

Wetland Delineation · Habitat Management Plans · Riparian Restoration · Mitigation · Biological Evaluations
Eastside Division · (509) 899-0355 Westside Division · (360) 620-0618

## WETLAND INVENTORY OF STARLIGHT PROPERTY Ellensburg, Washington

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Prepared By:
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Plant Ecologist
Agricultural Wetland Specialist
The Wetland Corps



Field Delineation

Methodology used for wetland delineation (if necessary) is consistent with the technical approaches articulated in the 1987 Corps of Engineers (COE) Manual and in the 1997 Washington State Wetlands Identification and Delineation Manual. These documents are the wetland delineation manuals that are used in determining wetland areas when applying federal, state and local government regulations under the Clean Water Act (Section 404), the Shoreline Management Act and the Growth Management Act in Washington State.

The project site field work was conducted over the course of four days in November and December 2006. A general field review of this property was also performed (Wetland Corps 2005) in May of 2005, as part of a feasibility study with the former land owner. Field work (2006) was conducted under cloudy skies with an ambient temperature ranging between 30 and 40 degrees Fahrenheit. The time of year and recent precipitation history was considered in assessing the type and extent of any wetlands existing on site.

Specific field methodology used in determining the extent and location of wetland areas include:

- As part of the initial project site reconnaissance, the site was walked to determine the general extent and location of potential wetland areas in relation to property boundaries.
- Potential wetland and upland sample plots were established in the identified potential wetland areas and in the adjacent upland area; and
- Potential wetland boundaries (if identified) were delineated with flagging, by noting localized topography and vegetation patterns and comparing parameters of hydrology, soil, and vegetation with data collected at the wetland and upland sample plots.

## WETLAND EVALUATION

The project area was investigated; soil, vegetation and hydrologic data were collected at twenty-two sample plot locations. Data collected at each sample plot was entered onto a Routine Wetland Determination Data Form (Washington State Department of Ecology 1997). (Appendix B).

Any wetlands identified on the property would be classified and rated using the categories set forth in Washington State Wetland Rating System, Eastern Washington, 2nd Edition, or as amended hereafter (Department of Ecology 1993). This wetland evaluation would use the new rating manual, Washington State Wetland Rating System for Eastern Washington (Hruby 2004). This system identifies various complexities within wetland structures, habitat attributes and various functions associated with wetlands.

National Wetlands Inventory

The USFWS NWI map - Online wetlands mapper shows potential wetlands on the subject property. (Appendix A)

NRCS / USDA Online Soil Survey - No information available

## WETLAND INVENTORY RESULTS

Data was collected at twenty two sample plot locations within potential wetland areas and adjacent known uplands. Suspected wetland areas included any portion of the site containing hydrophytic vegetation. The sample plots would normally be staked, flagged, and labeled with numbered ribbons for identification (DP 1, 1a 2, 2 a, 3, 3a, etc...), but the presence of cattle on the property at the time of soil pit excavation, prevented staking and labeling the pits. The pits were also filled in after soil data was recorded, to eliminate any possible liability to the Wetland Corps. However, all soil pits are located and labeled on the attached Data Points Map (Appendix C). For each soil pit dug (1.) in a potential wetland area (based on topography and vegetation), a corresponding soil pit was dug in a known upland (1a.).

• Soils

Soils inspected in soil pits ranged from 10YR 2/2 to 10YR 4/4 and 7.5YR 2.5/2 to 7.5YR 2.5/3. The Soil Survey of Kittitas County is not published and there is no available soil information. Information collected in most soil pits was fairly consistent, revealing dry to moist silt loams, cobbley silt loams, silt clay loams, fine sandy loams and sandy clay loams. These soils are underlain by a wavy loamy-gravel-cobble lens, which varied in depth from 14" to 18". None of the soil pits down to 14 inches showed any significant indicators of wetland hydrology, except for pits dug directly in irrigation ditches, in which soils had hydric characteristics. Pits dug in irrigation ditches, serve as reference points, to help determine what conditions to look for in other portions of the property. Data points in potential wetland areas were located at the point of lowest general topography. No data points revealed outside of irrigation ditches revealed any saturated soils or standing water. Soil pits near head ditches and near or in the most heavily irrigated portions revealed common, fine and faint/distinct mottling with a matrix of 5YR 4/6. Mottling of the soil is indicative of a fluctuating water table, and Gleyed soil is indicative of areas of long term saturation, neither of these soil conditions is predominant.

