Mitigation Monitoring Report Cover Sheet
Oregon Department of State Lands

Block 1: Report Information

DSL Permit Number: 36700-RF COE Permit Number: *Nationwide Permit 27* -#200500622
Permittee: Alton Sullivan
County: Linn Report Date: 11/2/09 Monitoring Year 3
Date Removal-Fill Activity Completed: July 07
Date mitigation was completed Grading: 7/06 Planting: 9/06, 10/06, 2/07-4/07, 10/07, and 2/08.
Report submitted by: Oregon Wetlands LLC – One Horse Wetland Mitigation Bank

Block 2: Monitoring Report Purpose

This monitoring report is for monitoring a project that includes: (check all that apply):

X Compensatory **freshwater** wetland mitigation for permanent wetland impacts.
NA Compensatory **estuarine** wetland mitigation for permanent wetland impacts.
Only non-wetland compensatory mitigation.
Only mitigation for temporary impacts that has a monitoring requirement.
Voluntary wetland enhancement, creation or restoration (General authorization or individual permit) not funded with money from our wetland mitigation revolving fund.
Voluntary wetland enhancement, creation or restoration (General authorization or individual permit) funded with money from **our wetland mitigation revolving fund.**
X **Mitigation Bank** Report
Other: _____

Block 3: Results

	Success Criteria	Met (Y/N)	Comments/Reasons for Failure*
1.	Emergent Vegetation	3 of 3 requirements	
2.	Wetland Prairie	5 of 6 requirements	The moisture index is 1.93, slightly wetter than the 2-3 goal
3.	Created Tree/Shrub	6of 6 requirements	
4.	Hydrology – Water Monitoring Tubes	1 of 1 requirement	
5.	Hydrology - Delineation	1 of 1 requirement	

Remedial work recommended Yes No X
Deed Restriction or other protection instrument attached (noted: if a filed deed restriction was a required as a permit condition, please attach a copy: *previously submitted* Yes No
Final Monitoring Report? Yes No X
Requesting release or partial release of bond/credits Yes X No
*see report for detailed information

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LIST OF ATTACHMENTS

1.0 REGULATORY BACKGROUND

The purpose of this report is to summarize the progress of the One Horse Wetland Mitigation Bank (Bank). The Bank is located on the south side of Payne Rd. in T12S, R2W, Sec. 1 & 36 Lots 201, 2201 and 3900. The letter of approval for the Bank was signed on December 5, 2006 and is permitted as DSL permit # 36700 and COE permit #200500622. The Bank consists of 130.48 acres.

Development of the Bank was through a combination of enhancement of cropped wetland (118.47 acres), and creation of wetlands (11.81acres). A portion (0.20 acres) of the 130.48 total acres is being used as parking and is not included in credit generation.

Bank credits:

Type of Credit	Acres	Ratio	Credits
Cropped Wetland Enhancement	118.47	2:1	59.235
Creation	11.81	1.5:1	7.87
New Parking	0.20		
Total	130.48 acres		66.91 credits

2.0 WORK SUMMARY

Fall work began in August 2008 with mowing of 2/3 of wet prairie areas, and between tree and shrub plantings. Emergent draw down zones were spot sprayed, targeting Penny royal and any other non-natives encountered. Borders were spot treated for non natives prior to fall rains. Most wet prairie areas received a fall broadleaf herbicide treatment, except for areas that were not mowed. Several trees and shrubs were replaced in winter from apparent herbicide drift damage from adjacent management activities.

March through June, restoration activities focused on non native species control. Beginning in early March, efforts concentrated on covering all prairie areas to spot treat unwanted species before native grasses got tall and inhibited detection. All prairie areas were walked at least two times targeting velvet grass, creeping bentgrass, annual ryegrass, rough-stalk bluegrass, annual blue grass, penny royal, and any other non-natives encountered. As spring moved on, focus shifted towards spot treating between tree/shrub plantings and patrolling the emergent draw down zones for opportunistic species such as spatula-leaf loosestrife, and penny royal. All prairie areas except areas that were not mowed were broadleaf herbicide treated when conditions were favorable. Site monitoring has occurred on an almost daily basis with follow-up spot treatment and removal of invasive and non-native species.

In August 2009 ~1/2 of wet prairie areas were mowed. Several large areas were left unmowed to provided winter and nesting cover for a variety of wildlife species. Emergent draw down zones were spot sprayed, targeting Penny royal and any other non-natives encountered. Borders were spot treated for non natives prior to fall rains. Unmowed wet prairie areas received a broadleaf herbicide application when conditions were favorable. ~ 20 acres of wet prairie were treated with a very light rate of glysophate, and no-till planted to a variety of wetland forbs species, blended with small amounts of California oatgrass, Slender hairgrass, and Annual hairgrass.

Table 1 shows a break down of the restoration actions the sponsors have taken to date from the last monitoring period, which establishes the hydrologic and vegetation conditions required to meet performance standards.

Table 1. Summary of Restoration Activities at One Horse Slough Mitigation Bank August 2008 – October 2009

Activity	Location
Site preparation	Ongoing on borders
Existing forested vegetation treatment	All Non-native vegetation treated (on-going)
Forbs seeding	~ 20 acres of wet prairie
Tree/shrub planting	Several dead stems replaced in existing PFO/PSS.
Spot weed control	100% of mitigation bank area (on-going)
Broadleaf weed control	Mowed wet prairie areas
Mowing	All levees (fall 2008), 2/3 wet prairie (fall 2008), Tree/shrub plantings (Fall 08' and 09') ½ wet prairie (Fall 2009).

3.0 AS-BUILT PLANS

The as-built plans were submitted within 60 days of grading as specified in the final instrument.

4.0 HYDROLOGY PERFORMANCE STANDARDS, METHODOLOGY, AND RESULTS

4.1 Performance Standards

Wetland hydrology sufficient to meet the criteria defined in the 1987 Corps of Engineers Wetland Delineation Manual (1987 Wetland Delineation Manual), will be present in at least three out of five years if the weather records are close to normal and no irrigation is supplied. Water depth and depth of saturation will be evaluated throughout the site using a combination of monitoring wells a d a one time hydrology and vegetation delineation designed to meet the requirements of the 1987 Wetland Delineation Manual. The soil parameter is expected to be disturbed by the proposed grading, therefore lock of hydric soils indicators will not be interpreted as disqualifying a plot as wetland.

4.2 Methodology

Water Monitoring Tubes: At least six (number of tubes will be driven by the site conditions, following bank grading) groundwater monitoring tubes will be constructed and monitored to show the duration of saturation. Tube monitoring data shall be collected three times between approximately March 1 and May 30 to demonstrate sufficient duration of wetness to meet the 1987 Wetland Delineation Manual. The monitoring report will also include precipitation date for the monitoring period from the nearest recording station. The locations of the monitoring tubes will be representative of the hydrological variation on site to prove duration of saturation needed to meet the 87 Manual criteria. These will be included on the as-built drawings.

Delineation: Paired plots concentrating along the wetland boundary, for any plots dominated by upland vegetation, and in any high areas will be utilized to indicate the exact location of the wetland boundary. The paired plots will be evaluated using soil probes or pits. This will be done to document that wetland hydrology has been achieved throughout the site. In addition to plot data, these areas will be visually documented with photographs to show a dominance of wetland species. The wetland boundary will then be displayed on a site map to confirm acreage achieving the performance measure.

4.3 Results

Water Monitoring Tubes: The ten monitoring tubes were monitored in March, April, and May 2009. The results of the monitoring indicate that 100% of the planned Bank area is meeting wetland hydrology criteria with the entire Bank area having saturated soils. By the May monitoring, portions of the wet prairie were beginning to dry out, but due to heavy late spring rains, this process was much slower than past years. Saturation levels were determined by digging 18" pits adjacent to each monitoring tube. Each pit was then evaluated for the saturation level in it.

