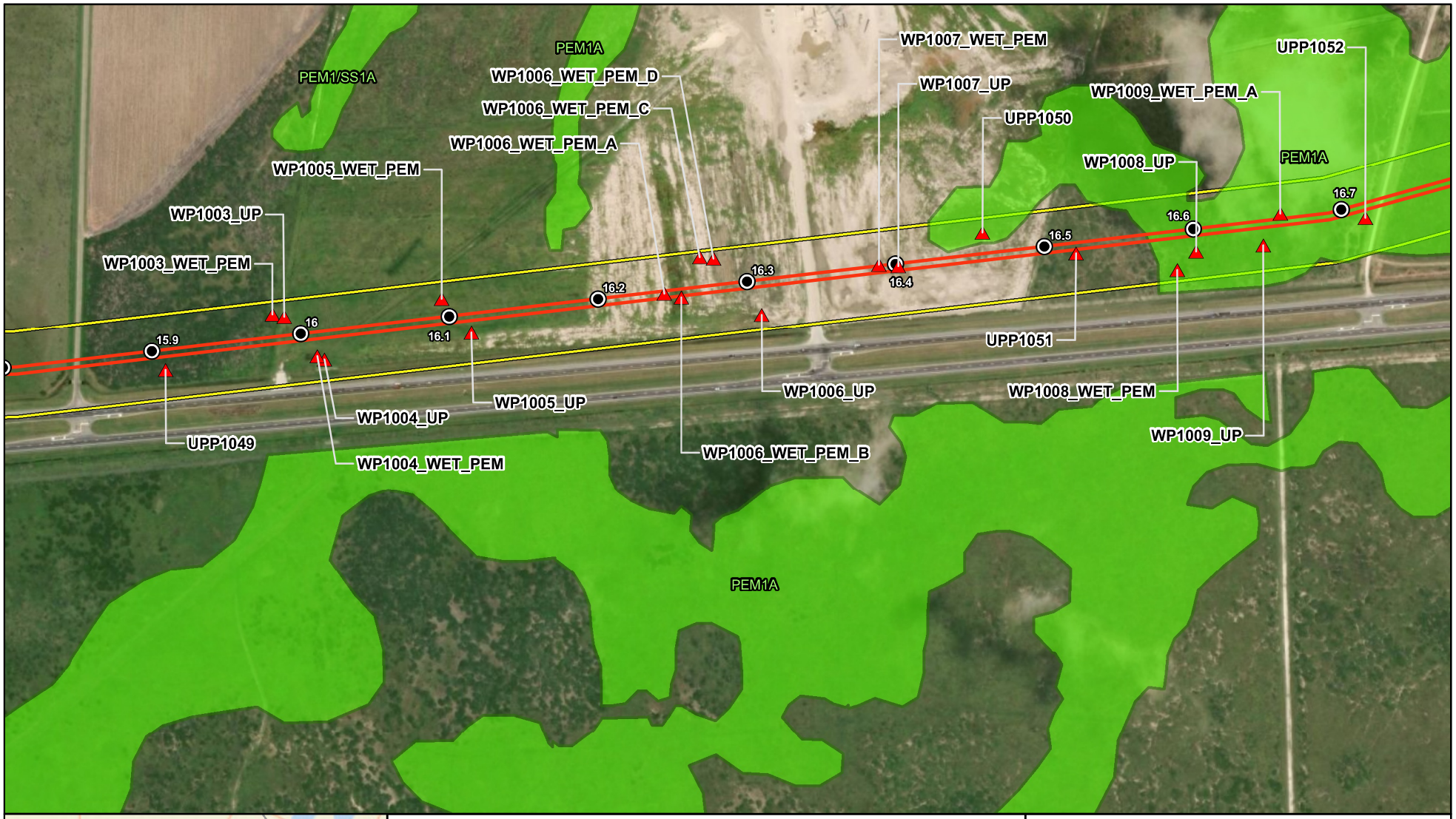


Soil Station
Milepost
Centerline
ESA
County Boundary
NWI Wetland

0 500 1,000 Feet

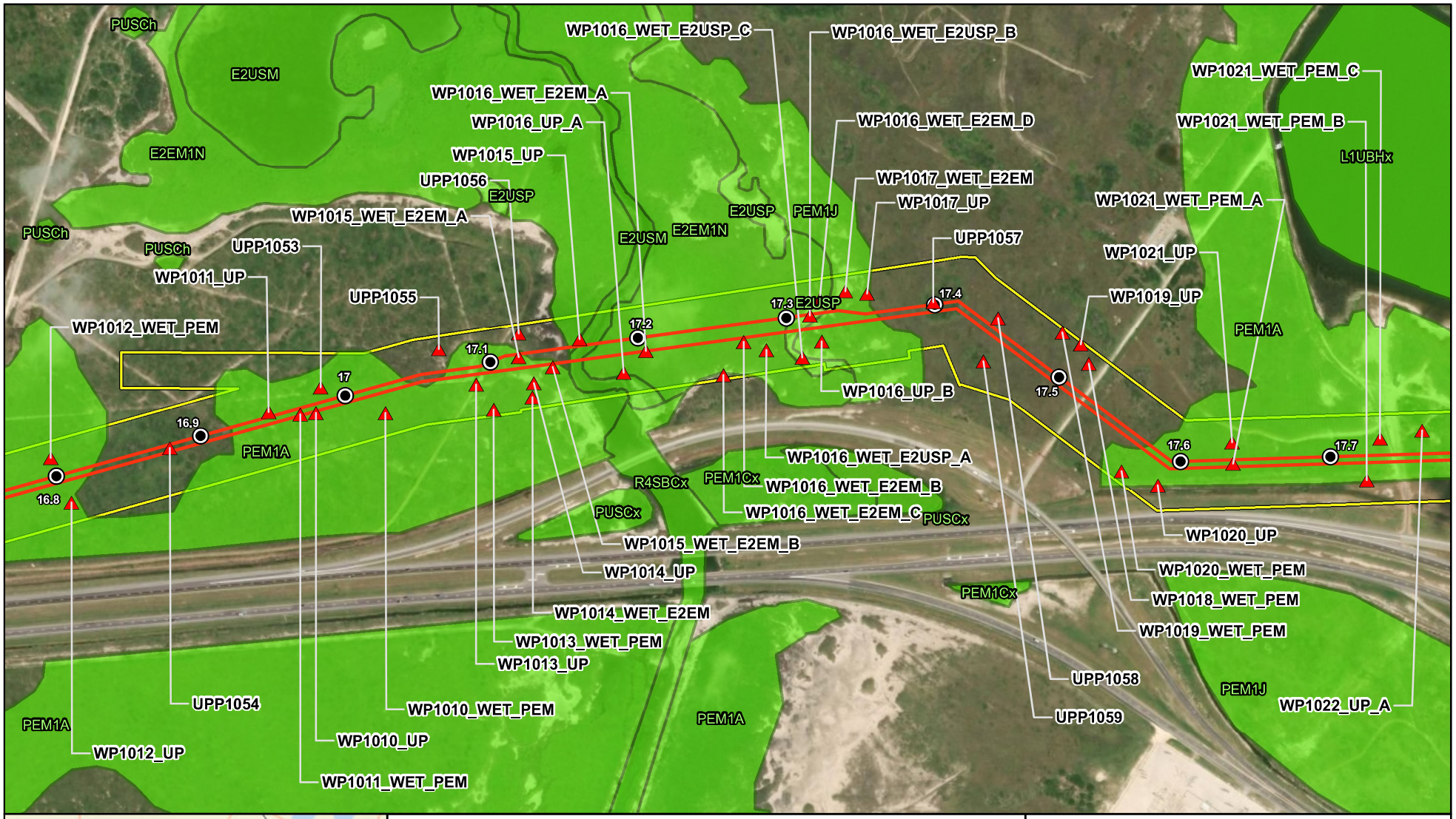
PERENNIAL

National Wetlands Inventory Map
Bluewater Texas Terminal LLC
Bluewater SPM Project
San Patricio County, Texas

Page 20 of 27	Scale: 1:6,000
NAD 83 TX SC ft	Date: April 2019

Document Path: P:\GIS\Client\Phillips66\Bluewater_Terminal_SPM_Project\Maps\ENV\WR\20190306_WR\MXD\4_NWI.mxd

