

STREAM FIELD FORM

SITE DESCRIPTION

Site ID: _____ Stream/Pond Name: _____ Field Staff: _____

Site Identification and Characteristics

Town:	Subbasin	Ownership:
Aerial Photo(s) ID:	USGS Quad	Date:
Width	Length:	Other:
Nearest Rd:	GPS (NAD 83) N _____ W _____	

DEPWQ Classification Associated with Water Resource: _____

Cold Water Stream: _____

General Site Conditions: _____

Man-Made Structures Present: Y / N Historic Channelization Paved Rip Rap

Other _____

Indicators of Degradation within stream and on stream banks

Devegetated Fill Excavation Solid Waste Erosion
Invasive Species Sedimentation Point Discharge: Other _____

Hazardous Waste Sites or Potential Sources of Contamination: Y / N

Comment: _____

In-Stream Resource Characteristics

Water depth: Ave _____ Max _____
% Riffle/ Pool Pool: _____ Riffle: _____
Water Flow : None Slow Moderate Rapid
Extensive Flood Plain Adjacent to Stream Y / N
Substrate: Sand Gravel Cobbles Boulders
Leaves Silt Mud Other: _____
In-Stream Cover: No rocks, snags or other cover
Some rocks, snags or other cover
Many rocks, snags or other cover

Banks and Shoreline

Banks Eroded: Y / N

Exposed Bank Material: Sand Gravel OrganicDebris Mixed Fill
Rocks Ledge Other: _____

% Canopy Cover: _____

Bank Configuration: Gradual Steep Vertical Undercut Other

Bank fragmented by Development: None Some Moderate Severe

% developed _____ % undeveloped _____

Obstructions: None Little Moderate Severe Describe: _____

Slope Characteristics of the bank: 0-3% 3-8% 8-15% 15-25% >25%

Nature: Eroded Stabilized Vegetated Sandy

Comments: _____

Dominant vegetation on stream bank: _____

Invasives/Exotics within on Streambank:

Phragmites P.Loosestrife E. Buckthorn Honeysuckle Knotweed

Other: _____

Comments: _____

Wildlife Indicators on/near Streambank:

Logs Snags Stumps Sandy/Mud Banks Nest Boxes

Cavities Burrows Tracks Other _____

Wildlife Observed: _____

Stream Bank Alteration

___ Stream bank stable, not altered by water flow, animals or other factors

___ Stream Bank stable, Less than 25% receiving stress of any kind. Less than 25% developed

___ Stream bank receiving moderate alteration at least 50% in stable condition, up to 50% altered

___ Stream bank receiving major alteration < 50% natural, > 50% altered

___ Stream bank almost entirely altered > 75% to 100%

Artificial Stream Channel: rip/rap paved straightened dredged
piped

piped partially

Comments:

Fisheries

Fishery Aquatic Invertebrates: Warm Water or Cold Water

Fish Observed: _____ Historic _____

Fish Passage: Possible Not Possible Possible but obstructed

Rare Species or Unique Habitats _____ Historic _____

Presence of Mussels _____ Historic _____

Water Quality

Historic WQ _____

Hazardous Waste Sites _____

Description: Clear Tea-colored Murky Muddy Odor Other

Erosion (Where?): _____

Sedimentation (where?) : _____

Comments: _____

ADJACENT AREA DESCRIPTION

Surrounding Land Use (within 300 feet) of Restoration Area

Residential			Upland Forest	
Dense (< 1/2 acre lots)			Deciduous	
Moderate (1/2 to one acre lots)			Mixed	
Light (> one acre lots)			Coniferous	
Commercial			Wetlands	
Industrial			Forested	
Agricultural			Scrub-Shrub	
Manicured Park or Turf			Emergent	
Abandoned (Brownfield)			Surface Waters	
			Abandoned Field	
Other:			Other:	

Comments:

Wildlife Indicators Adjacent to Restoration Site (within 150 feet)

Beaver Pond Snags Stumps Sandy Banks Rookery
 Logs Cavities Burrows Mud flats Sandy Beach Nest boxes
 Islands Persistent Open Waters in Winter Other _____

Wildlife Observed: _____

Invasives/Exotics Adjacent to Restoration Site (within 150 feet)

Shrubs: Phragmites P.Loosestrife E. Buckthorn Honeysuckle Knotweed Other
 Aquatic: Milfoil Chestnut Fanwort Pondweed Naiad Hydrilla Other

Vegetation Comments: _____

Nonpoint Pollution Adjacent to Restoration Site (within 150 feet)

Ag/crops Ag/tilled Ag/animals impervious (roadways, parking lots, etc) Septic
 CSO's Golf Course Construction Sites Roadway Outfalls Industrial Outfalls

Closest Roadway _____

SITE ANALYSIS

Impairments (circle the appropriate value for each factor)