Hydrology

This ownership is located within proximity of Cascade Canal. The property receives irrigation flows from the canal, via a made-made ditch system. Overall, there is a general rise in the water-table in the Kittitas Valley during the irrigation season. This water-table rise is considered natural and the "normal circumstance" of the environment. Areas of land that are directly affected by high water table which results in wetland conditions are valid and are regulated. Hydrology that clearly results from surface irrigation flows, can be shut off and hydrological connectivity is ceased. Therefore, wetland-like areas created from this conveyance are not regulated. No inundation or standing water in pits was observed.

We trust this information is sufficient for your needs at this time. Thank you for choosing The Wetland Corps as your environmental consultant. If you have any questions feel free to call. (509) 899-0355

Respectfully submitted,

Joe Gilbert Plant Ecologist

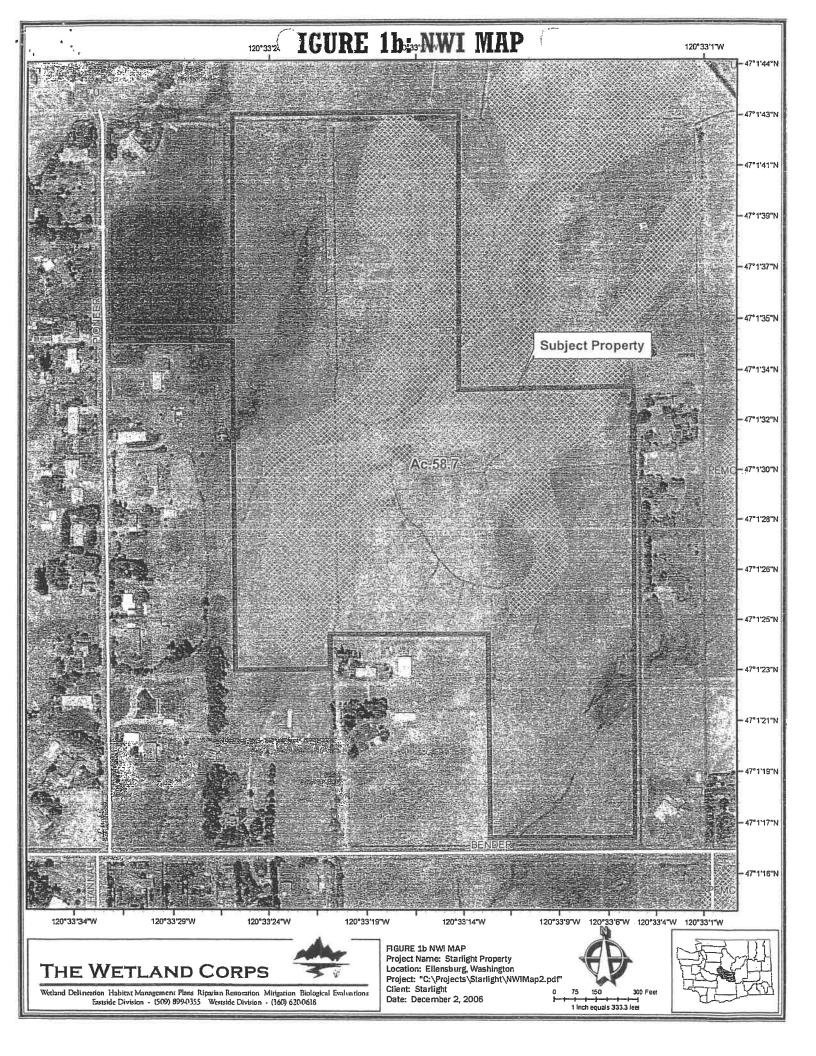
Senior Wetland Specialist

Figure 1a, 1b, 1c: Property Maps



1 inch equals 3333 feet

## Appendix A: NWI Maps



Appendix B: Routine Wetland Determination Data Forms

			1				
SOILS		Phase)	{ Linknown	Drainage Cla	ss: Unknown		
		ies and Phase):	Olikilowii		ations confirm mapped t	ype? N/A	
Taxonomy	(subgroup	) ,		, icid oboo! v.		· ·	
	1	,				1,8	
Profile Des	scription			I	Texture, concretions,	Drawing of soil profile	
Depth		Matrix color	Mottle colors	Mottle abundance	structure, etc.	(match description)	
(inches)	Horizon	(Munsell moist)	(Munsell moist)	size and contrast	Silt loam	(Mator Goodipion)	
0-10		5YR 3/3	5YR 4/6	F, F, D	Slit loani		
10-16		7.5YR 2.5/3			Silt Clay loam		
					Gravelly sandy loam		
16+							
I budeia Ca	il Indicators	: (check all that a	nply)				
1 -	⊓ Histosol	, (onlock an invest	FF:37	☐ Matrix chron	na ≤ 2 with mottles		
_	] Histic Epip	edoп		☐ Mg or Fe Concretions			
	☐ Sulfidic Oc				c Content in Surface Layer	of Sandy Soils	
		sture Regime		Organic Stre	eaking in Sandy Soils		
	Reducing			☐ Listed on Na	ational/Local Hydric Soils L	ist	
	Gleved or	Low-Chroma (=1)	matrix	Other (expla	ain in remarks)		
	oils present?						
Rationale	for decision/	Remarks: No prim	nary indicators pre	sent			
	Determination						
<u>vveuana</u>	Determinati	211				,	
Hydrophy	tic vegetation	n present?	☐ Yes X N				
	ils present?		☐ Yes X N				
	ydrology pre		☐ Yes X N				
Is the san	npling point v	vithin a wetland?	Yes XN	0			
