



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

MEMO

To: File
From: Liz Victor *LV*
Date: December 29, 2016
Site Name/BRRTS: Kewaunee Marsh Arsenic Spill (02-31-000508)
Re: Field Activities Report for Dec 12, 2016

Who: Liz Victor, NER R&R Hydrogeologist
Cheryl Bougie, NER Water Resource Management Specialist

GPS Unit Used: DNR's Garmin GPS Map 625 S & Victor's Garmin eTrex 20 Both operated by Liz Victor
Camera Used: Canon Powershot SX130 IS Operated by C. Bougie

Purpose of Field Visit: Site Reconnaissance in preparation for deer removal and fence repairs (Task D in the attached Draft Cap Vegetative Cover Evaluation). Cap Inspection with focus on area of distressed vegetation.

Scope of Work for Field Visit

- 1) Assess and document the conditions of the Marsh (is it frozen, ease of walking through marsh)
- 2) Read river staff gage just off bridge
- 3) Walk perimeter of fence to determine if additional holes are present
- 4) Measure dimensions of repairs needed to fence
- 5) Inspect Cap per Cap Maintenance Plan
- 6) Is edge of cap easily discernable?
- 7) Re-visit area of distressed vegetation observed during summer of 2016
- 8) Assess presence of deer by tracks

Tasks Accomplished and Observations:

1. Several inches of snow had fallen the previous day. Kuehl plowed the parking area near the gate leading onto the trail. Gate was open when we arrived and we observed directional signs for snowmobiles suggesting open gate on Kuehl property provides access to snowmobile trail. Vehicle was parked at gate and Cheryl and Liz hiked up the trail to marsh.
2. Tracks and Waypoints: Bougie and Victor hiked to river gage to collect reading and then entered marsh at eastern gate. From here we walked the perimeter of the fence inspecting the eastern, northeastern and then the northern side of the fence, as conditions allowed. We then headed to the south toward the cap, identified the edge of the cap using the GPS, then walked east over the cap to the area of the distressed vegetation. After this, we left the marsh via the gate near the kiosk. Waypoints and tracks are shown on the attached map, *Kewaunee Marsh: December 12, 2016 Track/Pts*. Waypoint coordinates are also attached.

Marsh – The Marsh was frozen in most areas and provided safe footing. Walking through vegetation proved to be difficult. Tracking to the N. Edge of Cap waypoint using the GPS was difficult...walking was so slow the GPS could not function properly. To overcome this, the person up front quickly bashes through vegetation while the GPS operator walks behind and directs the basher. Waypoints 061 and 062 were the southern edge of the sloughs - open areas of deep water that had a layer of ice otop. We walked around these areas to avoid going through the ice. The Southern slough appeared to be ~15 ft wide at the fence. The northern slough was less than 10 ft wide at the fence.

River - observations from the bridge:

- The river was covered with ice along the edges of the river (open water in the center).
- Many of the PVC well markers could be observed from the bridge.
- Staff gage reading was estimated to be 2.6 ft (see attached photo of staff gage).
- The water was low enough to note that the gage is broken and the lower portion is unreadable. This may explain the absence of staff gage readings in past field notes and reports.

Fence - Two cut holes were observed in the fence. The GPS coordinates are attached and the locations of the cut holes are provided in the attached aerial showing GPS tracks. Both holes were cut flush to a fence post and the opening was frozen and could be walked on. The bottom of the fence appears to be flush with ground surface, however; they may be snowed/iced in. The dimensions of the holes are as follows:

| | Width | Height |
|---|-------|----------|
| Hole at WP #63 (photo titled: N.-Angle Fence hole (facing NE) N.-Angle Fence hole Photo 2(facing NE) | 2' 7" | 3' 3" |
| Hole at WP #64 (photos titled: N. Fence Hole Photo (facing N) N. Fence Hole Photo #2 (facing N) | 2' 2" | 2' 10.5" |

The fence poles have sunk several inches into the sediment at the mouth of the Southern Slough. The area adjacent to the southern fence is overgrown with bushes, young trees, and vines. The young trees and bushes have grown into the fence and vines cover other portions.

Deer Trails – Deer trails were numerous throughout the marsh. Many of the trails appeared to be from immature deer. During our walk along the perimeter of the fence we did not notice any tracks that looked like a deer had jumped the 6 ft fence. The rail trail is elevated above the marsh ~4-6 ft and is heavily vegetated making the southern fence line difficult to jump over from the inside. There are thick cattails along the eastern, northeastern and the easternmost portion of the north fence lines – these areas were observed to under water this past summer. The easiest, most open place to jump over the fence is along the western half of the north fence line.