Author: CW



Soil Station
Milepost
Centerline
ESA
County Boundary
NWI Wetland

0 500 1,000 Feet

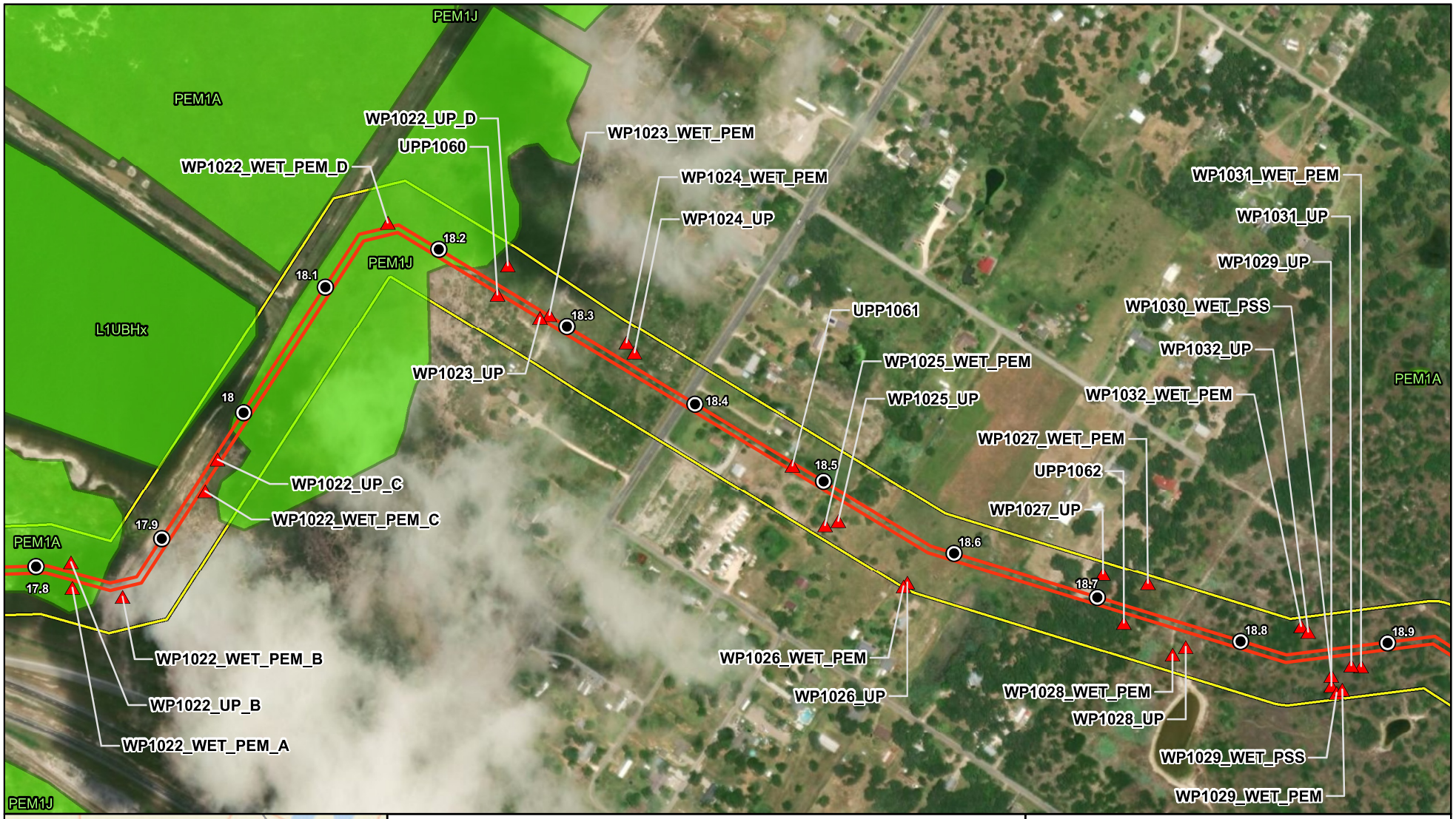
PERENNIAL

National Wetlands Inventory Map
Bluewater Texas Terminal LLC
Bluewater SPM Project
San Patricio County, Texas

Page 21 of 27	Scale: 1:6,000
NAD 83 TX SC ft	Date: April 2019

Document Path: P:\GIS\Client\Phillips66\Bluewater_Terminal_SPM_Project\Maps\ENV\WR\20190306_WR\MXD\4_NWI.mxd

