unusual in Massachusetts. The calcium-rich bedrock underlying the Housatonic Valley has given rise to especially fertile floodplain soils that support a uniquely high concentration of rare or uncommon species. The sanctuary alone provides habitat for at least seven state-listed rare species, including American Bittern (Endangered), a

breeding population of Wood Turtle (Special Concern), Bristly Buttercup (Threatened), and White Adder's-mouth (Endangered). Canoe Meadows also contains several certified vernal pools, and the uncommon northern leopard frog occurs there. Approximately 25% of the sanctuary's acreage, including the majority of the rare species habitat, is within the 10 year floodplain directly affected by PCB contamination. In addition to these rare species, there are also significant archeological resources located at Canoe Meadows.

The Upper Housatonic River Valley that includes Canoe Meadows Wildlife Sanctuary has also been designated by Mass Audubon as an Important Bird Area (IBA), underscoring its significance as bird habitat and as a migratory corridor. With approximately 1,300 acres of riparian woodland, oxbow ponds, marshes, beaver swamps, grasslands, and upland woods along the meandering Housatonic River, this IBA represents some of the finest riparian habitat remaining in central Berkshire County. The designated IBA comprises Canoe Meadows Wildlife Sanctuary in Pittsfield at the northern end; the 816-acre George L. Darey Housatonic Valley Wildlife Management Area, south of Canoe Meadows, extending from Pittsfield to Lenox and Lee; and the 200-acre Post Farm, the site of a former Lenox town landfill, currently managed by the Lenox Conservation Commission and abutting the Wildlife Management Area at its southern end. More than 200 species of birds have been recorded on these lands since 1970.

Up to several pairs of the state-endangered American Bittern breed in the area annually. A special concern species, the Common Moorhen is an uncommon though regular breeder in the area. Other high conservation priority species represented by at least 25 breeding pairs include: American Black Duck, American Woodcock, Hairy Woodpecker, Eastern Wood-Pewee, Alder Flycatcher, Least Flycatcher, Great Crested Flycatcher, Eastern Kingbird, Veery, Chestnut-sided Warbler, American Redstart, Indigo Bunting, and Rose-breasted Grosbeak. In addition, the following species with more than one percent of their entire breeding population within Massachusetts breed in the area: Eastern Phoebe, Wood Thrush, Gray Catbird, Blue-winged Warbler, Scarlet Tanager, and Baltimore Oriole. Riparian Forest is present along this portion of the Housatonic River. Characteristic breeding bird species of this increasingly rare habitat type include: Wood Duck, Hooded Merganser, Warbling and Yellow-throated Vireos, Veery, and Blue-gray Gnatcatcher. Rare and/or declining species representative of extensive freshwater marshlands that breed on the area include: American Bittern, Sora, Virginia Rail, King Rail, and Common Moorhen. The site is a migration corridor for the Common Nighthawk. **All of these species are currently affected by PCB contamination, and their future in this area will largely be dictated by the remediation and restoration efforts.**

Mass Audubon has a direct and substantial interest in the proposed cleanup <u>both</u> as the second largest affected landowner within the PSA and as a conservation organization whose mission is protecting the nature of Massachusetts for people and for wildlife. Mass Audubon strongly supports the clean up of the Housatonic River in order to reduce PCB concentrations to acceptable levels for humans and wildlife. At the same time, we recognize that this clean up is occurring within a highly complex ecosystem area with extraordinary scenic, wildlife habitat and recreational attributes including the gently meandering river itself, as well as the rare species habitat, floodplain forest, diverse wetlands, and vernal pools the river has influenced over time. The clean up, as envisioned in the CMS, will result in significant short and medium term adverse impacts on Mass Audubon's land as well as on land owned by the Massachusetts Department of Fish and Game,

including the potential construction of access roads and staging areas, closure of the most heavily visited recreational areas during the clean up, and alteration of critical habitat areas. As such, **it is essential that GE be held to accordingly high standards for this clean up, which must begin with avoidance and minimization of adverse impacts to critical habitats. Where there is no alternative but to destroy habitats, restoration of affected areas to fully functional habitats must be required by EPA.** The goal should not be creation of habitats that are merely aesthetically pleasing, but the restoration of high quality wildlife habitats that are functionally equivalent to those that will be altered by the remediation. We believe that restoration of the scope and nature that we envision is likely to significantly affect the cost of various alternatives and this cost must be factored into the evaluation of alternatives.