Rationale	e/Remarks:	Negative for all the	hree parameters				

NOTES: Located in between irrigation ditches

	Name (Ser y (subgroup	ies and Phase) : )	Unknown	Drainage Cl Field observ	ass: Unknown rations confirm mapped t	ype? N/A
Profile De	scription	Matrix color	Mottle colors	Mottle abundance	Texture, concretions,	Drawing of soil profile (match description)
Depth (inches)	Horizon	(Munsell moist)	(Munsell moist)	size and contrast	structure, etc.	(match description)
0-12		10 YR 3/3			Sandy Clay Loam	
12+		10 YR 3/3			Gravelly loam	1
						_
	☐ Histosol ☐ Histic Epip ☐ Sulfidic O ☐ Aquic Moi ☐ Reducing	dor sture Regime Conditions		☐ Mg or Fe C ☐ High Orga ☐ Organic St ☐ Listed on I	oma ≤ 2 with mottles Concretions nic Content in Surface Laye treaking in Sandy Soils National/Local Hydric Soils	
I budnin o	oile present	Low-Chroma (=1)  Remarks: No prir	res X No	y indicators present		
	Determinati					
Hydric so Wetland	ytic vegetatio oils present? hydrology pr	esent?	☐ Yes XI☐ Yes	No No		=
Is the sa	mpling point	within a wetland?  Negative for all				
Rationa	le/Kemarks:	Negauve for all	unce paremeter.			

NOTES: Known upland

			į.		1	
SOILS	(0	ing and Phosp):	Linknown	Drainage C	lass: Unknown	
		ies and Phase):	Ulikilowii	Field obser	vations confirm mapped t	type? N/A
<b>Faxonom</b>	y (subgroup	)		1 10.0 0200.	,	
Profile De	ecription	1	*			Drawing of soil profile
	Julipaon	Matrix color	Mottle colors	Mottle abundance	Texture, concretions,	(match description)
Depth	Horizon	(Munsell moist)	(Munsell moist)	size and contrast	structure, etc.	(match description)
(inches)	Horizon	10 YR 3/3			Sandy Clay Loam	
0-14		10 18 3/3			D. I. Sansa	
4.4.1			V		Gravelly loam	
14+						
						-
Hydric Se	oil Indicator	s: (check all that a	apply)		. Oth —attloo	
	Histosol	•			oma ≤ 2 with mottles	
	☐ Histic Epi	pedon		☐ Mg or Fe 6	Concretions	or of Condu Spile
	☐ Sulfidic O			☐ High Orga	nic Content in Surface Laye	y of Salidy Solis
		isture Regime		☐ Organic S	treaking in Sandy Soils	1 *-4
	Reducing	Conditions		☐ Listed on	National/Local Hydric Soils	LIST
	Cloned or	Low-Chroma (=1)	) matrix	Other (ex	plain in remarks)	
			Yes X No			
Hydric s	oils present	.r .rDomarke: No pril	mary or Secondar	y indicators present		
			illuly of the			
Wetland	Determinati	<u>ion</u>				
	•		□Yes X1	le.		
Hydroph	ytic vegetatio	on present?	□.55			
Hydric s	oils present?		□ ,00			
Wetland	hydrology pr	resent?	☐ Yes XI			
is the sa	mplina point	within a wetland?	☐ Yes XI			
Rationa	le/Remarks:	Negative for all	three parameters	<u> </u>		

NOTES: Within NWI, appears to be upland

	Name (Ser y (subgroup	ies and Phase) :	Unknown	Drainage Cla Field observ	ass: Unknown ations confirm mapped t	ype? N/A
Profile De	scription	]				Drawing of soil profile
Depth	Horizon	Matrix color (Munsell moist)	Mottle colors (Munsell moist)	Mottle abundance size and contrast	Texture, concretions, structure, etc.	(match description)
(inches) 0-14	HOUZOII	10 YR 3/3			Sandy Loam	
14+	-				Gravelly loam	
						-
		( leaste ell that a	upply)			
	☐ Histosol ☐ Histic Epi ☐ Sulfidic O ☐ Aquic Mo ☐ Reducing	dor isture Regime Conditions		☐ Mg or Fe C ☐ High Orgar ☐ Organic Str ☐ Listed on N	ma ≤ 2 with mottles oncretions tic Content in Surface Laye reaking in Sandy Soils lational/Local Hydric Soils I lain in remarks)	
11 delega	oile procent	r Low-Chroma (=1)	es X No			I <sup>1</sup>
Rationale	for decision	/Remarks: No prir	mary or Secondary	/ indicators present	(8)	
Wetland	Determinat	<u>ion</u>				
Hydric so Wetland	ytic vegetationils present?	resent?	☐ Yes X M ☐ Yes X M ☐ Yes X M ☐ Yes X M	lo lo		
Is the sa	mpling point	within a wetland?  Negative for all				
Kauona	IOI (CITICITICI					

NOTES: Known Upland

Profile De	escription		La Ul- coloro	Mottle abundance	Texture, concretions,	Drawing of soil profile
Depth (inches)	Horizon	Matrix color (Munsell moist)	Mottle colors (Munsell moist)	size and contrast	structure, etc.	(match description)
0-8		10 YR 2/2			Sill Edaili	
	-	-			Silt clay Loam	
8-16					Gravelly loam	1
16+						-
	ioil Indicato	rs: (check all that a	apply)		oma ≤ 2 with mottles	
ľ.	☐ Histic Ep	ipedon		☐ Mg or Fe (	nic Content in Surface Laye	er of Sandy Soils
					INC CONTON	
	Sulfidic C			Organic S	treaking in Sandy Soils	
	Aquic Mo	sisture Regime	*. =	☐ Organic S	treaking in Sandy Soils National/Local Hydric Soils	
	☐ Aquic Mo	oisture Regime g Conditions	, and the same of	☐ Organic S	treaking in Sandy Soils National/Local Hydric Soils <sub>Dlain</sub> in remarks)	
	☐ Aquic Mo	oisture Regime g Conditions or Low-Chroma (=1	Yes X No	Organic S Listed on Other (ex	National/Local Hydric Soils	
Hydric s	☐ Aquic Mo	oisture Regime g Conditions or Low-Chroma (=1	Yes X No	Organic S Listed on Other (ex	National/Local Hydric Soils	
Rationa	Aquic Mo Reducing Gleyed of soils presented for decision	oisture Regime g Conditions or Low-Chroma (=1 t?   n/Remarks: No pri	Yes X No	☐ Organic S	National/Local Hydric Soils	
Rationa	☐ Aquic Mo	oisture Regime g Conditions or Low-Chroma (=1 t?   n/Remarks: No pri	Yes X No mary or Secondar	Organic S Listed on Other (exp	National/Local Hydric Soils	
Rational Wetland	Aquic Mo	oisture Regime g Conditions or Low-Chroma (=1 t?   n/Remarks: No pri	Yes X No mary or Secondar	Organic S Listed on Other (ex	National/Local Hydric Soils	
Wetland Hydropl	Aquic Mo Reducing Gleyed of soils present de for decision defor decision deformination mytic vegetation soils present	oisture Regime g Conditions or Low-Chroma (=1) t?	Yes X No mary or Secondar  Yes X No Yes X No Yes X No	Organic S Listed on Other (exp	National/Local Hydric Soils	
Wetland Hydropl Hydric s	Aquic Mo	oisture Regime g Conditions or Low-Chroma (=1) t?	Yes X No mary or Secondar  Yes X I Yes X I Yes X I	Organic S Listed on Other (exp y indicators present	National/Local Hydric Soils	