Author: CW



Soil Station
Milepost
Centerline
ESA
County Boundary
NWI Wetland

0 500 1,000 Feet

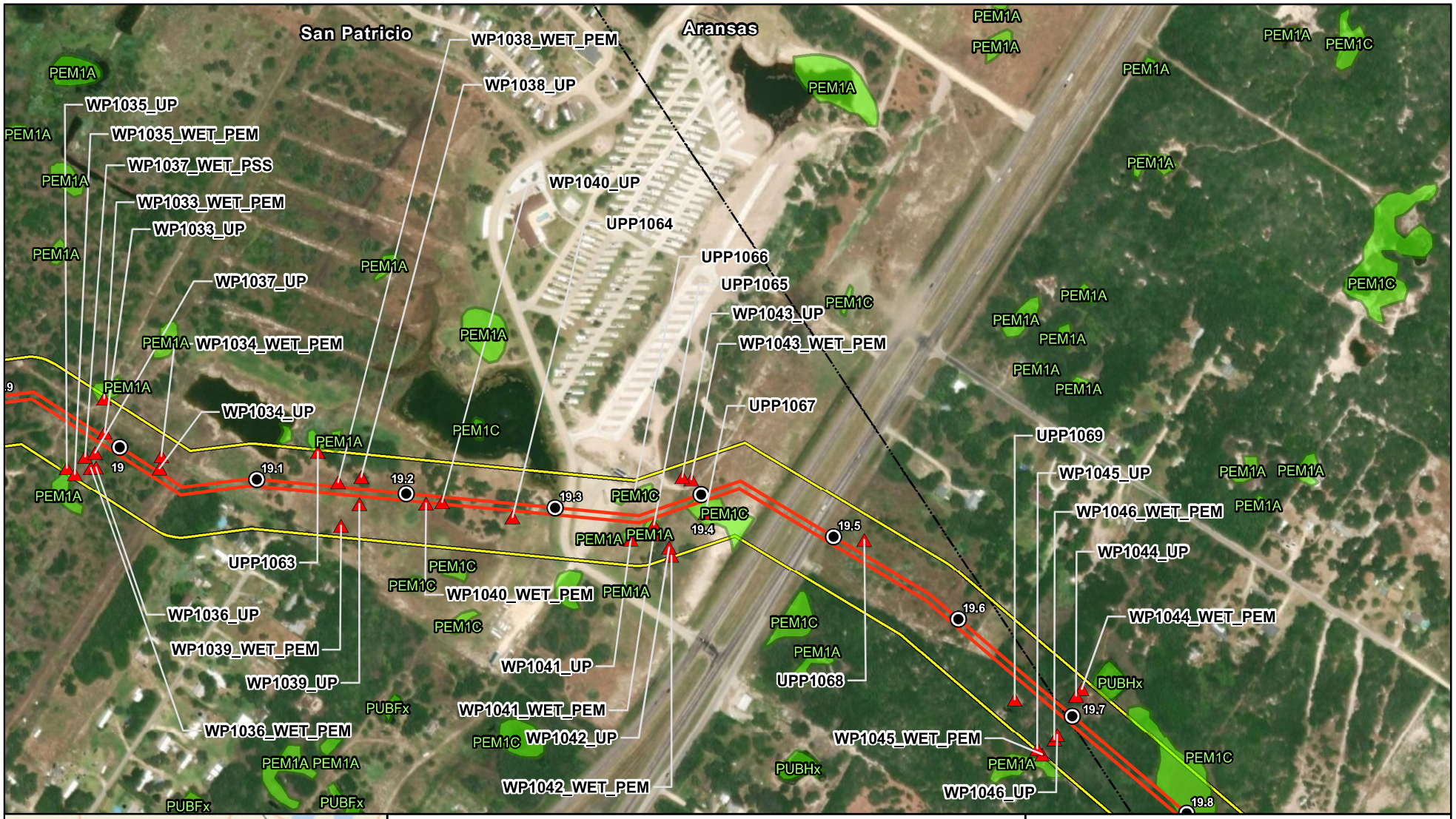
PERENNIAL

National Wetlands Inventory Map
Bluewater Texas Terminal LLC
Bluewater SPM Project
San Patricio County, Texas

Page 22 of 27	Scale: 1:6,000
NAD 83 TX SC ft	Date: April 2019

Document Path: P:\GIS\Client\Phillips66\Bluewater_Terminal_SPM_Project\Maps\ENV\WR\20190306_WR\MXD\4_NWI.mxd