We believe that the affected landowners should also be compensated by GE for the short and long-term harm to public recreational use of lands and waters that will be affected by the clean up as well as for any long term resource damage that will result from the clean up of river and floodplain resources. For example, Mass Audubon derives program revenue from activities at Canoe Meadows that will be lost during the period work is ongoing at the Sanctuary. In addition, we anticipate that Mass Audubon's stewardship and science staff, and consultants will be required to devote significant time to ensuring that all restoration work is designed and carried out in an appropriate manner as part of any agreement to allow access to our property for this proposed remediation work. We expect that the cost of this staff time and related expenditures will be covered by General Electric as part of the design and monitoring process.

II. The CMS Contains Insufficient Information to Evaluate the Proposed Alternatives

II.A. Insufficient Information is Provided in the CMS on Post-Remediation Restoration

In Mass Audubon's comments on the CMS Scope, we acknowledged the importance of the Housatonic River clean up to improving the overall health of this river system, even though it will result in some relatively severe short-term alterations of critical habitats. In those comments, we noted in the importance of restoration of affected habitats in our comments, stating:

> "… it is absolutely essential that the restoration of areas disturbed by remediation be very carefully planned, implemented, and monitored. This should include strong provisions to prevent establishment of invasive species in disturbed areas, and restoration of important habitat features such as bank habitat and vegetative structure and diversity to as close to "natural" conditions as possible."

After review of the 800+ page CMS, we are surprised to see virtually no information about restoration of affected habitats, and note that such information is required by Condition #4 of EPA's Conditional Approval letter for the Corrective Measures Study Proposal dated April 13, 2007. For example, there has been widespread public criticism of the approach to bank restoration and stabilization in the upstream 1 ½ miles of the Housatonic River. We share the public concern about this work. While it may be achieving the result of creating an aesthetically acceptable vegetated river bank, we do not believe that functionally equivalent habitat has been created that adequately "replicates" the pre-construction functionality of the bank, and have not seen any studies suggesting that it has. We are similarly concerned about restoration of functional floodplain forest habitat, vernal pools, and river bottom habitat as we have not seen any studies to date that suggest that GE has fully restored functional

habitat in such resource areas along the River. If such information exists, it should be provided in the Supplemental CMS.

The CMS (p.4-28) states that the project "would include restoration of areas that are directly impacted… *as appropriate to restore the habitat value of the affected systems to the extent practical*. Restoration would be accomplished using a combination of passive procedures (practices to facilitate natural re-establishment of the resource) and active procedures (plantings or other mitigation)" [emphasis added]. GE's CMS states that details of the restoration will be developed during the design phase of the project. Unfortunately this is after the selection of the most appropriate alternative and the opportunity for public comment. **The costs of this restoration work and the technical feasibility of restoration are essential components of the alternatives evaluation** and as noted above, we believe that they are significantly underestimated in the CMS, based on the work that we have seen occur upstream. Restoration of the type and scale necessary to allow this project to go forward in substantial compliance with federal and state Applicable or Relevant and Appropriate Requirements (ARARs), including the Massachusetts Wetlands Protection Act and the Massachusetts Endangered Species Act, is likely to significantly increase the costs of each of the alternatives, in an amount proportional to the scale of the habitat alteration proposed. **For these reasons, we do not believe that EPA can propose a remediation alternative without knowing whether or not it is possible to restore fully functional habitat in the areas that will be affected by the remediation.** GE's own consultant acknowledged at the Citizens Coordinating Council public hearing in Lee that they know of no other location where work of this nature has been done in as sensitive a habitat area as the Housatonic. Since GE will, of necessity, be working on the "cutting edge" of sensitive habitat restoration, it is even more critical that attention to be paid to this issue as part of the alternatives evaluation in the CMS, not during the design phase of the project.

GE states on page 16 of the Executive Summary of the CMS "The greater the scale of the remediation, the greater the long-term adverse effects on the environment (e.g. loss of mature trees in the floodplain staging areas, changes in the nature of wetlands, and long-term adverse impacts on biota and habitat." This statement is provided in support of SED 3, the clean up proposal that would result in the least impact to river systems. We do not concur with this reasoning. GE should not be using the sensitivity of the habitat along the river as a justification for a lower standard of remediation of the River. **EPA should insist on the appropriate level of cleanup and a correspondingly high standard for habitat restoration, even if this raises the cost of the selected alternative considerably**. To do otherwise would have the unintended consequence of "rewarding" polluters for damaging the most significant habitats as less clean up would be required in such sensitive locations.

