

Waste Management – Phase 7

File No.: 199200602

City and State: Norridgewock, ME

General Impacts: 1.8 acres forested

Functions and Values Lost:

- Floodflow Alteration
- Sediment Retention
- Wildlife Habitat

Year(s) Mitigation Constructed: June 1993

Size and Type of Mitigation as Proposed: 2.2 acres forested, scrub-shrub, emergent

Proposed Functions and Values of Mitigation:

- Floodflow Alteration
- Sediment Retention
- Wildlife Habitat

Mitigation Special Condition(s):

3. The permittee shall implement a mitigation plan to compensate for the project's impact to 1.8 acres of wetland. The conceptual details of this plan are described in the attached excerpt of the document entitled "Wetland Impact Assessment and Mitigation Plan at the CWS Phase VII site" dated "January 1992" and in the attached document entitled "Phase VII Wetland Report Addendum: Mitigation Design and Specifications" dated "August 1992". This plan involves the restoration, creation, and/or enhancement of 2.2 acres of emergent, scrub-shrub, and forested wetland in 6 locations on site.

Remarks:

None

Directions:

Take 128/95 north. Take exit 6A, I-295 north towards South Portland/Portland. I-295 north becomes I-95 north. Take exit 36, US-201 towards Fairfield/Skowhegan. Stay straight to go onto US-2.



MITIGATION SITE FIELD DATA FORM

Site Name: Waste Management – Phase 7 File No. 199200602

City/Town: Norridgewock State: ME Waterbody: none

Monitor(s): Ruth Ladd, Keith Wright Date: 8-15-02

Was site constructed? yes

Is site wetland? mostly

Size of proposed wetland: 2.2 acres

Actual size of wetland: TBD

Landscape position: TBD

Lat/Long Points: 44.70478N 68.83220W

Saved GPS Waypoint name: WM2-MW

GPS Tracking Log Name: N/A

Perimeter: TBD

Surrounding land use:
Immediately by forest, farther out by landfill

Is wetland function compromised by
surrounding land use?
No

Plant health:
Good

Invasive species:
Lotus corniculatus

Wildlife use:
Moose tracks, deer prints

Plants:

Site 2:

Abies balsamea
Acer rubrum
Agrostis gigantea
Alnus rugosa
Aster sp.
Betula populifolia
Carex lurida
Carex sp. (ovales)
Carex vulpinoidea
Cornus amomum
Daucus carota
Eupatorium perfoliatum
Hypericum sp.
Ilex verticillata
Juncus effusus
Onoclea sensibilis
Phalaris arundinacea
Phleum pratense
Pinus strobus
Poaceae spp. (several)
Populus alba
Populus tremuloides
Potentilla sp.
Rudbeckia hirta
Salix spp.
Scirpus cyperinus
Solidago canadensis
Solidago rugosa
Solidago sp.
Spiraea latifolia
Spiraea tomentosa
Trifolium pratense

Trifolium repens
Verbena hastata
Viburnum dentatum
Vicia sp.
Zizia sp.

Site 3:

Abies balsamea
Acer rubrum
Agrostis gigantea
Aster umbellatus
Betula populifolia
Carex crinita
Carex sp.
Carex stricta
Cornus amomum
Eupatorium perfoliatum
Fragaria virginiana
Geranium maculatum
Juncus effusus
Lysimachia terrestris
Onoclea sensibilis
Osmunda claytoniana
Phalaris arundinacea
Poaceae spp.
Prunus virginiana
Rubus idaeus
Rubus sp.
Scirpus cyperinus
Scirpus microcarpus
Solidago rugosa
Solidago spp.
Spiraea tomentosa
Vaccinium corymbosum
Verbena hastata
Vicia sp.

Northern lobe (wetter):

Aster umbellatus
Carex crinita
Carex lurida
Carex sp.
Eupatorium perfoliatum
Galium sp.
Ilex verticillata

Impatiens capensis
Juncus effusus
Lotus corniculatus
Onoclea sensibilis
Polygonum arifolium
Polygonum sagittatum
Scirpus cyperinus
Spiraea tomentosa
Thelypteris noveboracensis
Typha latifolia
Vaccinium corybosum
Verbena hastata
Viburnum cassinoides
Vicia sp.

Site 1:

Abies balsamea
Acer rubrum
Agrostis gigantea
Betula populifolia
Carex vulpinoidea
Eupatorium perfoliatum
Euthamia graminifolia
Ilex verticillata
Ipomoea sp.
Juncus effusus
Lysimachia terrestris
Onoclea sensibilis
Osmunda claytoniana
Phalaris arundinacea
Poaceae spp.
Polygonum sagittatum
Populus tremuloides
Rosa sp.
Rubus sp.
Salix sp.
Scirpus atrovirens
Scirpus cyperinus
Solidago rugosa
Solidago sp.
Spiraea latifolia
Thistle
Verbena hastata
Viburnum dentatum

Soils Data:

Soils data not collected at this site.