Stressed vegetation and tracks



Stressed vegetation



Immature deer tracks on top of cap

Stressed Vegetation – The areas of stressed vegetation observed during the summer are still evident. The impacted reed canary grass, cattails and phragmites appeared to be smaller than in other areas both on and off the cap. The smaller RCG was identified by the papery sheath where the leaf attaches to the stem.

Cap Inspection: Maintenance of the vegetative cap and the fence surrounding the site is a continuing obligation for this site. The 05/22/2012 Vegetative Cap Maintenance Plan in BRRS includes the following details: “The vegetative cap overlying the contaminated area will be inspected once a year, normally in spring after all snow and ice gone, for deterioration and other potential problems that can cause additional infiltration into underlying soils. The chain-link fence and gate will also be inspected for damage. The informational sign needs to be kept clean and up to date. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors.

Any area where sediments have become or are likely to become exposed where infiltration from the surface will not be effectively minimized will be documented."

The cap and fence was inspected during this sampling event. A copy of the Cap Inspection Log is attached. The results of the inspections indicate that the cap may possibly be degrading based on the encroachment of phragmites and cattails and standing water observed during the summer of 2016. The informational sign likely needs updating; the plastic protective sheet is cracked and clouded. The chain link fence has holes and vegetation growing through it that will cause damage if left to grow.

Observations/Recommendations:

- In the field, the edge of the cap is hard to differentiate from the adjacent vegetation and sediment. Any work on the cap will need GPS guidance.
- The holes in the fence will need repair and the entire fence should be cleared of vegetation (Task E of the attached Draft Cap Vegetative Cover Evaluation). The gates should be cleared of vegetation as well.
- The staff gage should be repaired unless it is determined this data is not needed.
- Mowing/cutting of paths through the marsh will aid navigation and future field work.
- The rail/trail is maintained as a snowmobile trail limiting access to the Marsh during the winter months to times when the snow cover is poor.
- Deer removal should be coordinated with the repair of the holes in the fence.
- The cap will require investigation and repair as described in Tasks A, B, and C in the attached Draft Cap Vegetative Cover Evaluation.

Attachments:

- Draft Cap Vegetative Cover Evaluation
- Copy of field notes
- December 12, 2016 Photos from Field Visit, Kewaunee Marsh
- 12/12/16 Estimate of River Level
- Kewaunee Marsh Waypoints December 12, 2016 Field Visit.
- Kewaunee Marsh: Dec 12, 2016 Track/Pts map
- Continuing Obligations Inspection and Maintenance Log

DRAFT CAP VEGETATIVE COVER EVALUATION
Kewaunee Marsh Arsenic Spill, 02-31-000508
December 2016

Vegetative Cover Construction Details (1996):

Figures: *Existing Site Conditions, March 1996*

Cross Sections

From ground level up:

- Polystyrene: 212 sheets polystyrene: 18'X4'X5"] placed in dead zone areas
Support for cover, buoyancy in low solids areas
- Geotextile: 155,000 ft² woven geotextile placed over entire area to be capped
Width strength of 300lbs/inch in machine and cross direction at 5% elongation
3 panels with sewn seams
Strong permeable layer to provide support for woodchips and allow infiltration to prevent ponding
- Anchor Berm: 220 yd³ of fill material placed near east end of berm over geotextile
125-145 lbs/ft³
Anchoring support for geotextile
- Wood Chips: yard waste mulch and woodchips from City of Green Bay placed over geotextile
28,000 yds³ loose/20,000 yds³ compacted
2-2.5 ft thick after compaction
- Seeding: 4 acres of temporary cover seeded May 1996
75% annual rye, 19% bluegrass, 4% timothy, 2% red top
- Fence: 2,430 ft of 6' high chain link fence within marsh
900 ft of 6' high fence along rail trail
18' long fence posts driven 12 ft into ground at 10 ft centers
- Finished elevations: 581: elevation of geotextile fabric and areas outside cap
584: elevation of top of anchor berm
583: elevation of much of central portion of capped area
582: elevation of remaining portion of capped area.
581: elevation of much of area outside of cap (limited data points)
Higher elevations adjacent to rail trail

Conditions of Cap ~2003: *Figure C-1, " Sample Locations and Interim cover conditions"* Thickness of vegetation/woodchips material above geotextile (measured in 20 borings) ranged between 0.6 and 2.7 (Average: 1.75 ft Median 1.73 ft). (Source: Figure C-1, STS Consultants, Ltd. "Site Assessment and Remedial Action Alternatives Report" , March 2004). This map includes topographic spot elevations of the area within the fence but outside the cap. The date of this survey is not known and there are no elevation points inside the fence*.