Author: CW



Soil Station
Milepost
Centerline
ESA
County Boundary
NWI Wetland

0 500 1,000 Feet

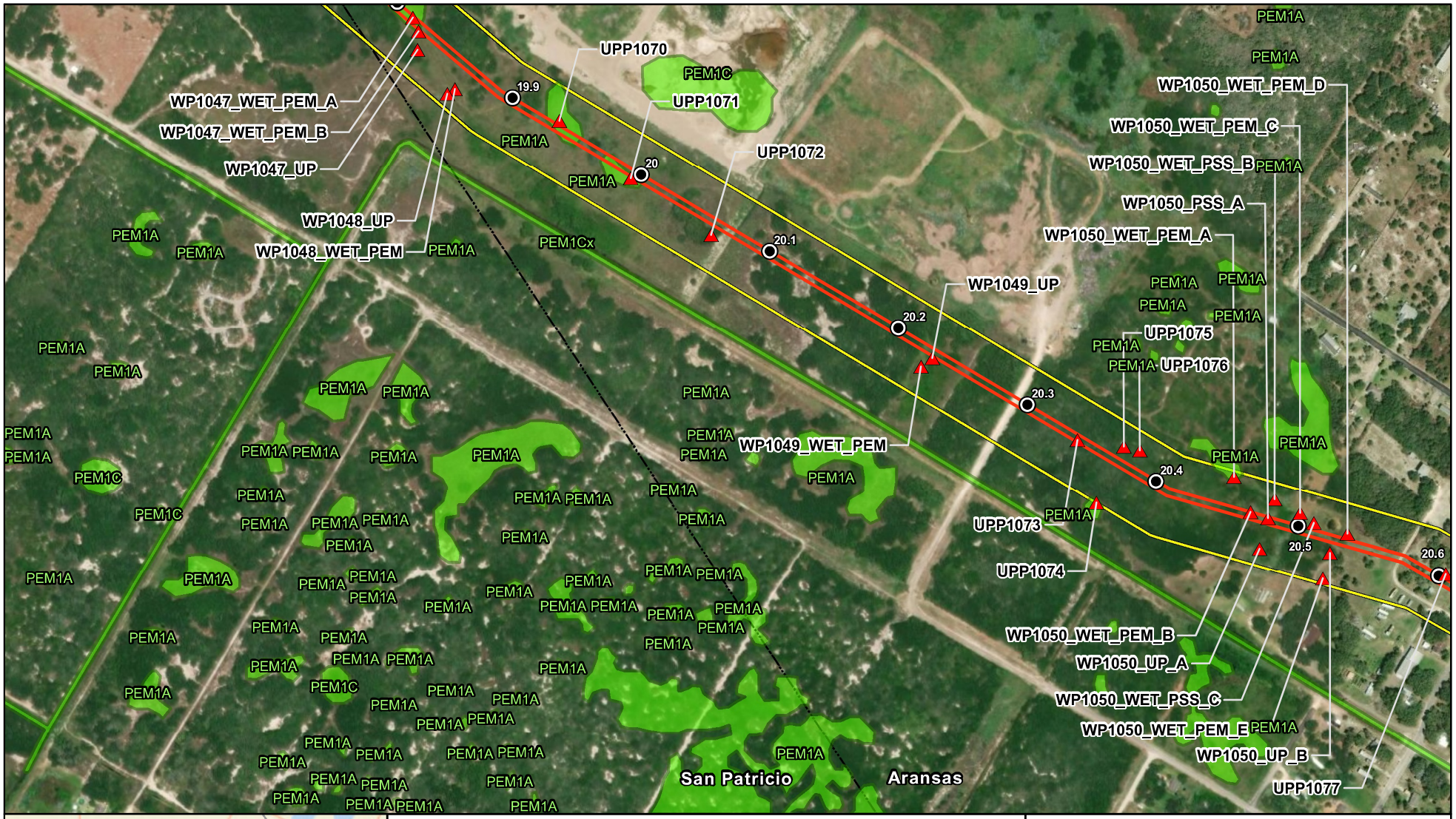
PERENNIAL

National Wetlands Inventory Map
Bluewater Texas Terminal LLC
Bluewater SPM Project
San Patricio & Aransas Counties, Texas

Page 23 of 27	Scale: 1:6,000
NAD 83 TX SC ft	Date: April 2019

Document Path: P:\GIS\Client\Phillips66\Bluewater_Terminal_SPM_Project\Maps\ENV\WR\20190306_WR\MXD\4_NWI.mxd

Author: CW



Soil Station
Milepost
Centerline
ESA
County Boundary
NWI Wetland

0 500 1,000 Feet

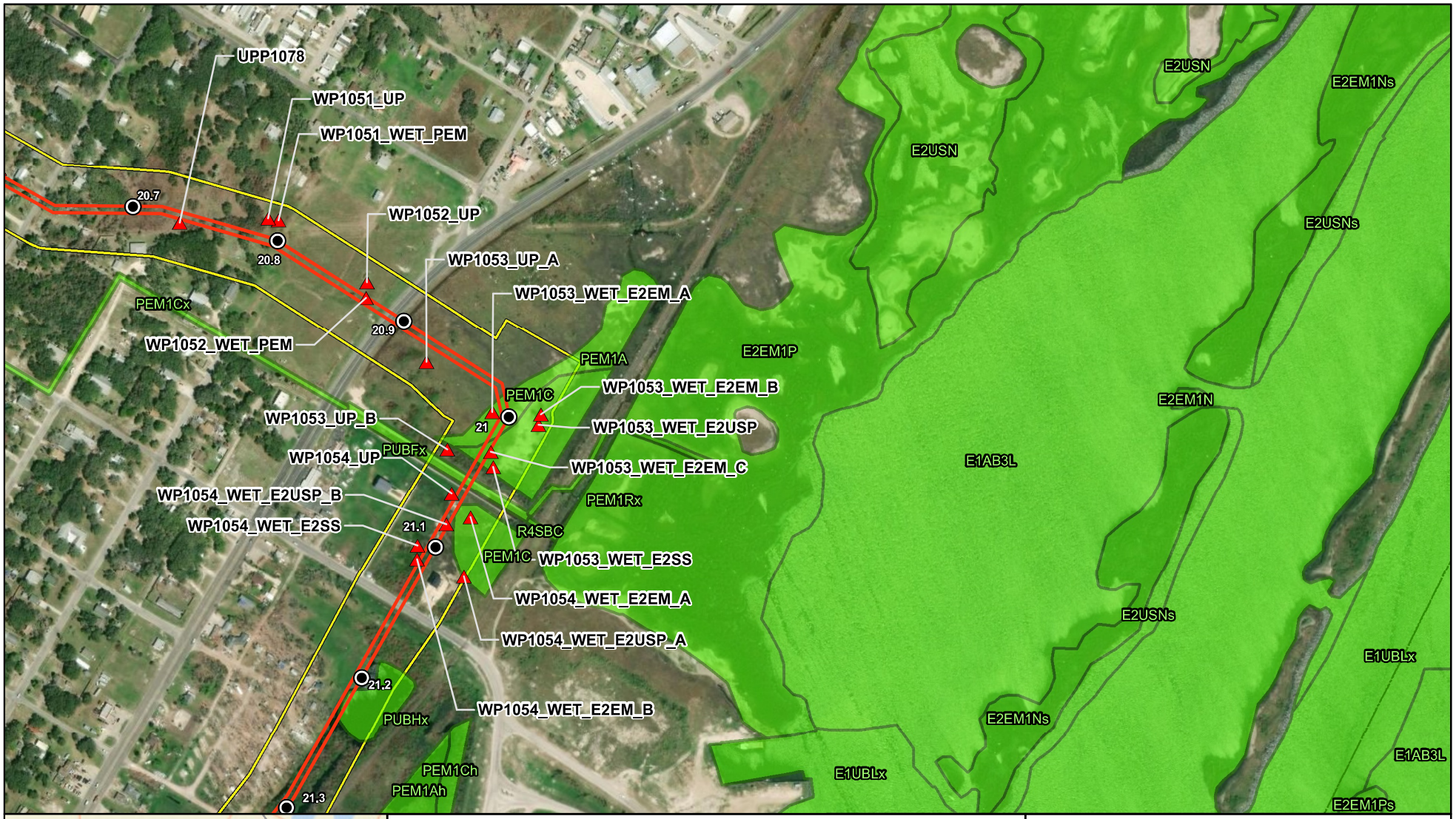
PERENNIAL

National Wetlands Inventory Map
Bluewater Texas Terminal LLC
Bluewater SPM Project
San Patricio & Aransas Counties, Texas

Page 24 of 27	Scale: 1:6,000
NAD 83 TX SC ft	Date: April 2019

Document Path: P:\GIS\Client\Phillips66\Bluewater_Terminal_SPM_Project\Maps\ENV\WR\20190306_WR\MXD\4_NWI.mxd

