

Shoreline Survey Section 1

Segment begins: Greenbrier Park
Segment ends: Hodges Village Dam

This section of the river is a winding, wooded area operated by the US Army Corps of Engineers that ends at Hodges Village Dam, a dry dam. Wooded riparian areas extend for approximately 150 feet on both left and right banks. Numerous pools fill the winding stretch of river. Trees fallen across the river and numerous beaver dams restrict easy boating. The area is an excellent wildlife habitat and is maintained in excellent condition by the Corps of Engineers. Marked trails line the riparian area. Seasonal rain conditions and flood control use cause the river level to fluctuate. The area has numerous hiking, cycling, and boating access and use areas.

The stream bottom consists primarily of organic debris and silt with some sand and lesser amounts of gravel and boulders. The color is primarily brown. The water is tea colored and has no odor. There are some problem areas of excess sedimentation. The depth of the water is at least 3 ft. deep and is almost still. There are multiple pools and only one area of riffles. The stream flow is occasionally blocked by fallen trees. Wetlands are numerous and are degraded by the presence of Purple Loosestrife, *Lythrum salicaria* and by vegetation blockages.

Trees and shrubs overhang the bank and provide 100% shading. Both left and right banks show trees and shrubs, exposed roots, loosestrife and phragmites, shrubs and brambles, and wetlands and marsh areas. Riparian areas of both sides show shrubs and grasses, and, forested areas. The width of the left bank is about 50 yards and that of the right bank is about 75 yards. There are no areas of fill or clear cutting. Land uses visible from the river include industrial, residential, wooded areas and most dominantly, protected /conservation land.

There is designated public access to the stream appropriate for canoeing, fishing, walking and cycling.

Wildlife and fish habitat elements present in the water include pools and riffles, gravel stream bottom, rocks and boulders, emergent aquatic vegetation and vegetation hanging over the banks and water, fallen trees in the stream, and undercut banks.

Wildlife habitats elements located near the stream include standing dead trees, fallen tree limbs and trunks, scattered rocks and boulders, stone walls without cement, vines, springs and seeps, and , vernal pools. Evidence of animals include holes, teeth marks, scat and footprints or tracks. Specific animals seen are beavers, fox, muskrat and deer. Birds seen are herons, mallard ducks, wood ducks, kingfishers, Canada geese, swans, kingbirds, blackbirds and bluebirds.

Two nearby quaking bogs are present with threatened plant life that includes pitcher plants, orchid species and autumn willow.

Links from riparian areas to other areas of wildlife habitats include wetlands adjacent to stream, abandoned croplands or pastures, vegetated riparian areas at least 100 ft. wide and connecting to adjacent open space or greenways.

Shoreline Survey Field Data Sheet Section 1

Oxford

Segment begins: Greenbriar Park,

Segment ends: HV Dam

Date: 8/1/05

Observers: J Hixson/J Hachigan

Today's weather: Overcast

Weather over past 24 -48 hours: No rain

INSTREAM CONDITIONS

Stream bottom

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

(**1**) Organic debris (leaves, twigs)

(**6**) Gravel (1/4 - 2")

(**1**) Silt (mud)

() Cobbles (2 -10")

(**3**) Sand (1/16 to 1/4")

(**6**) Boulders (> 10")

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

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

Water

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

() Cloudy (**X**) Tea () Milky () Muddy () Other (describe):

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:

(**X**) Excess sedimentation:

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

() Less than 1' () More than 1' () More than 2' (**X**) More than 3'

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

() Normal () Higher (**X**) 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: **multiple**

Number of riffles: **1**

() Don't know

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

(**X**) 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 :

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.*) (x) Yes () No If yes, are they degraded by... ("X")

() Phragmites (x) Purple Loosestrife () Fill (x) Blockages () Ditches () Sediment (

) Disturbed banks () Pipes () Trash () Other (describe):

STREAM CORRIDOR CONDITIONS

Riparian Area and Land Use

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

If yes, estimate what percentage of the bank is shaded: 100%

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 (X) Trees/Shrubs (X) Exposed Roots () Grass/Flowers

(X) Loosestrife/Phragmites () Beaches () Riprap/channelized (X) Shrubs/brambles

(X) Wetlands/marsh

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

(X) Loosestrife/Phragmites () Beaches () Riprap/channelized (X) 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: (X) Shrubs/grasses () mowed pasture/meadow (X) Forested/trees () Park with few trees

() Lawn

Right Bank: (X) Shrubs/grasses () mowed pasture/meadow (X) 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 : **50 yards** right bank: **75 yards**

18. Are there places that have fill or clear-cutting? ("X") () Yes (x) 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.)

(X) Industrial () Parking lots () Golf courses

() Commercial () Roads (X *) Protected/conservation land

() Agricultural () Landfills () Undeveloped/unprotected land

(X) Residential () Railroads () Wastewater treatment plants

() Park/ ballfields () Junkyards (X) Wooded areas () 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.)
(X) Canoeing (X) Fishing () Swimming (X) Walking (X) 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? (*perch pick. bass*):
Estimate number: **10+** If possible, describe species & size.
Evidence of fish? (i.e. nests):

24. Other forms of aquatic life? (“X”, *identify species if known*)
(X) Aquatic insects (X) Turtles (X) Frogs () Salamander () Snail () Mussels (X) Snakes () Clams
() Other: damsel, dragon fly; painted/spotted turtle, bull frog
Evidence of aquatic species? (i.e. eggs, tracks) :

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

- (X) Pools and riffles in stream
- (X) Gravel stream bottom
- (X) Rocks and boulders in stream
- (X) Emergent aquatic vegetation
- (X) Vegetation hanging over the banks and water
- (X) Fallen trees in water
- (X) 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 () Food storage/eating () Dens (X) Scat (X) Footprints/tracks
Specific animals seen (or evidence of): **Beavers, fox, muskrat, deer.**

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

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

28. Birds? (“X”) ()Hérons ()Mallard ducks ()Wood ducks ()Kingfishers ()Canada geese Other: **Swans, Kingbird, Blackbird**

Evidence of birds: (i.e. nests, footprints):

29. Do you know if there are rare & endangered species of plants or animals in your segment? If so, identify: **Two nearby quaking bogs with threatened plantlife: Pitcher Plant, orchid and Autumn Willow**

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 1

Assets

All adjacent land is Army Corps land and is undeveloped. Views are beautiful and wildlife abounds. Paddlers and hikers are encouraged

Problems

Some loosestrife in upper French River near Greenbrier Park. No phragmites seen

Many tree snags in the water Some cut during survey but many are large and difficult to cut above water

Beaver dams stall the river in five places

Quality canoeing is not possible except in the upper reach at Wellington Crossing above Greenbrier park

Actions

Support USACE in keeping the area open for paddling