- 582: elevation of anchor berm and the most of the western portion of the cap*
581: elevation of most of capped area; especially on the east side of cap*
580: elevation of area east and outside cap*
Higher elevations adjacent to rail trail

Rough comparison of 1996 and 2003 cap elevations indicates up to 2 ft of subsidence have occurred on top of the cap.
Rough comparison of land surface elevations.

Conditions of Cap during summer 2016: Figure: "Aerial Photo taken by DNR on 7-13-2016" Cattails and (very minor) phragmites were observed encroaching onto cap. Original seeding was not evident (this was temporary). The remaining cap was reed canary grass. Toward the east side of the cap, standing water and distressed or dead reed canary grass was observed. Aerial photos of the capped area were taken and show the area of distressed vegetation. River water was between 580.7 and 581.04 so much of the eastern cap was submerged. Additional observations: Two holes in the fence surrounding the site were observed. Deer and other animal tracks were observed inside of the fence.

Concerns:

1. The DNR is concerned that the vegetative cover cap may be breaking down, as evidenced by stressed/dead vegetation (reed canary grass) on the eastern portion of the cap exposing the As contaminated sediment/soil.
2. What impact does this have on surface water, fauna and flora, and on the cleanup of site?
3. What is impact to wildlife entering site through gaps in fence?

Questions to answer:

Was the standing water observed on the cap(6/15/16) a result of ponding (permeable geotextile liner plugged with fines) of rainwater?

Is capped area becoming depressed or has settled so that contaminated groundwater/surface water beneath liner is seeping up to surface? Compare Topographic elevation of cap to groundwater elevation

Is surface water so high that it is encroaching on top of pond, coming into contact with As soils beneath the geotextile liner, and then becoming contaminated? Compare Topographic elevation of cap to surface water elevation

Is standing water impacted by arsenic? Attempted to sample standing water on cap on 9/29/16 – no standing water was observed.

Is stressed vegetation (Reed Canary Grass) caused by Arsenic? Arsenic in surface water? Arsenic in groundwater? Arsenic in mulch/soil/decayed vegetation? Other? Sample surface water on cap in area of stressed veg (attempted). Sample groundwater beneath cap (little value unless root system is in contact with groundwater). Sample cover material above geotextile liner in area of stressed vegetation. Analyze RCG for arsenic (value?)

RCG: how deep are their roots? Shallow roots – 2 – 4 inches deep.

How much flooding can RCG withstand? See attached document: "*Reed Canary Grass*": this is a "cut and paste" from the internet. It looks like RCG can withstand flooding but to what degree varies. Flooding can be used as control for RCG. It may be possible that seedlings were stunted from flooding in this area.

Is the thinning of the cap material (~1.5-1.7 ft thick in 2003) and the presence of the geotextile liner interfering with healthy plant growth? RCG has shallow roots so for the liner to become a barrier to root growth it would have to be nearly uncovered. RCG demands a high nutrient supply for healthy growth. If cap material thins and roots cannot get below the liner, then I imagine RCG might not get the nutrients it needs for healthy growth.

What about the cattails? Can their growth habits provide us some information? Why are cattails growing on the cap? How deep are their roots? Is their growth interfering with the cap? Are they tolerant of As?

What is threat to wildlife on top of cap? Drinking As surface water? Contact with As contaminated mulch?

Which of these questions is most important?

PROPOSED SCOPE OF WORK

Kewaunee Marsh Arsenic Spill
02-31-000508

Task A: Characterize Cap: Determine the current conditions of the cap. Document thickness of cap material (decayed woodchips and other material) overlying the geotextile and condition of geotextile:

1. Install 20-30 hand auger borings within cap boundary until geotextile fabric is encountered. GPS coordinates for the proposed sample locations will be provided.
2. Measure thickness of cover material and document material (root mass, woodchips, and decayed organic material). Document the condition of geotextile fabric.
3. At each location, photograph and also document surface conditions (type of vegetation, standing water, lack of vegetation)
4. Prepare a table including surface conditions, cap material thickness and description, condition of geotextile and other comments
5. Prepare Isopach map of cap material
6. Provide a photo of each boring location
7. *Do we want to have the edge of the cap marked in the field?*
8. *Mowing paths along the cap to boring locations will be beneficial to aid in field work.*

Task B: Topographic Survey of Cap and Monitor Wells: Document the existing topography of the cap to identify low areas in relation to surface water. Provide new elevation data for the monitor well network at the site so that accurate groundwater flow maps can be prepared.