Author: CW

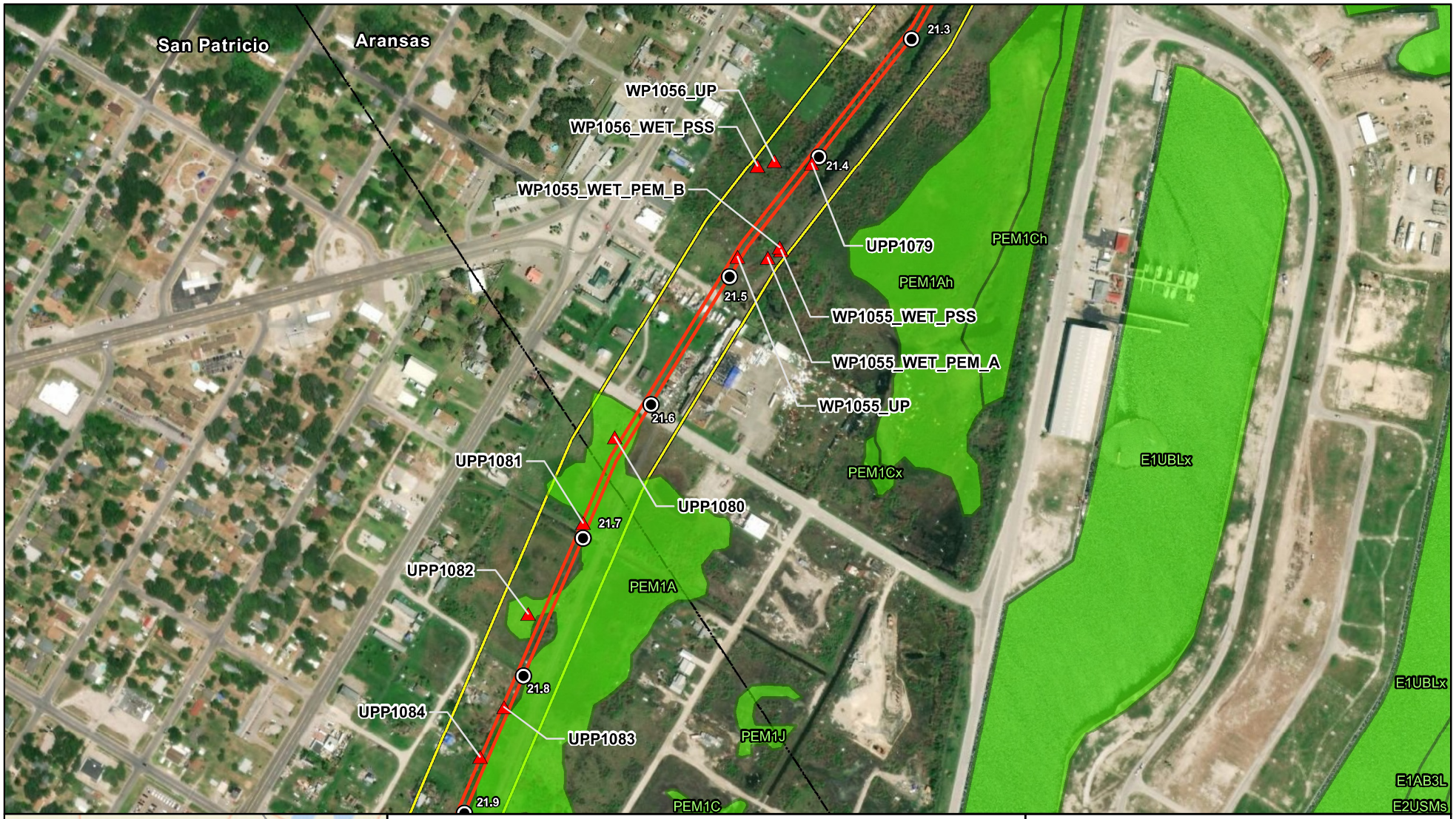


Soil Station
Milepost
Centerline
ESA
County Boundary
NWI Wetland

0 500 1,000 Feet

PERENNIAL

National Wetlands Inventory Map
Bluewater Texas Terminal LLC
Bluewater SPM Project
Aransas County, Texas