One of our most significant concerns about post-remediation restoration relates to the proposed river bank remediation work in Reach 5A. As noted above, **the bank stabilization and "restoration" work that has been completed upstream is wholly inadequate to restore the functional values of the river bank. We concur with the comments made by the Massachusetts Division of Fisheries and Wildlife in the CMS scoping process that the upstream work, replicated here, would be "a disaster and a complete ecological failure."** The Massachusetts Department of Environmental Protection (DEP) also weighed in expressing its concern about "hard engineering" of erodible banks:

> "Mass DEP has a number of concerns relative to the widespread use of hard structures as bank stabilization structures in areas of the river below the confluence. The 2-mile stretch of river where these

> structures have been used is a relatively straight section of channel (compared with the tight meanders in downstream sections) that is located in a highly urbanized area with minimal significant wildlife habitat and lower recreational and aesthetic value. By contrast, downstream river sections are undeveloped, provide significant habitat and experience significantly greater recreational use by the public. Widespread use of hard structures in this section of the river is likely to meet with considerable community opposition. Existing wildlife habitat functions will be lost and plantings to restore lost riverine characteristics can be problematic and not all that effective. In addition, the use of hard structures along the banks of the river will affect river flow dynamics by deflecting flows to downstream sections of the channel (particularly important in areas with meanders) and banks, and may also affect channel carrying capacity and the extent of flooding. In order to remain effective in preventing exposures and recontamination, long-term monitoring and potentially frequent maintenance of these structures (as evidenced by observations in the 0.5-Mile Reach) will be required. Considering the many river miles that may be impacted, such monitoring and maintenance may be a monumental task."

Nevertheless, GE's CMS proposes (p. 4-29) to stabilize the banks in the same manner as was done in the Upper ½ mile reach. The CMS (p. 4-44) discusses the long-term adverse impacts to this habitat that would result from the remediation/restoration as proposed. **We do not support any bank work within Canoe Meadows Wildlife Sanctuary that permanently "armors" the bank with stone, rip rap or other "hard" material in a manner that prevents future bank erosion and also prevents the planting of mature trees that will shade the river – which could eliminate habitat for avian and mammalian bank-dwelling species and adversely affect water temperature in the River. Such stabilization methods are also likely to result in downcutting of the river channel, exposing deep PCB-contaminated sediment layers. More creative bio-remediation or alternative approaches need to be identified by GE in the Supplemental CMS for this section of the river bank.** Examples of alternatives that should be evaluated include deeper excavation followed by covering armoring with clean material of sufficient depth to allow growth of mature trees; or leaving some sections of bank unaltered; or fully cleaning and restoring to a more natural condition some sections (i.e. through more localized testing and different treatments of some sections of the bank).

II.B. EPA Should Require a Supplemental CMS to address Ecological Restoration

As discussed above, we believe that GE has fundamentally failed to respond to comments that were raised in the CMS Scoping Process about the needs for detailed information on post-cleanup restoration by Mass Audubon, DEP, and the Massachusetts Division of Fisheries and Wildlife. Virtually no information is included regarding proposed restoration of the river bottom, banks and floodplains, access roads and staging areas. Without this information, we are unable to fully evaluate the various alternatives that are presented in the CMS and understand the impact that they will have on our property.

We have attached to our comment letter the Society for Ecological Restoration International's *Primer on Ecological Restoration* (2004). We believe that EPA should direct GE to prepare a Supplemental CMS that fully and completely documents how habitats affected by remediation activities will be restored. The Supplemental CMS should include sufficient detail to evaluate whether proposed restoration activities meets established standards such as SER's attributes of restored ecosystems, including re-established ecosystem structure and function, resilience, and self-sustenance. SER's *Guidelines for Developing and Managing Ecological Restoration Projects* (2005; http://www.ser.org/content/guidelines_ecological_restoration.asp) provides additional detail. Only

when GE provides such information will the public and EPA be able to fully evaluate the acceptability and trade-offs involved in each of the alternatives.

We also believe that GE should be required by EPA to escrow sufficient funds to ensure that all restoration activities in Rest of River are fully carried out and monitored. GE should be reimbursed from the fund as the restoration is completed and demonstrated to be fully functional by post-construction monitoring. This is necessary to ensure that the long terms funds are in place to ensure that restoration and monitoring occurs properly. In addition, EPA should establish a long-term funding mechanism to ensure that needed monitoring will take place in perpetuity. We do not believe that thirty years is a sufficient period for monitoring. Without such long-term monitoring, natural processes will eventually result in changes to the river system and the likely release of any PCBs that remain in the river system and floodplain. Historic maps of the area clearly depict the Housatonic as a dynamic river system, which has meandered across its floodplain for millennia. These meanders will continue as long as the river flows; armoring may alter these changes but will not stop them. Development in the watershed over the coming decades will increase storm flows and associated erosive forces. When these river dynamics are considered, it is more appropriate to be thinking in terms of hundreds of years than decades. GE must have a mechanism in place for accountability and appropriate responses to further PCB releases through this longer term.

