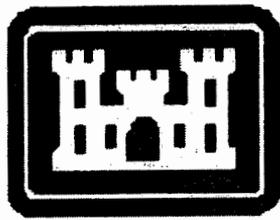


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**Wetlands Delineation Report
Los Alamos National Laboratory
Los Alamos, New Mexico**

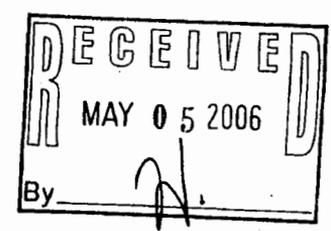
Submitted to:

**U. S. Department of Energy
National Nuclear Security Administration
Los Alamos Site Office**

October 2005

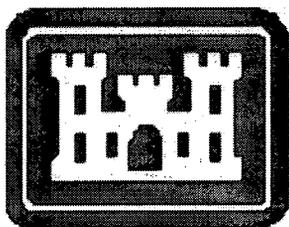
Authors and Delineation Team

**Champe Green, Ecologist, USACE
Lesley McWhirter, Biologist, USACE
Eddie Paulsgrove, Geologist, USACE
Jim Wood, Biologist, USACE**



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97



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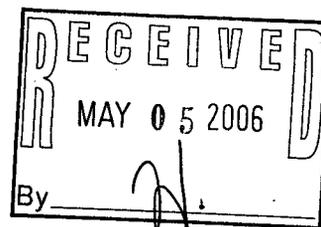


Table of Contents

Background.....	1
Methods	2
Results	4
Discussion.....	5
Summary.....	6
References	6
Appendices	7

Background

The Department of Energy (DOE), National Nuclear Security Administration (NNSA), Los Alamos Site Office (LASO), in March 2005, requested of and entered into contract with the U.S. Army Corps of Engineers Albuquerque District (Corps) for the purpose of identifying and delineating wetlands at Los Alamos National Laboratory (LANL). The Corps has regulatory authority over waters of the U.S. as legislated in Section 404 of the Clean Water Act of 1973 (33 U.S.C 1344). The results of this contract are intended to support the preparation of the Supplemental Site-wide Environmental Impact Statement (S-SWEIS) and various mitigative measures that may become part of the National Environmental Policy Act (NEPA) compliance process for LANL.

LANL occupies about 40 square miles of land in northwestern New Mexico and is located on the eastern flank of the Jemez Mountains along the Pajarito Plateau, which is characterized by a series of finger-like mesas and steep canyon drainages. The LANL reservation is divided into 49 Technical Areas (TAs) with over 2,000 structures. Much of the LANL site is forested, with buildings and other structures largely grouped together according to the type of work performed within.

During the early to mid-1990s, LANL staff biologists undertook the identification and delineation of wetlands at LANL, and the creation of computerized inventory records of the LANL wetlands and Geographic Information System (GIS) maps. The U.S. Fish & Wildlife Service, as part of their National Wetlands Inventory (NWI) project, identified about 39 acres of wetlands at LANL; this wetlands inventory was based on aerial photography interpretations and included waters of the U.S., in addition to wetlands meeting the criteria of the 1987 Corps Wetlands Delineation Manual. In 1996, field surveys performed by LANL biologists resulted in the identification of about 50 acres of wetlands at LANL based on the presence of wetland vegetation, also including some waters of the U.S., in addition to wetlands meeting the criteria of the 1987 manual. About 13 acres of wetlands then located within the LANL boundaries were either created or enhanced by process effluent wastewater from 38 of LANL's National Pollutant Discharge Elimination System (NPDES) permitted outfalls. The 1996 LANL wetlands information was used, in part, to support the preparation of an environmental assessment of a proposed industrial outfall effluent reduction program (DOE/EA- 1156), for which a Finding of No Significant Impact was issued in 1996. This effluent reduction program has since been initiated at LANL facilities.

Currently, the NNSA (a semi-autonomous administration within the DOE founded by Act in 2000) is preparing S-SWEIS in accordance with DOE NEPA implementing regulation requirements that require the review of site-wide NEPA documents every 5 years. In part, NNSA's reason for supplementing the 1999 SWEIS is due to changes to the LANL environmental setting that have occurred since 1999. These changes are due to: the 2000 Cerro Grande Fire, which burned over about one quarter of the LANL reservation; subsequent post-fire forest recovery activities, including actions taken to install new culverts and clear out existing culverts and ditches, together with the construction of various surface water flow control features and retention structures; forest thinning

actions conducted over an expedited schedule during the past 3 years; and tree and vegetation die-off that has occurred directly and indirectly as a result of fire and drought conditions extending over a broad portion of the Southwest during the past 5 years. Other changes to the LANL environmental setting have also occurred since 1999. These changes have resulted from implementation of the aforementioned LANL effluent reduction program, which has eliminated numerous industrial effluent outfalls to the canyon watershed systems at LANL; as a result of new construction at LANL that may have added or eliminated facilities and redistributed waste effluent between canyons; and as a result of transfers and conveyances of land tracks away from the LANL reservation. The number of outfalls present at LANL in 1998 was 66; there are now 21 outfalls at LANL. Outfall effluent has fluctuated over the past six years from a high of 317 million gallons per year (mgy) in 1999 to a low of 124 mgy in 2001. The 2003 discharge was approximately 210 mgy.

Methods

Field work by Corps staff commenced on May 24th, 2005, after security and safety training was completed and excavation permits were obtained. Field work was completed on August 10, 2005. Three members of the Corps wetland evaluation team assigned to this project are project managers for the Regulatory Section of the Corps' Albuquerque District office. The fourth member is a Corps senior ecologist who has completed wetlands delineation training and has experience performing delineations for a national environmental engineering company.

Only wetlands meeting the criteria of the U.S. Army Corps of Engineers Wetlands Delineation Manual (WES 1987), routine method, were delineated as a part of this reconnaissance study. However, other "Waters of the United States" occur throughout LANL and are regulated by the Corps (Section 404 of the Clean Water Act [33 U.S.C. 1344]), including:

- lakes, rivers, streams (including intermittent streams), prairie potholes, mudflats, playa lakes, etc. (to the ordinary high-water mark [OHWM]); isolated waters (such as prairie potholes and playas) may not be waters of the U.S., due to a recent Supreme Court decision (SWANCC).
- all impoundments of these waters (to OHWM)
- tributaries of the above listed waters (to OHWM)
- arroyos (to OHWM)

Many of these features occur at LANL and would require a permit if dredge and fill activities are planned. However, the above features were not specifically identified in this study if they did not meet the criteria of the 1987 Wetlands Delineation Manual, i.e., hydrophytic vegetation, primary or secondary indicators of surface hydrology, and hydric soils.

The landward regulatory limit for non-tidal waters (in the absence of adjacent wetlands) is the OHWM. The OHWM is the line on the streambanks or shores established by the

fluctuations of water and indicated by physical characteristics such as a clear, natural, water line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter and debris; or the appropriate means that consider the characteristics of the surrounding areas. Generally, in New Mexico, only U-shaped ephemeral and intermittent channels within dry arroyos are considered as waters of the U.S. and are regulated. V-shaped channels are considered as erosional pathways and are not regulated.

Department of the Army (DA) permits under Section 404 of the Clean Water Act (CWA) are required for most dredge and fill activities in all of the above waters.