Factor	Points		
	1	2	3
Coverage of Exotics	< 5%	5-25%	>25%
Existing In-stream Cover	Adequate	Deficient	Very Poor or Absent
Lack of Canopy Cover	Vegetation provides shade to all or a significant portion of the stream	Portions of the stream bank unvegetated or vegetation too low to provide shade	Stream banks unvegetated or too low to provide shade
Degree of Obstruction	Little Obstruction, Likely Fish Passage	Moderate Obstruction, Uncertain Fish Passage	Severe Obstruction, Unlikely Fish Passage
Sedimentation	Little (visible, but no impact observable)	Moderate (visible with impact visible)	Considerable (clear impact/ degradation)
Erosion	Little (visible, but no impact observable)	Moderate (visible with impact visible)	Considerable (clear impact/ degradation)
Outfall	None	1 Present	>1 Present
Adjacent Land Use	Light/Undeveloped	Moderately Developed	Heavily Developed
Non-Point Source Pollution Sources	0-1 Sources	2-3 Sources	>3 Sources
Off-Road Vehicle Use	None	Some	Heavy

Total Score for IMPAIRMENTS =

Impairment Rank: (circle) **Low 10-16** **Medium 17-23** **High 24-30**

Description of Impairments:

Potential Solutions:

Indicators of Potential Benefits of Restoration

- Circle all benefits that apply to the potential restoration site and enter into score box.
- Add up total number of circles to determine ranking: Few 0-5, Some 6-11, Many 12-17.
- Apply ranking to the Quality of Restoration Opportunity Table found on page 7 of this form.



SITE ID: _____

Water Quality: (Check box if any of the following benefits apply to the potential restoration site)

1. Surface water quality will be improved (e.g., by restoring eroding stream banks)
2. Restored site will improve water quality through removal of hazardous or solid waste from stream.
3. Other _____

Fisheries Habitat: (Check box if any of the following benefits apply to the potential restoration site)

1. Restored site will improve the diversity of in-stream cover in the watershed.
2. Restored site improves substrate for cold water or warm water fisheries.
3. Restored site will improve in-stream cover for cold water or warm water fisheries.
4. Restored site will improve fish habitat by creating canopy for cold water or warm water fisheries.
5. Site is located within an identified habitat for rare species or a priority natural community as identified in the 1999-2001 Massachusetts Natural Heritage Atlas, or contains other important in-stream habitat for noteworthy species such as mussels.
6. The project will remove potential obstructions to fish migration.
7. Other _____

Recreation: (Check box if any of the following benefits apply to the potential restoration site)

1. Site is part of or adjacent to a recreation area, park, forest or refuge and is accessible to the public for recreation.
2. Fishing is currently available or will be available on or adjacent to the site.
3. The site provides opportunities for wildlife observation and study.
4. High visual/aesthetic quality of this potential recreational site.
5. The watercourse associated with this site is wide and deep enough to accommodate canoeing and/or non-powered boating.
6. Off-road public parking available at the potential recreation site.
7. Other _____

TOTAL NUMBER OF POTENTIAL BENEFITS =
Ranking = _____ (Few 0-5, Some 6-11, Many 12-17)

Indicators of Potential Negative Impacts of Restoration

- Check all boxes that apply to the potential restoration site.
- Add up total number of check marks to determine ranking: Few 0-2, Some 3-4, Many 5-7.
- Apply ranking to the Quality of Restoration Opportunity Table found on page 7 of this form.

- Access to adjacent areas will be eliminated by restoration project.
- Existing fisheries will be impacted by the restoration project.
- Historic Structures will be impacted as a result of the project.
- Rare Species and/or their habitat will be impacted as a result of the restoration project.

SITE ID: _____

The restoration project could cause local flooding or imperial structural features due to increased streambank erosion.

Commercial, industrial, or agricultural activities could be impacted.

Other _____

TOTAL NUMBER OF POTENTIAL NEGATIVE IMPACTS =

Ranking = _____ (Few 0-2, Some 3-4, Many 5-7)

Potential Indicators of Cost

- Check all boxes that apply to the potential restoration site.
- Add up total number of check marks and multiply by the appropriate size factor rating (SFR) for the site:
Site Size 1-5 acres = 1 SFR, 6-10 acres = 2 SFR, 11+ acres = 3 SFR.
- Insert this number into the appropriate ranking: Low 0-6, Medium 7-14, High 15-36
- Apply ranking to the Quality of Restoration Opportunity Table found on page 7 of this form.

Ownership (e.g., site is located on private property).

Construction Access (e.g., access difficult, site more than 100 ft. from existing road, access through private property).

Regrading (e.g. substantial regrading work is necessary for the potential restoration project).

Substrate Enhancement (e.g., removing fill or structures).

In-stream Cover Modification (e.g., placement of boulders).

Stream bank restoration (e.g., bioengineering)

Revegetation (e.g., a significant planting and/or seeding effort is necessary for the project.)

Maintenance Needs (e.g., the potential restoration site will require regular maintenance work following the completion of the project).

Removal of Structures (e.g., on-site structures must be removed with heavy machinery).

Dredging (e.g., the project involves dredging).

Hazardous Waste (e.g., on-site hazardous waste clean-up will be required as part of restoration activities).

Other _____

TOTAL NUMBER OF POTENTIAL INDICATORS OF COST =

Ranking = _____ (Low 0-6, Medium 7-14, High 15-36)

Quality of Restoration Opportunities (circle)

*Factor	Points

SITE ID: _____

	1	2	3
Length of Stream	0-250 ft	251-500 ft	>500 ft
Potential Benefits	Few	Some	Many
Potential Negative Impacts	Many	Some	Few
Potential Costs	High	Medium	Low

Total Score for Restoration Opportunities =

Potential Restoration Opportunity Rank: (circle) Low 4-6 Moderate 7-9 High 10-12

Comments: _____

-