1. Survey the land surface elevation of each of the borings in Task A, above, and several points just off the cap for comparison to uncapped land surface.
2. Survey the top of casing of 41 groundwater monitor wells at the site.
3. Measure height of PVC stickup. Data used to calculate land surface elevations at each well.
4. Reference each elevation point to IGLD1985/NAVD 1988.
5. Prepare a table of the elevation data.
6. Prepare a topographic map of the cap.
7. *Mowing paths along the cap to survey locations will be beneficial to aid in field work.*

Task C: Sample Cap Material for As: To rule out arsenic being the cause of the stressed vegetation observed in June 2016, collect samples of the cap material from the area of the stressed vegetation. Collect surface samples and samples more at depth to get an idea if the contamination is from beneath the cap or from surface water deposition. This task will be conducted after the results of Task A and B are received. Sample locations will be determined based on past field observations and on Task A and B results. Actual sample locations may be adjusted based on field observations. *This will allow us to add additional samples if we think there will be some benefit (sample low areas we suspect to be impacted by As seeping up from below or transported to the top via SW)?*

1. Collect 2 samples (surface and at depth) of cap material from 3-5 locations within the area of the stressed vegetation and submit the samples for laboratory analysis of arsenic.
2. Collect 2 samples of cap material outside the area of stressed vegetation from 3-5 locations for comparison.
3. Collect several samples from non-stressed vegetation areas for control/comparison points
4. Samples should be collected from the root zone (upper 4").
5. At each sample location, describe the vegetation (if observed) and location features. Take a photograph of each sample location.
6. Geolocate each sample location.

Task D: Fence Inspection: The DNR has identified 2 cut gaps in the chain link fence surrounding the site. These will need to be repaired to prohibit entrance by animals and/or humans. Inspect the entire length of the perimeter fence that encloses the site for gaps and repairs that need to be made.

1. Geolocate each area needing repair.
2. Document each repair needing to be made including, photographs, dimensions of gaps, and other details as necessary to make the repair.
3. Geolocate and document the conditions of and around any gates. Identify access deficiencies, especially at gates used for vehicular access. Photograph the gates.
4. Take photos of each area needing repair.
5. Document any evidence of past access to the site by animals or humans
6. Provide GPS locations and photos of any areas needing repairs and gates. Describe the problem and provide enough details so that the repairs can be made.

Task E: Fence Repair *and* Gates:

- Repair the two known gaps in the fence and make other repairs, as necessary.
- Convert one of the gaps into a gate for foot access.
- Provide documentation of the repairs.

Logistics:

2002: used 6X4 mule to transport supplies and personnel through marsh. At this time there was no standing water in the marsh.

12-12-16 11:17 am

Starting at SE Gate - begin tracking

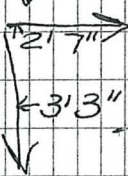
Li2 GPS

DNR GPS

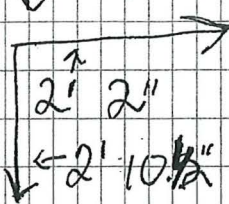
156 Slough (southern) 161 Slough (southern)

157 Slough (western) 162 Slough (northern)

158 hole in fence (NE) 163 hole in fence (NE)



159 hole in fence 164 hole in fence



East end of North fence

160 NW Corner Cap 165 NW Corner Cap

161 Mid Edge Cap
north side

169 Mid Edge Cap
north side

162 RCG Area

170 RCG Area

stunted
Phrag.
RCG

163 cattails
NW Gate

171 NW Gate 10'
double gate middle pole
4' 9"

People Gate NW ~~072~~
164 072

END OF NOTES



Stressed vegetation Area (Facing E.)



Immature Deer tracks Trapped in Fenced Area (Facing E.)



Stressed vegetation Area Cattail Growth Impacts (Facing S.)



Stressed vegetation Area (Facing N)



Stressed vegetation Area Stunted Plants (Facing W)



Stressed vegetation Area Cattail growth impacts (Facing NW)



N. Edge Cap Midpoint (Facing N.)



Stressed vegetation Area Stunted Phragmites - Cattails (Facing W.)



Stressed vegetation Area (Facing W.)