All sites indicated as wetlands from historical surveys, as illustrated on DoE Map 05-0009-01 (February 2005) were visited by the Corps wetland team and LANL escorts. Determinations and delineations were made, except for those wetlands adjacent to the Rio Grande, which were deemed generally inaccessible and unlikely to be affected by future development activity (Sam Loftin, pers. comm.). Incidental observations of other potential wetlands (e.g., outfalls designated on DoE Map 04-0045-01) were visited and assessed as security and safety considerations permitted. Due to safety and health risk concerns of Corps personnel and consistent with Notice No. 133, January 16, 2004, Workers Rights and Responsibilities for Performing Radiological Work, the Corps wetland team did not dig soil pits on sites designated as a Potential Release Site (PRS) or downstream of such a site. In those instances, Corps staff made a wetland determination at the site based solely on presence of dominant obligate, facultative wet or facultative vegetation and visible indicators of hydrology (if present).

For soils that were sampled for hydric characteristics when it could not be assumed that the soils were hydric based on dominant obligate, facultative wet or facultative vegetation, soils were sampled according to methods in Appendix D Section 1 of the 1987 Corps Wetlands Delineations Manual and the Munsell Soil Color Book.

Data recorded from delineated wetlands and non-wetlands were recorded on Data Forms for Routine Wetland Determination (March, 1992), and are included in Appendix B. All delineated wetland boundaries were identified geographically using a Garmin XL12 Global Positioning System Receiver (GPS) and projected in UTM Meters, North American Datum 1983, Zone 13N. Boundary points (.txt files) and created polygon shapefiles (.shp; ArcGIS 9.0 [ESRI]) are included on the data CD attached to this report. GPS points were not corrected using Differential GPS beacons. GPS readings were taken after several minutes in averaging mode, and at least 4 satellites were locked in; more often, seven or more satellites were engaged.

The Corps recommends that DoE follow the best management practice (BMP) of allowing a 100 ft. buffer around the perimeter of all wetlands delineated, as a protective measure. This will also envelop any possible differential error in GPS point accuracy and ensure that the wetland is protected. This recommendation is consistent with Executive Order 11990 (Protection of Wetlands) requiring the avoidance, to the greatest extent

possible, of both long and short-term impacts associated with the destruction, modification, or other disturbance of wetland habitats.

All delineated wetlands were marked with 21-inch wetland delineation pin flags or flagging tape around boundaries. Digital photos were taken of delineated and non-wetland sites, named by site, and are included on the data CD attached to this report.

Scientific names of species identified were taken from the Plants Database, Version 3.5 (USDA, NRCS 2005).

Results

Thirty wetlands occupying portions of 14 different technical areas met the criteria of the 1987 COE Wetlands Delineation Manual, Routine Method and were identified and delineated by Corps staff, totaling 33.955 acres (Table 1).

Table 1. Delineated wetlands on LANL, 2005.

Wetland Identification Number (Technical Area Number-Wetland Number)	Acreage
03-1	0.056999
03-2	0.077969
09-1	0.012338
11-1	0.189161
15-1 Three-Mile Canyon	0.295428
16-1	0.025870
16-2	0.014299
22-1	0.310261
22-2	0.349821
33-1	0.009900
36-1 Parajito Canyon	0.263660
36-2 Parajito Canyon	0.094147
36-3 Parajito Canyon	1.578811
36-4 Parajito Canyon	0.115417
36-5 Parajito Canyon	0.300533
36-6 Parajito Canyon	3.534695
36-7 Parajito Canyon	0.874092
36-8 Parajito Canyon	8.318531
36-9 Parajito Canyon	0.150036
43-1 Los Alamos Canyon	0.147192
43-2 Los Alamos Canyon	0.082978
48-1 Mortendad Canyon	0.076738
48-2 Mortendad Canyon	0.058465
48-3 Mortendad Canyon	0.916536
48-4	0.054330

53-1 Los Alamos Canyon	0.020072
55-1	1.193875
61-1 Sandia Canyon	2.955665
74-1 Pueblo Canyon	2.755046
74-2 Pueblo Canyon	9.122062
Total	33.954927

Dominant obligate or facultative-wet plant species (Reed 1988) that were most commonly found in the above wetlands during the 2005 delineation were: Reed canarygrass (*Phalaris arundinacea*), narrow-leaf cattail (*Typha angustifolia*), coyote willow (*Salix exigua*), Baltic rush (*Juncus balticus*), wooly sedge (*Carex lanuginosa*), American speedwell (*Veronica americana*), common spike rush (*Eleocharis palustris*) and curly dock (*Rumex crispus*).

Discussion

Many of the outfall wetlands that were identified as such during the 1996 LANL wetlands survey (which was based solely on vegetation) were not delineated as wetlands during this 2005 survey, due primarily to the closure or re-routing of the outfall sources of water during the past 6 years. In some cases, remnant obligate, facultative wet, or facultative vegetation still partially occupied those site(s), but those plants often were dying or decadent and were being replaced by upland species. Additionally, primary or secondary indicators of surface hydrology or presence or hydric soils were not evident at these sites. The reduction in effluent discharge at these sites over the intervening years and the application of surface hydrology and hydric soil criteria applied during the 2005 survey but not the 1999 survey, explain in part the reduction from 50 acres to 34 acres of wetlands found in 2005.

A further explanation for the difference in wetland acreage found in 1999 versus 2005 is that the methodology used in 1999 included as wetlands waters of the U.S. to the OHWM. These channel areas to the OHWM were not delineated in 2005 as wetlands that meet the criteria of the 1987 Corps Wetlands Delineation Manual.

In areas where active outfalls have created a continuous base flow condition that has caused incision of the channel (e.g., headwaters of Pueblo Canyon, TA74), a recommendation is made to use small, low-flow riffle weirs (brush or rock) to stop the incision and reverse the degradation of the channel (Zeedyk 2003). This suggested action would likely have the effect of slowing surface runoff and recharging what were once seasonal wetlands. This type of stream rehabilitation could also be useful in a small degraded channel just downstream from a culvert outfall east of State Route 501 and north of State Route 4 (photo TA16-3b-nonwet.jpg). Re-introduction of beavers in similar areas where sapling or pole sized shrubs or trees are prevalent could be expected to accomplish the same result, thus creating additional wetland acreage and habitat.

Reed canarygrass was found to be nearly monotypic in the large TA74 Pueblo Canyon wetlands. A cool season, obligate, perennial, rhizomatous and oft-considered invasive,

wetland grass, it crowds out other native species and forms thick mats across a wetland. Prescribed burning prior to seedhead formation in late May may prevent seedhead formation and winter burning every 2-3 years may reduce density of stands and improve wildlife feeding opportunities. Herbicidal control or treatment with boron may also control this invasive plant (Snyder 1992), but may be more controversial in an aquatic ecosystem.

Summary

Between May 24th and August 10, 2005, Corps wetland team reconned all known potential wetland sites on the Los Alamos National Laboratory, New Mexico. Thirty wetlands were identified and delineated based on criteria of the 1987 Corps Wetland Delineation Manual, totaling approximately 33.96 acres. Additional acreage of channel area of perennial, intermittent, and U-shaped ephemeral streams and arroyos to the OHWM were not included in this wetland study, but are considered waters of the U.S. and are protected under Section 404 of the CWA. Polygon shapefiles and coordinates of delineated wetlands and photos are submitted on CD.

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- Reed, P. B., Jr. 1988. National List of Plant Species That Occur in Wetlands: 1988, New Mexico; NERC-88/18.31. National Wetlands Inventory, U.S. Fish and Wildlife Service, St. Petersburg, Fla.
- Snyder, S. A. 1992. *Phalaris arundinacea*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: <http://www.fs.fed.us/database/feis/> [2005, October 7].
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- Zeedyk, B. 2003. An Introduction to Induced Meandering: A Method for Restoring Stability to Incised Stream Channels. The Quivira Coalition, Santa Fe, New Mexico.