III. The Selected Alternative Must be Responsive to Technological Advances and Site Conditions

The proposed clean up will occur over many years. There is an opportunity throughout the duration of this cleanup to apply new technologies and creative thinking. Mass Audubon believes that EPA should create a permitting process that is designed to recognize that technological advances in PCB clean up are likely to occur during this time period and encourage GE to employ them as the project progresses downstream. Therefore, we support the concept of a phased clean up.

We are open to discussing the possibility of using a portion of Reach 5A as a model or demonstration area for sound ecological restoration prior to the clean up proceeding along the remainder of the River. In this manner, GE would have the opportunity to demonstrate to the community and to regulatory agencies that the highest standard of restoration can be carried out following remediation activities. However, such an approach would require a period of study following the remediation and restoration work in order to provide time to gauge the effectiveness of the work and whether any modifications are needed in terms of the approach being taken.

The remediation planning and implementation process will be ongoing for a number of years. While alternative in-situ treatment technologies may not be presently available for utilization, the **remediation plans should be flexible enough to enable new technologies to be considered if and when they become available during further phases of planning or implementation.** This is part of an adaptive management approach, and appropriate for such a complex project of many years duration.

IV. The CMS contains Insufficient Information regarding to Compliance with ARARs

The CMS states that "it is anticipated that all the removal alternatives would meet the ARARs that have been identified" and that "… there is no material basis for distinguishing among these alternatives based

on ARAR compliance." We respectfully disagree with this conclusion, particularly with regard to the application of the Massachusetts Endangered Species Act (MESA) and the Massachusetts Wetlands Protection Act (WPA) to the proposed project. **We urge EPA to require additional information from GE with regard to compliance with MESA and the WPA in the Supplemental CMS.** ARARs for this project should include measures to address the substantive requirements of these laws and associated regulations in regards to chemical, location, and activity-specific ARARs. While we recognize that the procedural requirements of these laws will not apply, there nevertheless are important substantive requirements that are not addressed in the draft CMS. A Supplemental CMS should address these concerns.

MESA is identified in Table 2-2 of the CMS as a "location-specific" ARAR, and the CMS dismisses the need for compliance by stating that there is no state-designated habitat in Massachusetts. In fact, the requirements of MESA will significantly affect the proposed project. The CMS states (p. 4-43) that long-term alteration of habitat could adversely affect rare and plant species. The project is located within Priority and Estimated Habitat of state listed rare species. Work within these areas is regulated under MESA and the associated regulations at 321 CMR 10.00 (http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_home.htm). The CMS should specifically address the substantive requirements at 321 CMR 10.23(2):

> *If the Director [of Fish and Wildlife] determines that the applicant for a permit has avoided, minimized and mitigated impacts to State-listed Species consistent with the following performance standards, then the Director may issue a conservation and management permit, provided:*
> *(a) The applicant has adequately assessed alternatives to both temporary and permanent impacts to State-listed Species;*
> *(b) An insignificant portion of the local population would be impacted by the Project or Activity, and;*
> *(c) The applicant agrees to carry out a conservation and management plan that provides a long-term Net Benefit to the conservation of the State-listed Species that has been approved by the Director, as provided in 321 CMR 10.23(5), and shall be carried out by the applicant.*

The WPA is identified in Table 2-2 as a "location-specific" ARAR, stating "*under [310 CMR] 10.53(3)(q), actions responding to the release or threat of release of hazardous materials are allowed as "limited project" if they meet requirements specified therein. If response actions would not meet these criteria, the requirements of 10.54 -10.58 would apply."* This is true, but also incomplete and inadequate. Even in instances where projects qualify for "limited project" status, thereby allowing impacts in excess of the usual WPA regulatory limits, projects are nevertheless required to demonstrate that alternatives to avoid and minimize impacts are considered, and that impacts are mitigated (310 CMR 10.53(3)). These are substantive requirements that should be evaluated in relation to all of the wetland resource areas impacted by proposed remedial actions and associated sediment transport and disposition measures. For example, alternatives to permanent loss of bank and mature woody vegetation structure should be evaluated, along with alternative restoration designs that minimize and mitigate for impacts to these and other wetland habitat features. Impacts to important wildlife characteristics of wetland

resource areas should be evaluated, using the substantive standards in the Department of Environmental Protection's *Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands*. (http://www.mass.gov/dep/water/laws/wldhab.pdf). Furthermore, the limited project provision of the WPA regulations prohibits impacts to rare species. Further alternatives analysis is needed to demonstrate maximum feasible compliance with this regulation before a waiver may be considered.