DEC 12, 2016 Photos from Field visit

REMANUS MARSH

Dec 12, 2016 Photos from field visit

REMNANT MARSH



12/12/2016



12/12/2016



12/12/2016

N. Edge Cap Midpoint (Facing S)

N. Fence (Facing East)

Facing SW From N. Fence



12/12/2016



12/12/2016



12/12/2016

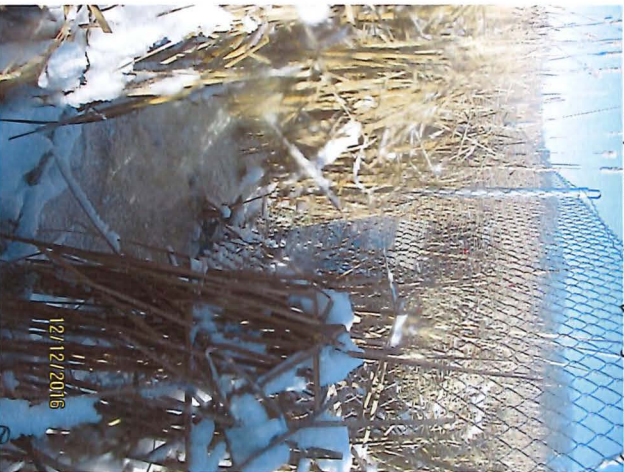
W. Angle Fence Hole Photo 2 (Facing W)

N. Fence hole Photo 2 (Facing N)

N. Fence Hole (Facing N)



12/12/2016



12/12/2016



12/12/2016

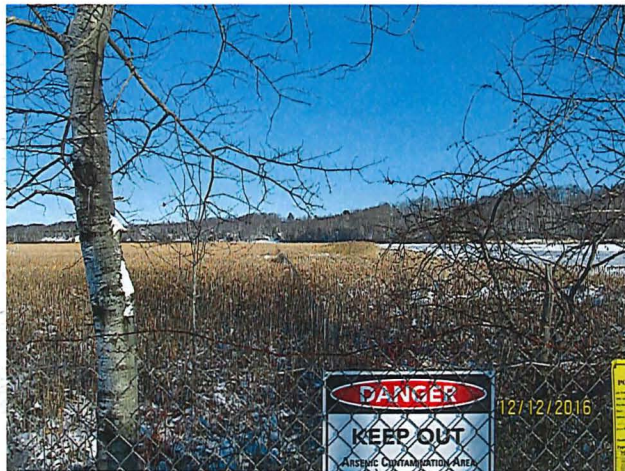
N. Angle Fence Hole (Facing NE)
(1:07pm)

N. Slough Fence (Facing NE)

Kavanaugh River Staff 6.45E
(Facing down from trail)



Phragmites (facing NE from Trail)



E. Fence (Facing N. From Trail)



River staff base 2 (facing down from Trail)



N. Fence (facing E. From Trail)



Facing NE From Trail



Facing NW. From Trail



Double Gate Access at Kiosk (facing NW)



West Fence (facing SE From trail)



Sign (facing NE from Trail)