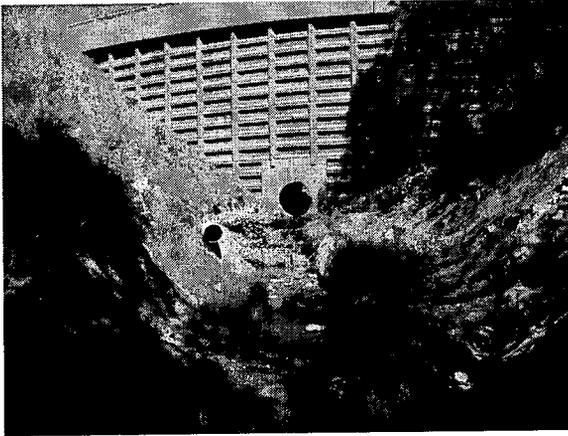
Appendices

Appendix A **Photos of Delineated Wetlands, 2005**

Appendix B **Field Sheets**

Appendix C **CoE/DoE Scope of Work and Workplan**

Appendix A
Photos of Delineated Wetlands, LANL, Los Alamos, NM, 2005.



TA03-Wetland 1



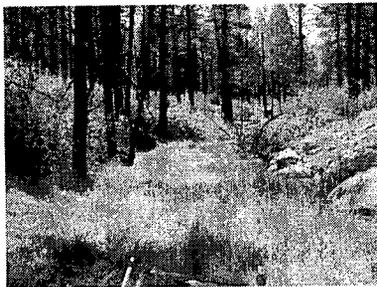
TA03-Wetland 2



TA09-Wetland 1



TA11-Wetland 1



TA 15 (Three Mile Canyon-Wet Meadow Wetland)
 View of vegetation at upstream end of wet
 meadow wetland, looking downstream.
 Previously-dug hole in foreground.
 2 Aug 05
 by Jim Waud
 Corps of Engineers

TA15-Wetland 1



TA16-Wetland 1



TA16-Wetland 2



TA22-02-01
Joe Alamos Wetlands
Looking Northeast (ESE)
Note cattails, sedges, rushes
12 July 2005
S. Paulsgrove

TA22-Wetland 1



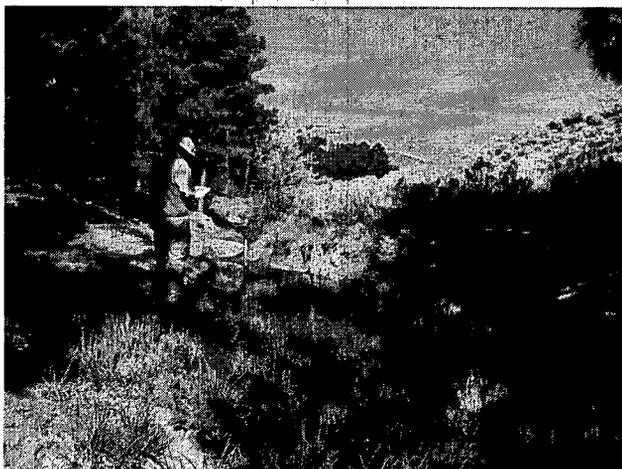
TA22-02-01
Joe Alamos Wetlands
Looking Southeast (ESE)
Note sedges, rushes
12 July 2005
S. Paulsgrove

TA22-Wetland 2



TA33 unnumbered outfall
Joe Alamos Wetlands
Looking North
Note cattails
12 July 2005
S. Paulsgrove

TA33-Wetland 1



TA36-Wetland 1



TA36-Wetland 2



TA36-Wetland 3

TA36-Wetland 4



TA36-Wetland 5

TA36-Wetland 6



TA36-Wetland 7

TA36-Wetland 8



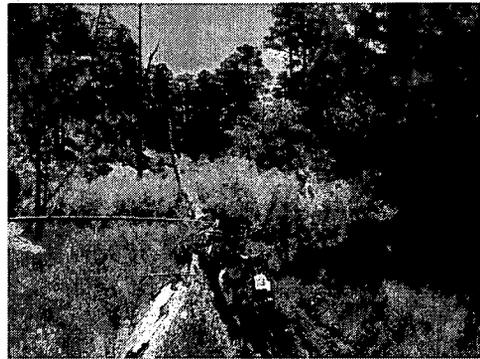
TA36-Wetland 9



TA43-Wetland 1



TA43-Wetland 2



TA48-Wetland 1



TA48-Wetland 2



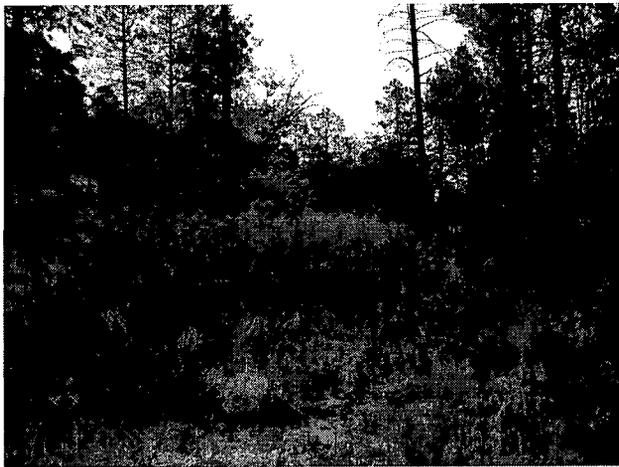
TA43-Wetland 3



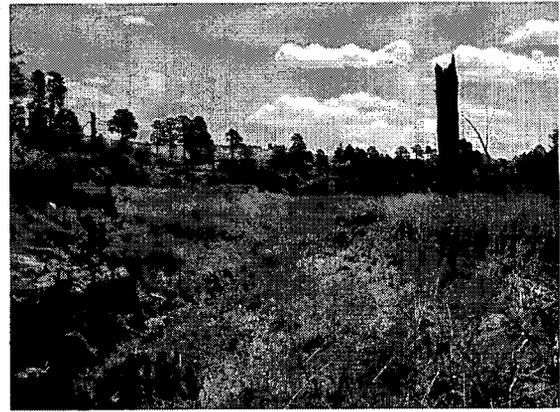
TA48-Wetland 4



TA53-Wetland 1



TA55-Wetland 1



TA61-Wetland 1



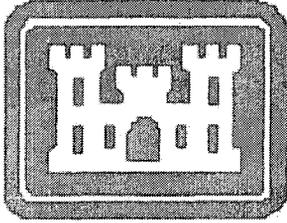
TA74-Wetland 1



TA74-Wetland 2

Appendix B
Field Data Forms

Appendix C
Scope of Work and Workplan



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**Wetlands Delineation Report
Los Alamos National Laboratory
Los Alamos, New Mexico**

Submitted to:

**U. S. Department of Energy
National Nuclear Security Administration
Los Alamos Site Office**

October 2005

Authors and Delineation Team

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Table of Contents

Background.....	1
Methods.....	2
Results.....	4
Discussion.....	5
Summary.....	6
References.....	6
Appendices.....	7

Appendix B
Field Data Forms

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

TA-3
WETLAND 1

Project/Site: <u>TA-3 below Outfall 55198</u> Applicant/Owner: <u>be ady. to Bldg 83-16-8</u> Investigator: <u>3-1264</u>	Date: <u>5/25/05</u> County: <u>CA</u> State: <u>U.S.</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>1-1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Typha angustifolia</u>		<u>OBL</u>	9. _____		
2. <u>(narrow leaf)</u>			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). Wetted portion of 100%

Remarks: reach of water growing within channel in upper portion (same as shown on existing map) from culvert drain to the structure at water of about 100 ft is 134' long, approx. 12' wide; then goes subsurface to reach wetland by

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

TA-3
WETLAND 2

Project/Site: <u>TA-3; DUFFALL EPA-03A022</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/25/05</u> County: <u>LA</u> State: <u>WA</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>2-1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Salix rosmarinoidea</u>		<u>OBL</u>	9. _____		
2. <u>Urtica sp.</u>		<u>OBL</u>	10. _____		
3. <u>Typha latifolia</u>		<u>OBL</u>	11. _____		
4. <u>Prison tree</u>		<u>FACW</u>	12. _____		
5. <u>(Toxicodendron sp.) radicans</u>			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>No soil pit dug-within PRS</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil Indicators:					
<input type="checkbox"/> Histic <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)	(Circle)
Wetland Hydrology Present? <input type="radio"/> Yes <input type="radio"/> No	
Hydric Soils Present? <input type="radio"/> Yes <input type="radio"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: <p style="text-align: center; font-size: 1.2em;">Based on vegetation only since it is within a PRS.</p>	

Approved by HQUSACE 3/92

PHOTO 92^{pl} OUTFALL SIGN
 PHOTO 94^{pl} WETLAND 2 looking down stream
 PH. AN 97^{pl} looking out on Williams within from Wetland 2

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Sandia TA-3</u> Applicant/Owner: <u>above landfill</u> Investigator: <u>LM</u>	Date: <u>5/25/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>6</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Dactylis sp.</u>		<u>FACW+</u>	9. _____		
2. <u>Bromus sp.</u>		<u>UPL</u>	10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: grasses border stream channels (N. channel - main; S. channel - trib)

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>0</u> (in.) Depth to Saturated Soil: <u>0</u> (in.)	Remarks: <u>No moisture/water in shallow soil pit</u> <u>Trib. is wet; minimal flow</u>

6

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Non-wetland

Project/Site: <u>TA-3 Outfall area</u>	Date: <u>1/23/05</u>
Applicant/Owner: <u>parking lot next</u>	County: <u>LA</u>
Investigator: <u>to [unclear] TA-3</u>	State: <u>NM</u>
Do Normal Circumstances exist on the site? <u>(transportable bble) A-3-35</u> Yes No	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: _____
Is the area a potential Problem Area? Yes No	Plot ID: <u>(2)</u>
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. _____	_____	_____	9. _____	_____	_____
2. _____	_____	_____	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: Upland grasses

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>dry</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	
Profile Description:			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Hydric Soil Indicators:			
<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils		
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils		
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List		
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List		
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: _____			

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No (Circle) Wetland Hydrology Present? Yes <input checked="" type="radio"/> No (Circle) Hydric Soils Present? Yes <input checked="" type="radio"/> No (Circle)	Is this Sampling Point Within a Wetland? Yes <input checked="" type="radio"/> No (Circle)
Remarks: No hole due to PPS + no wetland signs	

Outfall #10
 03A009
 TAB-102

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Non-wetland

Project/Site: <u>TAB - Outfall behind Occ.</u>	Date: <u>6/8/05</u>
Applicant/Owner: <u>Health Dept</u>	County: <u>CA</u>
Investigator: <u>LM</u>	State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No	Community ID: _____ Transect ID: _____ Plot ID: <u>(3)</u>
Is the site significantly disturbed (Atypical Situation)? Yes No	
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Salix sp. (Peachleaf)</u>	<u>FACW</u>	9.		
2. <u>Erigeron sp.</u>	<u>NI</u>	10.		
3. <u>Nelumbo officinalis</u>	<u>FACW</u>	11.		
4. <u>Poa sp.</u>	<u>NI</u>	12.		
5.		13.		
6.		14.		
7.		15.		
8.		16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks:

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>soil dry on surface</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-3 inactive outfall next to</u> Applicant/Owner: <u>Bldg. 16</u> Investigator: <u>LM</u>	Date: <u>6/8/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>(4)</u>

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator
1. _____	9. _____
2. _____	10. _____
3. _____	11. _____
4. _____	12. _____
5. _____	13. _____
6. _____	14. _____
7. _____	15. _____
8. _____	16. _____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TR 9 OUTFALL INACTIVE</u> Applicant/Owner: _____ Investigator: <u>CHAMPE GREEN</u>	Date: <u>6/21/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator
1. <u>no hydrophytic</u> _____	9. _____
2. _____	10. _____
3. _____	11. _____
4. _____	12. _____
5. _____	13. _____
6. _____	14. _____
7. _____	15. _____
8. _____	16. _____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Date (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>NA</u> (in.) Depth to Free Water in Pit: <u>NP</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	Remarks: <u>no wetland hydrology</u> <u>found 07</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

WETLAND TA 9-1

Project/Site: <u>TA 9-1</u> Applicant/Owner: _____ Investigator: <u>CSG</u>	Date: <u>6/21/05</u> County: <u>LOS ANGELES</u> State: _____
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus roemerianus</u>	<u>HERB</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Distichlis spicata</u>	<u>HERB</u>	<u>FAC-</u>	10. _____	_____	_____
3. <u>Cyperus tenuiflorus</u>	<u>HERB</u>	<u>OBL</u>	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 66%

Remarks: _____

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands
<p>Field Observations:</p> Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>12</u> (in.)	<p>Secondary Indicators (2 or more required):</p> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Remarks: <u>10/3/05 surface water in 4 bottles</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____		
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No		
Profile Description:				
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle- Abundance/Contrast
12		10YR 3/3	7.5YR 5/8	Many
Hydric Soil Indicators:				
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input checked="" type="checkbox"/> Aquic Moisture Regime <input checked="" type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <u>WET SOIL</u>				

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	(Circle)	
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		(Circle)
Hydric Soils Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
				Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: EDGE OF 210E Looking S. VERY SMALL AREA, TERRAIN FLAT, FEELS WETLAND CHARACTERISTICS BUT MAY BE ISLAND WITH TERRAIN				

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 9 INACTIVE OUTFALL</u> Applicant/Owner: _____ Investigator: <u>Charme Green</u>	Date: <u>6/27/85</u> County: <u>LA</u> State: <u>AL</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

EPA 55-067 UPPER BRIDGE RIVER DELTA

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>W. WEDDERSII</u>		<u>FAC-</u>	9. _____		
2. <u>SAGE</u>		<u>NOT RANKED</u>	10. _____		
3. <u>VERBENSCUM THAPSUS</u>		<u>NOT RANKED</u>	11. _____		
4. <u>JUNCEAEAE</u>		<u>NOT RANKED</u>	12. _____		
5. <u>ELYMUS CANADENSIS</u>		<u>FAC</u>	13. _____		
6. _____		<u>FACW</u>	14. _____		
7. <u>J. BALTICUS</u>		<u>OBL</u>	15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 25%

Remarks: SPECIMENS OF Juncus BALTICUS BUT DISCONTINUED AND MIXED upland

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>NA</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	Remarks: <u>NA</u>

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:	
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)

Remarks: <i>Soil 204</i>

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes No (Circle)	
Wetland Hydrology Present?	Yes <u>No</u>	(Circle) Is this Sampling Point Within a Wetland? Yes <u>No</u>
Hydric Soils Present?	Yes <u>No</u>	
Remarks:		