Soil Station
Milepost
Centerline
ESA
County Boundary
NWI Wetland

0 500 1,000 Feet

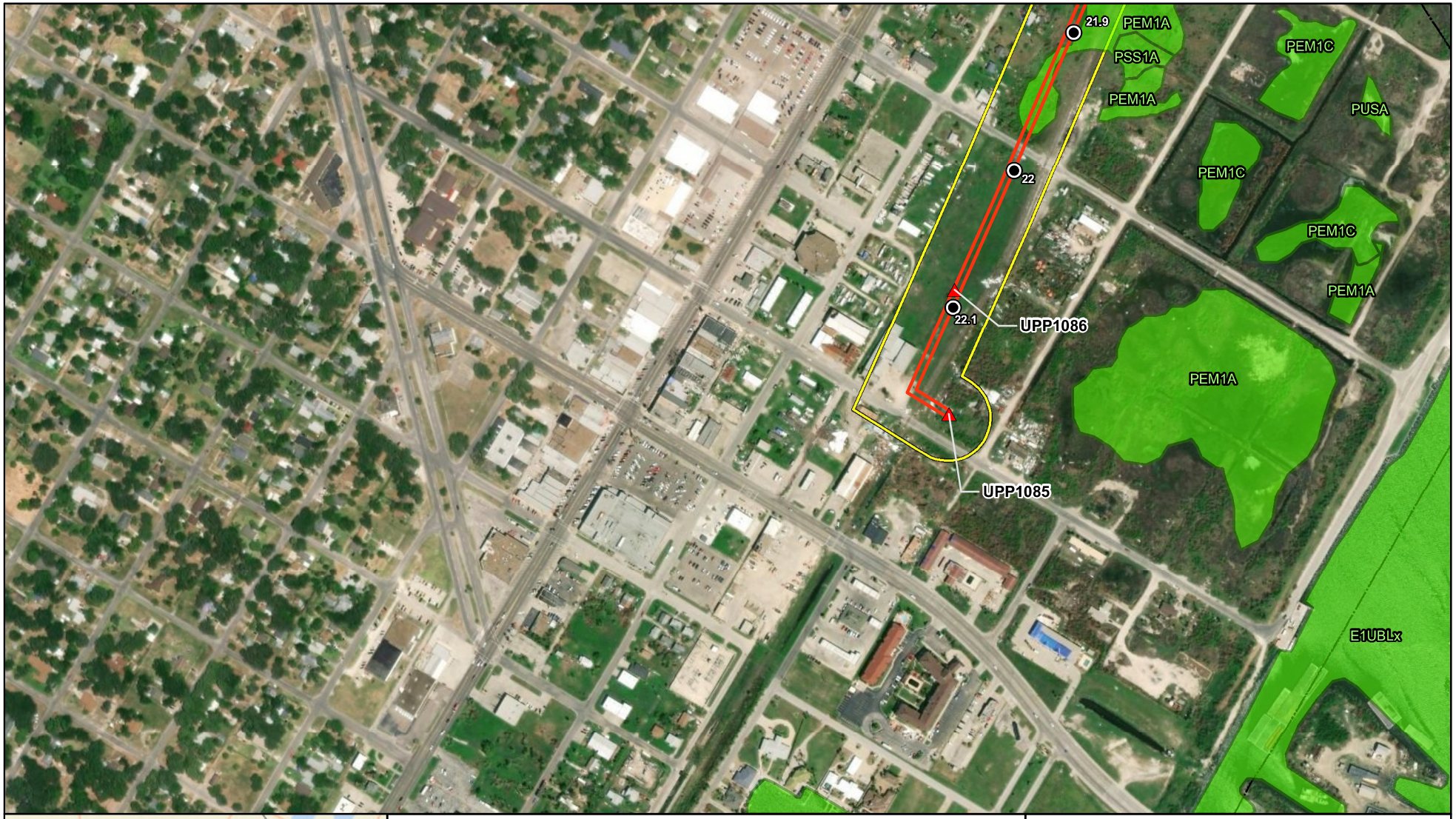
PERENNIAL

National Wetlands Inventory Map
Bluewater Texas Terminal LLC
Bluewater SPM Project
San Patricio & Aransas Counties, Texas

Page 26 of 27	Scale: 1:6,000
NAD 83 TX SC ft	Date: April 2019

Document Path: P:\GIS\Client\Phillips66\Bluewater_Terminal_SPM_Project\Maps\ENV\WR\20190306_WR\MXD\4_NWI.mxd

Author: CW



Soil Station
Milepost
Centerline
ESA
County Boundary
NWI Wetland

0 500 1,000 Feet

PERENNIAL

National Wetlands Inventory Map
Bluewater Texas Terminal LLC
Bluewater SPM Project
San Patricio County, Texas

Page 27 of 27	Scale: 1:6,000
NAD 83 TX SC ft	Date: April 2019

Document Path: P:\GIS\Client\Phillips66\Bluewater_Terminal_SPM_Project\Maps\ENV\WR\20190306_WR\MXD\4_NWI.mxd

Author: CW

Appendix B
Data Sheets (see enclosed electronic copy)

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Bluewater Terminal SPM Project **City/County:** San Patricio **Sampling Date:** 2/4/2019

Applicant/Owner: Phillips 66 Pipeline, LLC **State:** TX **Sampling Point:** **UPP1001**

Investigator(s): B. Bringhurst & A. Ostrowski **Section, Township, Range:** **S** N/A **T** N/A **R** N/A

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** Flat **Slope:** 0 % 0.0 °

Subregion (LRR): LRR T **Lat:** 27.910244 **Long:** -97.407705 **Datum:** NAD 83

Soil Map Unit Name: Victoria clay 0 to 1 percent slopes (VcA) **NWI Classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** ◉ **No** ○ **(If no, explain in Remarks.)**

Are Vegetation ☑ **, Soil** ☑ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** **Yes** ◉ **No** ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ○	No ◉	Is the Sampled Area within a Wetland?	Yes ○	No ◉
Hydric Soil Present?	Yes ○	No ◉			
Wetland Hydrology Present?	Yes ○	No ◉			

Remarks:
Hydrophytic vegetation, hydric soil, and wetland hydrology are not present. This is not a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (Minimum of 2 required)

- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches): 0

Wetland Hydrology Present? **Yes** ○ **No** ◉

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants. Sampling Point: UPP1001

		Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Sapling or Sapling/Shrub Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Shrub Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Herb Stratum	(Plot Size : 30)				
1.	Cynodon dactylon	2	☑	100.0%	FACU
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
9.		0	☐	0.0%	
10.		0	☐	0.0%	
11.		0	☐	0.0%	
12.		0	☐	0.0%	
50% of Total Cover: 1	20% of Total Cover: 0.4	2	= Total Cover		
Woody Vine Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, ro FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B

Percent of Dominant Species That are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Colum Totals:	2 (A)		8 (B)

Prevalence Index = B/A= 4.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤ 3.0[1]**
- ☐ **Problematic Hydrophytic Vegetation[1] (Explain)**

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present ? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: UPP1001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Location[2]	Texture	Remarks
0 - 16	10YR 3/1	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Bluewater Terminal SPM Project **City/County:** San Patricio **Sampling Date:** 2/4/2019

Applicant/Owner: Phillips 66 Pipeline, LLC **State:** TX **Sampling Point:** **UPP1002**

Investigator(s): B. Bringhurst & A. Ostrowski **Section, Township, Range:** **S** N/A **T** N/A **R** N/A

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** Flat **Slope:** 1 % 0.6 °

Subregion (LRR): LRR T **Lat:** 27.910093 **Long:** -97.399802 **Datum:** NAD 83

Soil Map Unit Name: Victoria clay 0 to 1 percent slopes (VcA) **NWI Classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (●) **No** ( ) **(If no, explain in Remarks.)**

Are Vegetation [✓] **, Soil** [✓] **, or Hydrology** [ ] **significantly disturbed?** **Are "Normal Circumstances" present?** **Yes** (●) **No** ( )

Are Vegetation [ ] **, Soil** [ ] **, or Hydrology** [ ] **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	Is the Sampled Area within a Wetland?	Yes ( )	No (●)
Hydric Soil Present?	Yes ( )	No (●)			
Wetland Hydrology Present?	Yes (●)	No ( )			

Remarks:
Hydrophytic vegetation and hydric soil are not present. This is not a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one required; check all that apply)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [✓] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) (LRR U)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (Minimum of 2 required)

- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ( ) No (●)	Depth (inches):	
Water Table Present?	Yes ( ) No (●)	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes (●) No ( )	Depth (inches):	0

Wetland Hydrology Present? **Yes** (●) **No** ( )

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants. Sampling Point: UPP1002

		Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Sapling or Sapling/Shrub Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Shrub Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Herb Stratum	(Plot Size : 30)				
1.	Cynodon dactylon	2	☑	100.0%	FACU
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
9.		0	☐	0.0%	
10.		0	☐	0.0%	
11.		0	☐	0.0%	
12.		0	☐	0.0%	
50% of Total Cover: 1	20% of Total Cover: 0.4	2	= Total Cover		
Woody Vine Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, ro FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B

Percent of Dominant Species That are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Colum Totals:	2 (A)		8 (B)

