Oak Creek Mitigation Monitoring Report Cover Sheet
Oregon Department of State Lands

Block 1: Report Information

DSL Permit Number: DSL Letter 8-4-1999 COE Permit Number: MOA/8-2-1999

Permittee : Oak Creek Mitigation Bank LLC

County: Linn County Report Date January 2017 Monitoring Year 18

Date Removal-Fill Activity Completed October 1998

Date mitigation was completed Grading: 1998 Planting: 2013

Report submitted by: Oak Creek Mitigation Bank LLC

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.

- ❑ Compensatory **estuarine** wetland mitigation for permanent wetland impacts.
- ❑ **Only non-wetland** compensatory mitigation.
- ❑ **Only mitigation for temporary** impacts that had 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/Reason for failure*
1.	Dominated by desirable native plant species	Y	
2.	Has more than 80% survival planted native trees and shrubs	Y	
3.	Has no more than 15% cover invasive undesirable herbaceous species	Y	
4.	Hydrology	Y	

Remedial work recommended	Yes ☐	No X
Deed Restriction or other protection instrument attached (note: if a filed deed restriction was required as a permit condition, please attach a copy):	Yes ☐	No X
Final Monitoring Report?	Yes ☐	No X
GIS Data Submitted?	Yes ☐	No X
Requesting release or partial release of bond?	Yes ☐	No X

* see report for detailed information

Oak Creek Monitoring Report 2016

1.0 Regulatory Background

This is the eighteenth monitoring report for the Oak Creek Wetland Mitigation Bank. The Bank is located in Lebanon, Oregon, parcel 800, T12S, R2W, Sec. 26. The original banking instrument was submitted in 1999 and constitutes a contract between the Oak Creek Bank LLC, Oregon Department of State Lands, and the U.S. Army Corps of Engineers.

The bank is 88.2 acres, and its goals are to restore and enhance approximately 62 acres of degraded wetland, including riparian, slope and depression wetland, emergent, scrub-shrub, and forested wetland. Additionally it will have created approximately 6 acres of buffer and upland. Phase I includes all riparian, PC, and buffer areas. Phase II includes forested wetland areas. The original potential credits include:

Type of Credit:

Phase 1

52.74 acres enhanced wetland @ 2:1	23.37 acres credit
2.75 acres restored wetland @ 1:1	2.75 acres credit
6.16 acres buffer and upland restoration @10:1	0.62 acres credit

Phase 2

5.39 acres enhanced wetland @3:1	1.80 acres credit
0.79 acres enhanced wetland @3:1	0.26 acres credit

2.0 Work summary

A remedial action plan was developed in 2010 with the help of Ray Fiori and Pat Thompson. The treatments have been conducted as scheduled. In 2012, several subsequent visits were conducted and concluded that the remedial plan was progressing successfully and a seeding plan was established. Spot spraying in all areas is ongoing and begins in early march, focusing on velvet grass, sweet vernal grass, hairy cat's ear, teasel, and pennyroyal in wetter areas. All prairie areas are walked at least twice before May when native grasses such as tufted hairgrass and meadow barley are growing tall and inhibiting spray of invasives. Blackberry and reed canary grass are sprayed once early in the spring, and any resprouts are sprayed again in the fall. There are two small areas (less than .25 acres) in the buffer edge between A4 and the Upland that were broadcast sprayed in the spring and again after fall green-up and seeded in late fall 2015. Additional seed was added to areas that have been sprayed out periodically throughout 2015, and 36 ponderosa pine were added to this edge to improve our upland habitat. The Upland area is mowed each year to lessen the seed source for non- natives. It is also sprayed for velvet grass and other non- natives. Our goal is to continue spraying out non- natives, replace those areas with seed, and eventually add trees and shrubs to further improve the overall function of the site.

Survival rate of Plantings

Remedial section	Total Plantings 2013	Surviving Plants 2014	Percentage Survival
B1 (prairie south of creek)	1,230	1,033	84%
A4 (north side of creek near upland)	700	574	82%
A2, A3 (North east property boundary)	1070	1037	97%
		Total survival = 88%	

3.0 As-Built Plan

Final as- built plans were submitted with original instrument (as well as in construction completion report in 2007.)

4.0 Hydrology Performance standards, Methodology, and Results

4.1 Performance Standards

Wetland hydrology sufficient to meet the criteria as 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 will be evaluated throughout the site at least once a month using a series of observation wells, electronic wells, and vernal pool pond gauges. A final delineation was completed and accepted in 2014.

4.2 Methodology

Ground water levels were measured in 17 deep observation tubes (approximately 120" below ground surface), and 13 shallow wells (approximately 36" below ground surface). These wells are located on map. In addition, 13 pond gauges are located throughout the site to measure vernal pool depths throughout the year. These measurements are taken monthly, and bi-monthly between March and May to demonstrate sufficient duration of wetness to meet the 1987 Wetland Delineation Manual. Electronic wells measure ground water daily. There are two electronic wells on the Bank site and one on the reference site.

4.3 Results

Oak Creek Mitigation Bank continues to meet hydrology criteria according to the 1987 manual. Vernal pools contain water through June. Oak Creek itself continued to flow through July, and flooded out of its banks more than in its recent agricultural history, proving the return of hydrologic function to the site.

5.0 Vegetation Performance Standards, Methodology, and Results

5.1 Performance Standards

Phase 1:

1) Dominated (more than 50% cover or more than 50% frequency of occurance) by desirable native plant species and plant associations after first growing season, (or by 60% after the second growing season, or by 70 % at any later time)
2) Has more than 80 % survival among the planted native trees and shrubs; and
3) Has no more than 15% cover invasive, undesirable herbaceous species.
   The criteria for undesirable species may include the following:
   - A) Designated a "noxious weed" requiring control by the Oregon Department of Agriculture Weed Control Program
   - B) Invasive non- native woody or herbaceous species that constitute a competitive threat to desirable native plant community establishment.

Phase 2:

1) Dominated (more than 50% cover or more than 50% frequency of occurrence) by desirable native plant species after the first growing season, (or by 60% after the second growing season, or by 70 % at any later time),
2) Have more than 80% survival rate among the planted native shrubs; and
3) Have no more than 15% cover of invasive, undesirable herbaceous species.
   The criteria for undesirable species may include the following:
   A) Designated a "noxious weed" requiring control by the Oregon Department of Agriculture Weed Control Program
   B) Invasive non- native woody or herbaceous species that constitute a competitive threat to desirable native plant community establishment.

5.2 Methodology

Vegetation monitoring was conducted at the Oak Creek Mitigation Bank site on May 28th, 29th, and 30th, 2016. The sampling protocol followed was that used in 1999 through 2013 at the site and is described in detail in the report for the 1999 vegetation monitoring. In brief, it consisted of 10 equally spaced sampling stations along each of 7 transects at the site, with 5 transects in the Prior Converted Wetland area and one transect each in the Forested areas in the northeast corner and along the west edge of the site. Sample stations were marked in 1999 with 5/8-inch steel rods, which were recovered in later years using descriptions of station locations, flags placed near the rods, and a magnetic locator if needed. In addition, in 2007 three new transects consisting of 5 sample stations each were added in areas of new construction. Transects 2.1 and 2.2 are 50 meters on either side of Transect 2 and parallel to it; Transect 5.1 is 50 meters south of Transect 5 and parallel to it. In 2010 one new transect (Transect 8) consisting of 10 sample stations was added in the upland area in the NW portion of the site. In 2014 one new transect (Transect 5.2), consisting of 5 sample stations, was placed between Transects 5 and 5.1, and parallel to them.

Species found in a one-square meter rectangular quadrat placed at each of the sampling stations were recorded and the cover of each was estimated as a percent of the quadrat area. In addition to the cover data in quadrats, other species encountered along transects were recorded as being present in the area. As in previous years, these latter data were not used in the calculations of average cover. Estimates of bare ground and other non-vegetated space were made at each quadrat. Estimates of overstory cover (canopy) were also included, when present. Sample stations with 16 inches or more of water at sampling time and with no emergent or aquatic vegetation (i.e. vernal pools) were not included in the vegetation analyses.

Data were entered into a spreadsheet and cover was averaged by species for each transect. Tables for the Prior Converted Wetlands area summarize data from Transects 1

through 5, and Transects 2.1, 2.2, 5.1, and 5.2. Data are presented separately for the Forested areas (Transects 6 and 7), and for the NW upland area (Transect 8).

To calculate the relative proportion of typical wetland species, those with an indicator status of FAC or better were considered. Species were assigned the indicator status for the Northwest region from the USFWS 1996 list. The most conservative National indicator status was used when the indicator status for the Northwest region was "NI" or blank. In determining proportions of cover for FAC and better species, the cover of those species was calculated as a percentage of the total cover. Percentage of the total cover comprised is native taxa, a Soil Moisture Index (SMI) were also calculated. The SMI was calculated by weighting the cover of individual species by their fidelity to wetland habitats (i.e. OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5). All species not on the USFWS 1996 list, taxa identified only to genus, and unknown taxa were assigned a value of 5 for calculating the SMI. The sum of the weighted cover values for all taxa in the plot was then divided by the total un-weighted cover of all taxa in the plot. SMI values for a plant community can range from 1.0 (all plants present are obligate wetland species) to 5.0 (all plants present are upland species), and a value of 3.0 is considered to be the break-point between wetlands and uplands.

5.3 Results

5.3.1 Prior Converted Wetland

In 2016, the dominant species found in the Prior Converted Wetlands area were *Deschampsia cespitosa* (tufted hairgrass), *Mentha pulegium* (pennyroyal), *Anthoxanthum odoratum* (sweet vernalgrass), *Hypochaeris radicata/ Leontodon hirtus* (hairy cat's ear/ hairy hawkbit), and *Carex unilateralis* (one-sided sedge). Species with an indicator status of FAC or better accounted for about 79% of the total cover in this area. Native species accounted for about 57% of the total cover in this area. The SMI for this area was 2.39, and 80% of the area was vegetated.

Performance standards:

1) Dominated (more than 50% cover or more than 50% frequency of occurance) by desirable native plant species and plant associations after first growing season, (or by 60% after the second growing season, or by 70 % at any later time)
   MET- 79% FAC or better species, with 57% native species in this area. We will continue to work to grow native plant communities and reduce non- natives to work on making this number much higher, as we are barely making the standard
2) Has more than 80 % survival among the planted native trees and shrubs
   MET-88 % of planted trees & shrubs surviving
3) Has no more than 15% cover invasive, undesirable herbaceous species.
   MET- 0.07% invasive species

5.3.2 Forested Wetlands

For the northeast Forested area (Transect 6), the dominant species were *Fraxinus latifolia* (Oregon ash), *Camassia leichtlinii* (great camas), *Poa trivialis* (roughstalk bluegrass), *Allium nigrum* (black garlic), and *Galium aparine* (cleavers). Species with an indicator status of FAC or better accounted for 84% of the total cover in this area. Native species accounted for 87% of the total cover. The SMI was 2.45, and 31% of the ground was vegetated (beneath the closed canopy layer).

For the west Forested area (Transect 7), the dominant species were *Fraxinus latifolia* (Oregon ash), *Geranium lucidum* (shining geranium), *Camassia leichtlinii* (great camas), *Poa trivialis* (roughstalk bluegrass), and *Crataegus douglasii* (black hawthorn). Species with an indicator status of FAC or better accounted for 81% of the total cover. Native species accounted for 71% of the total cover. The SMI was 2.61, and 82% of the ground was vegetated (beneath the closed canopy layer).

Performance Standard:

1) Dominated (more than 50% cover or more than 50% frequency of occurrence) by desirable native plant species after the first growing season, (or by 60% after the second growing season, or by 70 % at any later time)
   MET- 79% native species, 82.5% FAC or better species
2) Have more than 80% survival rate among the planted native shrubs
   N/A- no tree or shrub plantings have been done in this sample area, tree canopy is over 100% in all sample locations
3) Have no more than 15% cover of invasive, undesirable herbaceous species.
   MET- 0.65% invasive species

5.3.3 Upland

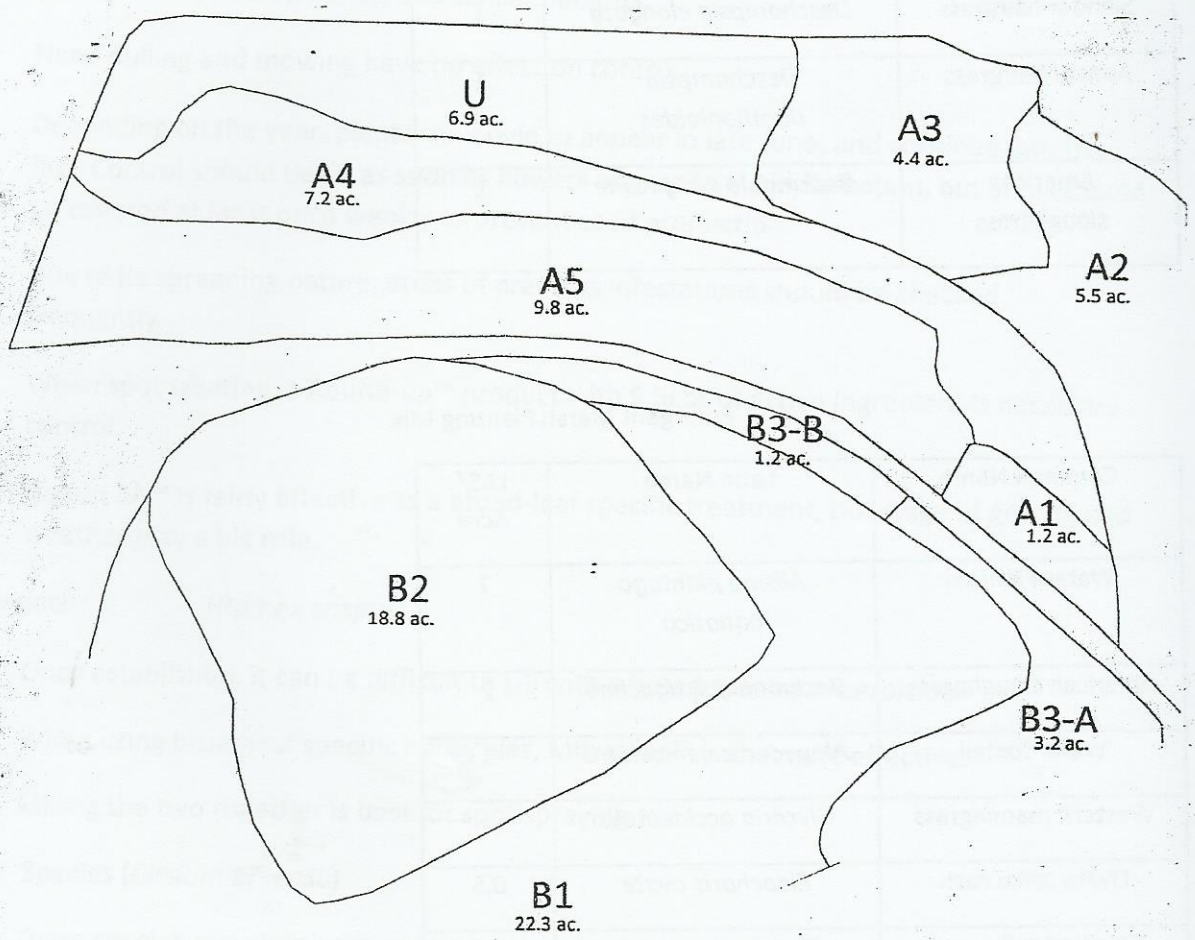
For the NW upland area (Transect 8), the dominant species were *Leucanthemum vulgare* (oxeye daisy), *Hypochaeris radicata* (hairy cat's ear), *Festuca idahoensis* ssp. *roemeri*/ *F. occidentalis* (Roemer's fescue/ western fescue), *Anthoxanthum odoratum* (sweet vernalgrass), *Holcus lanatus* (common velvetgrass), and *Elymus glaucus* (blue wildrye). Native species accounted for about 29% of the total cover in this area, and 91% of the area was vegetated.

There are no performance standards for this part of the site; however we will continue to work on the area, so it will not serve as a seed source to the wetland bank, and improve overall function of the site. With a potential of restoration credit, we plan to focus on targeting this area aggressively in 2017.

6.0 Credit Sales

No credit Sales in 2016. Appendix 3 shows journal of credit sales to date.

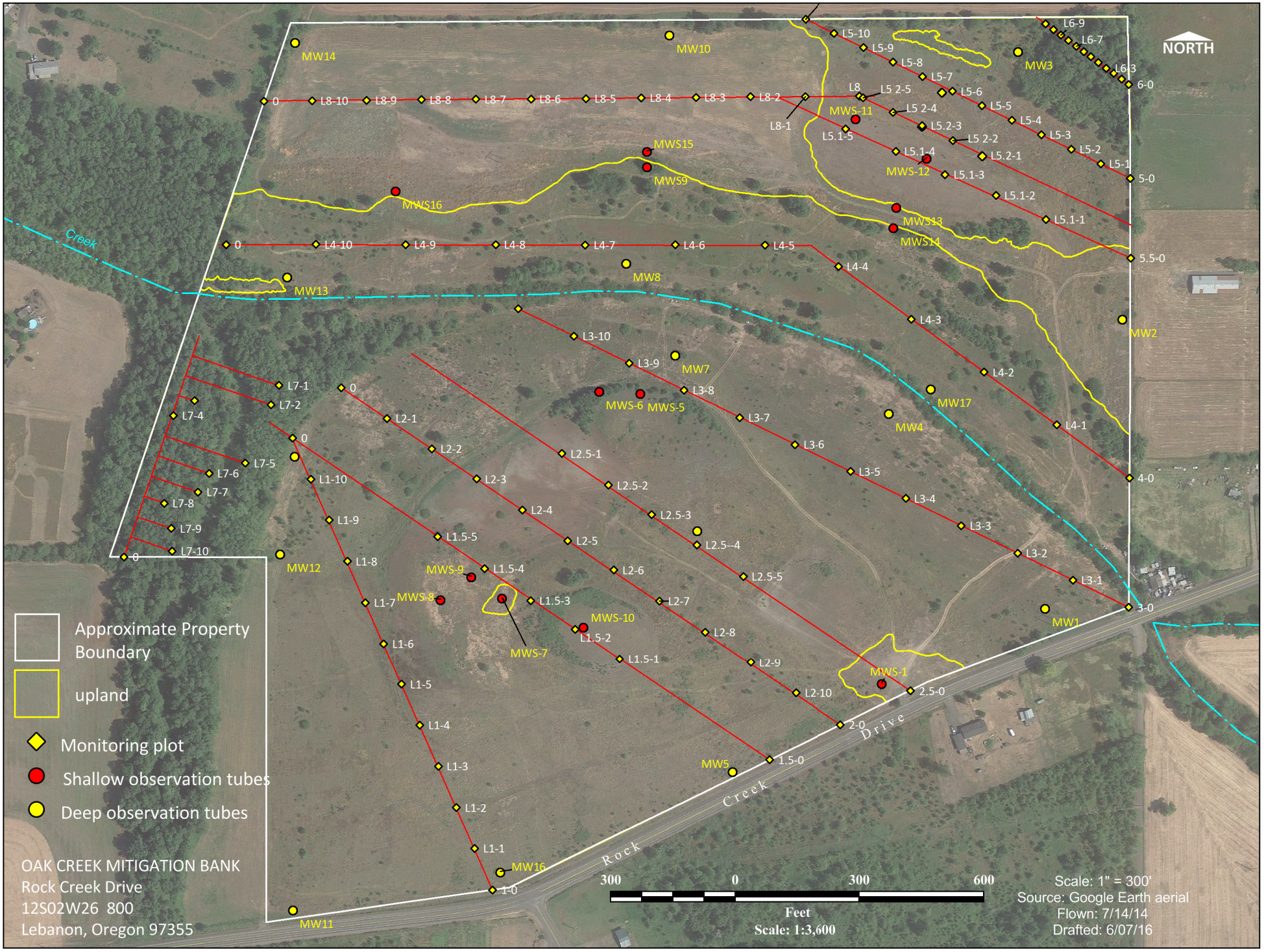
OAK CREEK MITIGATION BANK
REMEDIATION AREAS



360 0 360 720
Feet

Scale: 1:4,320

Source: NAIP 1m resolution flown summer 2009


NORTH
Approximate Property Boundary
upland
Monitoring plot
Shallow observation tubes
Deep observation tubes
OAK CREEK MITIGATION BANK
Rock Creek Drive
12S02W26 800
Lebanon, Oregon 97355
300 0 300 600
Feet
Scale: 1:3,600
Scale: 1" = 300'
Source: Google Earth aerial
Flown: 7/14/14
Drafted: 6/07/16
Rock Creek Drive
Creek
MW1
MW2
MW3
MW4
MW5
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MW8
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L1-0
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L8-9
L8-10

sci_name	common	native	indicator	wet	SMI
Agrostis capillaris/castellana	highland/colonial bentgrass		FAC	y	3
Agrostis exarata	spike bentgrass	yes	FACW	y	2
Agrostis gigantea	redtop		FAC	y	3
Agrostis sp.	bentgrass	NA	---	u	5
Agrostis stolonifera	creeping bentgrass		FACW	y	2
Aira caryophyllea	silver hairgrass		FACU		4
Alisma gramineum	narrowleaf water plantain	yes	OBL	y	1
Alisma subcordatum	American water plantain	yes	OBL	y	1
Allium nigrum	black garlic		NOL	u	5
Alopecurus geniculatis	water foxtail		OBL	y	1
Alopecurus pratensis	meadow foxtail		FACW	y	2
Amelanchier alnifolia	serviceberry	yes	FACU		4
Anagallis arvensis	scarlet pimpernel		FAC	y	3
Anaphalis margaritacea	pearly everlasting	yes	NOL	u	5
Anthemis arvensis	corn chamomile		NOL	u	5
Anthemis cotula	stinking mayweed		FACU		4
Anthoxanthum odoratum	sweet vernalgrass		FACU		4
Anthriscus caucalis	bur chervil		NOL	u	5
Antirrhinum orontium	weasel's snout [lesser snapdragon]		NOL	u	5
Arabidopsis thaliana	mouse-ear cress		NOL	u	5
Aster hallii	Hall's aster	yes	NOL	u	5
Aster sp.	aster	NA	---	u	5
Avena fatua	wild oat		NOL	u	5
Beckmannia syzigachne	American slough grass	yes	OBL	y	1
Bellis perennis	English daisy		NOL	u	5
Betula occidentalis	water birch	yes	FACW	y	2
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2
Brachypodium sylvaticum	false brome		NOL	u	5
Brassica rapa	wild mustard		NOL	u	5
Briza minor	little quaking grass		FAC	y	3
Brodiaea congesta	cluster brodiaea	yes	NOL	u	5
Bromus carinatus	California brome	yes	NOL	u	5
Bromus hordeaceus ssp. hordeaceus	soft brome		FACU		4
Bromus secalinus	ryebrome		NOL	u	5
Bromus sitchensis	Alaska brome	yes	NOL	u	5
Bromus sterilis	barren brome		NOL	u	5
Bromus vulgaris	Columbia brome	yes	UPL		5
Calamagrostis canadensis	blue-joint reedgrass	yes	FACW+	y	2
Camassia leichtlinii	great camas	yes	FACW-	y	2
Camassia quamash	common camas	yes	FACW	y	2
Cardamine angulata	seaside bittercress	yes	FACW	y	2
Cardamine oligosperma	little western bittercress	yes	FAC	y	3
Cardamine pendulaflora	Willamette Valley bittercress	yes	OBL	y	1
Carex densa	dense sedge	yes	OBL	y	1
Carex echinata ssp. phyllomanica	star sedge	yes	OBL	y	1
Carex feta	green-sheathed sedge	yes	FACW	y	2
Carex hendersonii	Henderson's sedge	yes	FAC	y	3
Carex leptopoda	Dewey's sedge	yes	FAC	y	3
Carex obnupta	slough sedge	yes	OBL	y	1
Carex pellita	woolly sedge	yes	OBL	y	1
Carex sp.	sedge	yes	---	u	5

Carex stipata	awl-fruited sedge	yes	OBL	y	1
Carex unilateralis	one-sided sedge	yes	FACW	y	2
Centaurium erythraea	European centaury		FAC	y	3
Cerastium glomeratum	sticky chickweed		UPL		5
Chamerion angustifolium	fireweed	yes	FACU+		4
Circaea alpina	small enchanter's nightshade	yes	FAC	y	3
Cirsium arvense	Canada thistle		FAC-		3
Cirsium vulgare	bull thistle		FACU		4
Claytonia perfoliata	miner's lettuce	yes	FAC	y	3
Collinsia parviflora	maiden blue eyed Mary	yes	NOL	u	5
Convolvulus arvensis	field bindweed		NOL	u	5
Conyza canadensis	horseweed	yes	FACU		4
Cornus sericea	redosier dogwood	yes	FACW	y	2
Crataegus douglasii	black hawthorn	yes	FAC	y	3
Crataegus monogyna	oneseed hawthorn		FAC-		3
Crepis capillaris	smooth hawksbeard		FACU		4
Crepis setosa	bristly hawksbeard		NOL	u	5
Cynosurus cristatus	crested dog's-tail grass		UPL		5
Cyperus acuminatus	short-pointed [tapertip] flat sedge	yes	OBL	y	1
Dactylis glomerata	orchard grass		FACU		4
Danthonia californica	California oatgrass	yes	FACU		4
Daucus carota	Queen Anne's lace		NOL	u	5
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2
Deschampsia danthonioides	annual hairgrass	yes	FACW-	y	2
Dianthus armeria	grass pink		UPL		5
Dianthus deltoides	maiden pink		FAC	y	3
Digitaria sanguinalis	hairy crabgrass		FACU		4
Dipsacus fullonum	common teasel		FACW-	y	2
Downingia elegans	common downingia	yes	OBL	y	1
Echinochloa crus-galli	barnyard grass		FACW	y	2
Eleocharis acicularis	needle spikerush	yes	OBL	y	1
Eleocharis ovata	ovate spikerush	yes	OBL	y	1
Eleocharis palustris	creeping spikerush	yes	OBL	y	1
Elymus glaucus	blue wildrye	yes	FACU		4
Epilobium brachycarpum	autumn [tall annual] willowherb	yes	UPL		5
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2
Epilobium densiflora	dense spike-primrose	yes	FACW-	y	2
Equisetum arvense	field horsetail	yes	FAC	y	3
Erodium cicutarium	common stork's bill		NOL	u	5
Erucastrum gallicum	common dogmustard		NOL	u	5
Eryngium petiolatum	rushleaf eryngo/ rushleaf coyote thistle	yes	OBL	y	1
Festuca idahoensis ssp. roemeri/ F. occidentalis	Roemer's fescue/ western fescue	yes	NOL	u	5
Festuca rubra	red fescue		FAC+	y	3
Festuca sp.	fescue	NA	---	u	5
forb	NA	NA	---	u	5
Fragaria virginiana	broadpetal strawberry	yes	FACU		4
Fragula purshiana	Pursh's buckthorn/ cascara	yes	FAC-		3
Fraxinus latifolia	Oregon ash	yes	FACW	y	2
Galium aparine	cleavers	yes	FACU		4
Galium oreganum	Oregon bedstraw	yes	NOL	u	5

Galium parisiense	creeping [wall] bedstraw		UPL		5
Galium sp.	bedstraw	NA	---	u	5
Galium trifidum	threepetal [small] bedstraw	yes	FACW+	y	2
Galium trifidum ssp. columbianum	Pacific bedstraw	yes	FACW	y	2
Galium triflorum	sweetscented [fragrant] bedstraw	yes	FACU		4
Geranium carolinianum	Carolina geranium	yes	NOL	u	5
Geranium lucidum	shining geranium		NOL	u	5
Geranium molle	dovefoot geranium		NOL	u	5
Geranium oreganum	Oregon geranium	yes	NOL	u	5
Geranium sp.	geranium	NA	---	u	5
Geum macrophyllum	large leaved avens	yes	FAC+	y	3
Glyceria borealis	northern mannagrass	yes	OBL	y	1
Glyceria occidentalis	western mannagrass	yes	OBL	y	1
Glyceria striata	fowl mannagrass	yes	OBL	y	1
Gnaphalium palustre	western marsh cudweed	yes	FAC+	y	3
grass (unidentified seedlings)	NA	NA	---	u	5
Gratiola ebracteata	bractless hedgehyssop	yes	OBL	y	1
Grindelia integrifolia	Puget Sound gumweed	yes	FACW	y	2
Hedera helix	English ivy		NOL	u	5
Heracleum maximum	cow parsnip	yes	FAC+	y	3
Holcus lanatus	common velvetgrass		FAC	y	3
Holcus mollis	creeping [German] velvetgrass		FAC	y	3
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2
Hordeum marinum ssp. gussonianum	Mediterranean barley		FACU		4
Hordeum murinum ssp. glaucum	smooth barley		NOL	u	5
Hypericum anagalloides	bog St. John'swort	yes	OBL	y	1
Hypericum perforatum	St. John'swort		NOL	u	5
Hypochaeris radicata	hairy cat's ear		FACU		4
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5
Juncus acuminatus	pointed rush	yes	OBL	y	1
Juncus articulatus	jointed rush	yes	OBL	y	1
Juncus bolanderi	Bolander's rush	yes	OBL	y	1
Juncus bufonius	toad rush	yes	FACW	y	2
Juncus effusus	common rush	yes	FACW	y	2
Juncus ensifolius	daggerleaf rush	yes	FACW	y	2
Juncus patens	spreading rush	yes	FACW	y	2
Juncus sp.	rush	yes	---	u	5
Juncus tenuis	slender rush	yes	FACW-	y	2
Kickxia elatine	sharp-leaved fluellin [cancerwort]		UPL		5
Lactuca serriola	prickly lettuce		FACU		4
Lamium purpureum	red deadnettle		NOL	u	5
Lapsana communis	nipplewort		FAC	y	3
Lathyrus sphaericus	grass peavine		NOL	u	5
Leersia oryzoides	rice cut-grass	yes	OBL	y	1
Leontodon hirtus	hairy hawkbit		NOL	u	5
Leucanthemum vulgare	oxeye daisy		UPL		5
Linum bienne	pale flax		NOL	u	5
Lolium arundinacea	tall fescue		FAC-		3
Lolium perenne	perennial ryegrass		FAC	y	3
Lolium perenne ssp. multiflorum	annual ryegrass		FAC	y	3
Lomatium bradshawii	Bradshaw's lomatium	yes	FACW	y	2
Lonicera involucrata	twinberry honeysuckle	yes	FAC+	y	3

Lotus corniculatus	birdsfoot trefoil		FAC	y	3
Lotus micranthus	small-flowered lotus	yes	NOL	u	5
Lotus unifoliolatus var. unifoliolatus	Spanish clover	yes	UPL		5
Ludwigia palustris	waterpurslane/ marsh seedbox		OBL	y	1
Lysimachia nummularia	creeping jenny		FACW	y	2
Lythrum hyssopifolia	hyssop loosestrife		OBL	y	1
Lythrum portula	spatulaleaf loosestrife		OBL	y	1
Madia glomerata	cluster [mountain] tarweed	yes	FACU+		4
Madia sativa	coast tarweed	yes	NOL	u	5
Mahonia aquifolium	shining Oregon grape	yes	UPL		5
Malus x domestica	cultivated apple		NOL	u	5
Melica subulata	Alaska oniongrass	yes	NOL	u	5
Melissa officinalis	garden balm		UPL		5
Mentha arvensis	field mint	yes	FACW-	y	2
Mentha piperita	peppermint		FACW+	y	2
Mentha pulegium	pennyroyal		OBL	y	1
Mimulus guttatus	seep monkeyflower	yes	OBL	y	1
Montia linearis	narrow-leaved montia	yes	NOL	u	5
Myosotis discolor	yellow and blue forget-me-not		FACW	y	2
Myosotis laxa	small flowered forget-me-not	yes	OBL	y	1
Navarretia squarrosa	skunkweed	yes	FACU		4
Oemleria cerasiformis	indian plum	yes	FACU		4
Oenanthe sarmentosa	Pacific water-parsley	yes	OBL	y	1
Osmorhiza berteroi	mountain sweet cicely	yes	FACU-		4
Panicum capillare	common witchgrass	yes	FACU+		4
Parentucellia viscosa	parentucellia		FAC-		3
Perideridia gairdneri	Gairdner's yampah	yes	FAC	y	3
Phacelia nemoralis	shade phacelia	yes	NOL	u	5
Phalaris arundinacea	reed canary grass	invasive	FACW	y	2
Phleum pratense	timothy		FAC-		3
Physocarpus capitatus	Pacific ninebark	yes	FACW	y	2
Plagiobothrys figuratus	fragrant popcornflower	yes	FACW	y	2
Plagiobothrys scouleri	Scouler's popcornflower	yes	FACW	y	2
Plantago lanceolata	English plantain		FACU+		4
Plantago major	broadleaf plantain	yes	FAC	y	3
Poa annua	annual bluegrass		FAC	y	3
Poa compressa	Canada bluegrass	yes	FACU+		4
Poa pratensis	Kentucky bluegrass		FAC	y	3
Poa sp.	bluegrass	NA	---	u	5
Poa trivialis	rough [roughstalk] bluegrass		FACW	y	2
Polygonum hydropiperoides	waterpepper	yes	OBL	y	1
Polygonum persicaria	spotted ladysthumb		FACW	y	2
Polygonum sp.	smartweed	NA	---	u	5
Polypodium glycyrrhiza	licorice fern	yes	NOL	u	5
Polystichum munitum	sword fern	yes	FACU		4
Populus balsamifera ssp. trichocarpa	black cottonwood	yes	FAC	y	3
Potentilla gracilis	northwest cinquefoil	yes	FAC	y	3
Prunella vulgaris	self-heal	yes	FACU+		4
Prunus emarginata	bitter cherry	yes	FACU		4
Prunus sp.	cherry, plum	NA	---	u	5
Pyrus communis	cultivated pear		NOL	u	5
Ranunculus alismifolius	water-plantain buttercup	yes	FACW	y	2

Ranunculus occidentalis	western buttercup	yes	FAC	y	3
Ranunculus orthorhynchus	straight-beaked buttercup	yes	FACW	y	2
Ranunculus repens	creeping buttercup		FACW	y	2
Ranunculus sp.	buttercup	NA	---	u	5
Ranunculus uncinatus	hooked [small-flowered] buttercup	yes	FAC	y	3
Raphanus sativus	wild radish		UPL		5
Rorippa curvisiliqua	western yellowcress	yes	OBL	y	1
Rosa eglanteria	sweetbriar rose		FACW	y	2
Rosa gymnocarpa	baldhip rose	yes	FACU		4
Rosa nutkana	Nootka rose	yes	FAC-		3
Rosa pisocarpa	clustered rose	yes	FAC	y	3
Rosa sp.	rose	NA	---	u	5
Rosa sp. (native)	wild rose	yes	---	u	5
Rubus discolor	Himalayan blackberry	invasive	FACU		4
Rubus laciniatus	evergreen blackberry	invasive	FACU+		4
Rubus ursinus	trailing blackberry	yes	FACU		4
Rumex acetosella	sheep sorrel/ sour dock		FACU+		4
Rumex conglomeratus	clustered dock		FACW	y	2
Rumex crispus	curly dock		FAC+	y	3
Rumex salicifolius	willow dock	yes	FACW	y	2
Salix fluviatilis	river willow	yes	NOL	u	5
Salix hookeriana	dune [Hooker's] willow	yes	FACW	y	2
Salix lucida ssp. lasiandra	Pacific willow	yes	FACW+	y	2
Salix sitchensis	Sitka willow	yes	FACW	y	2
Salix sp.	willow	yes	---	u	5
Sanicula crassicaulis	Pacific blacksnakeroot [sanicle]	yes	NOL	u	5
Saxifraga oregana	Oregon [bog] saxifrage	yes	FACW+	y	2
Saxifraga sp.	saxifrage	NA	---	u	5
Scirpus americanus	American bulrush	yes	OBL	y	1
Scirpus microcarpus	panicled bulrush	yes	OBL	y	1
Senecio jacobaea	tansy ragwort	invasive	FACU		4
Senecio vulgaris	common groundsel/ old-man-in-the-spring		FACU		4
Sherardia arvensis	blue fieldmadder		NOL	u	5
Sidalcea campestris	meadow checkerbloom	yes	NI	u	5
Sisyrinchium angustifolium	blue eyed grass	yes	FACW-	y	2
Sisyrinchium idahoense	Idaho blue-eyed grass	yes	FACW	y	2
Solanum dulcamara	bittersweet nightshade		FAC+	y	3
Solanum nigrum	black nightshade		FACU		4
Solanum physalifolium	hoe [hairy] nightshade		NOL	u	5
Solidago canadensis var. salebrosa	Canada [salebrosa] goldenrod	yes	FAC-		3
Sonchus asper	prickly sowthistle		FAC-		3
Spergula arvensis	stickwort/ starwort/ corn spurry		NOL	u	5
Spiraea douglasii	Douglas' spiraea/ hardhack	yes	FACW	y	2
Stachys chamissonis var. cooleyae	coastal hedgenettle	yes	NI	u	5
Stachys mexicana	Mexican betony	yes	FACW	y	2
Stachys rigida	rigid betony	yes	NOL	u	5
Stanleya confertiflora	biennial stanleya	yes	NOL	u	5
Stellaria media	chickweed		FACU		4
Stellaria sp.	starwort	NA	---	u	5
Symphoricarpos albus	snowberry	yes	FACU		4

Symphyotrichum chilense var. chilense					
	Pacific aster	yes	FAC	y	3
Taraxacum officinale	dandelion		FACU		4
Tellima grandiflora	fringecup	yes	FACU		4
Thalictrum occidentale	western meadowrue	yes	FACU		4
Tolmiea menziesii	youth on age	yes	FAC	y	3
Torilis arvensis	spreading hedgeparsley		NOL	u	5
Toxicodendron diversilobum	poison oak	yes	NOL	u	5
Trifolium dubium	small hop-clover		UPL		5
Trifolium hybridum	alsike clover		FAC	y	3
Trifolium pratense	red clover		FACU		4
Trifolium repens	white clover		FAC-		3
Trifolium sp.	clover	NA	---	u	5
Trifolium subterraneum	subterranean clover		NOL	u	5
Trillium chloropetalum	giant trillium	yes	NOL	u	5
Valerianella locusta	Lewiston cornsalad		NOL	u	5
Verbascum blattaria	moth mullein		UPL		5
Veronica americana	American speedwell [brooklime]	yes	OBL	y	1
Veronica anagallis-aquatica	water speedwell [pimpernel]	yes	OBL	y	1
Veronica peregrina ssp. xalapense	hairy purslane speedwell	yes	OBL	y	1
Veronica scutellata	marsh speedwell	yes	OBL	y	1
Veronica sp.	speedwell	NA	---	u	5
Vicia americana	American vetch	yes	FAC	y	3
Vicia hirsuta	tiny vetch		NOL	u	5
Vicia pannonica	Hungarian vetch		NOL	u	5
Vicia sativa	garden vetch/ tare		UPL		5
Vicia tetrasperma	slender vetch		NOL	u	5
Viola sp.	violet	NA	---	u	5
Vulpia bromoides	brome fescue		UPL		5

bare (soil, mud, rock)	BENEATH CANOPY, IF ANY
moss, duff, dead vegetation, etc.	
(includes sprayed vegetation)	"
standing water (inches)	

t1_s1_16	t1_s2_16	t1_s3_16	t1_s4_16	t1_s5_16	t1_s6_16	t1_s7_16	t1_s8_16	t1_s9_16	t1_s10_16
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t1_avg_16	t2_s1_16	t2_s2_16	t2_s3_16	t2_s4_16	t2_s5_16	t2_s6_16	t2_s7_16	t2_s8_16	t2_s9_16
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t3_s9_16	t3_s10_16	t3_avg_16	t4_s1_16	t4_s2_16	t4_s3_16	t4_s4_16	t4_s5_16	t4_s6_16	t4_s7_16
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3	1	2.5	3	2			
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		12.6	90	47		3	2
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	16	3.9							
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9	8	14.9	5	15	14	35	45	38	2
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		1.1				5		1	
1	1	0.6							
	4	0.8				10	3		
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	7	3.2				2		2	
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		0							
3	1	2.7	2	3	10	3	5	1	2
20	5	6.8	3	5	2	5	5	7	5

t4_s8_16	t4_s9_16	t4_s10_16	t4_avg_16	t5_s1_16	t5_s2_16	t5_s3_16	t5_s4_16	t5_s5_16	t5_s6_16
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			0.3						
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3			2.1						
4		4	0.8						
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		2	0.2	3	3	2	1		2
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6	4		1.6						
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1		45	4.6					1	2
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17	35		27.1					1	
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20	3	14	12.2	9	57	43	80	2	22
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	23	2.8	9	1	2	1	1	1
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43	27	1	22.5				1	
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		2	0.2					
		2	1.5					
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			0.1	4	1	2	5	5	2
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			0						
		10	1.4						
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6	3	1	3.6	1	8	15	1	18	12
8	12	8	6	8	4	12	9	1	45

t5_s7_16	t5_s8_16	t5_s9_16	t5_s10_16	t5_avg_16	t2.1_s1_16	t2.1_s2_16	t2.1_s3_16	t2.1_s4_16
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15	10	27		6.3	14	13	9	
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17	5	12	24.7	40	42	4	53
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18	3	10	15	6.1	1	1		2
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3	20	17	20	18.8	2	15	37	
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1	2			1.8				
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1			2	0.6	4	2	2	4
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	1	40	13	5.5			5
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17	5	4		4.5	2	1	1
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5	53	2	15	13	1	1	10	5
25	4	10	5	12	33	12	35	30

t2.1_s5_16	t2.1_avg_16	t2.2_s1_16	t2.2_s2_16	t2.2_s3_16	t2.2_s4_16	t2.2_s5_16	t2.2_avg_16
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	7.2				9	30	7.8
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60	39.8		27	28	11
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	0	7			1.4
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	0	20	1	1		4.4
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	0		6			1.2
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	0.8				1	12	2.6
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2	0.4				1		0.2
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1	11					7	1.4
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10	3	2	36	58		19.2
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	0.8				2	0.4
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	0						0
5	4.4	50	10	2	2	2	13.2
20	26	3	1	15	10	12	8.2

t5.1_s1_16	t5.1_s2_16	t5.1_s3_16	t5.1_s4_16	t5.1_s5_16	t5.1_avg_16	t5.2_s1_16	t5.2_s2_16
	40	5	3	3	10.2	10	
					0		
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		3			0.6	1	
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6	45	15		2	13.6	7	1
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95	2	17	32	27	34.6		95
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3	7	1		1	2.4	40	
					0		
1				13	2.8		
					0		
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1					0.2		
					0		
6	4	5	5	3	4.6	9	1
					0		
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					0		
			1		0.2		
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	3	3	2	3	2.2		
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1	1	4	3	1.8	
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			2	0.4	
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1			1	0.4	
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2	1	1	1	1	7
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		0		
		0		
		0		
		0		
		0		
	1	0.2		
		0		
		0		
		0		
		0		
		0		
1	2	0.6	3	1
		0		
		0		
		0		
		0		
		0		
		0		
		0		
		0		
		0		
		0		
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					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
					0		
				1	0.2		
					0		
					0		
					0		
					0		
				7	1.4		
					0		
					0		
					0		
					0		
1	3	25	55	20	20.8		1
15	5	20	3	15	11.6	25	3

t5.2_s3_16	t5.2_s4_16	t5.2_s5_16	t5.2_avg_16	pc_avg_16	t6_s1_16	t6_s2_16	t6_s3_16	t6_s4_16
			2	0.87				
			0	0.27				
			0	0.00				
			0	0.00				
			0	0.19				
			0.2	0.06				
			0	0.00				
			0	0.00				
			0	0.00		8	2	
			0	0.96				
			0	0.11				
			0	0.00	40			
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
9	4	4	5	5.83				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.31				
			0	0.00				
			0	0.00				
			0	0.87				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	1.60				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00	50	7	1	6
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.69				
			0	0.00				
			0	0.00		30	1	
			0	0.00				
			0	0.00				
			0	0.00				