F-380357
N 3966865

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-11</u> Applicant/Owner: <u>Los Alamitos National Lab.</u> Investigator: <u>Jim West Eddie Paulsant</u>	Date: <u>2/27/85</u> County: <u>Los Alamitos</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TA-11-1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Suaeda baltica</u>	<u>W</u>	<u>W</u>	9. _____	_____	_____
2. <u>Carex sp.</u>	_____	<u>W</u>	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>4/2</u> (in.) Depth to Free Water in Pit: <u>4/2</u> (in.) Depth to Saturated Soil: <u>4/2</u> (in.)	
Remarks: <u>Sample in well from area near transect. No water in that hole. One primary indicator (Drainage patterns) observed.</u>	

E0387727
N3967669

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>LANL - 3 Mile / TA 15</u>	Date: <u>8/2/05</u>
Applicant/Owner: <u>LANL</u>	County: <u>Los Alamos</u>
Investigator: <u>J. Wood-Corps, Julia Hansen-LWU</u>	State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No	Transect ID: _____
Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Plot ID: <u>TA15-1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Sarcocolla</u>	<u>Herb</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Unknown Grass</u>	<u>Herb</u>	<u>FAC</u>	10. _____	_____	_____
3. <u>Unknown</u>	<u>Herb</u>	<u>FAC</u>	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): ~~50%~~ 100%

Remarks: Vegetation is either FAC, FACW, or OBL, satisfied hydroic vegetation criteria.

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p><input type="checkbox"/> Aerial Photographs</p> <p><input type="checkbox"/> Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	<p>Remarks: <u>No water on hole at 12-16". However such evidence of high water levels observed such as oxidized root channels and mottles. Two secondary</u></p>

SOILS

Map Unit Name _____ Drainage Class: _____
 (Series and Phase): _____ Field Observations _____
 Taxonomy (Subgroup): _____ Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structures, etc.
12"		10YR 7/2	10YR 5/6	5/6	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: *Soils had a chroma of 2 with mottles positive indicators of hydric soils. Soils derived from previously dug hole at site. Did not dig hole. No digging area*

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Remarks:	

E3 82509
N 3967783

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TAIS - 3 MILE CANYON</u>	Date: <u>8/2/05</u>
Applicant/Owner: <u>LANL</u>	County: <u>Los Alamos</u>
Investigator: <u>Jim Wood-Cross, Julia Hudson-</u>	State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No	Community ID: _____ Transect ID: _____ Plot ID: <u>TAIS-2</u>
Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No	
Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus balticus</u>	<u>Herb.</u>	<u>OBL</u>	9. _____		
2. <u>Grass (Unknown)</u>	<u>Herb</u>	<u>OBL</u>	10. _____		
3. <u>Stachytarax</u>	<u>Herb</u>	<u>OBL</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50% to 100%

Remarks: Vegetation is either FACW or OBL, satisfies hydric vegetation criteria.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>1.5'</u> (in.) Depth to Free Water in Pit: <u>-</u> (in.) Depth to Saturated Soil: <u>-</u> (in.)	Remarks: <u>Water depth in small pond is 1.5' below ground surface. Soil saturated in upper 12" (Primary indicator) and FAC-Neutral Test (2 secondary indicators)</u>

95 (R/13)
E 380406 15-27
N 3967338

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Los Alamos National Laboratory</u> Applicant/Owner: <u>LANL</u> Investigator: <u>Don Wood, Eddie Paulson</u>	Date: <u>6/20/85</u> County: <u>Los Alamos</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TRK-2</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus patens</u>	<u>herb</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Grass</u>	_____	_____	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Grass growing along Juncus. Not dominant. Juncus very thick, vigorous.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>N/A</u> (in.) Depth to Free Water in Pit: <u>N/A</u> (in.) Depth to Saturated Soil: <u>N/A</u> (in.)	
Remarks: <u>No water in hole. One primary indicator and one secondary indicator of hydrology.</u>	

N 3967373

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 16</u> Applicant/Owner: <u>Los Alamos National Lab</u> Investigator: <u>Jim Wood Eddie Paulsgrove</u>	Date: <u>6.22.05</u> County: <u>Los Alamos</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TA-1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus balticus</u>	<u>oak</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Grass sp</u>	_____	_____	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100

Remarks: Grass growing along with juncus, not dominant. Juncus very lush and vigorous

HYDROLOGY

<p>___ Recorded Data (Describe in Remarks):</p> <p style="padding-left: 20px;">___ Stream, Lake, or Tide Gauge</p> <p style="padding-left: 20px;">___ Aerial Photographs</p> <p style="padding-left: 20px;">___ Other</p> <p>___ No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>N/A</u> (in.)</p> <p>Depth to Free Water in Pit: <u>N/A</u> (in.)</p> <p>Depth to Saturated Soil: <u>N/A</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
Remarks: <u>site has OBL dominant veg. low chrome soils, no water in hole at 16". one primary and one secondary indicators observed.</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	
Profile Description:			
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)
			Mottle Abundance/Contrast
			Texture, Concretions, Structure, etc.
Hydric Soil Indicators:			
<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils		
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils		
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List		
<input checked="" type="checkbox"/> Reducing Conditions	<input checked="" type="checkbox"/> Listed on National Hydric Soils List		
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <i>some mottled matrix</i>			

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	(Circle)	
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Hydric Soils Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
				Is this Sampling Point Within a Wetland?
				<input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: <i>Site supports appearance of hydrophytic vegetation. Saw low chroma soils with mottled oxidized soil channels and drainage patterns.</i>				

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 16 - SR501 & SR4</u> Applicant/Owner: _____ Investigator: <u>BSJW</u>	Date: <u>6/23/95</u> County: <u>LOS ALAMOS</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

*12-14" DRAINAGE DITCH CUT FROM HEART OF WETLANDS
 SEE PAGE 8, 109, 108, 11, 10*

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. _____	_____	_____	9. _____	_____	_____
2. <u>W. WHEATGRASS</u>	_____	<u>FAC-</u>	10. _____	_____	_____
3. <u>FLICKER</u>	_____	<u>SPRUE</u>	11. _____	_____	_____
4. <u>WETLAND SEDGE (C. sp.)</u>	_____	<u>OBL</u>	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 33%

Remarks: SOIL TEST SHOWS NO NITROGEN IN SOIL
NO NITROGEN IN WETLANDS - TAKEN FROM WETLANDS

SOIL TEST SHOWS NO NITROGEN IN SOIL - HIGH CONCENTRATION OF VEGETATION

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>8"</u> (in.)	Remarks: <u>NO FLOODING</u> <u>NO FLOODING</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>16 - NEAR 501 E W - EAST</u> Applicant/Owner: _____ Investigator: <u>Jim</u>	Date: <u>6/23/05</u> County: <u>LA</u> State: <u>LA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>T. BARTONII</u>	<u>+</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>N. W. ...</u>	<u>+</u>	<u>NE</u>	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: ...