Prevalence Index = B/A= 4.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤ 3.0[1]**
- ☐ **Problematic Hydrophytic Vegetation[1] (Explain)**

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present ? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: UPP1002

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Location[2]	Texture	Remarks
0 - 16	10YR 3/1	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Bluewater Terminal SPM Project **City/County:** San Patricio **Sampling Date:** 2/4/2019

Applicant/Owner: Phillips 66 Pipeline, LLC **State:** TX **Sampling Point:** **UPP1003**

Investigator(s): B. Bringhurst & A. Ostrowski **Section, Township, Range:** **S** N/A **T** N/A **R** N/A

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** Flat **Slope:** 0 % 0.0 °

Subregion (LRR): LRR T **Lat:** 27.910334 **Long:** -97.393075 **Datum:** NAD 83

Soil Map Unit Name: Victoria clay 0 to 1 percent slopes (VcA) **NWI Classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (●) **No** ( ) **(If no, explain in Remarks.)**

Are Vegetation [✓] **, Soil** [✓] **, or Hydrology** [ ] **significantly disturbed?** **Are "Normal Circumstances" present?** **Yes** (●) **No** ( )

Are Vegetation [ ] **, Soil** [ ] **, or Hydrology** [ ] **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	Is the Sampled Area within a Wetland?	Yes ( )	No (●)
Hydric Soil Present?	Yes ( )	No (●)			
Wetland Hydrology Present?	Yes (●)	No ( )			

Remarks:
Hydrophytic vegetation and hydric soil are not present. This is not a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one required; check all that apply)

- [ ] Surface Water (A1)
- [✓] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) (LRR U)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (Minimum of 2 required)

- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ( ) No (●)	Depth (inches):	
Water Table Present?	Yes (●) No ( )	Depth (inches):	4
Saturation Present? (includes capillary fringe)	Yes ( ) No (●)	Depth (inches):	

Wetland Hydrology Present? **Yes** (●) **No** ( )

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants. Sampling Point: UPP1003

		Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Sapling or Sapling/Shrub Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Shrub Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		
Herb Stratum	(Plot Size : 30)				
1.	Cynodon dactylon	2	☑	100.0%	FACU
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
6.		0	☐	0.0%	
7.		0	☐	0.0%	
8.		0	☐	0.0%	
9.		0	☐	0.0%	
10.		0	☐	0.0%	
11.		0	☐	0.0%	
12.		0	☐	0.0%	
50% of Total Cover: 1	20% of Total Cover: 0.4	2	= Total Cover		
Woody Vine Stratum	(Plot Size : 30)				
1.		0	☐	0.0%	
2.		0	☐	0.0%	
3.		0	☐	0.0%	
4.		0	☐	0.0%	
5.		0	☐	0.0%	
50% of Total Cover: 0	20% of Total Cover: 0	0	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, ro FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B

Percent of Dominant Species That are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Colum Totals:	2 (A)		8 (B)

Prevalence Index = B/A= 4.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤ 3.0[1]**
- ☐ **Problematic Hydrophytic Vegetation[1] (Explain)**

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present ? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: UPP1003

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Location[2]	Texture	Remarks
0 - 16	10YR 3/1	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Bluewater Terminal SPM Project **City/County:** San Patricio **Sampling Date:** 2/4/2019

Applicant/Owner: Phillips 66 Pipeline, LLC **State:** TX **Sampling Point:** **UPP1004**

Investigator(s): B. Bringhurst & A. Ostrowski **Section, Township, Range:** **S** N/A **T** N/A **R** N/A

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** Flat **Slope:** 0 % 0.0 °

Subregion (LRR): LRR T **Lat:** 27.910146 **Long:** -97.383997 **Datum:** NAD 83

Soil Map Unit Name: Victoria clay 0 to 1 percent slopes (VcA) **NWI Classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (●) **No** ( ) **(If no, explain in Remarks.)**

Are Vegetation [✓] **, Soil** [✓] **, or Hydrology** [ ] **significantly disturbed?** **Are "Normal Circumstances" present?** **Yes** (●) **No** ( )

Are Vegetation [ ] **, Soil** [ ] **, or Hydrology** [ ] **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	Is the Sampled Area within a Wetland?	Yes ( )	No (●)
Hydric Soil Present?	Yes ( )	No (●)			
Wetland Hydrology Present?	Yes (●)	No ( )			

Remarks:
Hydrophytic vegetation and hydric soil are not present. This is not a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one required; check all that apply)

- [ ] Surface Water (A1)
- [✓] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) (LRR U)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (Minimum of 2 required)

- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ( ) No (●)	Depth (inches):	
Water Table Present?	Yes (●) No ( )	Depth (inches):	4
Saturation Present? (includes capillary fringe)	Yes ( ) No (●)	Depth (inches):	

Wetland Hydrology Present? **Yes** (●) **No** ( )

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants. Sampling Point: UPP1004

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot Size : 30)			
1 .	0	0.0%	
2 .	0	0.0%	
3 .	0	0.0%	
4 .	0	0.0%	
5 .	0	0.0%	
6 .	0	0.0%	
7 .	0	0.0%	
8 .	0	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover	
Sapling or Sapling/Shrub Stratum (Plot Size : 30)			
1 .	0	0.0%	
2 .	0	0.0%	
3 .	0	0.0%	
4 .	0	0.0%	
5 .	0	0.0%	
6 .	0	0.0%	
7 .	0	0.0%	
8 .	0	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover	
Shrub Stratum (Plot Size : 30)			
1 .	0	0.0%	
2 .	0	0.0%	
3 .	0	0.0%	
4 .	0	0.0%	
5 .	0	0.0%	
6 .	0	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover	
Herb Stratum (Plot Size : 30)			
1 . Cynodon dactylon	2 ✔	100.0%	FACU
2 .	0	0.0%	
3 .	0	0.0%	
4 .	0	0.0%	
5 .	0	0.0%	
6 .	0	0.0%	
7 .	0	0.0%	
8 .	0	0.0%	
9 .	0	0.0%	
10 .	0	0.0%	
11 .	0	0.0%	
12 .	0	0.0%	
50% of Total Cover: 1 20% of Total Cover: 0.4	2	= Total Cover	
Woody Vine Stratum (Plot Size : 30)			
1 .	0	0.0%	
2 .	0	0.0%	
3 .	0	0.0%	
4 .	0	0.0%	
5 .	0	0.0%	
50% of Total Cover: 0 20% of Total Cover: 0	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, ro FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B

Percent of Dominant Species That are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Colum Totals:	2 (A)		8 (B)