Dec. 12, 2016 Photos from Field visit

KEMANUN SE MARSH



S. Slough - Fence (Facing NE)

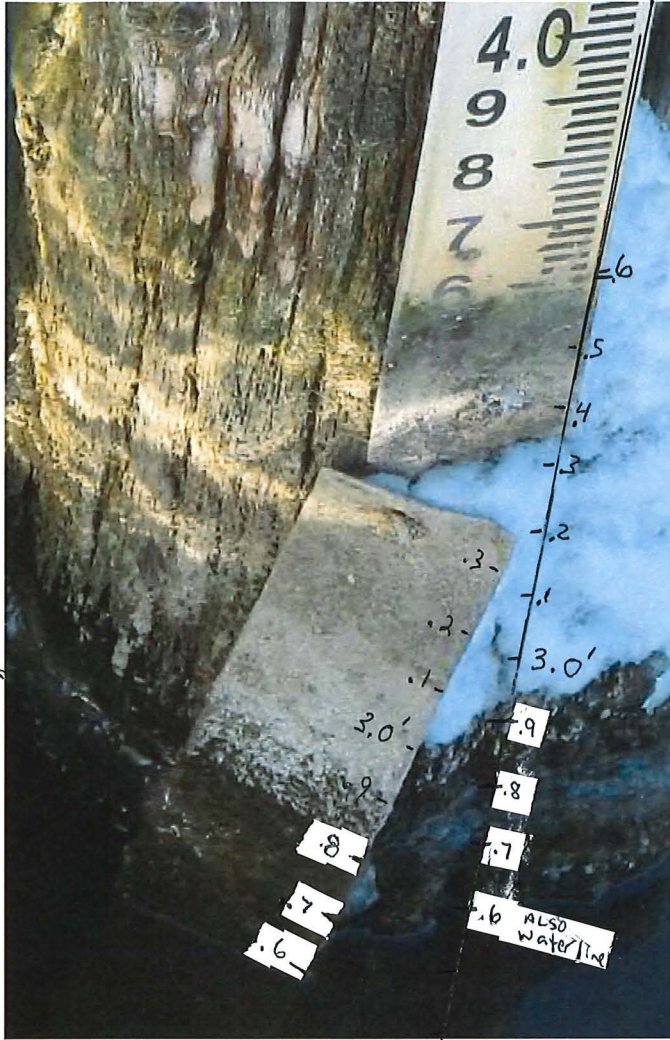


Facing NW From Trail #2



Cattails Liz (Facing NE From S. Gate)

12/12/16
- Estimation of River Level -



Faint white/grey line is water level

Estimated Reading: 2.6'

12/27/16 EAN

Kewarnee Marsh As Spill

Kewaunee Marsh Waypoints

December 12, 2016 Field Visit

Existing waypoints for the cap boundaries provided by J. Killian:

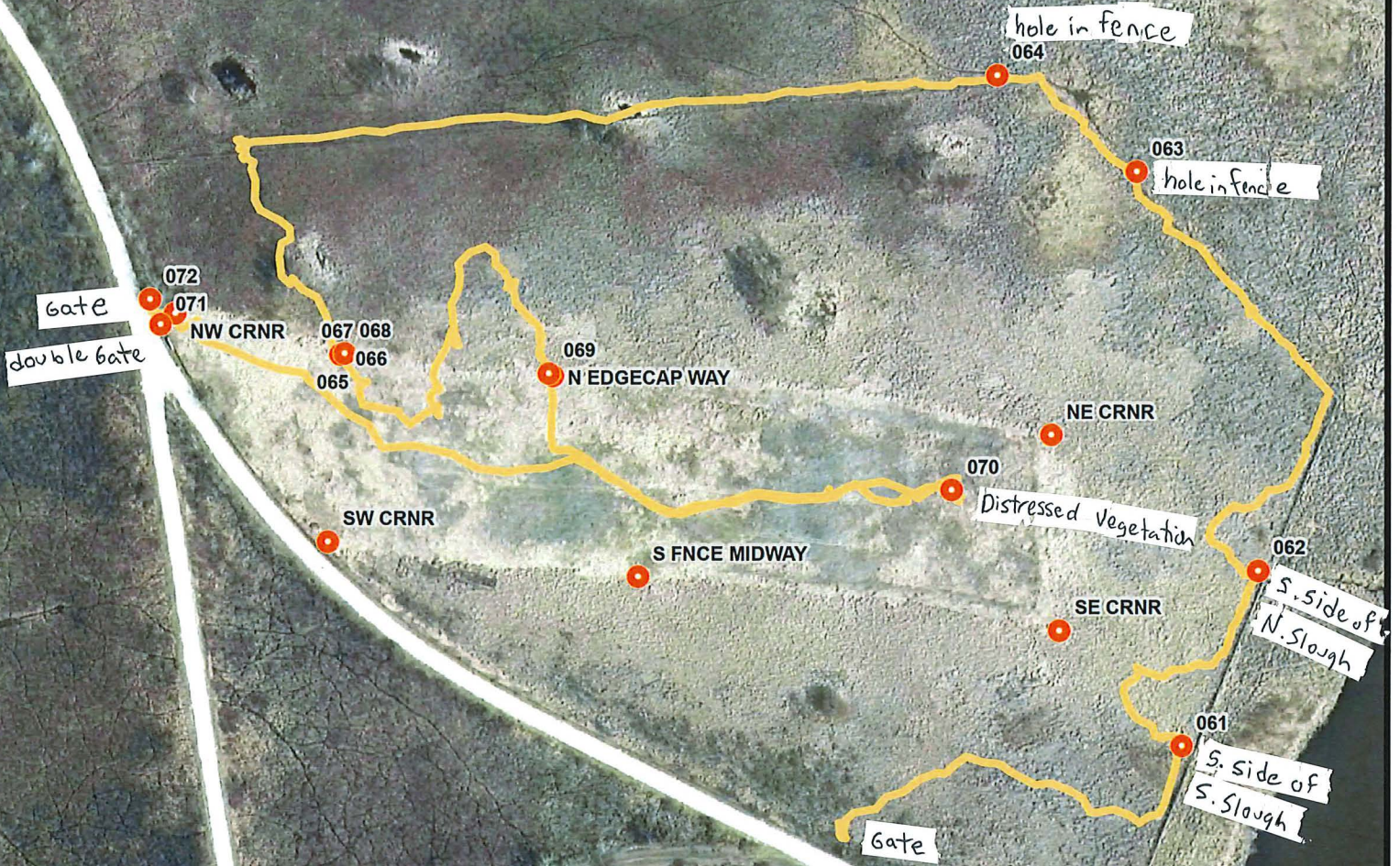
| ident | Latitude | Longitude | y_proj | x_proj | altitude |
|----------------|----------|-----------|-----------|-----------|----------|
| NW CRNR | 44.47582 | -87.51748 | 447720.99 | 717437.52 | 193.93 |
| NE CRNR | 44.47542 | -87.51418 | 447684.54 | 717701.33 | 258.22 |
| SE CRNR | 44.47489 | -87.51417 | 447625.69 | 717703.92 | 301.28 |
| SW CRNR | 44.47519 | -87.51693 | 447652.34 | 717483.39 | 297.3 |
| N EDGE CAP WAY | 44.47562 | -87.51606 | 447702.21 | 717551.14 | 354.25 |
| S FNCE MIDWAY | 44.47507 | -87.51576 | 447641.84 | 717576.85 | 324.02 |