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NP</u> (in.) Depth to Saturated Soil: <u>NP</u> (in.)	Remarks: <u>...</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 100-100-100-100-100-100</u> Applicant/Owner: _____ Investigator: <u>CS JW</u>	Date: <u>2/22/85</u> County: <u>MA</u> State: <u>MA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>SP-22</u>		<u>OBL</u>	9. _____		
2. <u>SP-22</u>		<u>FACW</u>	10. _____		
3. <u>SP-22</u>		<u>FACW</u>	11. _____		
4. <u>SP-22</u>		<u>FACW</u>	12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 25%

Remarks: SP-22

HYDROLOGY

<p><input type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p style="margin-left: 20px;"><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p style="margin-left: 20px;"><input type="checkbox"/> Aerial Photographs</p> <p style="margin-left: 20px;"><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>NA</u> (in.)</p> <p>Depth to Saturated Soil: <u>NA</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	
Profile Description:			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)
			Mottle Abundance/Contrast
			Texture, Concretions, Structure, etc.
Hydric Soil Indicators:			
<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils		
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils		
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List		
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List		
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <i>DRY SITE, DRY SOIL</i>			

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	(Circle)
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Hydric Soils Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	Is this Sampling Point Within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)
Remarks:	

Approved by HQUACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

74 No. 1000 281

Project/Site: <u><i>Pond site, 1000 281</i></u> Applicant/Owner: _____ Investigator: <u><i>Geo. J. W.</i></u>	Date: <u><i>6/23/05</i></u> County: <u><i>LA</i></u> State: <u><i>LA</i></u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u><i>NP 125 - POND 500 - 5 Ry</i></u>			9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). *0*

Remarks: *Photo 77*

HYDROLOGY

<p>___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ___ No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: <u><i>NP</i></u> (in.)</p> <p>Depth to Saturated Soil: <u><i>NP</i></u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12 Inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)</p>
Remarks: <u><i>no data to report</i></u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	
Profile Description:			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist) Mottle Abundance/Contrast Texture, Concretions, Structure, etc.
Hydric Soil Indicators:			
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)	
Remarks: <i>DRY SOIL NO INDICATORS</i>			

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	Is this Sampling Point Within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)
Remarks: <i>DRY Pond SITE</i>		

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 CDF Wetlands Delimitation Manual)

Project/Site: <u>LA 4101</u> Applicant/Owner: _____ Investigator: <u>AV</u>	Date: <u>1/10/88</u> County: <u>LA</u> State: <u>LA</u>
Do Normal Circumstances exist on the site? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the site significantly disturbed (Atypical Situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential Problem Area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Cyperus</u>		<u>S</u>	9. _____		
2. <u>Spartina</u>		<u>II</u>	10. _____		
3. <u>Spartina</u>		<u>III</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: _____

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p><input type="checkbox"/> Aerial Photographs</p> <p><input type="checkbox"/> Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>111</u> (in.)</p> <p>Depth to Saturated Soil: <u>111</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
Remarks: <u>111 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>1010 - 1010 - 1010 - 1010</u> Applicant/Owner: _____ Investigator: <u>CG</u>	Date: <u>6/1/03</u> County: <u>A</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Nothing</u>			3.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: no veg observed, no hydrology

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: <u>no surface hydrology</u>	

SOILS

Map Unit Name: (Series and Phase):		Drainage Class:		Field Observation:	
Texture (Subgroup):		Confirm Mapped Type?		Yes No	
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Straking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <i>Dry upland site</i>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	Is this Sampling Point Within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Remarks:		

Approved by HUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 CDE Wetlands Delineation Manual)

Project/Site: <u>11/16 - 5A9, 10A101, 10A9, Non 1001</u> Applicant/Owner: _____ Investigator: <u>Greg J. [unclear]</u>	Date: <u>10/20/06</u> County: <u>LA</u> State: <u>LA</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>[unclear]</u>	<u>II</u>	<u>OBL</u>	9. _____		
2. <u>[unclear]</u>			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: [unclear]

HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	Remarks: <u>[unclear]</u>

SOILS

Map Unit Name (Soils and Phase):		Drainage Class:			
Taxonomy (Subgroup):		Field Observations Confirm <input type="checkbox"/> Type <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>			
Profile Description:		Matrix Color	Mottle Colors	Mottle	Texture, Concretions
Depth (Inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc.
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Gleyed or Low-Chroma Colors
<input type="checkbox"/> Concretions	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils	<input type="checkbox"/> Organic Stroaking in Sandy Soils	<input type="checkbox"/> Listed on Local Hydric Soils List	<input type="checkbox"/> Listed on National Hydric Soils List	<input type="checkbox"/> Other (Explain in Remarks)
Remarks: <i>DRY SOILS, NO HYDRIC CHARACTERISTICS</i>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	Is this Sampling Point Within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)
Remarks: <i>WATER OF US</i>			

Approved by: **AGUSACE 3/92**

DATA FORM
 SOUTH-WEST WETLAND DETERMINATION
 (1997 COE Wetlands Delineation Manual)

Project/Site: <u>EPA OSA 067 YWA 002</u> Applicant/Owner: <u>DB 7-26</u> Investigator: <u>OS</u>	Date: <u>6/23/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>H. Bluggass</u>	<u>H</u>	<u>FAC</u>	9. _____		
2. <u>J. Balfour</u>	<u>J</u>	<u>OBL</u>	10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: Photos 99 & 100
ditto across road culvert under road

HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tidal Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other _____ <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	Remarks: <u>no hydrology</u> <u>no hydrology</u>

SOILS

Map Unit Name: _____
 Field No: _____
 Taxonomy (Subgroup): _____

Soil Observations: _____
 Confined Top? Yes No

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

<input type="checkbox"/> Histoal	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Clayed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: *Dry upland soil*

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	Is this Sampling Point Within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Hydric Soils Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Remarks:	

Approved by HOUACE 3/82

DATA FORM
 ROUTINE WETLAND DETERMINATION
 (1987 FDE Wetlands Delineation Manual)

1814-0000 LINE 077-00-000

Project/Site: <u>051-158</u>	Date: <u>10/23/87</u>
Applicant: <u>USF</u>	County: <u>WA</u>
Investigator: <u>CB</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Transect ID: _____
Is the area a potential Problem Area? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Plot ID: _____
(If needed, explain on reverse.)	

Area 1716-30-000

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>W. Bl. Grass</u>	<u>II</u>	<u>EM</u>	9. _____	_____	_____
2. <u>W. Bl. Grass</u>	<u>II</u>	<u>EM</u>	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: photo 100

HYDROLOGY

Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Sub.: <u>NA</u> (in.)	
Remarks: <u>No hydrology</u> <u>Wetland Hydrology Indicators</u> <u>PPS</u>	

SOILS

Map Unit Name: (Soils and Phases)		Soils Class: M Observations		
County (Subcounty):		Confined Topsoil? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Profile Description (Depth in inches)	Horizon	Matrix Color (Munsell Moist)	Mottles Color (Munsell Moist)	Mottle Abundance/Contrast
				Texture, Concretions, Structure, etc.
Hydric Soil Indicators:				
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions	
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils	
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking in Sandy Soils	
<input type="checkbox"/> Aquic Moisture Regime			<input type="checkbox"/> Listed on Local Hydric Soils List	
<input type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List	
<input type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (Explain in Remarks)	
Remarks: <p style="text-align: center; font-size: 2em; font-weight: bold;">PPS</p>				

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Circle)	(Circle)
Wetland Hydrology Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is this Sampling Point "Within" a Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Hydric Soils Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Remarks:	

Approved by HQUSACE 3/92

WETLAND DETERMINATION FORM
 WETLAND DETERMINATION FORM
 (USE COE Wetland Determination Manual)

WPA 134060 50425797

Project No: <u>TA 1000</u>	Date: <u>12/23/11</u>
Applicant/Owner: _____	County: <u>LA</u>
Investigator: <u>CLG</u>	State: <u>MS</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: _____
Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain reverse.)	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>J. sp.</u>		<u>OBL</u>	9.		
2. <u>C. sp.</u>	<u>S</u>	<u>OBL</u>	10.		
3. <u>R. sp.</u>	<u>S</u>	<u>OBL</u>	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC): 66%