Prevalence Index = B/A= 4.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤ 3.0[1]**
- ☐ **Problematic Hydrophytic Vegetation[1] (Explain)**

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present ? **Yes** ○ **No** ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: UPP1004

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0 - 16	10YR 3/1	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Bluewater Terminal SPM Project **City/County:** San Patricio **Sampling Date:** 2/4/2019

Applicant/Owner: Phillips 66 Pipeline, LLC **State:** TX **Sampling Point:** **UPP1005**

Investigator(s): B. Bringhurst & A. Ostrowski **Section, Township, Range:** **S** N/A **T** N/A **R** N/A

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** Flat **Slope:** 1 % 0.6 °

Subregion (LRR): LRR T **Lat:** 27.909978 **Long:** -97.379904 **Datum:** NAD 83

Soil Map Unit Name: Raymondville clay loam, 0 to 1 percent slopes (RaA) **NWI Classification:** None

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** (●) **No** ( ) **(If no, explain in Remarks.)**

Are Vegetation [✓] **, Soil** [✓] **, or Hydrology** [ ] **significantly disturbed?** **Are "Normal Circumstances" present?** **Yes** (●) **No** ( )

Are Vegetation [ ] **, Soil** [ ] **, or Hydrology** [ ] **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ( )	No (●)	Is the Sampled Area within a Wetland?	Yes ( )	No (●)
Hydric Soil Present?	Yes ( )	No (●)			
Wetland Hydrology Present?	Yes ( )	No (●)			

Remarks:
Hydric soil and wetland hydrology are not present. This is not a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one required; check all that apply)

- [ ] Surface Water (A1)
- [ ] High Water Table (A2)
- [ ] Saturation (A3)
- [ ] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [ ] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] Marl Deposits (B15) (LRR U)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres along Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (Minimum of 2 required)

- [ ] Sparsely Vegetated Concave Surface (B8)
- [ ] Drainage Patterns (B10)
- [ ] Moss Trim Lines (B16)
- [ ] Dry Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [ ] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [ ] FAC-Neutral Test (D5)
- [ ] Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ( ) No (●)	Depth (inches):	
Water Table Present?	Yes ( ) No (●)	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes ( ) No (●)	Depth (inches):	

Wetland Hydrology Present? **Yes** ( ) **No** (●)

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: UPP1005

	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot Size : 30)				
1. Celtis laevigata	10	✔	100.0%	FACW
2.	0		0.0%	
3.	0		0.0%	
4.	0		0.0%	
5.	0		0.0%	
6.	0		0.0%	
7.	0		0.0%	
8.	0		0.0%	
50% of Total Cover: 5 — 20% of Total Cover: 2	10		= Total Cover	
Sapling or Sapling/Shrub Stratum (Plot Size : 30)				
1.	0		0.0%	
2.	0		0.0%	
3.	0		0.0%	
4.	0		0.0%	
5.	0		0.0%	
6.	0		0.0%	
7.	0		0.0%	
8.	0		0.0%	
50% of Total Cover: 0 — 20% of Total Cover: 0	0		= Total Cover	
Shrub Stratum (Plot Size : 30)				
1. Prosopis glandulosa	3	✔	100.0%	UPL
2.	0		0.0%	
3.	0		0.0%	
4.	0		0.0%	
5.	0		0.0%	
6.	0		0.0%	
50% of Total Cover: 1.5 — 20% of Total Cover: 0.6	3		= Total Cover	
Herb Stratum (Plot Size : 30)				
1. Helianthus annuus	20	✔	44.4%	FAC
2. Galium aparine	15	✔	33.3%	FACU
3. Chaerophyllum tainturieri	10	✔	22.2%	FAC
4.	0		0.0%	
5.	0		0.0%	
6.	0		0.0%	
7.	0		0.0%	
8.	0		0.0%	
9.	0		0.0%	
10.	0		0.0%	
11.	0		0.0%	
12.	0		0.0%	
50% of Total Cover: 23 — 20% of Total Cover: 9	45		= Total Cover	
Woody Vine Stratum (Plot Size : 30)				
1.	0		0.0%	
2.	0		0.0%	
3.	0		0.0%	
4.	0		0.0%	
5.	0		0.0%	
50% of Total Cover: 0 — 20% of Total Cover: 0	0		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, ro FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B

Percent of Dominant Species That are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:		
OBL species	0	x 1 =	0	
FACW species	10	x 2 =	20	
FAC species	30	x 3 =	90	
FACU species	15	x 4 =	60	
UPL species	3	x 5 =	15	
Colum Totals:	2	(A)	8	(B)

Prevalence Index = B/A= 4.000

Hydrophytic Vegetation Indicators:

- ☐ **1 - Rapid Test for Hydrophytic Vegetation**
- ☐ **2 - Dominance Test is > 50%**
- ☐ **3 - Prevalence Index is ≤ 3.0[1]**
- ☐ **Problematic Hydrophytic Vegetation[1] (Explain)**

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present ? Yes ○ No ◉

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: UPP1005

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Location[2]	Texture	Remarks
0 - 16	10YR 3/1	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Muck Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)
- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Bluewater Terminal SPM Project **City/County:** San Patricio **Sampling Date:** 2/4/2019

Applicant/Owner: Phillips 66 Pipeline, LLC **State:** TX **Sampling Point:** **UPP1006**

Investigator(s): B. Bringhurst & A. Ostrowski **Section, Township, Range:** **S** N/A **T** N/A **R** N/A

Landform (hillslope, terrace, etc.): Flat **Local relief (concave, convex, none):** Convex **Slope:** 3 % 1.7 °

Subregion (LRR): LRR T **Lat:** 27.909526 **Long:** -97.37683 **Datum:** NAD 83

Soil Map Unit Name: Raymondville clay loam, 1 to 3 percent slopes (RaB) **NWI Classification:** PUBFh

Are climatic/hydrologic conditions on the site typical for this time of year? **Yes** ◉ **No** ○ **(If no, explain in Remarks.)**

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** **Yes** ◉ **No** ○

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **naturally problematic?** **(If needed, explain any answers in Remarks.)**

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ◉	No ○	Is the Sampled Area within a Wetland?	Yes ○	No ◉
Hydric Soil Present?	Yes ○	No ◉			
Wetland Hydrology Present?	Yes ◉	No ○			

Remarks:
Hydric soil is not present. This is not a wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☑ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) (LRR U)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (Minimum of 2 required)

- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) (LRR T, U)

Field Observations:

Surface Water Present?	Yes ○	No ◉	Depth (inches):
Water Table Present?	Yes ○	No ◉	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ○	No ◉	Depth (inches):

Wetland Hydrology Present? **Yes** ◉ **No** ○

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks: