

Shoreline Survey Section 6

**Segment begins: Short Cut Cove
Segment ends: Mouth of Collins Cove**

This section of the river is a part of the North Village dam impoundment and is a broad area with an irregular shoreline and numerous coves and islands. The depth varies from over 8 ft. in a sinuous channel to 1 to 2 ft. on broad areas adjacent to the channel and near the shore. The entire shore is wooded or shrubbed and presents an excellent wildlife habitat with numerous aquatic and riparian species. Fishing is excellent. A railroad bed runs along the left bank and is visible from the river.

Recently, a severe infestation the invasive aquatic smartweed, *Persicaria amphibia*, has been increasing in size and is beginning to present a problem to navigation and to the ecological balance of the river.

The stream bottom is primarily silt with decreasing amounts of sand, organic debris, gravel, cobbles and boulders. The bottom is colored brown. The water is clear with no odor and is ranges from 1 to 2 ft in depth to approximately 8 ft in channels. The level varies with seasonal rains and operation of the North Village dam. The water flow is slight and has no blockages.

Open areas and wetlands of the section are becoming covered with dense patches of *P. amphibia*.

Both stream banks are approximately 98% shaded by trees and shrubs. The stream banks also show moss, exposed roots, grasses and flowers, brambles and marshes. Beyond the stream bank a riparian area extends for hundred of feet on both sides. It contains mostly trees and shrubs, along with grasses. No clear cutting is evident. Land uses visible from the river include industrial, residential, roads, railroads, undeveloped land and wooded areas. Several potential areas exist for recreational access. There are no designated public access areas.

Fish are abundant in the section. They include bass, perch, bluegill, pout, fallfish and pickerel. Aquatic life includes turtles, frogs, mussels, clams and snakes. Wildlife and fish habitats present include pools and riffles, gravel stream bottom, emergent vegetation, vegetation hanging over the water and fallen trees in the water.

Evidence such as holes, teeth marks, food storage/eating, dens, scat and tracks show evidence of fox, deer, mink, muskrat and beaver. Wildlife habitat elements located near the stream include standing dead trees, fallen trees, scattered rocks and boulders, vines, springs and seeps, and vernal pools. Birds are numerous and include herons, mallard ducks, wood ducks, Canada geese, kingfishers, black ducks and cormorants. The endangered pied billed grebe, *Podilymbus podiceps* has been documented in the section. The riparian area has links to adjacent wetlands and, abandoned croplands and pastures.

Shoreline Survey Field Data Sheet Section 6

Segment begins: Short Cut Cove
Segment ends: Mouth of Collins Cove

Date: 9/30/2006

Observers: A. Dabrowski, T. C. Ryzewski

Today's weather: Clear

Weather over past 24 -48 hours: Fair

INSTREAM CONDITIONS

Stream bottom

1. What is stream bottom made of? (mark from 1=most typical to 6=least typical)

- | | |
|------------------------------------|-----------------------|
| (3)Organic debris (leaves, twigs) | (4)Gravel (1/4 - 2") |
| (1)Silt (mud) | (5)Cobbles (2 -10') |
| (2)Sand (1/16 to 1/4") | (6)Boulders (> 10") |

2. What color is the stream bottom? ("X" one)

- ()Black (x)Brown ()Orange/Red ()Yellow ()Sandy ()Gray ()Other(describe):

Water

3. What color is the water? ("X" one)

- ()Cloudy ()Tea ()Milky ()Muddy (x)Other (describe): Clear

4. What is the water odor? ("X" one)

- (x) None ()Rotten eggs ()Musky ()Fishy ()Oily ()Ammonia ()Other(describe):

5. Problem areas. ("X", describe location and cause, if apparent. Locate on map.)

() Oily sheen or smell:

() Sewage: smell, milky color, toilet paper:

()Foam or scum (describe. Does a stick break it up?):

() Fishy odor or fish kill:

() Floating garbage:

() Excess sedimentation:

6. How deep is the water? ("X")

- ()Less than 1' ()More than 1' ()More than 2' (x)More than 3' Can vary with seasonal rains and operation of North Village dam.

7. How does the water level compare to normal for this time of year? ("X")

- (x)Normal ()Higher ()Lower ()Don't know If very high or low, can you tell why?:

8. Is the water flowing ("X") ()Quickly ()Slightly (x)Almost still

9. Number of pools: numerous Number of riffles: ()Don't know

10. Is stream flow blocked by...("X" and locate on map.)

- ()Trees ()Trash ()Large objects ()Vegetation

Vegetation

11. Are there areas of extremely dense or clogging aquatic vegetation in any section? () Yes () No

If yes, locate on map and describe cause, if obvious:

Species, if known ("X") () Duckweed () Water chestnut () Other : *Persicaria amphibia*

12. Are there areas covered with algae? ("X") () Streambed () Around pipes

If algae seems abnormally heavy, locate on map. Draw in extent of algae on map.