Table 2 - 2009 Hydrology Monitoring Results

Well #	3/16/2009		4/14/2009		5/7/2009	
	Depth to Free Water*	Depth to Saturation	Depth to Free Water*	Depth to Saturation	Depth to Free Water*	Depth to Saturation
1	+2"	Inundated	+2"	Inundated	+2"	Inundated
2	Surface	Inundated	Surface	Inundated	1"	Inundated
3	-5.5"	-3"	-9"	-6.5"	-8"	-6"
4	-2.5"	Surface	-3	Surface	-7"	-4"
5	-5"	-2"	-6"	-3"	-7"	-4"
6	-4"	-1.5"	-5"	-3"	-4"	-2"
7	-3"	Surface	-5"	-2.5"	-8"	-5.5"
8	Surface	Inundated	Surface	Inundated	Surface	Inundated
9	+1"	Inundated	+1"	Inundated	Surface	1"
10	-4"	-1.5"	-5"	-2"	-6"	-3"

*measured from ground surface

Required: Three monitoring dates to be used to demonstrate sufficient duration of wetness to meet the 1987 Wetland Delineation Manual. ***Met – wetland hydrology was met in two consecutive readings of the monitoring tubes.***

Delineation: A hydrology delineation was conducted on March 20, 2009 by Ray Fiori and Marvin Gilmour, with assistance from Patrick S. Thompson Consulting. The delineation involved digging holes in the higher areas of the Bank including the top of each berm, to ascertain that wetland hydrology was present throughout the entire site. Five additional pits were evaluated in the northeast corner of the creation area and the uphill edges of created impoundment areas per DSL request. The data holes were visually documented with photographs and vegetation data was collected in a one meter quadrant starting at the northwest corner of the hole. The hydrology results are summarized in table 3, delineation data hole photos are included as Attachment 1, delineation data is included as Attachment 3, and the hydrology monitoring point location map is included as Attachment 2.

Table 3 - Delineation Data Points Hydrology Data, March 20, 2009

Point #	Depth to Free Water	Depth to Saturation
1	-10”	-8.5”
2	-9”	-6”
3	-6”	-3”
4	-6”	-3”
5	-10”	-7”
6	-6”	-3”
7	-9”	-6”
8	-12”	-10”
9	-12”	-9.5”
10	-10”	-7”
11	-12”	-9”
12	-10”	-7.5”
13	-11”	-8.5”
14	-10”	-8”
15	-11”	-9”
16	-10”	-8”
17	-8”	-5”
18	-10”	-7”
19	-4”	-1”
20	Surface	Surface
21	-6”	-3”
22	-2”	Surface
23	Surface	Surface
24	Surface	Surface
25	-8”	-5”

Climate Data: **Climate Data**: Precipitation data for this location was obtained through the AgriMet agricultural weather network, run by the Bureau of Reclamation in Corvallis, Oregon. Records indicate it was a below average precipitation year, with normal water year precipitation being 34.12” for this location through March, but only 21.19” was recorded.

Although overall rainfall was below average, isolated high intensity precipitation events were frequent throughout the spring, and early hydrology monitoring was close to normal. Heavy late spring precipitation events resulted in near steady free water/saturation levels throughout the monitoring period, which typically starts to taper off by mid-April.

Below is a table depicting the monthly average precipitation data from the WETS data with the actual precipitation received, and the precipitation for the day of and the 2 weeks immediately preceding the delineation.

	Corvallis- AgriMet Corvallis Station	WETS Tables
January	3.00 inches	6.46 inches
February	3.24 inches	5.71 inches
March	3.42 inches	4.49 inches
March 20th	Trace	
March 6th-19th	1.57 inches	

Required: One time hydrology and vegetation delineation will be completed, documented with plot data, photos, and climate information which will be displayed on a map. ***Met – hydrology*** *delineation indicted all high areas and previous upland areas met wetland hydrology criteria. Plot data, photos, climate data and map locations are all included.*

5.0 VEGETATION PERFORMANCE STANDARDS AND METHODOLOGY

5.1. Performance Measures

Emergent Herbaceous

1. A minimum of 55% of the relative plant cover (including bare soil) is comprised of native species.
2. No more that 15% of the relative plant cover is comprised of non-native invasive species as define below.
3. The wetland's moisture index is less than 3.0.

*Non-native invasive species to be included: reed canary grass (*Phalaris arundinacea*), purple loosestrife (*Lythrum salicaria*), Himalayan blackberry (*Rubus discolor*), and Japanese knotweed (*Polygonum cuspidatum*), Eurasion water milfoil (*Myriophyllum spicatum*), climbing nightshade (*solanium dulcamara*) (and yellow-flag iris (*Iris pseudacorus*), Anne•s lace (*Daucus carota*), Canadian thistle (*Cirsium arvense*), bull thistle (*Cirsium vulgare*), orchard grass (*Dactylis glomerata*) and annual ryegrass (*Lolium multiflorum*) or others as determined by the MBRT.

Wetland Prairie

The above performance standards along with the following:

1. At least 10 wetgrass prairie species are present as listed in "Species Composition for Willamette Valley Vegetation Types" by Kathy Pendergrass, August 2003, *supplied by John Marshall (USFWS) author of ■Draft Guidance on Vegetation Performance Standard and Monitoring Protocols for Reference Sites and Mitigation Sites"* to enhance Appendix II of this document.
2. Tufted hairgrass (*Deschampsia cespitosa*) is represented by 25% or greater relative plant cover.
3. At least 50% of the relative plant cover (including bare soil) is comprised of native species.
4. No more that 15% of the relative plant cover is comprised of non-native invasive species as define above.
5. The prairie's moisture index is between 2.0 and 3.0.
6. No more than 5% relative plant cover by shrubs or trees.

Shrub and Forest - Restoration

By the end of the second growing season, the newly planted shrub and forest component of the wetland will meet or exceed 75% of the species richness of the reference site (excluding non-native invasive species). The plant density in forested and shrub/scrub wetlands will be at least 80% of the reference site, of species that are rated FAC or wetter, excluding FAC- species. This must be achieved by the end of the second growing season following planting and maintained through the end of the monitoring period until trees and shrubs are established and free to grow. There will be no more than 15% aerial coverage of non-native invasive species*. These densities will be a combination of planted individuals and natural recruitment.

In addition, the herbaceous layer in the forest and shrub areas will meet or exceed the performance measures for emergent herbaceous wetlands as stated above.

5.2 Methodology

A stratified, systematic plot method was used to conduct vegetation sampling in all areas. Vegetation data was collected at each of 71 original sample points that had been pre-determined and plotted along 6 transects. One additional plot (#72) was added to the upper PSS area for a better representation of this area. Four additional emergent plots (#73 - #76) were added in between existing plots to get a better sample of this habitat type, and flatten out the species area curve. The monitoring point location map is included as Attachment 4. Each original transect crosses the entire wetland (north to south) and they are located approximately 400 feet apart (north-south). Sampling plots were then located at 200 foot intervals along each transect. Herbaceous data was collected using 1-meter quadrants, and tree and shrub data was collected in 30'diameter plots.

As recommended last year, plots were evaluated to make sure they were in the appropriate habitat type. Plots 3, and 44 were included in the emergent plots. Plots 1, and 65 were included in the wet prairie plots.

5.3 Vegetation Monitoring Results

Vegetation monitoring was conducted on June 25, 2009 by Ray Fiori and Marvin Gilmour for the wet prairie and PFO/PSS plots. Due to the hydrology and late draw down of emergent areas, the emergent sampling was completed on August 10, 2009 by Ray Fiori and Marvin Gilmour. Attachment 5 includes spread sheets with the results of the monitoring. The spread sheets include a complete listing of all plant species identified in the monitoring plots. Several species that are still present on site but didn't make the monitoring plots this year were left on the list. Seventy-six monitoring plots were examined. The data spread sheets include the botanical names, common names, indicator status, origin (native or non-native) and moisture index.

During the 2009 monitoring, 37 plant species were identified in the monitoring plots. Of the species present, 33 were native and 19 are on the prairie cohort list. The low occurrence and cover of invasive and non-native species on site is a reflection of the effectiveness of site preparation, monitoring, establishment care and spot treatment that has occurred over the past 4 years (Table 1). The Bank sponsors continue to treat problem areas and prepare the site for re- introduction of a diversity of native forbs.