SOILS Map Unit	Name (Ser y (subgroup	ries and Phase) : ))	Unknown	Drainage Cl Field obsen	lass: Unknown vations confirm mapped t	ype? N/A
Profile De	scription		- A - 11 I	Mottle abundance	Texture, concretions,	Drawing of soil profile
Depth	Horizon	Matrix color (Munsell moist)	Mottle colors (Munsell moist)	size and contrast	structure, etc.	(match description)
(inches) 0-8	11012011	10 YR 2/2			Silt Loam	
<u>U-8</u>					Silt clay Loam	1
8-16					Gravelly loam	
16+						
						-
	☐ Histosol ☐ Histic Epi ☐ Sulfidic C ☐ Aquic Mo ☐ Reducing ☐ Gleyed o	odor bisture Regime g Conditions or Low-Chroma (=1)	) matrix Yes X No	☐ Mg or Fe (☐ High Orga☐ Organic S☐ Listed on	oma ≤ 2 with mottles Concretions Inic Content in Surface Laye Itreaking in Sandy Soils National/Local Hydric Soils plain in remarks)	
	Determina					
Hydroph Hydric s Wetland	nytic vegetati soils present? I hydrology p	on present?	☐ Yes XI☐ Yes Yes XI☐ Yes Yes XI☐ Yes	No . No		

Taxonomy (subgro			Mottle abundance	Texture, concretions,	Drawing of soil profile
Depth (inches) Horizon	Matrix color (Munsell moist)	Mottle colors (Munsell moist)	size and contrast	structure, etc.	(match description)
)-12	10 YR 3/3			Sandy clay Loam	
12+	7.5YR 2.5/3				4
				Gravelly loam	
12+					V.
		1			
☐ Histos ☐ Histic ☐ Sulfidi ☐ Aquic ☐ Redu	Epipedon c Odor Moisture Regime ing Conditions		☐ Mg or Fe ☐ High Orga ☐ Organic S ☐ Listed on	oma ≤ 2 with mottles Concretions anic Content in Surface Laye streaking in Sandy Soils National/Local Hydric Soils plain in remarks)	
☐ Histos ☐ Histic ☐ Sulfidi ☐ Aquic ☐ Reduc ☐ Gleye	Epipedon C Odor Moisture Regime sing Conditions d or Low-Chroma (=1	) matrix Yes X No	☐ Mg or Fe ☐ High Orga ☐ Organic S☐ Listed on☐ Other (ex	Concretions anic Content in Surface Laye streaking in Sandy Soils National/Local Hydric Soils	
☐ Histos ☐ Histic ☐ Sulfidi ☐ Aquic ☐ Reduc ☐ Gleye	Epipedon C Odor Moisture Regime sing Conditions d or Low-Chroma (=1	) matrix Yes X No	☐ Mg or Fe ☐ High Orga ☐ Organic S☐ Listed on☐ Other (ex	Concretions anic Content in Surface Laye streaking in Sandy Soils National/Local Hydric Soils	
☐ Histos ☐ Histic ☐ Sulfidi ☐ Aquic ☐ Reduc ☐ Gleye	Epipedon C Odor Moisture Regime ing Conditions d or Low-Chroma (=1 ent?	) matrix Yes X No	☐ Mg or Fe ☐ High Orga ☐ Organic S☐ Listed on☐ Other (ex	Concretions anic Content in Surface Laye streaking in Sandy Soils National/Local Hydric Soils	