			0	0.00				
			0	5.30				
			0	0.06				
			0	0.09				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.07				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00	5			
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.03				
75	80	53	60.6	27.70				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.06				
			0	0.00				
			0	0.00				
			0	0.74				
			0	0.00				
			0	1.64				
			0	0.00				
			0	0.09				
		1	0.2	0.83				
			0	0.40				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	1.37				
			0	0.00				
			0	0.00				
			0	0.20	98	99	95	80
		1	0.4	0.04	7			
			0	0.00				

			0	0.16
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.10
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.74
			0	0.00
			0	0.14
			0	0.00
			0	0.00
			0	0.00
3	1		8.8	3.90
			0	0.00
			0	4.54
			0	0.00
			0	0.00
			0	0.00
			0	0.03
			0	0.00
10	4	4	5.6	5.74
			0	0.00
			0	0.00
			0	0.00
			0	0.87
			0	0.00
			0	0.03
			0	0.00
			0	0.00
			0	2.17
			0	0.00
			0	0.03
			0	0.00
			0	0.10
			0	0.00
			0	0.00
			0	0.00
			0	0.13
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.00
			0	0.00

		0	0.56		
		0	0.00		
		0	0.56		
		0	0.00		
		0	0.00		
		0	0.24		
		0	4.09		
		0	0.11		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	9.57		
		0	0.00		
		0	0.33		
	1	0.2	0.24		
		0	0.33		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.07		
1		1.6	1.59		
		0	0.00		
		0	0.00		
		0	0.03		
		0	0.00		
		0	0.00		
		0	0.14		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.63	1	6
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	1.61		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		
		0	0.00		

0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.07		
0	0.00		
0	0.00		
0	0.00		
0	0.06		
0	0.00		
0	0.00		
0	0.04		
0	0.00		
0	0.00		
0.8	0.39		
0	0.03		
0	0.04		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		4
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
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0	0.00		
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0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	1.06		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00		
0	0.00	6	

			0	0.00				
			0	0.00	1			
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.01				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.03				
			0	0.36				
			0	0.00				
			0	0.00				
			0	0.00				
			0	0.10				
			0	0.00				
			0	0.66				
			0	0.00				
			0	0.00				
5	3	1	2	7.54	5	1	5	8
5	9	40	16.4	12.54	35	45	91	86

t6_s5_16	t6_s6_16	t6_s7_16	t6_s8_16	t6_s9_16	t6_s10_16	t6_avg_16	t7_s1_16	t7_s2_16	t7_s3_16
						0			
						0			
						0			
						0			
						0	8		
						0			
						0			
						0			
12	42					6.4			
						0			
						0		1	
						4			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0	2		
						0			6
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
16	8	1	13	10		11.2			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						3.1	2		3
						0			
						0			
						0			

						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0.5			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0	40		
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0	1		2
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
80	50	77	98	95	95	86.7	5	92	95
				45	8	6		4	2
						0			

		0			
		0			
		0			
		0			
		0			
		0	4	1	
		0	13	57	28
		0			
		0			
		0			
	9	0.9		6	12
		0			
		0			
		0			
		0			
		0			
		0			
		0			
		0			
		0		23	
		0			
		0			
		0			
		0			
		0			
		0			
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		0			
		0			
		0	1		
		0			
		0			
		0			5
		0			
		0			
		0			
		0			
		0			
2	8	1	1	2	10
		0			
		0			
		0			
		0	1		
		0			
		0			
		0			
		0			
		0			
		0			

			0			
			0			
			0			
			0			
			0			1
			0	2		
			0			
			0			
			0			
			0			
			0			
			0			
			0		3	
			0			
			0			
			0	2		
			0			
			0			
			0			
			0	15		
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
27	15	5	5.4	10	12	62
			0			
			0			
			0			
			0			
			0			
			0			
			0			
3			0.3	2	3	
			0			
27			2.7			
			0			
			0			

	0			
	0			
	0			
	0			
5	0.5			1
	0			
	0			
	0			
	0			
	0			
	0			
	0			
	0			
3	0.3			
	0			
	0			
	0			
	0	1	8	7
	0			
	0			
	0			
	0			
	0			
	0			
	0			
	0			
	0.4			
	0			
	0			
	0			
	0			
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	0			
	0			
	0			
	0			
	0			
	0			
	0			
	0			
	0			
	0			
	0.6			

						0			
			2			0.3			
						0			
						0			
						0			
						0	1	7	1
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
						0			
			6	4		1	2		2
						0			
						0			
						0			
5	20	5	2	2	15	6.8	3		
70	30	94	42	37	88	61.8	8	2	5

t7_s4_16	t7_s5_16	t7_s6_16	t7_s7_16	t7_s8_16	t7_s9_16	t7_s10_16	t7_avg_16	for_avg_16	t8_s1_16
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
		33					4.1	2.05	
							0	0.00	
							0	0.00	
							0	0.00	
							0	3.20	
							0	0.00	
							0.1	0.05	
							0	2.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	1
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0.2	0.10	
		10					1.6	0.80	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
		32	78	13	67	88	27.8	19.50	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
5	8	9		2			2.9	3.00	
							0	0.00	
							0	0.00	
							0	0.00	

							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
		75					7.5	4.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	8
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							4	2.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	25
							0	0.00	
1	1	1		5			1.1	0.55	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	50
						1	0.1	0.05	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
98	65	72	99	10	85	98	71.9	79.30	
		1	6	2	4	1	2	4.00	
							0	0.00	

						0	0.00	1
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
					1	0.6	0.30	
1	2	27	30	25	23	20.6	10.30	
						0	0.00	
						0	0.00	
						0	0.00	
1			15	8		4.2	2.55	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
		4				2.7	1.35	
						0	0.00	1
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0.1	0.05	
						0	0.00	
						0	0.00	2
						0	0.00	
						0	0.00	
						0	0.00	
						0.1	0.05	
						0	0.00	
						0	0.00	
						0.5	0.25	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
	2		1			1.6	1.30	
						0	0.00	
						0	0.00	
						0	0.00	
	1					0.2	0.10	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	
						0	0.00	

		14				1.4	0.70
						0	0.00
						0	0.00
						0	0.00
8						0.9	0.45
						0.2	0.10
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0.3	0.15
						0	0.00
						0	0.00
						0.2	0.10
						0	0.00
						0	0.00
						0	0.00
						1.5	0.75
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
	12	5	2	10		11.3	8.35
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
						0	0.00
	1				2	0.8	0.55
						0	0.00
		1				0.1	1.40
						0	0.00
						0	0.00

							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
				8			0.9	0.70	
							0	0.00	
							0	0.00	
							0	0.00	
				10			1	0.50	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
	1	1			5	3	1	0.65	
							0	0.00	
					5	5	1	0.50	
							0	0.00	1
6	5	1		3			3.1	1.55	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.20	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
							0	0.00	
				6		8	1.4	1.00	

							0	0.00	
							0	0.15	
					22		2.2	1.10	
							0	0.00	
							0	0.00	
		1			3		1.3	0.65	
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	28						2.8	1.40	
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	1	2		1	3		1.1	1.05	2
							0	0.00	
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20	2						2.5	4.65	5
68	40	5	7	5	4	8	15.2	38.50	3

t8_s2_16	t8_s3_16	t8_s4_16	t8_s5_16	t8_s6_16	t8_s7_16	t8_s8_16	t8_s9_16	t8_s10_16	t8_avg_16
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3	3	1	3	25	15	3	15	6	7.7

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Prior Converted Habitat Type - Transect 1				Date(s) Sampled: 5/28/16														
Cover (%)																		
									Sample Station									
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2	63	60	8	35		35	12	10	70	24	31.7		63.4
Anthoxanthum odoratum	sweet vernalgrass		FACU		4		12	45				38	4	6	10	11.5		46.0
Eleocharis palustris	creeping spikerush	yes	OBL	y	1					85						8.5		8.5
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2			1			45	4				5		10.0
Lythrum portula	spatulaleaf loosestrife		OBL	y	1						40		3			4.3		4.3
Holcus lanatus	common velvetgrass		FAC	y	3		5	1				15	3	1	6	3.1		9.3
Carex unilateralis	one-sided sedge	yes	FACW	y	2									1	28	2.9		5.8
Alopecurus geniculatis	water foxtail		OBL	y	1				27							2.7		2.7
Mentha pulegium	pennyroyal		OBL	y	1		1		3		10		1	1	7	2.3		2.3
Parentucellia viscosa	parentucellia		FAC-		3		3	8				1	3	5		2		6.0
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2								12	3	4	1.9		3.8
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2	1		3				3	3	1	4	1.5		3.0
forb	NA	NA	---	u	5							2	13			1.5		7.5
Juncus bufonius	toad rush	yes	FACW	y	2		2	2			1		7	1		1.3		2.6
Agrostis exarata	spike bentgrass	yes	FACW	y	2				8				4			1.2		2.4
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5			2						6	3	1.1		5.5
Juncus tenuis	slender rush	yes	FACW-	y	2								7	3		1		2.0
Madia glomerata	cluster [mountain] tarweed	yes	FACU+		4								8			0.8		3.2
Myosotis discolor	yellow and blue forget-me-not		FACW	y	2							2	1	1	4	0.8		1.6
Lapsana communis	nipplewort		FAC	y	3							7				0.7		2.1
Carex feta	green-sheathed sedge	yes	FACW	y	2								2	4		0.6		1.2
Cirsium vulgare	bull thistle		FACU		4							5				0.5		2.0
Bromus hordeaceus ssp. hordeaceus	soft brome		FACU		4								4			0.4		1.6
Galium parisiense	creeping [wall] bedstraw		UPL		5		4									0.4		2.0
Rorippa curvisiliqua	western yellowcress	yes	OBL	y	1						1		3			0.4		0.4
Centaurium erythraea	European centaury		FAC	y	3							1				0.1		0.3
Gnaphalium palustre	western marsh cudweed	yes	FAC+	y	3				1							0.1		0.3
Montia linearis	narrow-leaved montia	yes	NOL	u	5									1		0.1		0.5
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					2	2	1			1	2	3	1	2	1.4		
moss, duff, dead/sprayed vegetation, etc.	"					35	13	32	28	15	2	15	12	7	13	17.2		
	Invasive species cover:	0		Total cover:		64	87	70	74	85	132	90	88	104	90	88		200.3
	Soil Moisture Index:	2.27		FAC and better cover:		64	68	15	74	85	132	44	56	86	77	70		
	Percent vegetated (under canopy):	81		Native cover:		64	62	14	44	85	82	19	56	84	60	57		
				Percent FAC and better of total:		100	78	21	100	100	100	49	64	83	86	79		
				Percent native of total:		100	71	20	59	100	62	21	64	81	67	64		

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Prior Converted Habitat Type - Transect 2				Date(s) Sampled: 5/28/16														
Cover (%)																		
									Sample Station									
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2		6				67	5	45	35	22	18		36.0
Populus balsamifera ssp. trichocarpa	black cottonwood	yes	FAC	y	3		85					1		27		11.3		33.9
Mentha pulegium	pennyroyal		OBL	y	1	20	23	4	6	52						10.5		10.5
Lythrum portula	spatulaleaf loosestrife		OBL	y	1			12	53	28						9.3		9.3
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5	5	25				3	50		7		9		45.0
Holcus lanatus	common velvetgrass		FAC	y	3	25	5				4	5	1	3	12	5.5		16.5
Anthoxanthum odoratum	sweet vernalgrass		FACU		4	8					1	17		1	15	4.2		16.8
Carex feta	green-sheathed sedge	yes	FACW	y	2	40						1		1		4.2		8.4
Gnaphalium palustre	western marsh cudweed	yes	FAC+	y	3			8	17					1	2	2.8		8.4
forb	NA	NA	---	u	5	23										2.3		11.5
Carex unilateralis	one-sided sedge	yes	FACW	y	2		1			2				18		2.1		4.2
Juncus bufonius	toad rush	yes	FACW	y	2					5		2		1	13	2.1		4.2
Juncus tenuis	slender rush	yes	FACW-	y	2		1					8	2	10		2.1		4.2
Veronica scutellata	marsh speedwell	yes	OBL	y	1		15						4			1.9		1.9
Parentucellia viscosa	parentucellia		FAC-		3	1					12	1			2	1.6		4.8
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2	1							2	1	7	1.1		2.2
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2							6		5		1.1		2.2
Eleocharis palustris	creeping spikerush	yes	OBL	y	1			10								1		1.0
Spiraea douglasii	Douglas' spiraea/ hardhack	yes	FACW	y	2							2	1	7		1		2.0
Beckmannia syzigachne	American slough grass	yes	OBL	y	1					6						0.6		0.6
Rumex acetosella	sheep sorrel/ sour dock		FACU+		4						5					0.5		2.0
Gratiola ebracteata	bractless hedgehyssop	yes	OBL	y	1					4						0.4		0.4
Cerastium glomeratum	sticky chickweed		UPL		5	2										0.2		1.0
Montia linearis	narrow-leaved montia	yes	NOL	u	5									1	1	0.2		1.0
Alopecurus geniculatis	water foxtail		OBL	y	1				1							0.1		0.1
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2										1	0.1		0.2
Lythrum hyssopifolia	hyssop loosestrife		OBL	y	1							1				0.1		0.1
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					1		75	24	7	2	4	2	2	2	11.9		
moss, duff, dead/sprayed vegetation, etc.	"					7	20	1	1	1	8	6	45	30	25	14.4		
	Invasive species cover:	0		Total cover:		125	161	34	77	97	92	99	55	118	75	93		228.4
	Soil Moisture Index:	2.45		FAC and better cover:		86	136	34	77	97	71	31	55	109	57	75		
	Percent vegetated (under canopy):	74		Native cover:		41	108	18	17	17	67	25	54	107	46	50		
				Percent FAC and better of total:		69	84	100	100	100	77	31	100	92	76	81		
				Percent native of total:		33	67	53	22	18	73	25	98	91	61	54		

