## Commonwealth of Massachusetts Executive Office of Environmental Affairs ■ MEPA Office



## **Environmental Notification Form**

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: /4399

MEPA Analyst: A. s/ing Eg/

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Resource Improvement, Bank Stabilization, Green River							
Street: 974 South Main Street							
Municipality: Great Barrington		Watershed: Green River/Housatonic					
Universal Tranverse Mercator Coordinates:		Latitude:42 10' 03.94" N Longitude:73 21' 53.95"					
Estimated commencement date:July 1, 09		Estimated completion date:Oct 1, 09					
Approximate cost:\$130,000		Status of project design: 100 %complete					
Proponent: GB Riverbend, Beth & Richard Larkin							
Street:974 South Main St.							
Municipality: Great Barrington		State: MA	Zip Code:	01230			
Name of Contact Person From Whom Copies of this ENF May Be Obtained: James Toth, P.E.							
Firm/Agency: James Toth Engineering		Street: 111 Northfield Road					
Municipality: Warwick		State: MA	Zip Code:				
Phone: 978-544-5620 Fax:			E-mail: jtoth	n@crocker.com			
Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  Yes  Yes  Yes (EOEA No)  Has any project on this site been filed with MEPA before?							
Is this an Expanded ENF (see 301 CMR 11.05(7)) ro a Single EIR? (see 301 CMR 11.06(8)) a Special Review Procedure? (see 301 CMR 11.0 a Waiver of mandatory EIR? (see 301 CMR 11.11 a Phase I Waiver? (see 301 CMR 11.11)	eques	es (EOEA No sting:		⊠No ⊠No ⊠No ⊠No ⊠No			
Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):							
Are you requesting coordinated review with any other federal, state, regional, or local agency?  \times(Specify_MADEP, NHESP, ACOE, Great Barrington Conservation  Commission) \times No							
List Local or Federal Permits and Approvals: <u>Currently seeking an Order of Conditions and NHESP approval.</u> A 401 Water Quality Certification and screening under Category 2 ACOE will be submitted shortly.							

☐ Land ☐ Water ☐ Energy ☐ ACEC	Wastewater			zardous Waste Archaeological	
Summary of Project Size	Existing	Change	Total	State Permits &	
& Environmental Impacts				Approvals	
	LAND			Order of Conditions	
Total site acreage	1.7 acres			Superseding Order of Conditions	
New acres of land altered		0.28 acres		Chapter 91 License	
Acres of impervious area		0	0	☐ 401 Water Quality  Certification	
Square feet of new bordering vegetated wetlands alteration		0		MHD or MDC Access Permit	
Square feet of new other wetland alteration		0.		☐ Water Management Act Permit	
Acres of new non-water dependent use of tidelands or waterways		0		☐ New Source Approval ☐ DEP or MWRA Sewer Connection/ Extension Permit	
STRU	JCTURES			Other Permits	
Gross square footage	0			(including Legislative Approvals) - Specify:	
Number of housing units	0			Approvais) — Opeony.	
Maximum height (in feet)	0				
TRANS	PORTATION				
Vehicle trips per day	0				
Parking spaces	0	<u> </u>			
WATER/V	VASTEWATE	R			
Gallons/day (GPD) of water use	0		e estidies in eni	· • • • • • • • • • • • • • • • • • • •	
GPD water withdrawal	0	. *	,		
GPD wastewater generation/ treatment	0				
Length of water/sewer mains (in miles)	0				
CONSERVATION LAND: Will the processources to any purpose not in according Yes (Specify	rdance with Artic	cle 97? ) [	⊠No		