Profile De	scription					Descript of poil profile
Depth	l ladean	Matrix color (Munsell moist)	Mottle colors (Munsell moist)	Mottle abundance size and contrast	Texture, concretions, structure, etc.	Drawing of soil profile (match description)
(inches) 0-8	Horizon	10 YR 3/3	(Mandon Money)		Silt Loam	
8-14		10 YR 4/6			Sandy clay Loam	
	-				Gravelly loam	
14+ 						
						_
						<u> </u>
Hydric So	oil Indicator	s: (check all that a	pply)	□ Martin abor	< 2 with mottles	
[	Histosol		pply)	_	oma ≤ 2 with mottles	
[	☐ Histosol ☐ Histic Epi	pedon	pply)	☐ Mg or Fe C	concretions	r of Sandy Soils
] ]	☐ Histosol ☐ Histic Epi ☐ Sulfidic O	pedon dor	pply)	☐ Mg or Fe C ☐ High Organ	concretions nic Content in Surface Laye	r of Sandy Soils
] [ ]	☐ Histosol ☐ Histic Epi ☐ Sulfidic O ☐ Aquic Mo	pedon dor isture Regime	pply)	☐ Mg or Fe C ☐ High Orgar ☐ Organic St	concretions nic Content in Surface Laye reaking in Sandy Soils	
[ [ ] . [	Histosol Histic Epi Sulfidic O Aquic Mo Reducing	pedon dor isture Regime Conditions	30°	☐ Mg or Fe C ☐ High Organ ☐ Organic St ☐ Listed on N	concretions nic Content in Surface Laye reaking in Sandy Soils National/Local Hydric Soils I	
[ [ [ . [	Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed o	pedon dor isture Regime Conditions r Low-Chroma (=1)	matrix	☐ Mg or Fe C ☐ High Organ ☐ Organic St ☐ Listed on N	concretions nic Content in Surface Laye reaking in Sandy Soils	
[ [ [ [ ]	Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or	pedon dor isture Regime Conditions r Low-Chroma (=1)	matrix es X No	☐ Mg or Fe C ☐ High Organ ☐ Organic St ☐ Listed on N ☐ Other (exp	concretions nic Content in Surface Laye reaking in Sandy Soils National/Local Hydric Soils I	
[ [ [ [ Hydric so Rationale	Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or oils present	pedon dor isture Regime Conditions r Low-Chroma (=1) ?	matrix es X No	☐ Mg or Fe C ☐ High Organ ☐ Organic St ☐ Listed on N ☐ Other (exp	concretions nic Content in Surface Laye reaking in Sandy Soils National/Local Hydric Soils I	
[ [ [ [ Hydric so Rationale	Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or	pedon dor isture Regime Conditions r Low-Chroma (=1) ?	matrix es X No	☐ Mg or Fe C ☐ High Organ ☐ Organic St ☐ Listed on N ☐ Other (exp	concretions nic Content in Surface Laye reaking in Sandy Soils National/Local Hydric Soils I	
Hydric so Rationale	Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or oils present for decision	pedon dor isture Regime Conditions r Low-Chroma (=1) ?	matrix es X No	Mg or Fe C High Organ Organic St Listed on N Other (exp	concretions nic Content in Surface Laye reaking in Sandy Soils National/Local Hydric Soils I	
Hydric so Rationale Wetland	Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or oils present for decision Determinati	pedon dor isture Regime Conditions r Low-Chroma (=1) ?	matrix es X No nary or Secondary	Mg or Fe C High Organ Organic St Listed on N Other (exp	concretions nic Content in Surface Laye reaking in Sandy Soils National/Local Hydric Soils I	
Hydric so Rationale Wetland Hydrophy Hydric so	Histosol Histic Epi Sulfidic O Aquic Mo Reducing Gleyed or oils present for decision	pedon dor isture Regime Conditions Low-Chroma (=1) Remarks: No prim	matrix es X No nary or Secondary	Mg or Fe C High Organ Organic St Listed on N Other (exp	concretions nic Content in Surface Laye reaking in Sandy Soils National/Local Hydric Soils I	