Waypoints recorded during December 12, 2016 Field visit.

GPS Model: Garmin GPSMAP 62s S

| ident | Latitude | Longitude | y_proj | x_proj | altitude | Time | |
|-------|-----------|-----------|-----------|-----------|----------|-------------|---|
| 61 | 44.474568 | -87.51372 | 447591.02 | 717740.88 | 174.52 | 11:28:21 AM | s. Slough |
| 62 | 44.475036 | -87.51341 | 447643.75 | 717763.79 | 175.99 | 11:42:04 AM | N. slough |
| 63 | 44.476125 | -87.51383 | 447763.7 | 717727.02 | 174.48 | 12:02:28 PM | hole in fence |
| 64 | 44.476397 | -87.51435 | 447792.66 | 717684.75 | 175.5 | 12:12:56 PM | hole in fence |
| 65 | 44.475698 | -87.51685 | 447708.96 | 717487.96 | 179.14 | 12:42:59 PM | NW corner of cap |
| 66 | 44.475696 | -87.51686 | 447708.71 | 717486.93 | 179.33 | 12:43:36 PM | |
| 67 | 44.475696 | -87.51686 | 447708.71 | 717487.01 | 179.33 | 12:43:38 PM | |
| 68 | 44.475698 | -87.51685 | 447708.97 | 717488.28 | 178.96 | 12:43:57 PM | |
| 69 | 44.475628 | -87.51608 | 447703.06 | 717549.84 | 178.68 | 1:05:51 PM | Mid edge cap (north side) |
| 70 | 44.475279 | -87.51456 | 447667.95 | 717671.43 | 176.1 | 1:20:58 PM | Distressed vegetation/Reed Canary Grass Area |
| 71 | 44.475791 | -87.51754 | 447717.63 | 717433.01 | 178.81 | 1:37:05 PM | NW double gate (middle pole) |
| 72 | 44.47586 | -87.51757 | 447725.21 | 717429.91 | 179.51 | 1:37:38 PM | people gate |

Kewaunee Marsh Dec 12, 2016 Track/Pts



Directions: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

| | |
|---|----------------------------------|
| Activity (Site) Name Kewaunee Marsh Arsenic Spill | BRRTS No. 02-31-000508 |
|---|----------------------------------|

Inspections are required to be conducted (see closure approval letter):

annually
 semi-annually
 other – specify _____

When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):

| Inspection Date | Inspector Name | Item | Describe the condition of the item that is being inspected | Recommendations for repair or maintenance | Previous recommendations implemented? | Photographs taken and attached? |
|-----------------|----------------|------|--|---|---------------------------------------|---------------------------------|
|-----------------|----------------|------|--|---|---------------------------------------|---------------------------------|