Sketch approximate mitigation site, noting areas and types of wetlands, waters, other features, landscape position, landmarks, etc., and data and photo point(s)

See file.

Overall Description of site:

This site is best approached as follows. Find the sign just outside the scale house that discusses wetland mitigation, and then continue away from the landfill a few hundred feet. The sites are located on the same side (the right-hand side as you leave the guard house) as the sign. Site 1 is adjacent to the road, albeit down an embankment. Sites 2 and 3 are accessible then using a map. They are through the woods to the north of Site 1. Site 4 was not located, though it is supposed to be south of the leachate tanks which can be driven to: drive onto the site past the guard house and be on the lookout on the left for the large tanks.

Site 1 is the most open of the sites, characterized by a PEM wetland.

Site 2 was scrub shrub over pit and mound topography. Approximately half the site was a wetland, while the other half contained dry upland vegetation. The dividing line is the first contour line away from the road (see map).

Site 3 consisted of a wet meadow and an emergent section. Shrubs for Sites 2 and 3 were 10-20" high.

Comments, problems, recommendations:

Highbush blueberry used is a cultivar and should not have been planted.

Monitoring wells were installed on several of these sites but the caps were on too tight.

There was a caterpillar infestation that stripped many of the alders of their leaves.

A siltation fence was found in Site 3 that needs to be removed. This site was also probably smaller than it was supposed to be; it was missing a narrow section that was supposed to connect the northern lobe to the rest of the site (see map), and it was missing a narrow band that was supposed to extend up towards the road.

We looked in vain for Site 4 of this site. We found a monitoring well in the place where the site was supposed to be, but dense woody debris and the maturity of living trees suggested that this site had been wetland prior to the time when the mitigation site was built. Further discussion with the consultant in charge of this site is in order to determine if this site, which represents approximately 20% of the site, was built.

LEGEND

- Proposed Forested Wetlands
- Proposed Shrub Wetlands
- Proposed Contours
- Existing Wetland Boundary

Existing Wetland Boundary

Landfill Boundary

N

MM-4

Shrub - Monitoring well
location on Phase VII
mit. area

MA-Up

MA-Mec

MM-3

MM-6

28,000 Sq. Ft.

20,500 Sq. Ft.

MM-2

23,600 Sq. Ft.

1100 Sq. Ft.

8,500 Sq. Ft.

MW-1

MW-2

MW-3

MW-4

MW-5

Main Access Road

Landfill Boundary

0 50' 100'

Figure 7-2. Access Road mitigation area for wetland creation and restoration.

Wetland Function-Value Evaluation Form

Total area of wetland ~2.2 ac Human made? yes Is wetland part of a wildlife corridor? yes or a "habitat island"? no

Adjacent land use forest, road Distance to nearest roadway or other development 50 feet

Dominant wetland systems present PSS w/some PEM Contiguous undeveloped buffer zone present 90%

Is the wetland a separate hydraulic system? no If not, where does the wetland lie in the drainage basin? high

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Waste Management –
Wetland I.D. Phase 7 199200602













Latitude N45.73793 Longitude W68.65787

Prepared by: Ladd Date 8/15/02

Wetland Impact:
Type _____ Area _____

Evaluation based on:
Office _____ Field X

Corps manual wetland delineation
completed? Y _____ N X

Function/Value	Suitability Y N		Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge		X			insufficient information
 Floodflow Alteration		X			
 Fish and Shellfish Habitat		X			
 Sediment/Toxicant Retention	X				dense vegetation, no ditches
 Nutrient Removal	X				dense vegetation
 Production Export	X				wildlife food sources
 Sediment/Shoreline Stabilization		X			
 Wildlife Habitat	X			X	part of large undeveloped area of forested upland and wetland; wildlife food source (berries, seeds)
 Recreation		X			private property (land fill)
 Educational/Scientific Value		X			
 Uniqueness/Heritage		X			
 Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			none known
Other					

Notes:

* Refer to backup list of numbered considerations.

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Norridgewock, ME
8/15/02



Site 1 from near the road to the northeast looking south, southwest, and west. Edge of site is at the tree line.



Site 2 from eastern edge looking southwest and west.
Edge of site is at the treeline in the distance and at the far left.



Site 2 looking northeasterly from the southwestern edge. Everything visible except the large *Pinus strobus* on the far left and in the distance on the right is in the site.



Site 3 from the midpoint of the slope down to the northern edge of the site looking south and west. Site extends to the trees in the distance.



Site 3 looking west and northwest from the western lobe of the site. Note the monitoring well in the foreground and the edge of the site (dark area). The person is at the edge of the mitigation site.



Site 4 (possibly) looking southeast from the top of a steep slope.
The site seemed too mature to be a mitigation site but it is in the correct location and is certainly wet.



Site 5 looking easterly from west side.



Small brook in vicinity of Site 5 (water visible in lower central part of photo)

USGS 5 km W of Norridgewock, Maine, United States 07 May 1996



0 100 200M

0 100 200yd

Image courtesy of the U.S. Geological Survey
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