SOILS			( Linkmourn	Drainage (	class: Unknown	
		ries and Phase):	Unknown	Field obse	rvations confirm mapped	type? N/A
Taxonomy	y (subgroup	<b>)</b>		i idia abaa		
		7				
Profile De	scription		· ·	Mottle abundance	Texture, concretions,	Drawing of soil profile
Depth		Matrix color	Mottle colors	640	structure, etc.	(match description)
(inches)	Horizon	(Munsell moist)	(Munsell mois	(t) Size and Contrast	Sandy Clay Loam	
0-15		10 YR 3/3			Galley Glay Loan.	
15+					Gravelly loam	
10+						1
						4
Budric Sc	il Indicator	s: (check all that a	pply)			
1	☐ Histosol	(			roma ≤ 2 with mottles	
1 -	☐ Histic Epir	pedon		☐ Mg or Fe	Concretions	
	Sulfidic O				anic Content in Surface Laye	er of Sandy Soils
	_	isture Regime		Organic S	Streaking in Sandy Soils	
	Reducing				National/Local Hydric Soils I	List
		Low-Chroma (=1)	matrix	Other (ex	plain in remarks)	
Hydric so	oils present	? □Y	es X No			
Rationale	for decision	/Remarks: No prin	nary or Second	ary indicators present		
	Determinati					
			-	_		
Hydrophy	rtic vegetatio	n present?		No		
	ils present?			No		
Wetland	hydrology pr			No		
		within a wetland?		No		
Detional	o/Domarke:	Negative for two	of three parar	neters		

	Name (Ser y (subgroup	ies and Phase) :	Unknown	Drainage Cl Field observ	lass: Unknow vations confirm mapped t	type? N/A
Profile De	scription		A	Mottle abundance	Texture, concretions,	Drawing of soil profile
Depth		Matrix color	Mottle colors (Munsell moist)	1	structure, etc.	(match description)
(inches)	Horizon	(Munsell moist)	(Midisen moist)	SILO CITO CERTA	Silt loam	
0-8		10YR 3/2			la la Olevelace	-
8-14		10YR 3/3	Į.		Sandy Clay Loam	
0-14					Gravel -Cobble	
14+						-
7						
Hydric s Rationald	Histosol Histic Epi Sulfidic O Aquic Moi Reducing Gleyed o	dor isture Regime Conditions r Low-Chroma (=1) ?	matrix /es X No	☐ Mg or Fe 0☐ High Orga☐ Organic S☐ Listed on	oma ≤ 2 with mottles Concretions nic Content in Surface Laye treaking in Sandy Soils National/Local Hydric Soils olain in remarks)	
wettand	Determinac	1011				
Hydroph	ytic vegetatio	on present?		No 		
Hydric s	oils present?		L., 100	No No		
Wetland	hydrology pi	resent?		No No		
Is the sa	mpling point	within a wetland?				
Rationa	le/Remarks:	Negative for all	mree parameter	3		

NOTES: Located just above irrigated depression

SOILS			Unknown	Drainage C	lass: Unknown		
		ries and Phase):	UNKNOWN		vations confirm mapped	type? N/A	
Taxonom	y (subgroup	o)		Field observ	vations committen inapped		
		24					
Profile De	scription			T .	Turbus semanticas	Drawing of soil profile	
Depth		Matrix color	Mottle colors	Mottle abundance	Texture, concretions,	(match description)	
(inches)	Horizon	(Munsell moist)	(Munsell moist)	size and contrast	structure, etc.	(Inatori description)	
0-8		7.5 YR 2.5/3			Sik ibani		
8-16		10YR 3/1			Silt Clay Loam		
	-				Gravel -Cobble		
16+							
	1						
Hydric Sc	il Indicator	s: (check all that a	pply)				
	Histosol	•		_	ma ≤ 2 with mottles		
	_ ] Histic Epip	oedon		☐ Mg or Fe C		"	
	Sulfidic O	dor			nic Content in Surface Laye	r of Sandy Soils	
	Aquic Moi	sture Regime			reaking in Sandy Soils		
	Reducing			<del></del>	lational/Local Hydric Soils L	_IST	
[	Gleyed or	Low-Chroma (=1)		Other (exp	Other (explain in remarks)		
Hydric so	oils present	? 🗆 Y					
Rationale	for decision	/Remarks: No prin	nary or Secondar	y indicators present			
Wetland	Determinati	on					
Hydrophy	tic vegetatio	n present?	☐ Yes X I				
Hydric so	ils present?		☐ Yes XI				
	hydrology pre		Yes XI		SER		
is the san	npling point	within a wetland?	☐ Yes XI	ło			
	Managaran	Monotive for all t	bree narameters	<b>1</b>			