5.3.1 Emergent Vegetation

Herbaceous canopy cover averaged 83.27% throughout the emergent marsh area. Open water and bare ground comprised 13.46% and 3.27% respectively. This was a shift from the 2008 monitoring when there was much less herbaceous covering and a lot more open water. The 2009 emergent monitoring occurred 2 months later than 2008, allowing significant draw down to occur and the vegetation to respond. The recorded vegetation cover was 94.42% native species. The only non-native species present was Spatulaleaf loosestrife (*Lythrum portula),* which occurred with a frequency of only 2.31% over the entire emergent area.

All three of the performance criteria for **emergent herbaceous** vegetation were met.

Required: At least 55% of the mean plant cover (including bare soil) will be comprised of native species – ***Met****; the emergent vegetation plots have a relative percent native cover of 94.42%.*

Required: No more that 15% of the mean plant cover will be comprised of non-native invasive species. –***Met;*** *with 2.31 % of non-native species, with no non-native invasives.*

Required: The wetlands moisture index is less than 3 –***Met;*** *with an average moisture index of 1.06*

5.3.2 Wetland Prairie

Herbaceous native canopy cover averaged 95.66% throughout the wetland prairie areas. Non-native canopy cover (including bareground) averaged 3.55% As in past years, there was only one non-native invasive species present; annual rye grass, which accounted for 0.79% canopy cover. Bareground accounted for 2.89% cover this year. Of the vegetation itself in the wet prairie, 98.68% was native, while 1.32% is non-native species.

As succession moves forward, diversity will decrease as early seral species are out competed. To counteract this process certain prairie areas will be selected each fall to set back the existing vegetation and introduce additional diversity. This will take approximately 4 years to complete, but it will load up the seed bank with a diversity of native seeds as they reproduce, so over the long run, the site can naturally adapt to natural disturbance. This will not affect the long-term management costs, as this will be completed as part of the active management by the sponsors.

In the fall of 2009 a diverse assemblage of native wetland forbs species were planted in ~20 acres of the prairie area which joins the levees of all the major emergent areas in the middle, west side of the site. Most of these species were perennials, and are expected to establish through the summer and fall, and begin reproducing in 2011, with full establishment by 2012.

The performance criteria for **wetland prairie** were met for 5 of the 6 requirements.

Required: At least 10 wetgrass prairie species are present as listed in "Species Composition for Willamette Valley Vegetation Types" by Kathy Pendergrass. – In conversations in spring 2008 with John Marshall (USFWS), it was agreed upon to include the vernal pool species from this same source in the 10 required species, as this was the original intent. ***Met****; eleven wet grass prairie and vernal pool species were identified within the prairie plots.*

Required: Tufted hairgrass (*Deschampsia cespitosa*) is represented by 25% or greater mean cover.- ***met;*** *tufted hairgrass represented 55.92%.*

Required: At least 55% of the relative plant cover (including bare soil) will be comprised of native species- ***Met;*** *the overall relative native plant cover was 95.66%.*

Required: No more that 15% of the mean plant cover will be comprised of non-native invasive species –***Met;*** *with only 0.79% cover of non-native invasive species. The only non native invasive species present was annual rye grass.*

Required: The wetland prairie moisture index is between 2.0 and 3.0 – ***Not Met****; the average moisture index is slightly low at 1.93. This can partially be explained by the way habitat types are displayed, the numerous microhabitats within the prairie, the lack of facultative upland species (only 1 non-native), and the presence of obligate prairie cohort species.*

Required: The prairie has no more than 5% relative plant cover comprised of shrubs or trees. ***Met****; any seedling trees encroaching on the prairie were taken out with broadleaf herbicide treatment.*

5.3.3 Forest and Scrub/Shrub Creation

Four plots were picked at random in the reference site which is directly adjacent to the bank, and represent both the open and closed canopy sections of this relatively undisturbed forested wetland. Many areas had extensive Himalayan blackberry thickets and were avoided as reference plots. These plots are representative of other forested wetlands in the area, although the shrub density seems to be higher than other sites. Every tree stem over 18” and every shrub stem over 1” diameter was counted to compute the stem density. Although this would be too time consuming on a large scale, with a relatively small site this seemed the best way to quantify stem density and compare it to the restored areas. An analysis of the original reference site data was conducted with the results included in Table 4.

Monitoring plots were surveyed the same way as the reference site, with tree species over 18” tall (2 to3 yrs old) and shrub stems over 1” diameter separate from the original planted individuals were counted. A 30ft diameter sampling plot was used from the original monitoring date, as all but one plot contained both tree and shrub species. This same sampling protocol has been followed in subsequent years to be consistent, and the 30ft diameter plot has been utilized in all the emergent and wet prairie sample plots to quantify encroachment of woody vegetation into these habitats. Many new trees and shrubs are taking hold through natural recruitment from adjacent areas as well as from planted individuals and will take several years to fully establish. This year’s data is included in table 5.

Required: Year 2 performance measure. Meet or exceed 75% of the species richness of the reference site excluding non native invasive species. ***Met**; 13 woody species were identified with only seven species in the reference site*.

Required: Year 2 performance measure. Plant density will be at least 80% of the reference site with FAC or wetter species. ***Met**; with an average 613 stems per acre of FAC or wetter species. An analysis of the original reference site data was conducted with the results included in Table 4.*

Table 4 - Reference Site Analysis Summary

Reference Site Species	**Native/Non**	**Indictor Status**	**Reference Site Stem/Acre**
Oregon Ash	Native	FAC	200
Pacific crabapple	Native	FACW	30
Nootka rose	Native	FAC	222
Sweetbriar rose	**Non**	FACW	87
Service berry	Native	**FACU**	65
Snowberry	Native	**FACU**	65
English hawthorne	**Non**	FAC	65
Total stems per acre of FAC or wetter and native			452

* **Items in bold** do not meet bank performance standards

The analysis showed that of the seven species in the reference site only three species (Oregon ash, pacific crabapple and nootka rose) were both FAC or wetter and native species. The other four species were either non-native or FACU species. The original stem density calculations for the reference site included all of the species, even those that do not count toward the Bank's performance standard (FAC or wetter and native). It was determined that of the suitable species on the reference site, the stem density is 452 stems per acre. Using this analysis information, the reference site usable stem densities would be 80% of 452 stems/per acre which is 362 stems per acre.

A similar analysis was done of the 13 species that were found in the created shrub/forest wetlands within the Bank. All of the Bank species are native and 8 of the 13 species are FAC or wetter. The results are included on Table 5.

Table 5 – One Horse Shrub/Forest Analysis Summary

Bank Species	Native/Non	Indictor Status	Stem/Acre
Douglas hawthorne	native	FAC	84
Oregon ash	native	FACW	265
Ponderosa pine	native	**FACU**	12
Black cotton wood	native	FAC	90
Service berry	native	**FACU**	6
Red osier dogwood	native	FACW	12
Indian plum	native	**FACU**	18
Red flowering current	native	**FACU**	24
Nootka rose	native	FAC	78
Clustered rose	native	FAC	54
Pacific willow	native	FACW	12
Douglas spirea	native	FAC	18
Snowberry	native	**FACU**	60
Total stems per acre of FAC or wetter and native			613

*__Items in bold__ do not meet bank performance standards

Required: Year 2 performance measure. There will be no more than 15% aerial coverage of non-native invasive species*. ***Met;*** *with 0% non-native invasive species found within in the plots.*

The herbaceous layer in the shrub and forest area will meet or exceed the following year 2 emergent habitat performance measures.

Required: At least 55% of the mean plant cover (including bare soil) will be comprised of native species – ***Met****; Native plant cover was 80.91%, while non-native cover (including bareground) was 19.09%*

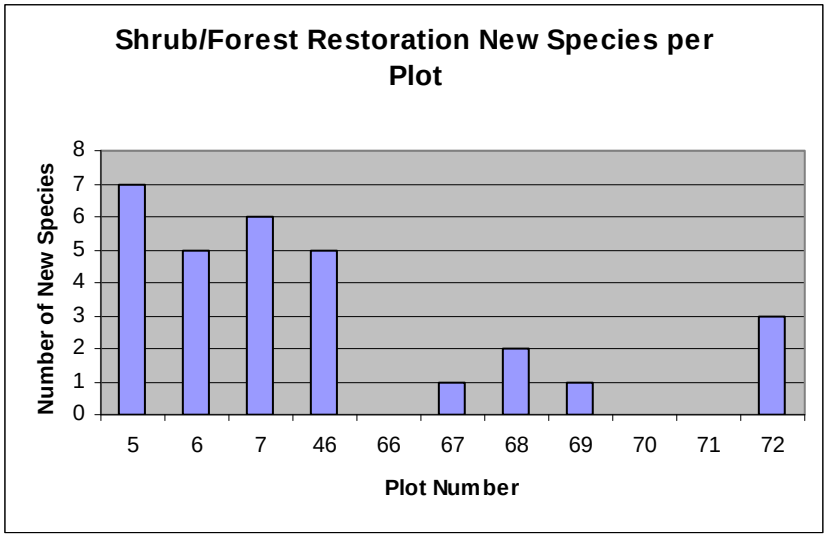
Required: No more that 15% of the mean plant cover will be comprised of non-native invasive species – ***Met;*** *with 0 % of non-native invasive species found in the plots.*

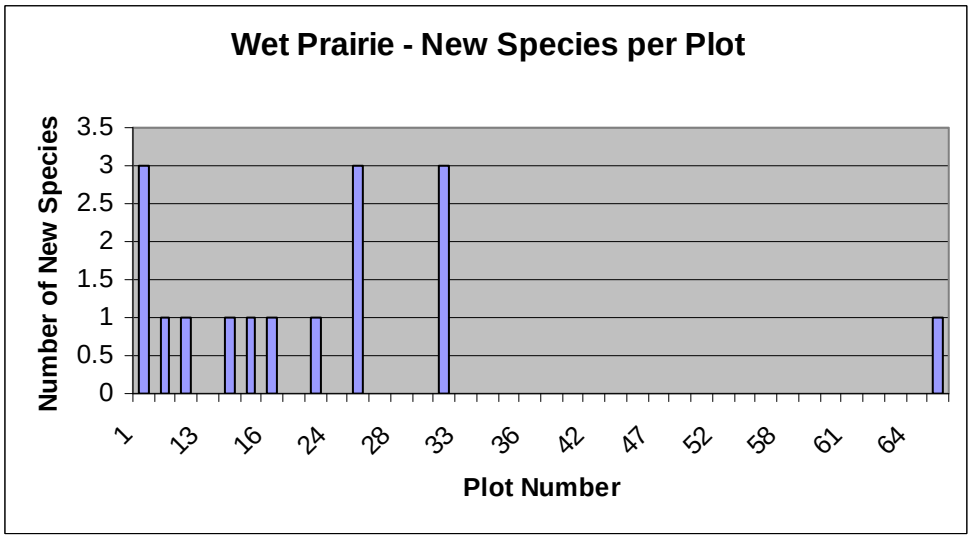
Required: The wetlands moisture index is less than 3 –***Met;*** *with an average moisture of the herbaceous layer of 1.96.*

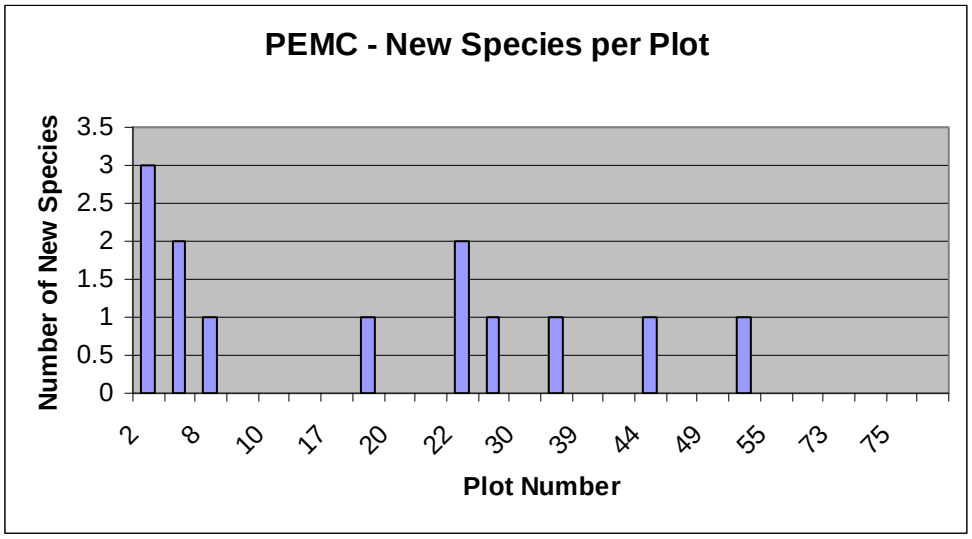
6.0 SPECIES AREA CURVE

The species area curves for each of the major wetland types are included. It was the original plan to develop the species area curve for each of the habitat types and then analyze the data. The evaluating criteria was that after the curve flattens out it would be deemed a sufficient number of plots when there are three plots in a row with one or few new species.

The data on the 76 monitoring plots indicates that there is extensive plant diversity on the site. The shrub/forest restoration area shows 3 additional new species in the final plot, which are Yarrow, Watson's willow herb, and Oregon sunshine. These species are prevalent in the shrub/forest area, but are still small in size and didn't make any other monitoring plots. These species should represent significant cover next year in multiple plots as they mature, if this is an issue during monitoring next year several new plots will be added. The wet prairie area had one new species in the last plot (Hairy purslane-speedwell) which is prevalent on the site, but only made one monitoring plot this year. The Bank sponsors feel that unless these new species are non-native invasive species, no additional plots are really needed.







7.0 PHOTO POINT MONITORING

Photos from the photo points are included as Attachment 6.

8.0 CREDIT SALES SUMMARY

An initial 17.8 credits (30% of enhancement credits) were released in December 2006. Following the 2007 MBRT site visit Release #2 was approved pending submission of the monitoring report. The 2008 Monitoring Report was submitted and release #2 and a partial release #3 was issued by DSL on 09/09/08 and by the Corps on 08/14/08 for 19.11 credits.

With the submission of this monitoring report, we have shown that all the performance measures have been met for the remainder of Release #3 and Release #4 for 23.299 credits. This would be a 90% release of the total credits, 66.91 * 90% = 60.219 – the previously released 36.92 credits (17.8 credits + 19.11 credits = 36.92) = 23.299 (release 4).

Release 1 (Fall/Winter 2006): Up to 30 percent (of the enhancement areas until a hydrology delineation occurs on the creation areas), upon submission of the grading as-built, Restrictive Covenant, submission of financial assurance and the MBRT conducts a field inspection.
Release 2 (Spring/Summer 2007): Up to 20 percent (of the enhancement areas until a hydrology delineation occurs on the creation areas) upon demonstration of all performance measures being achieved and delineation of acreage meeting the 1987 Wetland Delineation Manual hydrology (if weather conditions are close to normal).
Release 3 *(Spring/Summer 2008): Up to 20 percent upon demonstration of all performance measures being.*
Release 4 *(Spring/Summer 2009): Up to 20 percent upon demonstration of all performance measures being.*

Total Credit Release Requested: 23.299 credits

Table 6 is a summary of the credit sales to date.

Table 6 – One Horse Credit Sales Summary

DATE	**NAME**	**LOCATION**	**DSL**	**CORP**	**ADDED**	**SOLD**	**BALANCE**
12/5/06	**INITIAL 30% RELEASE**		**Permit Number**		**17.8**		17.8
12/28/06	City of Lebanon	T12S; R2W; Sec 16; DA; Lot 300	37235-RF	2006-00825		0.71	17.09
12/28/06	Pace American	T12S; R2W; Sec 16; DA; Lot 301	37233-RF	2006-00737		5.02	12.07
12/28/06	David Hunter	T12S; R2W; Sec 16; DA; Lot 302	36777-RF	2006-00462		1.38	10.69
12/28/06	RC Ventures	T12S; R2W; Sec 16; DA; Lot 303	36799-RF	2006-00462		2.08	8.61
12/28/06	Lane Manufacturing	T12S; R2W; Sec 16; DA; Lot 304	37302-RF	2006-00786		1.1	7.51
3/19/07	RC Ventures	T12S; R2W; Sec 16; DA; Lot 305	36799-RF	2006-00462		0.046	7.464
3/20/07	Lepman Properties	Sweet Home	37745-RF	NA		0.2	7.264
4/3/07	Linn County Parks Dept	Calkins Park Boating Facility	37424-RF	2006-00851		0.154	7.11
7/11/07	Western Warehousing, LLC	Lebanon	38585-RF	NA		0.56	6.55
6/4/07	Pacific Empire Construction	Crimson Estates; Lebanon	36684-RF	TBD		1.04	5.51
5/12/08	Ralph Nauman	Thornton Lake Drive, Albany	37957-RF	2007-148		0.15	5.36
7/21/08	LCD Partners LLC	Lebanon; 2900 S. Main Road	39960-RF	2008-125		0.31	5.05
7/25/08	Pacific Cast Technologies	2008 expansion –Pacific Cast T	40084	2008-154		0.28	4.77
8/5/08	Benton Co. Public Works	53rd Street	34015-NP	NA		.06	4.71
8/12/08	Gilbert LLC	T12S, R2W, Sec 16; TL 808 &900	40946-RF	2008-388		1.92	2.79
8/25/08	City of Lebanon	Lebanon Railroad Reload Facility	41028	2008-439		0.86	1.93
9/9/08	**RELEASE #2 & part of #3**		**Permit Number**		**19.11**		21.04
10/29/08	City of Lebanon	NW Industrial Improvements	6392-ENF	NA		0.27	20.77
10/20/09	First Creek, Lebanon	T12S, R1W, Sect. 4&5	43062-RF	2009-457		1.22	19.55

Attachment 1 – Hydrology Data Hole Photos

One-Horse Slough Mitigation Bank 2009 Hydrology Photos

Pit 1

Pit 2

Pit 3

Pit 4

Pit 5

Pit 6

Pit 7

Pit 8

Pit 9

Pit 10

Pit 11

Pit 12

Attachment 1 – Hydrology Data Hole Photos

Pit 13

Pit 14

Pit 15

Pit 16

Pit 17

Pit 18

Pit 19

Pit 20

Pit 21

Pit 22

Pit 23

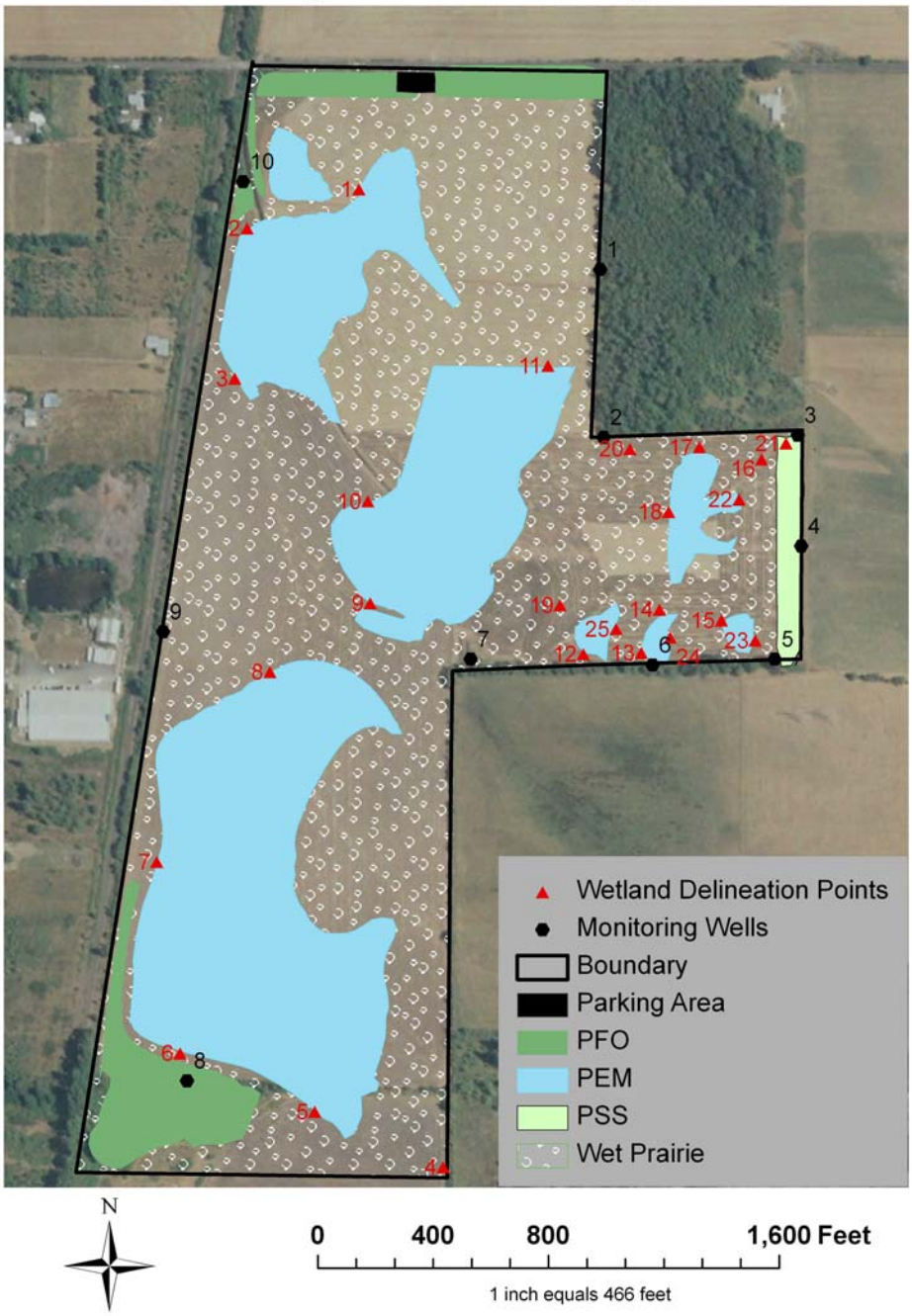
Attachment 1 – Hydrology Data Hole Photos

Pit 24

Pit 25

Attachment 2:

One Horse Slough Mitigation Bank
Hydrological Monitoring Points

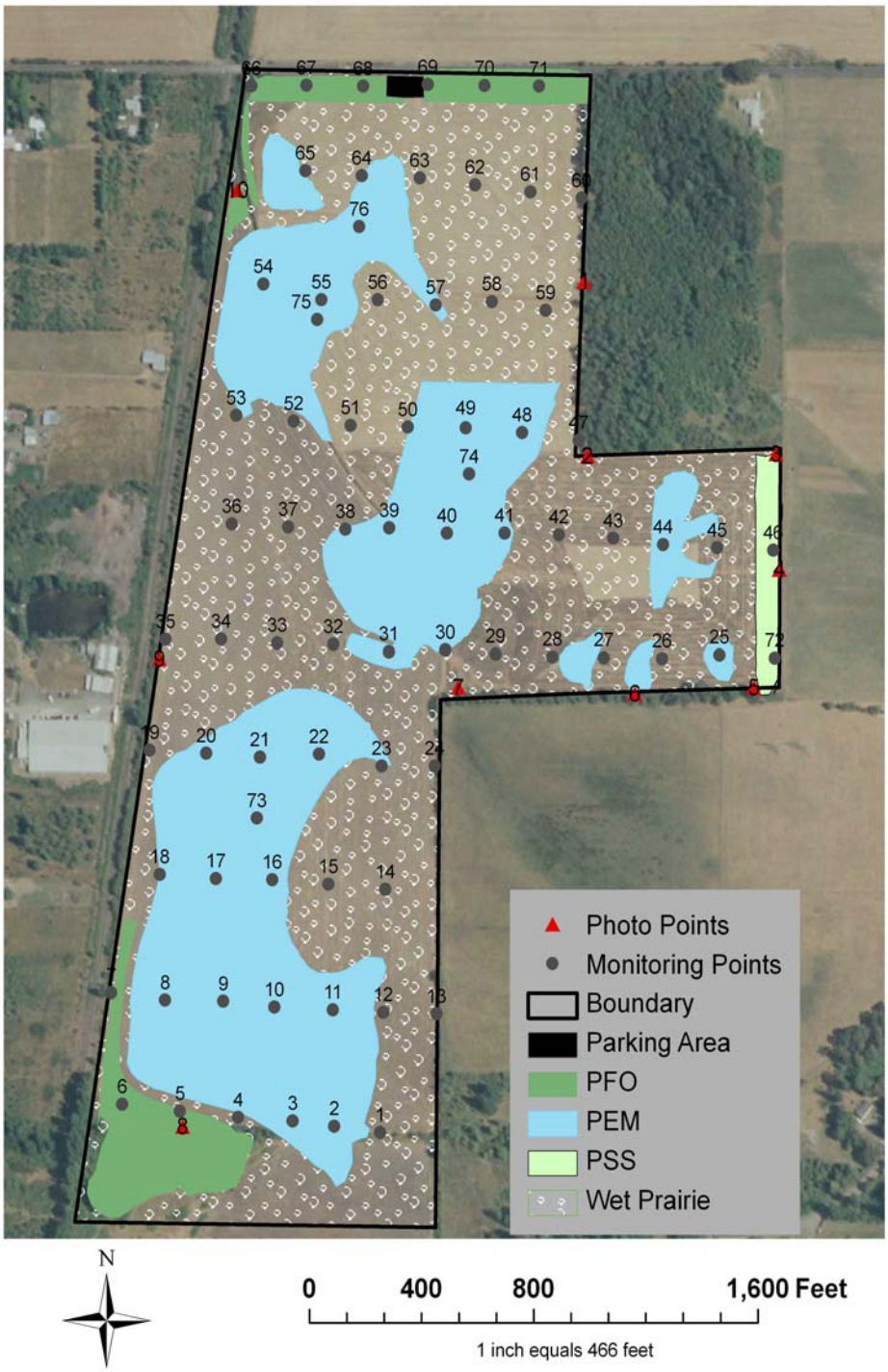


Attachment 3- Wetland Delineation Data 03/20/09					Pit #																							
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21*	22	23	24	25
Hydrology																													
Free Water (in.) (measured from ground surface**)**					-10	-9	-6	-6	-10	-6	-9	-12	-12	-10	-12	-10	-11	-10	-11	-10	-8	-10	-4	surface	-6	-2	surface	surface	-8
Depth of Saturation (in.)					-8.5	-6	-3	-3	-7	-3	-6	-10	-9.5	-7	-9	-7.5	-8.5	-8	-9	-8	-5	-7	-1	surface	-3	surface	surface	surface	-5
				Moisture																									
Common Name	**Botanical Name**	**Status**	**Origin**	**Index**																									
Shrub/Herbaceous Species - percent cover																													
Douglas spirea	Spiraea douglasii	FAC	native	3																					2				
Rosa nutkana	Nootka rose	FAC	native	3																					2				
Rosa pisocarpa	Clustered rose	FAC	native	3																					1				
Young grasses and forbs																									50				
Grass Species - percent cover																													
Agrosis exaraa	Spike bentgrass	FACW	native	2		10		15		10	10	10				10	10			10			10			20	20	15	
Alopecurus geniculatus	Water foxtail	OBL	native	1														45	50	20	45						35	45	
Beckmania syzigachne	American Sloughgrass	OBL	native	1																							15		
Deschampsia cespitosa	tufted hairgrass	FACW	native	2	75	50	30	20	60	60	70	70	85	60	80	90	10	25	25		20	25	60	45		60		30	20
Glyceria occidentalis	Western mannagrass	OBL	native	1				30	15			10		30									15						
Hordeum brachyantherm	Meadow barley	FACW	native	2	15	20	50		10	20	10		10		20		70			60		50		45		5	15		80
Lolium multiflorum	Annual rye grass	FACU	non	4				5																					
Poa annua	Annual bluegrass	FAC	non	3															10		10								
Bareground (due to early in the growing season)		**Mean=**	**14.8**		10	20	20	30	15	10	10	10	5	10			10	30	15	10	25	25	15	10	50	15	15	10	
Relative % native canopy cover		**Mean=**	**84.20**		90	80	80	65	85	90	90	90	95	90	100	100	90	70	75	90	65	75	85	90	50	85	85	90	100
Relative % non-native canopy cover, includes bareground:		**Mean=**	**15.6**		10	20	20	30	15	10	10	10	5	10	0	0	10	30	25	10	35	25	15	10	50	15	15	10	0
Relative % non-native invasive canopy cover		**Mean=**	**0.2**		0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sample plot average moisture index					2.00	2.00	2.00	2.25	1.67	2.00	2.00	1.67	2.00	1.50	2.00	2.00	2.00	1.50	2.00	1.67	2.00	2.00	1.67	2.00		2.00	1.50	1.67	2.00
Average Moisture Index (herbacous only):		**Mean=**	**1.9**																										
*A 30ft diameter shrub sample plot was used because of location in the Scrub/Shrub area.																													

Herbacous species were too small to ID.

Attachment 4:

One Horse Slough Mitigation Bank
Photo and Vegetation Monitoring Points



One Horse Slough Wetland Mitigation Bank

Plant Species List

June-09

Includes only species identified in monitored plots (some species were found last year, but not this year, but remain on the list because they are still present just didn't make the monitoring plot).

Common Name	Botanical Name	Status	Origin	Wet Prairie Species	Moisture Index
Overstory Species					
Crataegus douglasii	Douglas hawthorne	FAC	native		3
Fraxinus latifolia	Oregon ash	FACW	native		2
Malus fusca	Flowering crabapple	FACW	native		2
Pinus ponderosa	Ponderosa pine	FAC	native		3
Populus angustifolia	Black cottonwood	FACW	native		2
Scrub/shrub Species					
Amelanchier alnifolia	Service berry	FACU	native		4
Cornus sericea	Red osier dogwood	FACW	native		2
Douglas spirea	Spiraea douglasii	FAC	native		3
Oemlaria cerasiformis	Indian plum	FACU	native		4
Rosa nutkana	Nootka rose	FAC	native	Yes	3
Ribies sanquineum	Red flowering current	FACU	native		4
Rosa pisocarpa	Clustered rose	FAC	native		3
Salix lasiandra	Pacific willow	FACW	native		2
Symphoricarpos albus	Snowberry	FACU	native		4
Herbaceous Species					
Achillea millefolium	Yarrow	FACU	native		4
Alisma gramineum	Narrow leaf water plantain	OBL	native		1
Alisma plantago aquatica	Water plantain	OBL	native		1
Camassia quamash	Camas	FACW	native	Yes	2
Carex feta	Green-sheath sedge	FACW	native	Yes	2
Carex unilateralis	One-sided sedge	FACW	native	Yes	2
Eleocharis acicularis	Needle spike-rush	OBL	native	yes	1
Eleocharis ovata	Ovoid spike rush	OBL	native	Yes	1
Eleocharis palustris	Creeping spike rush	OBL	native		1
Epilobium watsonii	Watson's willow herb	FACW	native		2
Eriophyllum lanatum	Oregon sunshine	NOL	native	Yes	
Gilia capitata	Bluefield gilia	NOL	native		
Gnaphalium palustre	Cudweed	FAC	native	Yes	3
Juncus bufonius	Toad rush	FACW	native	Yes	2
Juncus tenuis	Slender rush	FACW	native	Yes	2
Lupinus rivularis	Stream-side lupine	FAC	native		3
Lythrum portula	Spatulaleaf loosestrife	NOL	non		
Plagiobothrys figuratus	Fragrant popcorn flower	FACW	native	Yes	2
Plagiobothrys scouleri	Scouler's popcorn flower	FACW	native	Yes	2
Polygonum hydropiperoides	Waterpepper	OBL	native		1
Rorippa curvisiliqua	Western yellowcress	OBL	native	Yes	1
Potamogeton natans	Floating-leaved pondweed	OBL	native		1
Sisyrinchium angustifolium	Blue-eyed grass	FACW	native	Yes	2
Sparganium emersum	Simple-stem bur-reed	OBL	native		1
Typha latifolia	Common cattail	OBL	native		1
Veronica peregrina var. xala	Hairy purlane speedewell	OBL	native	Yes	1

Grass Species					
Agrostis exarata	Spike bentgrass	FACW	native	Yes	2
Alopecurus aequalis	Short-awned foxtail	OBL	native		1
Alopecurus geniculatus	Water foxtail	OBL	native		1
Beckmania syzigachne	American Sloughgrass	OBL	native	Yes	1
Deschampsia cespitosa	Tufted hairgrass	FACW	native	Yes	2
Deschampsia elongata	Slender hairgrass	FACW	native	Yes	2
Glyceria borealis	Floating mannagrass	OBL	native		1
Glyceria occidentalis	Western mannagrass	OBL	native		1
Hordeum brachyantherm	Meadow barley	FACW	native	Yes	2
Leersia oryzoides	Rice cut-grass	OBL	native		1
Lolium multiflorum	Annual rye grass	FACU	non		4
Panicum capillare	Common witchgrass	FACU	native	yes	4
Poa trivialis	Rough-stalk bluegrass	FAC	non		3
Vulpia myuros	Rattail fescue	FAC	non		3

One Horse Slough Wetland Mitigation Bank

Wetland Prairie Plot Data

June 25, 2009

Species Observed				Wet/Prairie		Ave. %														
				Vernal	Moisture	Cover									Plot #s					
Botanical Name	Common Name	Status	Origin	Pool	Index	ea. Species	1	4	12	13	14	15	16	19	23	24	26	27	28	29
				Species																
No Scrub/Shrub Species found in vegetation plots																				
Herbaceous Species - percent cover																				
Alisma gramineum	Narrow leaf water plantain	OBL	native		1	0.13														
Camassia quamash	Camas	FACW	native	Yes	2	0.00														
Eleocharis ovata	Ovoid spike rush	OBL	native	Yes	1	0.79														
Epilobium watsonii	Watson's willow herb	FACW	native		2	0.00														
Gnaphalium palustre	Cudweed	FAC	native	Yes	3	0.00														
Juncus bufonius	Toad rush	FACW	native	Yes	2	0.53											10			
Lythrum portula	Spatulaleaf loosestrife	NOL	non			0.26			5											
Plagiobothrys figuratus	Fragrant popcorn flower	FACW	native	Yes	2	0.26														
Plagiobothrys scouleri	Scouler's popcorn flower	FACW	native	Yes	2	0.26											10			
Rorippa curvisiliqua	Western yellowcress	OBL	native	Yes	1	0.53					5		10		5					
Veronica peregrina var. xalap	Hairy purlane speedewell	OBL	native	Yes	1	0.13														
Grass Species																				
Agrostis exarata	Spike bentgrass	FACW	native	Yes	2	13.95	50	5	15	40	35	20	25		15	10				10
Alopecurus aequalis	Short-awned foxtail	OBL	native		1	0.00														
Alopecurus geniculatus	Water foxtail	OBL	native		1	3.16									25					25
Beckmania syzigachne	American Sloughgrass	OBL	native	Yes	1	2.76							15		25					5
Deschampsia cespitosa	Tufted hairgrass	FACW	native	Yes	2	55.92	25	85	80	30	60	75	50	80	20	70	75	40	35	50
Deschampsia elongata	Slender hairgrass	FACW	native	Yes	2	0.13						5								
Glyceria occidentalis	Western mannagrass	OBL	native		1	0.00														
Hordeum brachyantherm	Meadow barley	FACW	native	Yes	2	17.11	10	5						20		10		60	65	
Lolium multiflorum	Annual rye grass	FACU	non		4	0.79		5												5
Poa trivialis	Rough-stalk bluegrass	FAC	non		3	0.26											5			5
Vulpia myuros	Rattail fescue	FAC	non		3	0.13														
Bareground **Mean =**	**2.89**						15			30					10	10				
Relative % Native canopy cover			**Mean =**	**95.66**			85	95	95	70	100	100	100	100	90	90	95	100	100	90
Relative % non-native invasive canopy cover :			**Mean =**	**0.79**			0	5	0	0	0	0	0	0	0	0	0	0	0	5
Relative % non-native canopy cover, includes bareland:			**Mean =**	**3.55**			15	0	5	30	0	0	0	0	10	10	5	0	0	5
% of Total Vegetation that is Native =		**98.68**		Percent of Total Vegetation that is Non-native =					2	**1.32**										
Sample plot average moisture index **Mean =**		**1.93**					2.00	2.00	1.84	2.00	1.67	2.00	1.33	2.00	1.25	2.00	2.25	2.00	2.00	2.20
Total # of native Species: 14		# of Wet Praire or Vernal Pool Species = 11																		
Total number of Species Sampled**: 18** Total Number of Sample Plots: **38**																				
Baregound due to recent inundation or age =#1, #23, #24, # 50, #60, #65																				
Bareground (organic litter) #35																				

32	33	34	35	36	37	41	42	43	45	47	50	51	52	53	56	58	59	60	61	62	63	64	65
5																							
30																							
																							10
5																							
10																							
																							5
		15	15	10	10	10		15	15		10	25	15		30	10	10	30	60	5	5		15
						20	35	10	5														
50							10																
	90	75	60	85	55	70	55	60	70	65	60	65	30	45	60	65	65	40	20	40	35	90	50
	10	10	15	5	35			10		35	20	10	55	50	10	25	25	15	20	55	55	10	10
									10					5							5		
								5															
			10								10							15					10
95	100	100	90	100	100	100	100	95	90	100	90	100	100	95	100	100	100	85	100	100	95	100	90
0	0	0	0	0	0	0	0	0	10	0	0	0	0	5	0	0	0	0	0	0	5	0	0
5	0	0	10	0	0	0	0	5	0	0	10	0	0	0	0	0	0	15	0	0	0	0	10
1.25	2.00	2.00	2.00	2.00	2.00	1.25	1.33	1.75	2.25	2.00	2.00	2.00	2.00	2.67	2.00	2.00	2.00	2.00	2.00	2.00	2.50	2.0	1.8

One Horse Slough Wetland Mitigation Bank

Planted Shrub/Forest (PFO) Sample Plot Monitoring Results - June 25, 2009

Species Observed					Ave.%											
				Moisture	Cover	5	6	7	46	66	67	68	69	70	71	72
Botanical Name	**Common Name**	**Status**	**Origin**	**Index**	**ea. Species**											
Overstory Species. - stem count within 30' diameter																
Crataegus douglasii	Douglas hawthorne	FAC	native	3				7		7						
Fraxinus latifolia	Oregon ash	FACW	native	2		5	2		2	4	6	4	5	8	8	
Malus fusca	Flowering crabapple	FACW	native	2												
Pinus ponderosa	Ponderosa pine	FACU	native	4				2								
Populus balemifera	Black cotton wood	FAC	native	3		3	5	3		2	2					
Total # of Plots: **11**																
Total Stems per plot						8	7	12	2	13	8	4	5	8	8	
Average Stems per Plot =	6.8	Avg Stems per Plot (fac or wetter) =			6.6											
Mean Trees/Acre =	420															
Mean Trees/Acre(fac or wetter) =	409															
Shrub Species. - stem count within 30' diameter																
Amelanchier alnifolia	Service berry	FACU	native	4				1								
Cornus sericea	Red osier dogwood	FACW	native	2								1	1			
Oemlaria cerasiformis	Indian plum	FACU	native	4		2		1								
Ribies sanquineum	Red flowering current	FACU	native	4					3							1
Rosa nutkana	Nootka rose	FAC	native	3				1	3	1	1				1	6
Rosa pisocarpa	Clustered rose	FAC	native	3			1		2	2	2					2
Salix lasiandra	Pacific willow	FACW	native	2									2			
Spiraea douglasii	Douglas spirea	FAC	native	3					2							1
Symphoricarpos albus	Snowberry	FACU	native	4		2	1	1	2		1	2				1
Total # of Plots: **(11)**																
Total Stems per plot						4	2	4	12	3	4	3	3	0	1	11
Average Stems per Plot =	4.3	Avg Stems per Plot (fac or wetter) =			2.6											
Mean Shrubs/Acre =	263															
Mean Shrubs/Acre(fac or wetter) =	163															
Herbaceous Species - percent cover																
Achillea millefolium	Yarrow	FACU	native	4	0.45											5
Carex unilateralis	One-sided sedge	FACW	native	2	4.09				45							
Epilobium watsonii	Watson's willow herb	FACW	native	2	0.91											10
Eriophyllum lanatum	Oregon sunshine	NOL	native		0.45											5
Gilia capitata	Bluefield gilia	NOL	native		0.45						*5*					
Gnaphalium palustre	Cudweed	FAC	native	3	5.45				30						10	20
Juncus bufonius	Toad rush	FACW	native	2	2.73			30								
Juncus tenuis	Slender rush	FACW	native	2	0.45	5										
Lupinus rivularis	Stream-side lupine	FAC	native	3	2.73				10							20
Lythrum portula	Spatulaleaf loosestrife	NOL	non		0.00											
Sisyrinchium angustifolium	Blue-eyed grass	FACW	native	2	0.91	10										
Grass Species																
Agrostis exarata	Spike bentgrass	FACW	native	2	8.64			25		15	15	10	10	15	5	
Alopecurus geniculatus	Water foxtail	OBL	native	1	3.64							10	15	10	5	
Beckmania syzigachne	American Sloughgrass	OBL	native	1	6.82		20			10	5	5	15	15	5	
Deschampsia cespitosa	Tufted hairgrass	FACW	native	2	4.55		25					20			5	
Deschampsia elongata	Slender hairgrass	FACW	native	2	26.36		20	5		35	45	45	60	50	30	
Hordeum brachyantherm	Meadow barley	FACW	native	2	5.00		20		5	10				10	10	
Panicum capillare	Common witchgrass	FACU	native	4	7.27	70									10	
Poa annua	Annual bluegrass	FAC	non	3	0.00											
Poa trivialis	Rough-stalk bluegrass	FAC	non	3	0.00											
					80.91											
Bareground* **Mean =**	**19.09**					15	15	40	10	30	30	10			20	40
Relative % native cover (herbaceous only)			**Mean =**	**80.91**		85	85	60	90	70	70	90	100	100	80	60
Relative % non-native invasive (herbaceous layer only):			**Mean =**	**0**		0	0	0	0	0	0	0	0	0	0	0
Relative % non-native (includes bareground,herbaceous layer only):			**Mean =**	**19.09**		15	15	40	10	30	30	10	0	0	20	40
Percent of Total Vegetation Cover That is Native **=**			**Mean =**	**100.00**	Percent of Total Vegetation Cover That is Non-Native **=**								0.00			
Sample plot average moisture index (herbaceous layer only)			**Mean =**	**1.96**		2.67	1.75	2.00	2.50	1.75	1.67	1.60	1.50	1.60	2.13	2.40
Total # of Native Species = 30	Total Sample points = 11															
* Baregound due to age, or recent inundation																

One Horse Slough Wetland Mitigation Bank

Emergent Marsh (PEMC) Plot Data - August 10, 2009

Species Observed					Ave. %		Sample Plot Number																								
				Moisture	Cover																										
Botanical Name	**Common Name**	**Status**	**Origin**	**Index**	**ea. Species**	**2**	**3**	**8**	**9**	**10**	**11**	**17**	**18**	**20**	**21**	**22**	**25**	**30**	**38**	**39**	**40**	**44**	**48**	**49**	**54**	**55**	**57**	**73**	**74**	**75**	**76**
Herbaceous Species - percent cover																															
Alisma gramineum	Narrow leaf leaf water plantain	OBL	native	1	7.12		30	5		25	45			20		30						30									
Alisma plantago aquatica	Water plantain	OBL	native	1	9.04	30	20			40	30	5		15	30		30											10	10		15
Eleocharis acicularis	Needle spike-rush	OBL	native	1	0.38								10																		
Eleocharis ovata	Ovoid spike rush	OBL	native	1	13.85												25					40	85			65	10	15	60	60	
Eleocharis palustris	Creeping spike rush	OBL	native	1	7.12	40						65							25									30			25
Gnaphalium palustre	Cudweed	FAC	native	3	0.00																										
Juncus bufonius	Toad rush	FACW	native	2	0.00																										
Lythrum portula	Spatulaleaf loosestrife	NOL	non		2.31			5					5								25		5			10		5	5		
Plagiobothrys figuratus	Fragrant popcorn flower	FACW	native	2	1.15																	30									
Plagiobothrys scouleri	Scouler's popcorn flower	FACW	native	2	0.00																										
Polygonum hydropiperoides	Waterpepper	OBL	native	1	0.00																										
Potamogeton natans	Floating-leaved pondweed	OBL	native	1	0.96																				25						
Sparganium emersum	Simple-stem bur-reed	OBL	native	1	14.42		20	25		25	15			65	10						30			90	35						60
Typha latifolia	Common cattail	OBL	native	1	16.15	30		65				30	85		60				65		45		10	10		10			10		
Grass Species																															
Alopecurus geniculatus	Water foxtail	OBL	native	1	0.00																										
Beckmania syzigachne	American Sloughgrass	OBL	native	1	4.04											60										15		15	15		
Deschampsia cespitosa	Tufted hairgrass	FACW	native	1	0.38											10															
Glyceria borealis	Floating mannagrass	OBL	native	1	0.00																										
Hordeum brachyantherm	Meadow barley	FACW-	native	2	0.00																										
Leersia oryzoides	Rice cut-grass	OBL	native	1	5.96														10								80	25		40	
Panicum capillare	Common witchgrass	FACU	native	4	0.38												10														
Herbaceous Cover **Mean =**		**83.27**																													
Bareground (due to recent inundation) **Mean =**		**3.27**															35								40		10				
Open Water **Mean =**		**13.46**					30		100	10	10							100		100											
Relative Percent Native Cover			**Mean =**	**94.42**		100	100	95	100	100	100	100	95	100	100	100	65	100	100	100	75	100	95	100	60	90	90	95	95	100	100
Relative Percent Non-Native Cover (includes bareland)			**Mean =**	**5.58**		0	0	5	0	0	0	0	5	0	0	0	35	0	0	0	25	0	5	0	40	10	10	5	5	0	0
Relative % non-native invasive canopy cover :			**Mean =**	**0.00**																											
Percent of Total Vegetation Cover That is Native **=**			**Mean =**	**97.69**	Percent of Total Vegetation Cover That is Non-Native **=**								2.31																		
Sample plot moisture index			**Mean =**	**1.06**		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00		1.00		1.00	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total # of Species: 13	Total Sample points = 26																														

One-Horse Slough Mitigation Bank 2009 Photo Monitoring

Photo Point 1 North

Photo Point 1 South

Photo Point 1 West

Photo Point 2 West

Photo Point 2 East

Photo Point 2 South

Photo Point 3 Southwest

Photo Point 3 South

Photo Point 3 West

Attachment 6 – Monitoring Photos

Photo Point 4 East

Photo Point 4 South

Photo Point 4 West

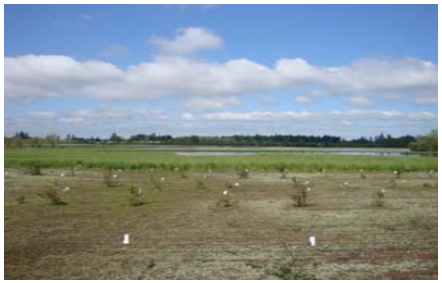


Photo Point 5 North

Photo Point 5 East

Photo Point 5 West

Photo Point 6 East

Photo Point 6 North

Photo Point 6 west

Attachment 6 – Monitoring Photos

Photo Point 7 East

Photo Point 7 South

Photo Point 7 West

Photo Point 7 North

Photo Point 8 North

Photo Point 8 East

Photo Point 8 South

Photo Point 8 west

Photo Point 9 North

Photo Point 9 East

Photo Point 9 South

Attachment 6 – Monitoring Photos

Photo Point10 North

Photo Point 10 East

Photo Point 10 South

Photo Point 10 West