| Inspection Date | Inspector Name | Item | Describe the condition of the item that is being inspected | Recommendations for repair or maintenance | Previous recommendations implemented? | Photographs taken and attached? |
|-----------------|----------------|---|--|--|--|---|
| 12/12/2016 | E. Victor | <input type="checkbox"/> monitoring well <input checked="" type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input checked="" type="checkbox"/> other: Fence | <p>Cap appears to be degrading and/or sinking. This conclusion is based on presence of standing water on top of cap and distressed and stunted vegetation on top of cap. The stunted vegetation and standing water was first observed on June 15, 2016. It was noticed on the eastern end of cap. The site was photographed by the air on 7/13/2016 (photo attached). Encroachment of cattails and phragmites is also present.</p> <p>Fence has two holes cut into it on the section oriented NW/SE and on the eastern end of the northern fence. Small trees and bushes are growing through the southern fence and vines and other vegetation are growing through the fence in other areas.</p> <p>The Plexiglas on the informational sign is cracked and beginning to get cloudy</p> | <p>The cap should be investigated to determine if the cap material is degrading and thinning and/or if it is becoming depressed. This data should be used to add cover where necessary and to raise the elevation of the cap above the standing water.</p> <p>Sampling of the cap material and/or standing water on the cap may be helpful to establish if arsenic contamination is present on top of the cap and if it is a hazard to wildlife.</p> <p>The holes in the fence should be repaired and the vegetation should be cleared from the fence.</p> <p>coordinate repairs to Plexiglas when information is changed.</p> | <p><input type="radio"/> Y <input type="radio"/> N</p> | <p><input checked="" type="radio"/> Y <input type="radio"/> N</p> |
| | | <input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other: | | | <p><input type="radio"/> Y <input type="radio"/> N</p> | <p><input type="radio"/> Y <input type="radio"/> N</p> |
| | | <input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other: | | | <p><input type="radio"/> Y <input type="radio"/> N</p> | <p><input type="radio"/> Y <input type="radio"/> N</p> |

| Inspection Date | Inspector Name | Item | Describe the condition of the item that is being inspected | Recommendations for repair or maintenance | Previous recommendations implemented? | Photographs taken and attached? |
|-----------------|----------------|---|--|---|---|---|
| | | <input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other: | | | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
| | | <input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other: | | | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |
| | | <input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other: | | | <input type="radio"/> Y <input type="radio"/> N | <input type="radio"/> Y <input type="radio"/> N |

{Click to Add/Edit Image}

Date added: 12/28/2016



12/12/2016

Title: One of the cut holes in the fence.

{Click to Add/Edit Image}

Date added: 12/28/2016



12/12/2016

Title: Southern fence with small trees growing through fence.

{Click to Add/Edit Image}

Date added: 06/15/2016



Title: 6/15/2016 (to E/NE): stressed vegetation eastern end of cap

{Click to Add/Edit Image}

Date added: 12/28/2016



Title: 6/15/2016: closed up of stressed vegetation

{Click to Add/Edit Image}

Date added: 12/28/2016



Title: 6/15/2016: For comparison....healthy vegetation on western side of cap.

{Click to Add/Edit Image}

Date added: 12/28/2016



Title: 6/29/2016 to : stressed vegetation eastern end of cap

{Click to Add/Edit Image}

Date added: 12/28/2016



Title: 12/12/2016 (to E/NE) stressed vegetation eastern end of cap

{Click to Add/Edit Image}

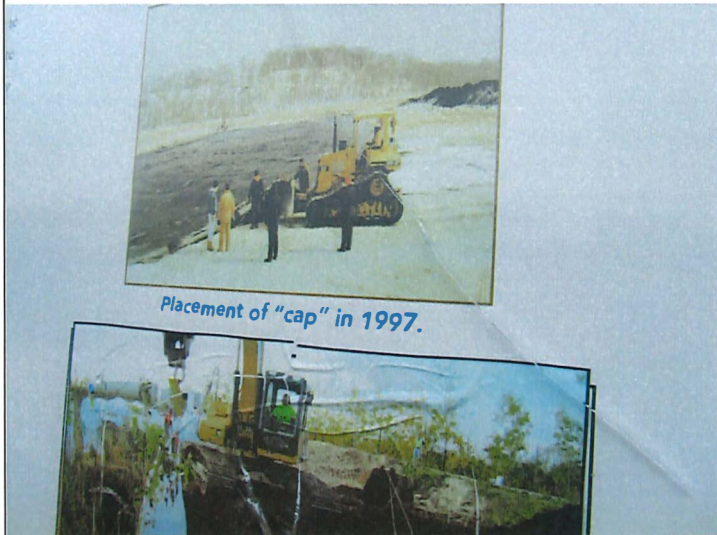
Date added: 12/28/2016



Title: 7/13/2016 Aerial Photograph of cap showing distressed vegetation

{Click to Add/Edit Image}

Date added: 12/28/2016



Title: 6/15/2016 Informational kiosk - cracks in Plexiglas