RARE SPECIES: Does the project site include E		ls, Priority Sites of
Rare Species, or Exemplary Natural Communities  Yes (Specify_Estimated Habitat for wood)		)
⊠ res (opeciny_Estimated Flabitat for wood	torde	_) []NO
HISTORICAL /ARCHAEOLOGICAL RESOURC	ES: Does the project site include any structure	, site or district listed
in the State Register of Historic Place or the inve	entory of Historic and Archaeological Assets of	
If yes, does the project involve any demolition or resources?	destruction of any listed or inventoried historic	or archaeological
☐Yes (Specify	)	
AREAS OF CRITICAL ENVIRONMENTAL CON	ICERN: Is the project in or adjacent to an Area	of Critical
Environmental Concern?		
☐Yes (Specify	) 🖾 No	
PROJECT DESCRIPTION: The project of	description should include (a) a description	of the project site,
(b) a description of both on-site and off-site	alternatives and the impacts associated v	vith each
alternative, and (c) potential on-site and off-	site mitigation measures for each alternati	ive (You may

The work site is adjacent to open fields of grasses and forbs. The opposite bank consists of a gravel bar and forested riparian buffer. The project site is an outside meander bend of the Green River.

attach one additional page, if necessary.)

The bank varies in height from 4 to 10 vertical feet. The slope of the bank is estimated at 1.5H to 1V ft. Portions of the bank are near vertical and some areas are being undercut by high water flows. There is limited to no vegetation along the bank. The bank is undergoing significant soil erosion. As a result, the river is increasing its lateral migration towards the automotive businesses located just east of the bank. Therefore, the landowners with the assistance of the USDA Natural Resource Conservation Service are proposing to stabilize the bank using blocky rock and bioengineering methods described on the attached plans.

Off site alternatives will not provide adequate protection to the automotive businesses since stabilizing other sections of bank are not likely to slow the lateral migration in this reach of the Green River. An on-site alternative would be not to stabilize the bank.

To avoid completing bank stabilization work could increase the risk of weakening the structural integrity of the building near the bank. As of November 2008, the building was about 58 linear feet from the river. During a recent site visit (March 26, 09), the bank had migrated an estimated ten feet closer to the southwest corner of the building. Moreover, not stabilizing the bank will likely increase the sediment load and degrade water quality. Increased sediment loads will likely continue to degrade wildlife habitat due to the streambed becoming embedded. Therefore, not completing the proposed bank stabilization work should not be considered a practicable alternative.

Other on-site alternatives would be to utilize different construction methods. For example sheet piles placed behind the top of bank. This would be a less invasive construction method and limit work within resource areas. However, this is not a viable alternative since once the bank has eroded the sheet piles would be exposed and will likely increase flow, subsequently accelerating downstream bank erosion. Additionally, there would be negative long-term affects to wildlife habitat. The proposed construction method incorporates a stone toe and vegetation into the plan resulting in continuity of wildlife habitat along the bank.

The project will incorporate blocky rock, root wads, a tree revetment and live stakes. The blocky rock will be keyed into the left bank (a.k.a outside meander) beginning at Station 10+15 through 11+54 for an approximate distance of 139 feet. The rock will be used to stabilize the toe of slope which

parallels the thalweg along this reach of the river. The rock will be set below the existing mean annual high water elevation to stabilize the lower portions of bank. Root wads will be installed within the proposed rock bank.

The plans have incorporated ten root wads to be installed along Stations 10+50 through 11+50. The root wads will be of hardwood species or hemlock and the trunks will have a minimum 15-inch diameter. They will be placed about ten feet apart and set at a 30-degree angle to the flow of current. A portion of the root wad will be placed below the existing MAHW. The tree revetment shall be installed along the downstream portion of the work zone.

The tree revetment will begin at Station 11+50 through 13+00 for an estimated distance of 150-feet. The trees will be anchored together in a shingle method and the revetment will be anchored into the existing bank. The species for the revetment will consist of spruce, hemlock or fir. Live stakes will also be planted throughout the project area.

Live stakes will be planted throughout the project area. They will be placed along the mid and upper bank and approximately three feet away from the first observable break in slope. The live stakes will likely consist of willow and dogwood species. The plantings will occur during the dormant season.

To mitigate wildlife impacts during construction a monitor should review the site prior to each work day to insure no wildlife will be lost or harmed. If wildlife is encountered within the work zone, all work will cease until the wildlife monitor can assist movement or the wildlife has moved outside the work boundaries. To mitigate turbidity levels, installation of the stone toe should only be completed during low flow periods.