11 °C					's	
SOILS	Name /055	ice and Phase) .	Unknown	Drainage C	lass: Unknown	
		ies and Phase) :	Olikilowii	Field observ	vations confirm mapped t	type? N/A
Taxonom	y (subgroup	9)				
		_				
Profile De	scription				Texture, concretions,	Drawing of soil profile
Depth		Matrix color	Mottle colors	Mottle abundance	structure, etc.	(match description)
(inches)	Horizon	(Munsell moist)	(Munsell moist)	size and contrast		- Indian desire
0-6		7.5 YR 2.5/3			Silt loam	
		100/17 0/17			Sandy Clay Loam	
6-14		10YR 3/3				-
14+					Gravel -Cobble	
147				-		
Hydric S	oil Indicator	s: (check all that a	ipply)		. O ith illan	
	Histosol				oma ≤ 2 with mottles	
	Histic Epi	pedon		☐ Mg or Fe 0	Concretions	or of Sandy Soils
	Sulfidic O	dor			nic Content in Surface Laye	n of Saridy Sons
	Aquic Moi	isture Regime		☐ Organic St	treaking in Sandy Soils	l iet
	Reducing	Conditions			National/Local Hydric Soils	List
	☐ Gleyed or	r Low-Chroma (=1)		U Other (exp	olain in remarks)	
Hydric s	oils present	? 🔲	res X No	4 - 11 - 1		
Rationale	e for decision	/Remarks: No prir	nary or Secondar	y indicators present		
Wetland	Determinati	ion				
Hydroph	ytic vegetatio	on present?	☐ Yes X N			
	oils present?		☐ Yes X N			
Wetland	hydrology pr	resent?	☐ Yes X1			
Is the sa	mpling point	within a wetland?	☐ Yes XI			
Pationa	le/Remarks:	Negative for all	three parameters	S		

SOILS.	Name (Ser	ies and Phase):	( Unknown	Drainage Cl	ass: Unknown				
	y (subgroup			Field observ	ations confirm mapped t	ype? N/A			
		-							
Profile De	scription			Mottle abundance	Texture, concretions,	Drawing of soil profile			
Depth		Matrix color	Mottle colors	size and contrast	structure, etc.	(match description)			
(inches)	Horizon	(Munsell moist)	(Munsell moist)	Size and contract	Silt loam				
0-8		7.5 YR 2.5/3							
8-14		10YR 3/1		>:	Silt Clay Loam				
					Gravel -Cobble				
14+						-			
		s: (check all that a	pply)	□ Matrix chro	ma ≤ 2 with mottles				
☐ HISTOSOI									
I his contact in Surface Layer of Sandy Soils									
☐ Sulfidic Odor ☐ High Organic Content in Sulface Layer of Garley Golds ☐ Aquic Moisture Regime ☐ Organic Streaking in Sandy Soils									
☐ Reducing Conditions ☐ Listed on National/Local Hydric Soils List									
Gleyed or Low-Chroma (=1) matrix  Other (explain in remarks)									
Hydric soils present? Yes X No									
Rationale for decision/Remarks: No primary or Secondary indicators present									
	Determinati								
Hydrophytic vegetation present?									
Hydric soils present?  Yes X No  Yes X No									
Welland hydrology present:									
Is the sampling point within a wetland? Yes X No  Pationale/Remarks: Negative for all three parameters									

SOILS Map Unit Na Taxonomy (	ame (Seri	es and Phase):	Unknown	Drainage Cl Field observ	( lass: Unknown vations confirm mapped t	ype? N/A			
Profile Desc	ription Horizon	Matrix color (Munsell moist)	Mottle colors (Munsell moist)	Mottle abundance size and contrast	Texture, concretions, structure, etc.	Drawing of soil profile (match description)			
(inches) 0-8	TIONZON	7.5 YR 2.5/3			Silt loam Silt Clay Loam	1			
8-14		10YR 3/3			Gravel -Cobble				
14+									
Hydric Soil Indicators: (check all that apply)  ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed or Low-Chroma (=1) matrix ☐ Other (explain in remarks) ☐ Histosol ☐ Matrix chroma ≤ 2 with mottles ☐ Mg or Fe Concretions ☐ High Organic Content in Surface Layer of Sandy Soils ☐ Organic Streaking in Sandy Soils ☐ Listed on National/Local Hydric Soils List ☐ Other (explain in remarks)									
Undele enil	e present?	Р	es X No	y indicators present					
Wetland D  Hydrophyti Hydric soils Wetland hy	etermination c vegetation s present? ydrology pre	on n present? esent?	☐ Yes X N ☐ Yes X N ☐ Yes X N	lo lo					
Is the sam	pling point \	within a wetland?  Negative for all t							