13. Are there wetlands? ("X", *locate on map.*) () Yes () No If yes, are they degraded by... ("X")
() Phragmites () Purple Loosestrife () Fill () Blockages () Ditches () Sediment () Disturbed banks
() Pipes () Trash () Other(describe): *Persicaria amphibia*

STREAM CORRIDOR CONDITIONS

Riparian Area and Land Use

14. Do trees and shrubs overhang the stream and provide shade? ("X") () Yes () No

If yes, estimate what percentage of the bank is shaded: 98%

15. What are the stream bank conditions? ("X". *Also put an asterisk "*" next to the most common.*)

Left Bank: (Looking downstream) (If doing only one bank, indicate which one)

() Eroding () Moss () Trees/Shrubs () Exposed Roots () Grass/Flowers () Loosestrife/Phragmites
() Beaches () Riprap/channelized () Shrubs/brambles () Wetlands/marsh

Right Bank: () Eroding () Moss () Trees/Shrubs () Exposed Roots () Grass/Flowers

() Loosestrife/Phragmites () Beaches () Riprap/channelized () Shrubs/brambles () Wetlands/marsh

16. Is there a vegetated riparian area beyond the stream bank? If yes, indicate condition. ("X". *Also put an asterisk "*" next to the most common.*)

Left Bank: () Shrubs/grasses () mowed pasture/meadow () Forested/trees () Park with few trees
() Lawn

Right Bank: () Shrubs/grasses () mowed pasture/meadow () Forested/trees () Park with few trees
() Lawn

If area is not vegetated, please describe condition: (i.e. parking lot, pavement, roadway, buildings)

Left Bank:

Right Bank:

17. If the riparian area is forested or in shrubs and grasses, estimate width of the vegetated area (to a lawn, road, or other change in land use): left bank : 0 to several hundred ft right bank: Hundreds of feet

18. Are there places that have fill or clear-cutting? ("X") () Yes () No

If yes, mark locations on map as fill F1 , F2, F3. Etc (or clear-cutting CC1 CC2, CC3, etc).

19. What are the land uses visible from the river? ("X" and "*" the dominant land use type.)

(<input checked="" type="checkbox"/>) Industrial	(<input type="checkbox"/>) Parking lots	(<input type="checkbox"/>) Golf courses
(<input type="checkbox"/>) Commercial	(<input checked="" type="checkbox"/>) Roads	(<input type="checkbox"/>) Protected/conservation land
(<input type="checkbox"/>) Agricultural	(<input type="checkbox"/>) Landfills	(<input checked="" type="checkbox"/>) Undeveloped/unprotected land
(<input checked="" type="checkbox"/>) Residential	(<input checked="" type="checkbox"/>) Railroads	(<input type="checkbox"/>) Wastewater treatment plants
(<input type="checkbox"/>) Park/ ballfields	(<input type="checkbox"/>) Junkyards	(<input type="checkbox"/>) Wooded areas (<input type="checkbox"/>) Other (describe):

20. Do you see runoff from any of the following? ("X". " *" *If run-off is significant locate on map.*)
()Manure ()Pet / goose droppings ()Parking lots ()Sewage ()Roads
()Bridges ()Construction ()Plowed fields ()Lawns ()Other(describe):

Pipes: Please fill out separate pipe survey and mark locations on map as P1, P2, P3, etc.

Trash: Describe any potential cleanup areas. Locate on map:

Potential Open Space: Describe and locate on map: Extensive areas of open space surround this part of the river.

Recreation

21. Is there designated public access to the stream? Is it appropriate for... ("X" and locate on map.)
()Canoeing ()Fishing ()Swimming ()Walking ()Bicycling ()Other(describe):

22. Are there areas which are informal or potential access points? ()No (x)Yes (*Describe and locate on map*):

WILDLIFE / HABITAT

Aquatic Habitat/Species

23. Do you see fish or evidence of fish? (*describe*): Seen and caught

Estimate number: numerous If possible, describe species & size. Bass, perch, bluegill, pout, fallfish, pickerel

Evidence of fish? (i.e. nests): nests, observation and caught

24. Other forms of aquatic life? ("X", *identify species if known*)

- (x)Aquatic insects (x)Turtles (x)Frogs ()Salamander (x)Snail (x)Mussels (x)Snakes (x)Clams
()Other:

Evidence of aquatic species? (i.e. eggs, tracks) : all species seen

25. Wildlife and fish habitat elements present in water ("X")

- (x)Pools and riffles in stream
(x) Gravel stream bottom
() Rocks and boulders in stream
(x)Emergent aquatic vegetation
(x)Vegetation hanging over the banks and water
(x)Fallen trees in water
()Undercut banks

Riparian Habitat/Species (look along stream bank and vegetated riparian areas)

26. Animals or evidence of animals? ("X")

- (x)Holes (x)Teeth marks (x)Food storage/eating (x)Dens (x)Scat (x)Footprints/tracks
Specific animals seen (or evidence of): fox, deer, mink, muskrat,beaver

27. Wildlife habitat elements located near the stream ("X")

- (x)Standing dead trees
(x)Fallen tree limbs and trunks
(x)Scattered rocks and boulders
()Stone walls (without cement)
(x)Vines
(x)Springs and seeps
(x)Vernal pools

28. Birds? (“X”) () Herons () Mallard ducks () Wood ducks () Kingfishers () Canada geese
Other: numerous other water birds inc. black duck, cormorant
Evidence of birds: (i.e. nests, footprints): all species seen

29. Do you know if there are rare & endangered species of plants or animals in your segment? If so, identify: Pied-billed grebe, *Podilymbus podiceps* seen and photographed

30. Links from riparian area to other areas of wildlife habitat: (“X”)

- () Wetlands adjacent to stream
- () Abandoned cropland or pasture near stream
- () The riparian area is vegetated with trees and/or shrubs at least 100 feet wide
- () The riparian area connects to adjacent open space or greenway

Shoreline Survey Priorities for Action

Section 6

Assets

The area is a superb wildlife habitat and potential canoe, kayak and hiking area.

Problems

The invasive smartweed, *P. amphibium*, is increasing in area and must be dealt with

Control of the level of the river area by the operation of the North Village dam is vital to maintain proper ecological conditions

Potential for increased industrial development that would seriously impact riparian areas

Actions

Determine the cause and develop and effective control of the invasive aquatic smartweed

Develop a plan to control the North Village dam operation in order to maintain a proper water level.

Develop a plan to avoid further ecological damage by industrial development.