MESA and the WPA should be applied to the chemical and activity-specific ARARs as well as the location-specific section where they are currently mentioned. Chemical impacts to rare species and chemical alterations of wetland resources are covered by these laws. The choice of activities used in remediation has direct bearing on the degree to which impacts to rare species and wetlands are avoided, minimized, and mitigated.

V. Evaluation of Alternatives

As noted above, we feel strongly that without additional information on the type and nature of the proposed restoration it is not possible to adequately evaluate the alternatives that are presented by GE in the CMS. We do have the following preliminary comments regarding the alternatives:

- We believe that GE should be required to evaluate the feasibility of removing material from the project site using the existing railroad line.

- We have serious concerns about any proposals for thin layer capping of contaminated aquatic resources at Canoe Meadows including Oxbow Pond and West Pond. Both West and Oxbow Ponds are important habitats on the sanctuary, supporting populations of frogs, turtles, wading birds and waterfowl, and insects not found elsewhere on the site. Thin layer capping – which would deposit a thin layer of material directly over existing sediments, without removing contaminants, would make these ponds shallower and change their substrate characteristics, making them less suitable habitat for many organisms. It would also result in significant alteration of resources without any removal of contaminated soils. In the area of West Pond, the floodplain remediation options would impact portions of an old field, a *Phalaris* meadow, a wet meadow and a sedge marsh. The wet meadow in particular, hosts diverse plant, mammal, bird and insect communities and would be affected by FP2, 3, 4 and 7. We believe that these resources should either be fully remediated or left alone with monitored natural recovery – but are not able to choose between these alternatives without more specific information on proposed restoration.

- We request that there be additional site-specific analysis at Oxbow Pond in Reach 5A. This is a forested floodplain area that would be significantly altered by the proposed clean up. This area is likely to host rare species including wood turtles, mustard white, and purple milkweed, as well as Watch Listed species including butternut. Restoration of the forested areas affected by the remediation activities will take many decades, even in a best-case scenario. This floodplain forest is an area where a finer scale of analysis is needed with regard to PCB contamination levels to determine the most appropriate clean up remedy.

- We also believe that any work in the floodplain should be done at the same time as river/bank work so as to complete the work on any given affected property and move downstream in an orderly fashion.

- We are particularly concerned about the proposed vernal pool work which would alter 14 acres of vernal pool habitat, encompassing portions of 60 different vernal pools, and require the construction of extensive access roads and staging areas in some places. As noted on Pages 6-35, 36 and 39 of the CMS, there are no known locations where vernal pool work of this magnitude and extent has been successfully undertaken. We believe that additional examination of vernal pools should be required in the Supplemental CMS. In some cases it may be appropriate to choose monitored natural recovery for those pools that are distant from existing access points, and to ensure that breeding populations of vernal pool species are not entirely displaced as a result of remediation activities.

- In all cases, GE should be required to limit the extent of staging areas and access road construction to the extent feasible. For example, roads could be built narrower than 20 feet and staging areas should be as narrow as possible. One lane roads with pull-offs should be more than adequate. Full restoration of any areas disturbed for access and staging must be required with monitoring and revegetation to ensure that invasive species do not take hold in these areas.

- We are strongly opposed to construction of a Confined Disposal Facility within riverine wetland areas and concur with GE that this alternative is inappropriate. We are also concerned about the siting of a permanent landfill in close proximity to the Housatonic River. Additional evaluation of measures to treat and reuse soil should be contained in the Supplemental CMS, particularly in light of the claims made by BioGenesis that their treatment methods have applicability to this project.

Thank you for this opportunity to comment during this informal comment period on the Draft CMS. We want to again reiterate our strong support for the clean up of the Housatonic River for both its human health and ecological benefits. We look forward to continuing to work with EPA and GE, as well as with community leaders on these important issues over the coming months and years.

Sincerely,

Laura A. Johnson
President

cc: Jeff Porter, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (for General Electric)

Kevin Mooney, Remediation Project Manager, General Electric
Mary Griffin, Commissioner, Massachusetts Department of Fish and Game
Laurie Burt, Commissioner, Department of Environmental Protection
Wayne F. MacCallum, Director, Massachusetts Division of Fisheries and Wildife
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Housatonic Valley Association
Housatonic River Initiative
Berkshire Environmental Action Team
The Trustees of Reservations