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):

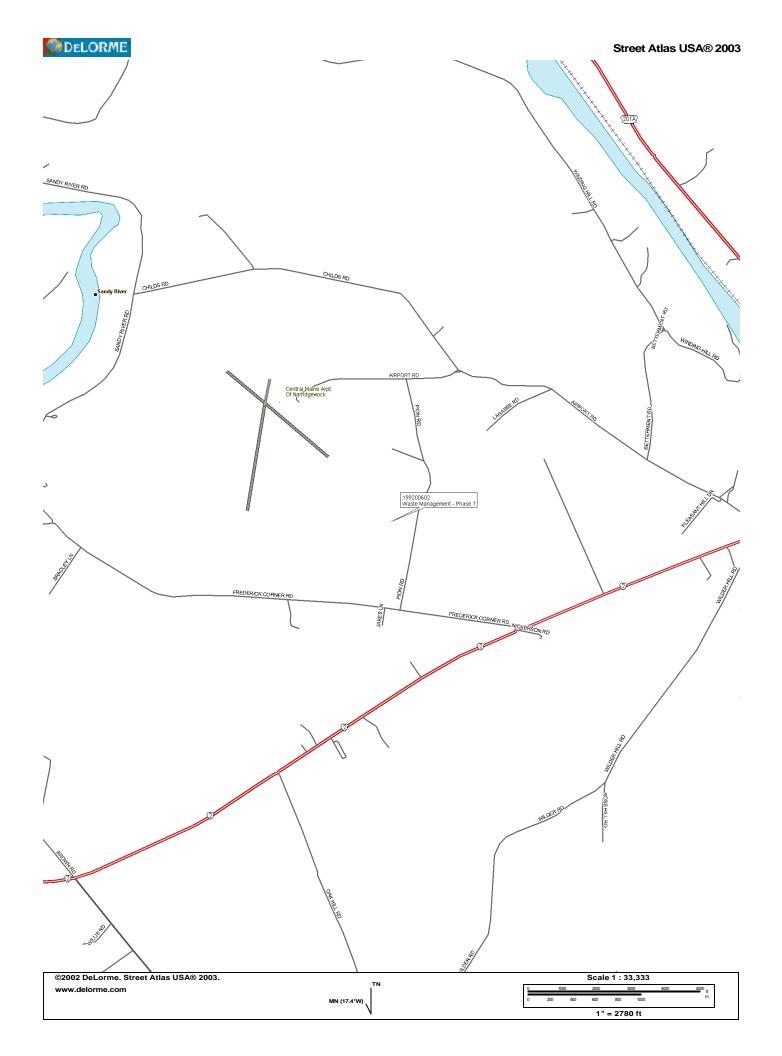
3. The permittee shall implement a mitigation plan to compensate for the project's impact to 1.8 acres of wetland. The conceptual details of this plan are described in the attached excerpt of the document entitled "Wetland Impact Assessment and Mitigation Plan at the CWS Phase VII site" dated "January 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.

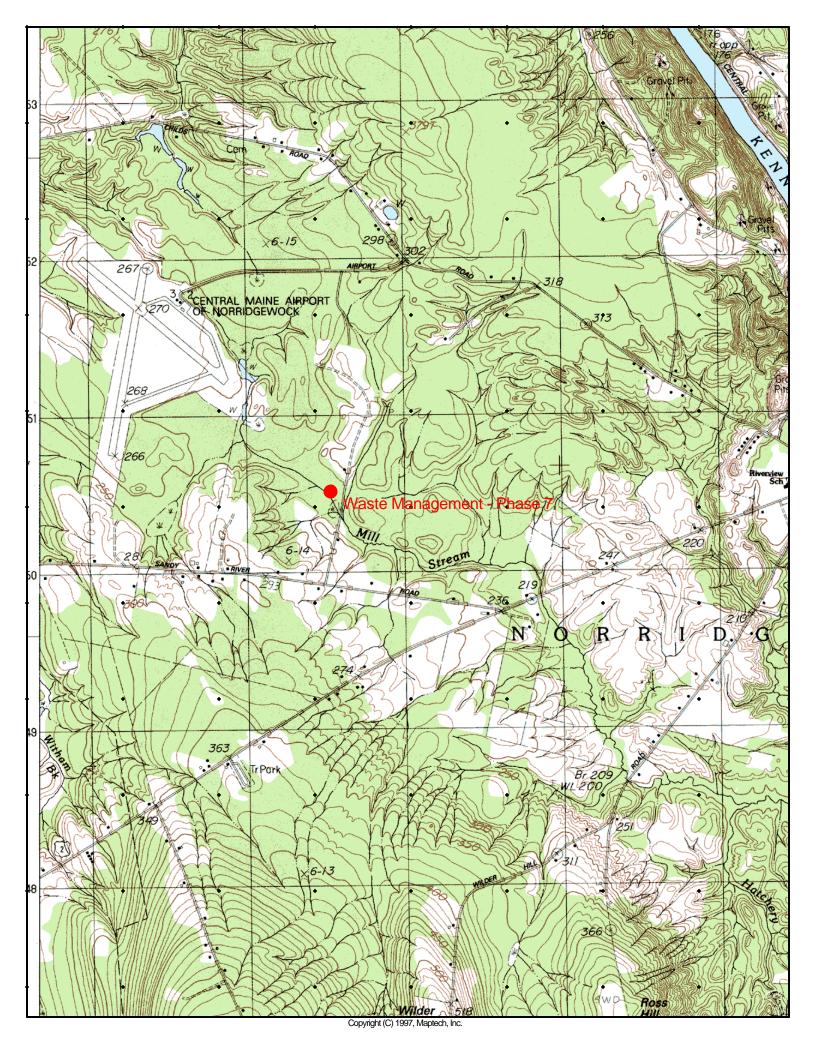
Remarks:

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.

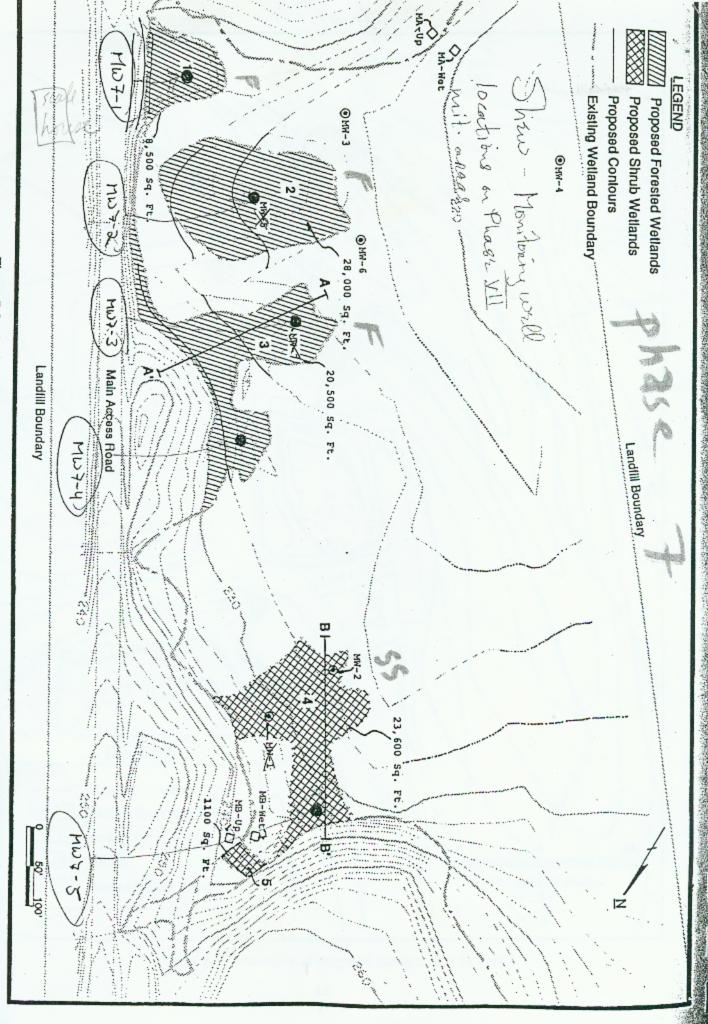


Figure 7-2. Access Road mitigation area for wetland creation and restoration.

Wetland Function-Value Evaluation Form

						Wetland I.D. Phase 7 199200602	
Total area of wetland_~2.2 ac Human made?_yes Is wetland part of a wildlife corridor?_yes or a "habitat island"?_no						Latitude N45.73793 Longitude W68.65787	
icent land use forest, road Distance to nearest roadway or other development _50 feet						Prepared by: Ladd Date 8/15/02	
Dominant wetland systems present_PSS w/some PEM Contiguous undeveloped buffer zone present_90%						Wetland Impact:Area	
Is the wetland a separate hydraulic system? <u>no</u> How many tributaries contribute to the wetland?	0 Suit	w ability	Tildlife & vegetation diver	rsity/abunda Princij	ance (see attached list)	Evaluation based on: Office FieldX Corps manual wetland delineation completed? Y NX	
Function/Value	Y	N	(Reference #)*	Functi	on(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 food source (berries, seeds)	of forested upland and wetland; wildlife	
A 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:

Waste Management -

^{*} Refer to backup list of numbered considerations.

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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 200yd

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