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Prior Converted Habitat Type - Transect 3				Date(s) Sampled: 5/28 and 5/30, 2016														
Cover (%)																		
									Sample Station									
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2	55	20	70	58	35	27	18	15	3	42	34.3		68.6
Mentha pulegium	pennyroyal		OBL	y	1		1	17	16	35	20	42	1	9	8	14.9		14.9
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2	40	30	4	4	20	24	4				12.6		25.2
Carex unilateralis	one-sided sedge	yes	FACW	y	2				3		16	18			12	4.9		9.8
Poa trivialis	rough [roughstalk] bluegrass		FACW	y	2	20	22								1	4.3		8.6
Lotus corniculatus	birdsfoot trefoil		FAC	y	3					23					16	3.9		11.7
Bromus hordeaceus ssp. hordeaceus	soft brome		FACU		4		1	3	1				12	20		3.7		14.8
Vicia tetrasperma	slender vetch		NOL	u	5	8	7	4	2				4		7	3.2		16.0
forb	NA	NA	---	u	5								25	1		2.6		13.0
Holcus lanatus	common velvetgrass		FAC	y	3	3	7			8		2	1	3	1	2.5		7.5
Epilobium densiflora	dense spike-primrose	yes	FACW-	y	2									20	2	2.2		4.4
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2			1		1	7	3	1	3	4	2		4.0
Alopecurus geniculatis	water foxtail		OBL	y	1		18									1.8		1.8
Anthoxanthum odoratum	sweet vernalgrass		FACU		4								18			1.8		7.2
Juncus tenuis	slender rush	yes	FACW-	y	2						2	3	11			1.6		3.2
Montia linearis	narrow-leaved montia	yes	NOL	u	5				4	1		3	3			1.1		5.5
Agrostis stolonifera	creeping bentgrass		FACW	y	2									10		1		2.0
Fraxinus latifolia	Oregon ash	yes	FACW	y	2						10					1		2.0
Parentucellia viscosa	parentucellia		FAC-		3								8	2		1		3.0
Myosotis laxa	small flowered forget-me-not	yes	OBL	y	1			1		1	2				4	0.8		0.8
Epilobium brachycarpum	autumn [tall annual] willowherb	yes	UPL		5	2			1			1	1		1	0.6		3.0
Myosotis discolor	yellow and blue forget-me-not		FACW	y	2	1							3	1	1	0.6		1.2
Plagiobothrys figuratus	fragrant popcornflower	yes	FACW	y	2					1	3				1	0.5		1.0
Galium parisiense	creeping [wall] bedstraw		UPL		5	2			1							0.3		1.5
Lactuca serriola	prickly lettuce		FACU		4	2										0.2		0.8
Rumex conglomeratus	clustered dock		FACW	y	2					2						0.2		0.4
Rumex crispus	curly dock		FAC+	y	3			1				1				0.2		0.6
Cerastium glomeratum	sticky chickweed		UPL		5	1										0.1		0.5
Dipsacus fullonum	common teasel		FACW-	y	2					1						0.1		0.2
Geranium carolinianum	Carolina geranium	yes	NOL	u	5								1			0.1		0.5
Juncus bufonius	toad rush	yes	FACW	y	2		1									0.1		0.2
Lythrum portula	spatulaleaf loosestrife		OBL	y	1		1									0.1		0.1
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					1	3	3	6	1	4	2	3	3	1	2.7		
moss, duff, dead/sprayed vegetation, etc.	"					2	2	3	7	8	6	10	5	20	5	6.8		
	Invasive species cover:	0		Total cover:		134	108	101	90	128	111	95	104	72	100	104		234.0

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Prior Converted Habitat Type - Transect 3				Date(s) Sampled: 5/28 and 5/30, 2016														
Cover (%)																		
									Sample Station									
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
	Soil Moisture Index:	2.24	FAC and better cover:			119	100	94	81	127	111	91	32	49	92	90		
	Percent vegetated (under canopy):	91	Native cover:			97	51	76	70	59	91	50	32	26	66	62		
	Percent FAC and better of total:					89	93	93	90	99	100	96	31	68	92	86		
			Percent native of total:			72	47	75	78	46	82	53	31	36	66	59		

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Prior Converted Habitat Type - Transect 4				Date(s) Sampled: 5/29/16														
Cover (%)																		
									Sample Station									
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
Carex unilateralis	one-sided sedge	yes	FACW	y	2	5	42	68	8	18		78	17	35		27.1		54.2
Mentha pulegium	pennyroyal		OBL	y	1	5	15	14	35	45	38	2	43	27	1	22.5		22.5
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2	90	47			3		2	2			14.4		28.8
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2		3			12	65	5	20	3	14	12.2		24.4
Bromus hordeaceus ssp. hordeaceus	soft brome		FACU		4								1		45	4.6		18.4
Eleocharis acicularis	needle spikerush	yes	OBL	y	1				7	4		16	9	4		4		4.0
Lythrum portula	spatulaleaf loosestrife		OBL	y	1			13	12	4				1		3		3.0
Holcus lanatus	common velvetgrass		FAC	y	3	3	2								23	2.8		8.4
Spiraea douglasii	Douglas' spiraea/ hardhack	yes	FACW	y	2							27				2.7		5.4
forb	NA	NA	---	u	5				23						1	2.4		12.0
Alopecurus geniculatis	water foxtail		OBL	y	1	10	8						3			2.1		2.1
Eleocharis palustris	creeping spikerush	yes	OBL	y	1					10				10		2		2.0
Beckmannia syzigachne	American slough grass	yes	OBL	y	1			1		2		3	6	4		1.6		1.6
Myosotis laxa	small flowered forget-me-not	yes	OBL	y	1				10	3					2	1.5		1.5
Lythrum hyssopifolia	hyssop loosestrife		OBL	y	1			2	4	2	6					1.4		1.4
Vicia tetrasperma	slender vetch		NOL	u	5				2		2				10	1.4		7.0
Leucanthemum vulgare	oxeye daisy		UPL		5										9	0.9		4.5
Alopecurus pratensis	meadow foxtail		FACW	y	2								4		4	0.8		1.6
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2				1			2		4		0.7		1.4
Montia linearis	narrow-leaved montia	yes	NOL	u	5				5		1				1	0.7		3.5
Epilobium densiflora	dense spike-primrose	yes	FACW-	y	2				4		2					0.6		1.2
Veronica scutellata	marsh speedwell	yes	OBL	y	1				5	1						0.6		0.6
Geranium carolinianum	Carolina geranium	yes	NOL	u	5				1						4	0.5		2.5
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2	1			3							0.4		0.8
Fraxinus latifolia	Oregon ash	yes	FACW	y	2	2			2							0.4		0.8
Galium parisiense	creeping [wall] bedstraw		UPL		5				2		1				1	0.4		2.0
Agrostis stolonifera	creeping bentgrass		FACW	y	2		3									0.3		0.6
Dipsacus fullonum	common teasel		FACW-	y	2				2						1	0.3		0.6
Rosa pisocarpa	clustered rose	yes	FAC	y	3							3				0.3		0.9
Anthoxanthum odoratum	sweet vernalgrass		FACU		4										2	0.2		0.8
Cerastium glomeratum	sticky chickweed		UPL		5						1				1	0.2		1.0
Myosotis discolor	yellow and blue forget-me-not		FACW	y	2										2	0.2		0.4
Phalaris arundinacea	reed canary grass	invasive	FACW	y	2		2									0.2		0.4
Parentucellia viscosa	parentucellia		FAC-		3						1					0.1		0.3
Plagiobothrys figuratus	fragrant popcornflower	yes	FACW	y	2								1			0.1		0.2
Poa trivialis	rough [roughstalk] bluegrass		FACW	y	2			1								0.1		0.2
Rorippa curvisiliqua	western yellowcress	yes	OBL	y	1								1			0.1		0.1
Rumex crispus	curly dock		FAC+	y	3				1							0.1		0.3
Valerianella locusta	Lewiston cornsalad		NOL	u	5										1	0.1		0.5
Veronica peregrina ssp. xalapense	hairy purslane speedwell	yes	OBL	y	1									1		0.1		0.1
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					2	3	10	3	5	1	2	6	3	1	3.6		
moss, duff, dead/sprayed vegetation, etc.	"					3	5	2	5	5	7	5	8	12	8	6.0		

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Prior Converted Habitat Type - Transect 4				Date(s) Sampled: 5/29/16														
Cover (%)																		
									Sample Station									
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
	Invasive species cover:	0			Total cover:	116	122	99	127	104	117	138	107	89	122	114		222.0
	Soil Moisture Index:	1.95			FAC and better cover:	116	122	99	94	104	111	138	106	89	47	103		
	Percent vegetated (under canopy):	90			Native cover:	98	92	69	46	53	68	136	56	61	21	70		
					Percent FAC and better of total:	100	100	100	74	100	95	100	99	100	39	90		
					Percent native of total:	84	75	70	36	51	58	99	52	69	17	61		

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Prior Converted Habitat Type - Transect 5				Date(s) Sampled: 5/29/16														
Cover (%)																		
									Sample Station									
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2	9	57	43	80	2	22	17	5		12	24.7		49.4
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5	70	28	17	2	1	10	3	20	17	20	18.8		94.0
Anthoxanthum odoratum	sweet vernalgrass		FACU		4	3	3	2	1		2	15	10	27		6.3		25.2
Holcus lanatus	common velvetgrass		FAC	y	3	9	1	2	1	1	1	18	3	10	15	6.1		18.3
Lythrum portula	spatulaleaf loosestrife		OBL	y	1					60						6		6.0
Mentha pulegium	pennyroyal		OBL	y	1					1			1	40	13	5.5		5.5
Parentucellia viscosa	parentucellia		FAC-		3	4	1	2	5	5	2	17	5	4		4.5		13.5
Bromus hordeaceus ssp. hordeaceus	soft brome		FACU		4					1	2			2	20	2.5		10.0
Spiraea douglasii	Douglas' spiraea/ hardhack	yes	FACW	y	2	1									20	2.1		4.2
Juncus bufonius	toad rush	yes	FACW	y	2	1				14		1	2			1.8		3.6
Rumex acetosella	sheep sorrel/ sour dock		FACU+		4	1		5		1	2	1	1		1	1.2		4.8
forb	NA	NA	---	u	5					8						0.8		4.0
Agrostis exarata	spike bentgrass	yes	FACW	y	2	3				4						0.7		1.4
Juncus tenuis	slender rush	yes	FACW-	y	2			2			1	1			2	0.6		1.2
Eleocharis acicularis	needle spikerush	yes	OBL	y	1					5						0.5		0.5
Centaurium erythraea	European centaury		FAC	y	3	1		1			1					0.3		0.9
Daucus carota	Queen Anne's lace		NOL	u	5					1		1				0.2		1.0
Lythrum hyssopifolia	hyssop loosestrife		OBL	y	1					2						0.2		0.2
Montia linearis	narrow-leaved montia	yes	NOL	u	5										2	0.2		1.0
Carex unilateralis	one-sided sedge	yes	FACW	y	2					1						0.1		0.2
Galium aparine	cleavers	yes	FACU		4				1							0.1		0.4
Geranium carolinianum	Carolina geranium	yes	NOL	u	5									1		0.1		0.5
Gnaphalium palustre	western marsh cudweed	yes	FAC+	y	3					1						0.1		0.3
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2				1							0.1		0.2
Hypericum perforatum	St. John'swort		NOL	u	5										1	0.1		0.5
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					1	8	15	1	18	12	5	53	2	15	13.0		
moss, duff, dead/sprayed vegetation, etc.	"					8	4	12	9	1	45	25	4	10	5	12.3		
	Invasive species cover:	0		Total cover:		102	90	74	91	108	43	74	47	101	106	84		246.8
	Soil Moisture Index:	2.95		FAC and better cover:		24	58	48	82	91	25	37	11	50	62	49		
	Percent vegetated (under canopy):	75		Native cover:		14	57	45	82	27	23	19	7	1	36	31		
		Percent FAC and better of total:				24	64	65	90	84	58	50	23	50	58	58		
			Percent native of total:			14	63	61	90	25	53	26	15	1	34	37		

Oak Creek Mitigation Bank Plant Monitoring, 2016													
Prior Converted Habitat Type - Transect 2.1				Date(s) Sampled: 5/28/16									
Cover (%)													
								Sample Station					
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**2.1-1**	**2.1-2**	**2.1-3**	**2.1-4**	**2.1-5**	**Mean**		**SMI_m**
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2	40	42	4	53	60	39.8		79.6
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5	2	15	37		1	11		55.0
Anthoxanthum odoratum	sweet vernalgrass		FACU		4	14	13	9			7.2		28.8
Lotus unifoliolatus var. unifoliolatus	Spanish clover	yes	UPL		5		27	3			6		30.0
Mentha pulegium	pennyroyal		OBL	y	1				5	10	3		3.0
Juncus tenuis	slender rush	yes	FACW-	y	2	4	2	2	4	1	2.6		5.2
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2	2			4		1.2		2.4
Holcus lanatus	common velvetgrass		FAC	y	3	1	1		2		0.8		2.4
Parentucellia viscosa	parentucellia		FAC-		3		2	1	1		0.8		2.4
Rubus discolor	Himalayan blackberry	invasive	FACU		4	2				1	0.6		2.4
Rumex acetosella	sheep sorrel/ sour dock		FACU+		4	1		2			0.6		2.4
Spiraea douglasii	Douglas' spiraea/ hardhack	yes	FACW	y	2	3					0.6		1.2
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2					2	0.4		0.8
Juncus ensifolius	daggerleaf rush	yes	FACW	y	2				2		0.4		0.8
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2					1	0.2		0.4
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					1	1	10	5	5	4.4		
moss, duff, dead/sprayed vegetation, etc.	"					33	12	35	30	20	26.0		
	Invasive species cover:	0.6	Total cover:			69	102	58	71	76	75		216.8
	Soil Moisture Index:	2.88	FAC and better cover:			50	45	6	70	74	49		
	Percent vegetated (under canopy):	70	Native cover:			49	71	9	63	64	51		
		Percent FAC and better of total:				72	44	10	99	97	65		
			Percent native of total:			71	70	16	89	84	68		

Oak Creek Mitigation Bank Plant Monitoring, 2016													
Prior Converted Habitat Type - Transect 2.2				Date(s) Sampled: 5/28/16									
Cover (%)													
							Sample Station						
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**2.2-1**	**2.2-2**	**2.2-3**	**2.2-4**	**2.2-5**	**Mean**		**SMI_m**
Mentha pulegium	pennyroyal		OBL	y	1	2	36		58		19.2		19.2
Juncus tenuis	slender rush	yes	FACW-	y	2			75			15		30.0
Lythrum portula	spatulaleaf loosestrife		OBL	y	1	20	37				11.4		11.4
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2				27	28	11		22.0
Anthoxanthum odoratum	sweet vernalgrass		FACU		4				9	30	7.8		31.2
Gnaphalium palustre	western marsh cudweed	yes	FAC+	y	3	20	1	1			4.4		13.2
Holcus lanatus	common velvetgrass		FAC	y	3				1	12	2.6		7.8
Spiraea douglasii	Douglas' spiraea/ hardhack	yes	FACW	y	2			13			2.6		5.2
Eleocharis acicularis	needle spikerush	yes	OBL	y	1		7				1.4		1.4
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5					7	1.4		7.0
Juncus bufonius	toad rush	yes	FACW	y	2		7				1.4		2.8
Gratiola ebracteata	bractless hedgehyssop	yes	OBL	y	1		6				1.2		1.2
Panicum capillare	common witchgrass	yes	FACU+		4	5					1		4.0
Plagiobothrys figuratus	fragrant popcornflower	yes	FACW	y	2		4				0.8		1.6
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2		2				0.4		0.8
Parentucellia viscosa	parentucellia		FAC-		3					2	0.4		1.2
Cerastium glomeratum	sticky chickweed		UPL		5					1	0.2		1.0
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2				1		0.2		0.4
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2				1		0.2		0.4
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					50	10	2	2	2	13.2		
moss, duff, dead/sprayed vegetation, etc.	"					3	1	15	10	12	8.2		
	Invasive species cover:	0		Total cover:		47	100	89	97	80	83		161.8
	Soil Moisture Index:	1.96		FAC and better cover:		42	100	89	88	40	72		
	Percent vegetated (under canopy):	79		Native cover:		25	27	89	29	28	40		
				Percent FAC and better of total:		89	100	100	91	50	87		
				Percent native of total:		53	27	100	30	35	48		

Oak Creek Mitigation Bank Plant Monitoring, 2016													
Prior Converted Habitat Type - Transect 5.1				Date(s) Sampled: 5/29/16									
Cover (%)													
							Sample Station						
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**Mean**		**SMI_m**
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2	95	2	17	32	27	34.6		69.2
Anthoxanthum odoratum	sweet vernalgrass		FACU		4	6	45	15		2	13.6		54.4
Agrostis capillaris/castellana	highland/colonial bentgrass		FAC	y	3		40	5	3	3	10.2		30.6
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5	6	4	5	5	3	4.6		23.0
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2	1				13	2.8		5.6
Holcus lanatus	common velvetgrass		FAC	y	3	3	7	1		1	2.4		7.2
Juncus tenuis	slender rush	yes	FACW-	y	2		3	3	2	3	2.2		4.4
Lotus unifoliolatus var. unifoliolatus	Spanish clover	yes	UPL		5	1	1	4		3	1.8		9.0
Vicia pannonica	Hungarian vetch		NOL	u	5					7	1.4		7.0
Parentucellia viscosa	parentucellia		FAC-		3	2	1	1		1	1.0		3.0
Aira caryophyllea	silver hairgrass		FACU		4			3			0.6		2.4
Rumex acetosella	sheep sorrel/ sour dock		FACU+		4	1		2			0.6		2.4
Lythrum portula	spatulaleaf loosestrife		OBL	y	1				2		0.4		0.4
Mentha pulegium	pennyroyal		OBL	y	1	1			1		0.4		0.4
Hypericum perforatum	St. John'swort		NOL	u	5	1					0.2		1.0
Juncus bufonius	toad rush	yes	FACW	y	2				1		0.2		0.4
Rosa pisocarpa	clustered rose	yes	FAC	y	3			1			0.2		0.6
Veronica peregrina ssp. xalapense	hairy purslane speedwell	yes	OBL	y	1					1	0.2		0.2
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					1	3	25	55	20	20.8		
moss, duff, dead/sprayed vegetation, etc.	"					15	5	20	3	15	11.6		
	Invasive species cover:	0		Total cover:		117	103	57	46	64	77		221
	Soil Moisture Index:	2.86		FAC and better cover:		100	52	27	41	48	54		
	Percent vegetated (under canopy):	68		Native cover:		97	6	25	35	47	42		
				Percent FAC and better of total:		85	50	47	89	75	69		
				Percent native of total:		83	6	44	76	73	54		

Oak Creek Mitigation Bank Plant Monitoring, 2016												
Prior Converted Habitat Type - Transect 5.2				Date(s) Sampled: 5/29/16								
Cover (%)												
							Sample Station					
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**Mean**	
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2		95	75	80	53	60.6	
Holcus lanatus	common velvetgrass		FAC	y	3	40		3	1		8.8	
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5	9	1	10	4	4	5.6	
Anthoxanthum odoratum	sweet vernalgrass		FACU		4	7	1	9	4	4	5.0	
Agrostis capillaris/castellana	highland/colonial bentgrass		FAC	y	3	10					2.0	
Parentucellia viscosa	parentucellia		FAC-		3	7		1			1.6	
Rumex acetosella	sheep sorrel/ sour dock		FACU+		4	3	1				0.8	
Galium aparine	cleavers	yes	FACU		4	1				1	0.4	
Aira caryophyllea	silver hairgrass		FACU		4	1					0.2	
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2					1	0.2	
Myosotis discolor	yellow and blue forget-me-not		FACW	y	2				1		0.2	
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY						1	5	3	1	2.0	
moss, duff, dead/sprayed vegetation, etc.	"					25	3	5	9	40	16.4	
	Invasive species cover:	0		Total cover:		78	98	98	90	63	85	
	Soil Moisture Index:	2.49		FAC and better cover:		50	95	78	82	54	72	
	Percent vegetated (under canopy):	82		Native cover:		1	95	75	80	55	61	
			Percent FAC and better of total:			64	97	80	91	86	84	
			Percent native of total:			1	97	77	89	87	72	

SMI_m
121.2
26.4
28.0
20.0
6.0
4.8
3.2
1.6
0.8
0.4
0.4
213

Oak Creek Mitigation Bank Plant Monitoring, 2016

Prior Converted Habitat Type - Transect Means

Cover (%)

									Transect																	
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**2.1**	**2.2**	**3**	**4**	**5**	**5.1**	**5.2**	**PC Mean***		**SMI_1**	**SMI_2**	**SMI_2.1**	**SMI_2.2**	**SMI_3**	**SMI_4**	**SMI_5**	**SMI_5.1**	**SMI_5.2**	**SMI_m**
Deschampsia cespitosa	tufted hairgrass	yes	FACW	y	2	31.7	18.0	39.8	11.0	34.3	12.2	24.7	34.6	60.6	27.70		63.4	36.0	79.6	22.0	68.6	24.4	49.4	69.2	121.2	55.4
Mentha pulegium	pennyroyal		OBL	y	1	2.3	10.5	3.0	19.2	14.9	22.5	5.5	0.4	0.0	9.57		2.3	10.5	3.0	19.2	14.9	22.5	5.5	0.4	0.0	9.6
Anthoxanthum odoratum	sweet vernalgrass		FACU		4	11.5	4.2	7.2	7.8	1.8	0.2	6.3	13.6	5.0	5.83		46.0	16.8	28.8	31.2	7.2	0.8	25.2	54.4	20.0	23.3
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		---	u	5	1.1	9.0	11.0	1.4	0.0	0.0	18.8	4.6	5.6	5.74		5.5	45.0	55.0	7.0	0.0	0.0	94.0	23.0	28.0	28.7
Carex unilateralis	one-sided sedge	yes	FACW	y	2	2.9	2.1	0.0	0.0	4.9	27.1	0.1	0.0	0.0	5.30		5.8	4.2	0.0	0.0	9.8	54.2	0.2	0.0	0.0	10.6
Hordeum brachyantherum	meadow barley	yes	FACW-	y	2	1.9	1.1	0.4	0.2	12.6	14.4	0.1	2.8	0.0	4.54		3.8	2.2	0.8	0.4	25.2	28.8	0.2	5.6	0.0	9.1
Lythrum portula	spatulaleaf loosestrife		OBL	y	1	4.3	9.3	0.0	11.4	0.1	3.0	6.0	0.4	0.0	4.09		4.3	9.3	0.0	11.4	0.1	3.0	6.0	0.4	0.0	4.1
Holcus lanatus	common velvetgrass		FAC	y	3	3.1	5.5	0.8	2.6	2.5	2.8	6.1	2.4	8.8	3.90		9.3	16.5	2.4	7.8	7.5	8.4	18.3	7.2	26.4	11.7
Juncus tenuis	slender rush	yes	FACW-	y	2	1.0	2.1	2.6	15.0	1.6	0.0	0.6	2.2	0.0	2.17		2.0	4.2	5.2	30.0	3.2	0.0	1.2	4.4	0.0	4.3
Eleocharis palustris	creeping spikerush	yes	OBL	y	1	8.5	1.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	1.64		8.5	1.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	1.6
Populus balsamifera ssp. trichocarpa	black cottonwood	yes	FAC	y	3	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.61		0.0	33.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Bromus hordeaceus ssp. hordeaceus	soft brome		FACU		4	0.4	0.0	0.0	0.0	3.7	4.6	2.5	0.0	0.0	1.60		1.6	0.0	0.0	0.0	14.8	18.4	10.0	0.0	0.0	6.4
Parentucellia viscosa	parentucellia		FAC-		3	2.0	1.6	0.8	0.4	1.0	0.1	4.5	1.0	1.6	1.59		6.0	4.8	2.4	1.2	3.0	0.3	13.5	3.0	4.8	4.8
forb	NA	NA	---	u	5	1.5	2.3	0.0	0.0	2.6	2.4	0.8	0.0	0.0	1.37		7.5	11.5	0.0	0.0	13.0	12.0	4.0	0.0	0.0	6.9
Spiraea douglasii	Douglas' spiraea/ hardhack	yes	FACW	y	2	0.0	1.0	0.6	2.6	0.0	2.7	2.1	0.0	0.0	1.06		0.0	2.0	1.2	5.2	0.0	5.4	4.2	0.0	0.0	2.1
Alopecurus geniculatis	water foxtail		OBL	y	1	2.7	0.1	0.0	0.0	1.8	2.1	0.0	0.0	0.0	0.96		2.7	0.1	0.0	0.0	1.8	2.1	0.0	0.0	0.0	1.0
Agrostis capillaris/castellana	highland/colonial bentgrass		FAC	y	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2	2.0	0.87		0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	6.0	2.6
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2	5.0	0.1	0.2	0.4	0.0	0.7	0.0	0.0	0.0	0.87		10.0	0.2	0.4	0.8	0.0	1.4	0.0	0.0	0.0	1.7
Juncus bufonius	toad rush	yes	FACW	y	2	1.3	2.1	0.0	1.4	0.1	0.0	1.8	0.2	0.0	0.87		2.6	4.2	0.0	2.8	0.2	0.0	3.6	0.4	0.0	1.7
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2	1.5	1.1	1.2	0.2	2.0	0.4	0.0	0.0	0.2	0.83		3.0	2.2	2.4	0.4	4.0	0.8	0.0	0.0	0.4	1.7
Eleocharis acicularis	needle spikerush	yes	OBL	y	1	0.0	0.0	0.0	1.4	0.0	4.0	0.5	0.0	0.0	0.74		0.0	0.0	0.0	1.4	0.0	4.0	0.5	0.0	0.0	0.7
Gnaphalium palustre	western marsh cudweed	yes	FAC+	y	3	0.1	2.8	0.0	4.4	0.0	0.0	0.1	0.0	0.0	0.74		0.3	8.4	0.0	13.2	0.0	0.0	0.3	0.0	0.0	2.2
Carex feta	green-sheathed sedge	yes	FACW	y	2	0.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.69		1.2	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Vicia tetrasperma	slender vetch		NOL	u	5	0.0	0.0	0.0	0.0	3.2	1.4	0.0	0.0	0.0	0.66		0.0	0.0	0.0	0.0	16.0	7.0	0.0	0.0	0.0	3.3
Poa trivialis	rough [roughstalk] bluegrass		FACW	y	2	0.0	0.0	0.0	0.0	4.3	0.1	0.0	0.0	0.0	0.63		0.0	0.0	0.0	0.0	8.6	0.2	0.0	0.0	0.0	1.3
Lotus corniculatus	birdsfoot trefoil		FAC	y	3	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.56		0.0	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0	1.7
Lotus unifoliolatus var. unifoliolatus	Spanish clover	yes	UPL		5	0.0	0.0	6.0	0.0	0.0	0.0	0.0	1.8	0.0	0.56		0.0	0.0	30.0	0.0	0.0	0.0	0.0	9.0	0.0	2.8
Epilobium densiflora	dense spike-primrose	yes	FACW-	y	2	0.0	0.0	0.0	0.0	2.2	0.6	0.0	0.0	0.0	0.40		0.0	0.0	0.0	0.0	4.4	1.2	0.0	0.0	0.0	0.8
Rumex acetosella	sheep sorrel/ sour dock		FACU+		4	0.0	0.5	0.6	0.0	0.0	0.0	1.2	0.6	0.8	0.39		0.0	2.0	2.4	0.0	0.0	0.0	4.8	2.4	3.2	1.5
Veronica scutellata	marsh speedwell	yes	OBL	y	1	0.0	1.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.36		0.0	1.9	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4
Montia linearis	narrow-leaved montia	yes	NOL	u	5	0.1	0.2	0.0	0.0	1.1	0.7	0.2	0.0	0.0	0.33		0.5	1.0	0.0	0.0	5.5	3.5	1.0	0.0	0.0	1.6
Myosotis laxa	small flowered forget-me-not	yes	OBL	y	1	0.0	0.0	0.0	0.0	0.8	1.5	0.0	0.0	0.0	0.33		0.0	0.0	0.0	0.0	0.8	1.5	0.0	0.0	0.0	0.3
Beckmannia syzigachne	American slough grass	yes	OBL	y	1	0.0	0.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.31		0.0	0.6	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.3
Agrostis exarata	spike bentgrass	yes	FACW	y	2	1.2	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.27		2.4	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.5
Lythrum hyssopifolia	hyssop loosestrife		OBL	y	1	0.0	0.1	0.0	0.0	0.0	1.4	0.2	0.0	0.0	0.24		0.0	0.1	0.0	0.0	0.0	1.4	0.2	0.0	0.0	0.2
Myosotis discolor	yellow and blue forget-me-not		FACW	y	2	0.8	0.0	0.0	0.0	0.6	0.2	0.0	0.0	0.2	0.24		1.6	0.0	0.0	0.0	1.2	0.4	0.0	0.0	0.4	0.5
Fraxinus latifolia	Oregon ash	yes	FACW	y	2	0.0	0.0	0.0	0.0	1.0	0.4	0.0	0.0	0.0	0.20		0.0	0.0	0.0	0.0	2.0	0.8	0.0	0.0	0.0	0.4
Agrostis stolonifera	creeping bentgrass		FACW	y	2	0.0	0.0	0.0	0.0	1.0	0.3	0.0	0.0	0.0	0.19		0.0	0.0	0.0	0.0	2.0	0.6	0.0	0.0	0.0	0.4
Galium parisiense	creeping [wall] bedstraw		UPL		5	0.4	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.16		2.0	0.0	0.0	0.0	1.5	2.0	0.0	0.0	0.0	0.8
Gratiola ebracteata	bractless hedgehyssop	yes	OBL	y	1	0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.14		0.0	0.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.1
Plagiobothrys figuratus	fragrant popcornflower	yes	FACW	y	2	0.0	0.0	0.0	0.8	0.5	0.1	0.0	0.0	0.0	0.14		0.0	0.0	0.0	1.6	1.0	0.2	0.0	0.0	0.0	0.3
Leucanthemum vulgare	oxeye daisy		UPL		5	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.13		0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.6
Alopecurus pratensis	meadow foxtail		FACW	y	2	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.11		0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.2
Madia glomerata	cluster [mountain] tarweed	yes	FACU+		4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11		3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Geranium carolinianum	Carolina geranium	yes	NOL	u	5	0.0	0.0	0.0	0.0	0.1	0.5	0.1	0.0	0.0	0.10		0.0	0.0	0.0	0.0	0.5	2.5	0.5	0.0	0.0	0.5
Lapsana communis	nipplewort		FAC	y	3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10		2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Vicia pannonica	Hungarian vetch		NOL	u	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.10		0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.5
Cerastium glomeratum	sticky chickweed		UPL		5	0.0	0.2	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.09		0.0	1.0	0.0	1.0	0.5	1.0	0.0	0.0	0.0	0.4
Epilobium brachycarpum	autumn [tall annual] willowherb	yes	UPL		5	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.09		0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.4
Cirsium vulgare	bull thistle		FACU		4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07		2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Panicum capillare	common witchgrass	yes	FACU+		4	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.07		0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.3
Rorippa curvisiliqua	western yellowcress	yes	OBL	y	1	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.07		0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Aira caryophyllea	silver hairgrass		FACU		4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.06		0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.8	0.2
Centaurium erythraea	European centaury		FAC	y	3	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.06		0.3	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.2
Dipsacus fullonum	common teasel		FACW-	y	2	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.06		0.0	0.0	0.0	0.0	0.2	0.6	0.0	0.0	0.0	0.1
Rosa pisocarpa	clustered rose	yes	FAC	y	3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.0	0.06		0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.6	0.0	0.2

Oak Creek Mitigation Bank Plant Monitoring, 2016

Prior Converted Habitat Type - Transect Means

Cover (%)

						Transect																				
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**2.1**	**2.2**	**3**	**4**	**5**	**5.1**	**5.2**	**PC Mean***		**SMI_1**	**SMI_2**	**SMI_2.1**	**SMI_2.2**	**SMI_3**	**SMI_4**	**SMI_5**	**SMI_5.1**	**SMI_5.2**	**SMI_m**
Galium aparine	cleavers	yes	FACU		4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.04		0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	1.6	0.2
Rubus discolor	Himalayan blackberry	invasive	FACU		4	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.04		0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Rumex crispus	curly dock		FAC+	y	3	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.04		0.0	0.0	0.0	0.0	0.6	0.3	0.0	0.0	0.0	0.1
Daucus carota	Queen Anne's lace		NOL	u	5	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.03		0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.1
Hypericum perforatum	St. John'swort		NOL	u	5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.03		0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	0.0	0.1
Juncus ensifolius	daggerleaf rush	yes	FACW	y	2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.03		0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Lactuca serriola	prickly lettuce		FACU		4	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.03		0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.1
Phalaris arundinacea	reed canary grass	invasive	FACW	y	2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.03		0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1
Rumex conglomeratus	clustered dock		FACW	y	2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.03		0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1
Veronica peregrina ssp. xalapense	hairy purslane speedwell	yes	OBL	y	1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.03		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0
Valerianella locusta	Lewiston cornsalad		NOL	u	5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.01		0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					1.4	11.9	4.4	13.2	2.7	3.6	13.0	20.8	2.0	7.54											
moss, duff, dead/sprayed vegetation, etc.	"					17.2	14.4	26.0	8.2	6.8	6.0	12.3	11.6	16.4	12.54											
	Number of native species:	32	Total cover:			88	93	75	83	104	114	84	77	85	92		200	228	217	162	234	222	247	221	213	220
	Number of introduced species:	35	FAC and better cover:			70	75	49	72	90	103	49	54	72	73											
	Number of invasive species:	2	Native cover:			57	50	51	40	62	70	31	42	61	52											
			Percent FAC and better of total:			79	81	65	87	86	90	58	69	84	79											
			Percent native of total:			64	54	68	48	59	61	37	54	72	57											
			Soil Moisture Index:			2.27	2.45	2.88	1.96	2.24	1.95	2.95	2.86	2.49	2.39											
			Invasive species cover:			0	0	0.6	0	0	0.2	0	0	0	0.07											
			Percent vegetated (under canopy):			81	74	70	79	91	90	75	68	82	80											
* Because there are different numbers of sampling stations in the different transects, the "PC Mean" values shown here are the means of all 70 individual stations,																										
rather than the means of the 9 transect means shown here.																										

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Forested Habitat Type - Transect 6				Date(s) Sampled: 5/30/16														
Cover (%)																		
									Sample Station									
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
Fraxinus latifolia	Oregon ash	yes	FACW	y	2	98	99	95	80	80	50	77	98	95	95	86.7		173.4
Camassia leichtlinii	great camas	yes	FACW-	y	2	50	7	1	6	16	8	1	13	10		11.2		22.4
Allium nigrum	black garlic		NOL	u	5		8	2		12	42					6.4		32.0
Galium aparine	cleavers	yes	FACU		4	7								45	8	6		24.0
Poa trivialis	rough [roughstalk] bluegrass		FACW	y	2	1	6						27	15	5	5.4		10.8
Amelanchier alnifolia	serviceberry	yes	FACU		4	40										4		16.0
Carex leptopoda	Dewey's sedge	yes	FAC	y	3		30	1								3.1		9.3
Prunus sp.	cherry, plum	NA	---	u	5								27			2.7		13.5
Lapsana communis	nipplewort		FAC	y	3						2			8		1		3.0
Vicia sativa	garden vetch/ tare		UPL		5								6	4		1		5.0
Geum macrophyllum	large leaved avens	yes	FAC+	y	3									9		0.9		2.7
Symphoricarpos albus	snowberry	yes	FACU		4	6										0.6		2.4
Crataegus douglasii	black hawthorn	yes	FAC	y	3	5										0.5		1.5
Ranunculus uncinatus	hooked [small-flowered] buttercup	yes	FAC	y	3								5			0.5		1.5
Saxifraga oregana	Oregon [bog] saxifrage	yes	FACW+	y	2		4									0.4		0.8
Prunella vulgaris	self-heal	yes	FACU+		4								3			0.3		1.2
Rubus discolor	Himalayan blackberry	invasive	FACU		4								3			0.3		1.2
Taraxacum officinale	dandelion		FACU		4	1							2			0.3		1.2
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					5	1	5	8	5	20	5	2	2	15	6.8		
moss, duff, dead/sprayed vegetation, etc.	"					35	45	91	86	70	30	94	42	37	88	61.8		
	Invasive species cover:	0.3		Total cover:		208	154	99	86	108	102	78	184	186	108	131		322
	Soil Moisture Index:	2.45		FAC and better cover:		154	146	97	86	96	60	78	143	137	100	110		
	Percent vegetated (under canopy):	31		Native cover:		206	140	97	86	96	58	78	119	159	103	114		
				Percent FAC and better of total:		74	95	98	100	89	59	100	78	74	93	84		
				Percent native of total:		99	91	98	100	89	57	100	65	85	95	87		

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Forested Habitat Type - Transect 7				Date(s) Sampled: 5/30/16														
Cover (%)																		
										Sample Station								
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
Fraxinus latifolia	Oregon ash	yes	FACW	y	2	5	92	95	98	65	72	99	10	85	98	71.9		143.8
Camassia leichtlinii	great camas	yes	FACW-	y	2						32	78	13	67	88	27.8		55.6
Geranium lucidum	shining geranium		NOL	u	5	13	57	28		1	2	27	30	25	23	20.6		103.0
Poa trivialis	rough [roughstalk] bluegrass		FACW	y	2	10	12	62		12	5	2	10			11.3		22.6
Crataegus douglasii	black hawthorn	yes	FAC	y	3						75					7.5		22.5
Geum macrophyllum	large leaved avens	yes	FAC+	y	3		6	12		1			15	8		4.2		12.6
Agrostis stolonifera	creeping bentgrass		FACW	y	2	8					33					4.1		8.2
Dipsacus fullonum	common teasel		FACW-	y	2	40										4		8.0
Rumex conglomeratus	clustered dock		FACW	y	2	1	8	7	6	5	1		3			3.1		6.2
Carex leptopoda	Dewey's sedge	yes	FAC	y	3	2		3	5	8	9		2			2.9		8.7
Veronica scutellata	marsh speedwell	yes	OBL	y	1					28						2.8		2.8
Heracleum maximum	cow parsnip	yes	FAC+	y	3		23					4				2.7		8.1
Tellima grandiflora	fringecup	yes	FACU		4									22		2.2		8.8
Galium aparine	cleavers	yes	FACU		4		4	2			1	6	2	4	1	2		8.0
Brachypodium sylvaticum	false brome		NOL	u	5			6			10					1.6		8.0
Lapsana communis	nipplewort		FAC	y	3	1	2	10			2		1			1.6		4.8
Myosotis laxa	small flowered forget-me-not	yes	OBL	y	1	15										1.5		1.5
Lotus corniculatus	birdsfoot trefoil		FAC	y	3						14					1.4		4.2
Symphoricarpos albus	snowberry	yes	FACU		4							6		8		1.4		5.6
Torilis arvensis	spreading hedgeparsley		NOL	u	5	1	7	1			1			3		1.3		6.5
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2	1		2	1	1	1		5			1.1		2.2
Vicia sativa	garden vetch/ tare		UPL		5	2		2		1	2		1	3		1.1		5.5
Rosa gymnocarpa	baldhip rose	yes	FACU		4								10			1		4.0
Rubus discolor	Himalayan blackberry	invasive	FACU		4					1	1			5	3	1		4.0
Rubus ursinus	trailing blackberry	yes	FACU		4									5	5	1		4.0
Lysimachia nummularia	creeping jenny		FACW	y	2			1	8							0.9		1.8
Ranunculus uncinatus	hooked [small-flowered] buttercup	yes	FAC	y	3			1					8			0.9		2.7
Prunella vulgaris	self-heal	yes	FACU+		4	2	3			1				2		0.8		3.2
Geranium carolinianum	Carolina geranium	yes	NOL	u	5	4	1								1	0.6		3.0
Juncus patens	spreading rush	yes	FACW	y	2			5								0.5		1.0
Melissa officinalis	garden balm		UPL		5		3									0.3		1.5
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2	2										0.2		0.4
Leucanthemum vulgare	oxeye daisy		UPL		5	1					1					0.2		1.0
Lythrum hyssopifolia	hyssop loosestrife		OBL	y	1	2										0.2		0.2
Mentha pulegium	pennyroyal		OBL	y	1	2										0.2		0.2
Alopecurus pratensis	meadow foxtail		FACW	y	2		1									0.1		0.2
Festuca rubra	red fescue		FAC+	y	3										1	0.1		0.3
Hypericum perforatum	St. John'swort		NOL	u	5			1								0.1		0.5

Oak Creek Mitigation Bank Plant Monitoring, 2016																		
Forested Habitat Type - Transect 7				Date(s) Sampled: 5/30/16														
Cover (%)																		
										Sample Station								
Species	**Common Name**	**Native**	**Indicator**	**Wet**	**SMI**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**		**SMI_m**
Juncus bufonius	toad rush	yes	FACW	y	2	1										0.1		0.2
Prunus sp.	cherry, plum	NA	---	u	5						1					0.1		0.5
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY					3			20	2						2.5		
moss, duff, dead/sprayed vegetation, etc.	"					8	2	5	68	40	5	7	5	4	8	15.2		
	Invasive species cover:	1.0	Total cover:			113	219	238	118	124	263	222	110	237	220	186		486
	Soil Moisture Index:	2.61	FAC and better cover:			90	144	198	118	120	244	183	67	160	187	151		
	Percent vegetated (under canopy):	82	Native cover:			32	129	120	104	104	190	193	65	201	193	133		
		Percent FAC and better of total:				80	66	83	100	97	93	82	61	68	85	81		
			Percent native of total:			28	59	50	88	84	72	87	59	85	88	71		

Oak Creek Mitigation Bank Plant Monitoring, 2016

Forested Habitat Type - Transect Means

Cover (%)

Species	Common Name	Native	Indicator	Wet	SMI	Transect 6	Transect 7
Fraxinus latifolia	Oregon ash	yes	FACW	y	2	86.7	71.9
Camassia leichtlinii	great camas	yes	FACW-	y	2	11.2	27.8
Geranium lucidum	shining geranium		NOL	u	5	0.0	20.6
Poa trivialis	rough [roughstalk] bluegrass		FACW	y	2	5.4	11.3
Crataegus douglasii	black hawthorn	yes	FAC	y	3	0.5	7.5
Galium aparine	cleavers	yes	FACU		4	6.0	2.0
Allium nigrum	black garlic		NOL	u	5	6.4	0.0
Carex leptopoda	Dewey's sedge	yes	FAC	y	3	3.1	2.9
Geum macrophyllum	large leaved avens	yes	FAC+	y	3	0.9	4.2
Agrostis stolonifera	creeping bentgrass		FACW	y	2	0.0	4.1
Amelanchier alnifolia	serviceberry	yes	FACU		4	4.0	0.0
Dipsacus fullonum	common teasel		FACW-	y	2	0.0	4.0
Rumex conglomeratus	clustered dock		FACW	y	2	0.0	3.1
Prunus sp.	cherry, plum	NA	---	u	5	2.7	0.1
Veronica scutellata	marsh speedwell	yes	OBL	y	1	0.0	2.8
Heracleum maximum	cow parsnip	yes	FAC+	y	3	0.0	2.7
Lapsana communis	nipplewort		FAC	y	3	1.0	1.6
Tellima grandiflora	fringecup	yes	FACU		4	0.0	2.2
Vicia sativa	garden vetch/ tare		UPL		5	1.0	1.1
Symphoricarpos albus	snowberry	yes	FACU		4	0.6	1.4
Brachypodium sylvaticum	false brome		NOL	u	5	0.0	1.6
Myosotis laxa	small flowered forget-me-not	yes	OBL	y	1	0.0	1.5
Lotus corniculatus	birdsfoot trefoil		FAC	y	3	0.0	1.4
Ranunculus uncinatus	hooked [small-flowered] buttercup	yes	FAC	y	3	0.5	0.9
Rubus discolor	Himalayan blackberry	invasive	FACU		4	0.3	1.0
Torilis arvensis	spreading hedgeparsley		NOL	u	5	0.0	1.3
Epilobium ciliatum ssp. watsonii	Watson's willowherb	yes	FACW-	y	2	0.0	1.1
Prunella vulgaris	self-heal	yes	FACU+		4	0.3	0.8
Rosa gymnocarpa	baldhip rose	yes	FACU		4	0.0	1.0
Rubus ursinus	trailing blackberry	yes	FACU		4	0.0	1.0
Lysimachia nummularia	creeping jenny		FACW	y	2	0.0	0.9
Geranium carolinianum	Carolina geranium	yes	NOL	u	5	0.0	0.6
Juncus patens	spreading rush	yes	FACW	y	2	0.0	0.5
Saxifraga oregana	Oregon [bog] saxifrage	yes	FACW+	y	2	0.4	0.0
Melissa officinalis	garden balm		UPL		5	0.0	0.3
Taraxacum officinale	dandelion		FACU		4	0.3	0.0
Bidens frondosa	leafy beggar's ticks	yes	FACW+	y	2	0.0	0.2
Leucanthemum vulgare	oxeye daisy		UPL		5	0.0	0.2
Lythrum hyssopifolia	hyssop loosestrife		OBL	y	1	0.0	0.2
Mentha pulegium	pennyroyal		OBL	y	1	0.0	0.2
Alopecurus pratensis	meadow foxtail		FACW	y	2	0.0	0.1
Festuca rubra	red fescue		FAC+	y	3	0.0	0.1
Hypericum perforatum	St. John'swort		NOL	u	5	0.0	0.1
Juncus bufonius	toad rush	yes	FACW	y	2	0.0	0.1

bare (soil, mud, rock)	BENEATH CANOPY			6.8	2.5
moss, duff, dead/sprayed vegetation, etc.	"			61.8	15.2
	Number of native species:	22	Total cover:	131	186
	Number of introduced species:	22	FAC and better cover:	110	151
	Number of invasive species:	1	Native cover:	114	133
			Percent FAC and better of total:	84	81
			Percent native of total:	87	71
			Soil Moisture Index:	2.45	2.61
			Invasive species cover:	0.3	1
			Percent vegetated (under canopy):	31	82

Mean	SMI_6	SMI_7	SMI_m
79.30	173.4	143.8	158.6
19.50	22.4	55.6	39.0
10.30	0.0	103.0	51.5
8.35	10.8	22.6	16.7
4.00	1.5	22.5	12.0
4.00	24.0	8.0	16.0
3.20	32.0	0.0	16.0
3.00	9.3	8.7	9.0
2.55	2.7	12.6	7.7
2.05	0.0	8.2	4.1
2.00	16.0	0.0	8.0
2.00	0.0	8.0	4.0
1.55	0.0	6.2	3.1
1.40	13.5	0.5	7.0
1.40	0.0	2.8	1.4
1.35	0.0	8.1	4.1
1.30	3.0	4.8	3.9
1.10	0.0	8.8	4.4
1.05	5.0	5.5	5.3
1.00	2.4	5.6	4.0
0.80	0.0	8.0	4.0
0.75	0.0	1.5	0.8
0.70	0.0	4.2	2.1
0.70	1.5	2.7	2.1
0.65	1.2	4.0	2.6
0.65	0.0	6.5	3.3
0.55	0.0	2.2	1.1
0.55	1.2	3.2	2.2
0.50	0.0	4.0	2.0
0.50	0.0	4.0	2.0
0.45	0.0	1.8	0.9
0.30	0.0	3.0	1.5
0.25	0.0	1.0	0.5
0.20	0.8	0.0	0.4
0.15	0.0	1.5	0.8
0.15	1.2	0.0	0.6
0.10	0.0	0.4	0.2
0.10	0.0	1.0	0.5
0.10	0.0	0.2	0.1
0.10	0.0	0.2	0.1
0.05	0.0	0.2	0.1
0.05	0.0	0.3	0.2
0.05	0.0	0.5	0.3
0.05	0.0	0.2	0.1

4.65

38.50

159 322 486 404
130
124

82
78

2.54

0.65
57

Oak Creek Mitigation Bank Plant Monitoring, 2016													
Upland Habitat Type - Transect 8				Date(s) Sampled: 5/29/16									
Cover (%)													
							Sample Station						
Species	**Common Name**	**Native**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Mean**
Hypochaeris/ Leontodon	hairy cat's ear/ hairy hawkbit		2		18	80	80	40	15				23.5
Festuca idahoensis ssp. roemeri/ F. occidentalis	Roemer's fescue/ western fescue	yes	50	85	52	5		1	5	20	4		22.2
Holcus lanatus	common velvetgrass		1	2	40	3	2	32	23	30	16	15	16.4
Leucanthemum vulgare	oxeye daisy						7			25	62	70	16.4
Elymus glaucus	blue wildrye	yes	25	18	1				5	4	7		6.0
Anthoxanthum odoratum	sweet vernalgrass		1	2		4		6	32	1			4.6
Daucus carota	Queen Anne's lace		8				12			8	2	10	4.0
Vicia hirsuta	tiny vetch		7				1			3	5		1.6
Vicia sativa	garden vetch/ tare		2	8	2	1							1.3
Rumex acetosella	sheep sorrel/ sour dock		1		2			3	3				0.9
Hordeum brachyantherum	meadow barley	yes						7					0.7
Agrostis capillaris/castellana	highland/colonial bentgrass			4									0.4
Bromus sterilis	barren brome						4						0.4
Myosotis discolor	yellow and blue forget-me-not										1	3	0.4
Geranium carolinianum	Carolina geranium	yes								2	1		0.3
Poa pratensis	Kentucky bluegrass					3							0.3
Danthonia californica	California oatgrass	yes		2									0.2
Galium parisiense	creeping [wall] bedstraw		1		1								0.2
Valerianella locusta	Lewiston cornsalad									1		1	0.2
Torilis arvensis	spreading hedgeparsley										1		0.1
bare (soil, mud, rock)	BENEATH CANOPY, IF ANY		5	1		3	2	1		1	2	2	1.7
moss, duff, dead/sprayed vegetation, etc.	"		3	3	3	1	3	25	15	3	15	6	7.7
	Total cover:		98	121	116	96	106	89	83	94	99	99	100
	Native cover:		75	105	53	5	0	8	10	26	12	0	29
	Percent native of total:		77	87	46	5	0	9	12	28	12	0	29
							Percent vegetated (under canopy):						91

Oak Creek Mitigation Bank Plant Monitoring, Trends

	Percent FAC and better (FAC+ and better in 2000)																	
Transect	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1		36	70	39	46	36	59	S	71	64	76	94	98	94	91	77	80	79
2		41	91	52	48	70	77	S	82	67	86	90	98	98	98	85	79	81
2.1	NA	NA	NA	NA	NA	NA	NA	NA	81	87	87	81	94	97	84	83	68	65
2.2	NA	NA	NA	NA	NA	NA	NA	NA									88	87
3		55	64	52	51	54	65	S	54	87	96	94	98	94	96	90	89	86
4		78	85	78	76	85	88	87	92	88	79	79	96	99	90	94	88	90
5		5	56	55	39	52	62	S	59	66	56	44	R	75	69	57	47	58
5.1	NA	NA	NA	NA	NA	NA	NA	NA	63	71	61	54	R	53	55	74	70	69
5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	76	84
6*		26	77	78	81	64	78	89	79	82	80	83	87	84	85	89	87	84
7*		29	61	65	73	66	75	70	75	82	84	88	77	87	89	91	77	81

	Percent native																	
Transect	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
1						24	12	S	65	54	56	45	44	74	63	61	62	64
2						50	37	S	89	62	63	49	80	69	71	68	51	54
2.1	NA	NA	NA	NA	NA	NA	NA	NA	83	84	80	70	69	70	65	63	65	68
2.2	NA	NA	NA	NA	NA	NA	NA	NA									46	48
3						32	16	S	80	72	79	77	66	75	56	71	60	59
4						59	46	43	66	57	56	53	65	68	47	54	57	61
5						6	3	S	54	43	37	21	R	31	50	34	24	37
5.1	NA	NA	NA	NA	NA	NA	NA	NA	60	67	71	48	R	55	45	59	49	54
5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81	65	72
6*						46	74	69	76	78	78	79	81	79	80	88	83	87
7*						34	61	58	63	75	77	81	74	74	74	69	67	71

*Includes canopy from 2005 on S = sprayed R = remediated

Number of Species, PC Transects																		
Native					31	26	26	N	25	30	26	29	24	26	30	32	33	32
Introduced					35	37	35	N	27	25	32	24	20	23	28	26	33	35
Total					66	63	61	N	52	55	58	53	44	49	58	58	66	67

OAK CREEK MITIGATION BANK

DATE	NAME	LOCATION	PERMIT	ADD	SOLD	BALANCE
8/4/1999	DSL/COE UNCERTIFIED 30%			9.350		9.350
10/13/1999	RANCO	MILLERSBURG, OREGON	FP14608		0.420	8.930
10/15/1999	CENTRAL TRAINING TRUST	TANGENT, OREGON	FP17275/1999-00935		0.420	8.510
1/13/2000	GORDON VOGT	CENTER ST.,ALBANY, OR	FP18135/		0.360	8.150
3/15/2000	GARY HARTALOO	COVEY RUN, NORTH ALBANY, OR	RF17655		0.360	7.790
5/19/2000	CLEAR CHANNEL BROADCASTING	2840 MARION RD.ALBANY, OR	RF18955		0.260	7.530
8/16/2000	WESTERN WEBB PRESS	263 29TH AVE., ALBANY, OR	FP22718/2000-00581		0.110	7.420
8/16/2000	PAHLISCH NEILSON HOMES	GRAND OAKS SUBDIVISION, CORVALLIS, OR	RF22756		0.130	7.290
9/8/2000	CLOUDBURST DEVELOPMENT	5TH AND MAIN STS., LEBANON, OR	RF22824/2008-00659		0.470	6.820
9/20/2000	L&H BUILDERS	FIR CT SWEET HOME, OR	RF22478/2000-00365		0.130	6.690
10/5/2000	CAMAS COMMONS	53RD AND COUNTRYCLUB, CORVALLIS, OR	2255-1RF/2000-00467		0.450	6.240
10/20/2000	CONIFER PL APARTMENTS,LLC	3403 NW 60TH ST.,CORVALLIS, OR	22351/20000492		1.520	4.720
10/20/2000	TIMBERHILL HOMES, LLC	29TH ST., CORVALLIS, OR	DSL22349		0.351	4.369
11/1/2000	DSL/COE CREDITS CERTIFIED			6.24		10.609
12/11/2000	ALL STATE PROPERTIES	SKYVIEW ESTATES, LEBANON, OR	FP18844		0.740	9.869
1/8/2001	WEYERHAEUSER COMPANY	AMERICAN CEMWOOD SITE, ALBANY, OR			0.270	9.599
1/27/2001	CITY OF MILLERSBURG	KUMPULA PROPERTY MT VIEW PL	RF22934		0.105	9.494
2/18/2001	MONACO COACH	COBURG, OREGON	FP17425/99-00778		3.680	5.814
3/15/2001	CITY OF LEBANON	VIOLATION	VIOLATION		0.339	5.475
6/8/2001	PAHLISCH NEILSON HOMES	THE PARK AT TIMBERHILL	2001-00207		0.017	5.458
7/27/2001	HARRISON INDUSTRIES	KNOX BUTTE RD AND TIMBER ST., ALBANY, OR	24201RF/2001-00724		0.120	5.338
9/22/2001	LINN COUNTY AFFORDABLE HOUSING	LINN COUNTY AFFORDABLE HOUSING	24434FP/2001-00724		0.020	5.318
5/25/2002	THE SANDERS DO/TC2 INVESTMENT	45TH STREET NEAR COUNTRY CLUB DR	25203FP/2002-00179		0.190	5.128
2/7/2003	CITY OF ALBANY	OAK CREEK DRAINAGE AT 53RD AVENUE	26256/2002-00901		0.480	4.648
2/17/2003	BENTON COUNTY PUBLIC HEALTH	CHAPEL DRIVE NEWTON CR. BRIDGE	26401GA/2002-00993		0.060	4.588
3/8/2003	CITIES OF ALBANY AND MILLERSBURG	WATER INTAKE, SCAVEL HILL ROAD	25849RF/2000-00720		0.105	4.483
11/3/2003	OREGON DEPT OF TRANSPORTATION	I-5 N. JEFFERSON TO N. ALBANY, OR	31156RF/2003-00622		0.300	4.183
1/14/2004	BBF DEVELOPMENT, LLC	NE 1/4 SEC. 20,T11S,R3W W. ALBANY, OR	3106FP/2003-00570		0.080	4.103
3/11/2004	STILLWATER ASSOC, A WASH LP,WA	T12S,R2W TAX LOT 1400 LEBANON, OR	30822FP/2003-00473		0.466	3.637
3/27/2004	LINN COUNTY ROAD DEPARTMENT	CALAPOOIA RIVER (DRIVER ROAD) BRIDGE TANGENT, OR	31618GA/NA		0.047	3.590
5/26/2004	OREGON DEPT OF STATE LANDS	WETLAND MITIGATION BANK REVOLVING FUND			0.167	3.423
6/7/2004	TIMBERHILL CORPORATION	KINGS BLVD. EXT. N OF WALNUT BLVD.,CORVALLIS, OR	30514FP/2000-00320		2.464	0.959
7/20/2004	ROTH BUILT AND BASIC HOMES INC	NW/NE 1/4 SEC.3&4 T11S R3W IN ALBANY, OR	32195FP/2004-00280		0.980	-0.021
5/2/2007	OREGON DEPT OF TRANSPORTATION	I-5 CROSSING OF SODOM DITCH MP221.13 NEAR HALSEY,OR	38105GA/2004-0035		0.052	-0.073
4/4/2008	DSL/COE CREDITS RELEASED			3.000		2.927
9/17/2008	CONSUMERS POWER	AIRPORT SUBSTATION SITE NEAR 36394 AIRPORT DR.,LEBANON,OR	40366RF/2008-00241		0.191	2.736
9/15/2008	DSL/COE CREDITS RELEASED			4.000		6.736
12/3/2008	JUSTIFICATION HOLDINGS, LLC	T13S,R1E,SEC29,TAX LOT 6500,SWEETHOME,OR	40059RF/2008-00153		0.059	6.677
10/8/2009	CITY OF JEFFERSON	700 N 2ND ST,JEFFERSON. OR	39627/RP/1994-989-1		0.250	6.427
10/14/2010	CITY OF PHILOMATH	SEC 18,19,20TS23SR5/6W TAX LOT 801	43699RF/2009-00626		6.230	0.197
6/26/2012	CITY OF CORVALLIS	T11S R5W SSO T23SEC.26TAX LOT 500	50275GP/2012-00173		0.170	