Remarks: Photos 109, 103, 102 Permanent Hydrology probably established when water was present

HYDROLOGY

Recorded Data (Describe in Remarks): Stream, Lake, or Tidal Gate: Aerial Photographs: Other: No Recorded Data Available:	Wetland Hydrology Indicators: Primary Indicators: — Inundated — Saturated in Upper 12 inches — Water Marks — Drift Lines — Sediment Deposits — Drainage Patterns in Wetlands Secondary Indicators (2 or more required): — Oxidized Root Channels in Upper 12 inches — Water-Stained Leaves — Local Soil Survey Data — FAC-Neutral Test — Other (Explain in Remarks):
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Capillary Soil: <u>NA</u> (in.)	
Remarks: <u>no hydrology</u>	

SOILS

Top Unit Name: _____
 (Use soil class): _____ Orange Class
 Field Observations: _____

Economy: _____
 Soil Type? Yes No

Depth (feet)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Order	<input type="checkbox"/> Organic Straking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: *NO hydric soil DRY SITE, DR. Soil*

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)	(Circle)
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Hydric Soils Present? <input type="radio"/> Yes <input checked="" type="radio"/> No	Is this Sampling Point Within Wetland? <input type="radio"/> Yes <input checked="" type="radio"/> No

Remarks: *No*

Approved by HOUFACE 3782

FACIA FORM
 ROUTE STATE AND DISTANCE
 (1987 U.S. Wetlands Determination Manual)

Project/Site: LA 16-160 100 197
 Applicant/Owner: _____
 Investigator: ESB MW

County: 6/1/10
 State: LA

Community ID: _____
 Transect ID: _____
 Plot ID: _____

Do Normal Circumstances exist on the site? Yes No
 Is the site significantly disturbed (Atypical Situation)? Yes No
 Is the area a potential Problem Area? Yes No
 (If needed, explain on reverse.)

VEGETATION

Dominant Plant Species	Stratum	Abundance	Dominant Plant Species	Stratum	Abundance
1. <u>Bluegrass</u>	<u>H</u>	<u>100%</u>	9. _____		
2. <u>Wetland grass</u>	<u>H</u>	<u>100%</u>	10. _____		
3. <u>Wetland grass</u>	<u>H</u>	<u>100%</u>	11. _____		
4. <u>Wetland grass</u>	<u>H</u>	<u>100%</u>	12. _____		
5. <u>Wetland grass</u>	<u>H</u>	<u>100%</u>	13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		
9. _____			17. _____		
10. _____			18. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Photos 10/1/10

HYDROLOGY

Recorded Data (Describe if blank):
 Stream, Lake, or File Change
 Aerial Photographs
 Other
 No Recorded Data Available

Field Observations:
 Depth of Surface Water: 0 (in.)
 Depth to Free Water in Pit: NA (in.)
 Depth to First Hard Soil: NA (in.)

Water Table Hydrology Indicators:
 Primary Indicators:
 Inundated
 Saturated in Upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands
 Secondary Indicators (2 or more required):
 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 FAC-Neutral Plot
 Other (Explain in Remarks)

Remarks: no saturation

SOILS

Map Sheet Name (Scale and Projection): _____

Drainage: _____

Taxonomy (USDA Code): _____

Field Notes: _____

Continuously Flooded Type? Yes No

Depth (Inches)	Horizon	Mottled Color (Munsell Moist)	Matrix Color (Munsell Moist)	Matrix Abundance/Contrast	Texture, Concretions, Structure, etc.
0-10			10Y		
10-20					
20-30					
30-40					
40-50					
50-60					
60-70					
70-80					
80-90					
90-100					

Hydro Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretion
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfide Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydro Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydro Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: *Dry Soil, No Hydroic Features*

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	Is this Sampling Point within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (Circle)
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Hydroic Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Circle)	
Remarks:		

Approved by: *[Signature]* 1982

WETLAND Delineation
 National Wetlands Inventory
 National Wetlands Inventory

Project/Site: Upper River Basin Date: 7/1/00
 Applicant/Owner: Bechtel Dam County: Los Angeles
 Investigator: CG State: CA

Do Normal Circumstances exist on the site? Yes No
 Is the site significantly disturbed (Atypical Situation)? Yes No
 Is the area a Potential Problem Area? Yes No
 If "No" to any of the above, explain on reverse.

Community ID: _____
 Transaction: _____
 Plot ID: _____

VEGETATION

Dominant Plant Species	Indicator	Plant Group	Indicator
1. <u>W. White</u>	<u>W</u>		
2. <u>Yellow Clover</u>	<u>W</u>		
3. <u>W. White</u>	<u>W</u>		
4. <u>W. White</u>	<u>W</u>		
5. <u>W. White</u>	<u>W</u>		
6. <u>W. White</u>	<u>W</u>		
7. <u>W. White</u>	<u>W</u>		
8. <u>W. White</u>	<u>W</u>		
9. <u>Slender whorlgrass</u>	<u>FAC</u>		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: Very poor hydrology

MORPHOLOGY

Recorded Data (Optional) (Name of Stream, Lake, or Tidal Canal)
 Aerial Photographs
 Other
 No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
 Depth of Free Water in Pit: NA (in.)
 Depth of Standing Water: NA (in.)

Wetland Hydrology Indicators:

Inundated
 Saturated in Upper 12 Inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

Oxidized Root Channels in Upper 12 Inches
 Water-tolerant Leaves
 Local Flooding Data
 FAC-1
 Other (specify in remarks)

NO Hydrology

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 21 OUTFALL 209</u> Applicant/Owner: _____ Investigator: <u>CG. S. PPA 05A156</u>	Date: <u>8/10/05</u> County: <u>LA</u> State: <u>LA</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator
1. <u>Grass oak Q. GRISEA</u> T <u>WPL</u>	9. _____
2. <u>K. blanda</u> H <u>FACW</u>	10. _____
3. <u>CLIMATIS LIQUSTICIFOLIA</u> H <u>FAC</u>	11. _____
4. _____	12. _____
5. _____	13. _____
6. _____	14. _____
7. _____	15. _____
8. _____	16. _____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0

Remarks: NO Disturbance

HYDROLOGY

<p>___ Recorded Data (Describe in Remarks):</p> <p style="padding-left: 20px;">___ Stream, Lake, or Tide Gauge</p> <p style="padding-left: 20px;">___ Aerial Photographs</p> <p style="padding-left: 20px;">___ Other</p> <p>___ No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>NA</u> (in.)</p> <p>Depth to Free Water in Pit: <u>NA</u> (in.)</p> <p>Depth to Saturated Soil: <u>NA</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12 Inches</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
Remarks: <u>NO Disturbance</u> <u>SANDY</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 21-STD and Wetland</u> Applicant/Owner: _____ Investigator: <u>NA HR BLK 21-2</u>	Date: <u>6/23/88</u> County: <u>CA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <u>Yes</u> <input checked="" type="radio"/> <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <u>Yes</u> <input checked="" type="radio"/> <input type="radio"/> No Is the area a potential Problem Area? (If needed, explain on reverse.) <u>Yes</u> <input checked="" type="radio"/> <input type="radio"/> No	Community ID: _____ Transect ID: _____ Plot ID: _____

OUTF DELIMITED 3/98 1 photo 3 2 photos 3.55 @ OF A...

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>ALL UPLAND VEG H FACU</u>			9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0

Remarks: All Upland veg; no indicator

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: <u>No hydrology</u>	

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

Project/Site: <u>TA 21 NEAR OUTFALLS W OF AT</u> Applicant/Owner: <u>FEARLE GHE</u> Investigator: <u>CS, SS</u>	Date: <u>6/23/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

! ~~INACTIVE~~ OF NEARBY

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>C. willow</u>	<u>S</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>J. ERECTUS</u>	<u>H</u>	<u>OBL</u>	10. _____	_____	_____
3. <u>RUSSIAN OLIVE</u>	<u>T</u>	<u>FACW</u>	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100 %

Remarks: 3 photos 3/30 2/25/05
1/10/05 REMANENT VEG FROM
OUTFALL NOW INACTIVE

HYDROLOGY

<p>___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ___ No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: <u>NA</u> (in.)</p> <p>Depth to Saturated Soil: <u>NA</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated ___ Saturated in Upper 12 inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12 inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)</p>
Remarks: <u>no hydrology</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>PA 21 - SOUTH OF FLOCO GOLF</u> Applicant/Owner: <u>BLDG 276</u> Investigator: <u>CG, SS</u>	Date: <u>6/23/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

STORMWATER OUTFALL FROM PAVED ROAD 2 PHOTOS 3:00 NOT A WETLAND

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>COYOTE WILLOW</u>	<u>SH</u>	<u>OBL</u>	9. _____	_____	_____
2. _____	_____	_____	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input checked="" type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	Remarks: <u>NO hydrology or hydrology</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

WETLAND 5

Project/Site: <u>TA 36 LANL / Paparito</u> Applicant/Owner: _____ Investigator: <u>McWhorter</u>	Date: <u>7-13-05</u> County: <u>CA</u> State: <u>AM</u>
Do Normal Circumstances exist on the site? Yes No is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>S-1</u>

Points S-1 thru S-9

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Rumex sp.</u>		<u>~FACW</u>	9. _____		
2. <u>sp.</u>			10. _____		
3. <u>Salix exigua</u>		<u>OBL</u>	11. _____		
4. <u>Hordeum jubatum</u>		<u>FACW</u>	12. _____		
5. <u>san to herb</u>			13. _____		
6. <u>7 grasses</u>			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>cracks in mud</u>	

Photos 11-12

0.11 AC.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

WETLAND 4

Project/Site: <u>LANL TAB6/Pajarito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7-13-05</u> County: <u>CA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>4-1</u>

Points 4-1 thru 4-11

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u><i>Pleccharum palustre</i></u>		<u>OBL</u>	9. _____		
2. <u><i>Hordeum jubatum</i></u>		<u>FACW</u>	10. _____		
3. <u><i>Juncus balticus</i></u>		<u>OBL</u>	11. _____		
4. <u><i>Rumex crispus</i></u>		<u>FACW</u>	12. _____		
5. <u><i>Poa sp.</i></u>		<u>FAC/FACW</u>	13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/5 = 80%

Remarks: _____

HYDROLOGY

Recorded Date (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>algal mats</u>

1.62 AC.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

WETLAND 3

Project/Site: <u>LANL TAZ36 / Pajarito Cyn.</u> Applicant/Owner: _____ Investigator: <u>M. Whittle</u>	Date: <u>7-12-05</u> County: <u>Los Alamos</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

GPS PTS. 3-1 thru 3-44

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u><i>Glebocharis palustris</i></u>		<u>OBL</u>	9. _____		
2. <u><i>Juncus balticus</i></u>		<u>OBL</u>	10. _____		
3. <u><i>Typha latifolia</i></u>		<u>OBL</u>	11. _____		
4. <u><i>Rumex</i> sp.</u>		<u>~FACW</u>	12. _____		
5. <u><i>Carex</i> sp.</u>		<u>~OBL</u>	13. _____		
6. <u><i>Poa</i> sp.</u>		<u>FAC/FACW</u>	14. _____		
7. <u><i>Salix repens</i></u>		<u>OBL</u>	15. _____		
8. <u><i>Populus deltoides</i></u>		<u>FACW</u>	16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 7/8 = ~88%

Remarks: _____

HYDROLOGY

Recorded Date (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

0.09 AC.

WETLAND 2

Project/Site: <u>LALL TA 36 / Pajarito Cyn</u>	Date: <u>7-12-05</u>
Applicant/Owner: _____	County: <u>Los Alamos</u>
Investigator: <u>M. Hunter</u>	State: <u>NM</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No
	Community ID: _____ Transect ID: _____ Plot ID: _____

GPS Points 2-1 thru 2-9

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Hordeum jubatum</u>		<u>FACW-</u>	9. _____		
2. <u>Juncus balticus</u>		<u>OBL</u>	10. _____		
3. <u>Poa sp.</u>		<u>FAC/FACU</u>	11. _____		
4. <u>Salix exigua</u>		<u>OBL</u>	12. _____		
5. <u>Populus tremuloides</u>		<u>FACW</u>	13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 4/5 = 80%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

0.366 Ac.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

WETLAND 1

Project/Site: <u>LANL TA36/Pajarito Cyn</u> Applicant/Owner: _____ Investigator: <u>McWhister</u>	Date: <u>7-12-05</u> County: <u>Los Alamos</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

GPS Points 1-1 thru 1-27

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus balticus</u>		<u>OBL</u>	9. _____		
2. <u>Carex sp.</u>		<u>FACW/OBL</u>	10. _____		
3. <u>Poa sp. (pratensis?)</u>		<u>FAC/FACW</u>	11. _____		
4. <u>Salix exigua</u>		<u>OBL</u>	12. _____		
5. <u>Populus fremontii</u>		<u>FACW</u>	13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 80%

Remarks: _____

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ___ Oxidized Root Channels in Upper 12 Inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>site dry at time of visit</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-35 OUTFALL next to</u> Applicant/Owner: <u>Bldg 035 114</u> Investigator: <u>Lm, CG</u> <u>+110</u>	Date: <u>6/8/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>(2) (1)</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Salix exigua</u>		<u>OBL</u>	9. _____		
2. <u>Western wildgrass</u>		<u>FAC-</u>	10. _____		
3. <u>Bromus tectorum</u>		<u>UPL</u>	11. _____		
4. <u>Juniper sp.</u>		<u>FACW/OBL</u>	12. _____		
5. <u>Opuntia sp.</u>		<u>FACU</u>	13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 40%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Dry site</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	
Profile Description:			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)
			Mottle Abundance/Contrast
			Texture, Concretions, Structure, etc.
		N/A	
Hydric Soil Indicators:			
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)	
Remarks: site access denied			

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)	(Circle)
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: site access was denied; however, from observation point, soil appears saturated. Combined w/ vigorous hydrophytic vegetation, strongly suggests a wet soil condition.	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-33</u> Applicant/Owner: <u>Los Alamos Natl Lab</u> Investigator: <u>Eddie Paulsen</u>	Date: <u>7-13-05</u> County: <u>LOS ALAMOS</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Cattails</u>		<u>Obl</u>	9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Vigorous cattail stand in area ~ 15' W x 25' L

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: ___ Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ___ Oxidized Root Channels in Upper 12 Inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>N/A</u> (in.) Depth to Free Water in Pit: <u>N/A</u> (in.) Depth to Saturated Soil: <u>N/A</u> (in.)	Remarks: <u>Although direct site access was denied, it appeared soil was saturated.</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-22-02</u> Applicant/Owner: <u>LOS ALAMOS NATH LAD</u> Investigator: <u>EMILIO PAWISARALIS</u>	Date: <u>7-12-05</u> County: <u>LOS ALAMOS</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TA-22-02-06</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus Balticus</u>		<u>OBL</u>	9. _____		
2. <u>Carex sp</u>		<u>OBL</u>	10. _____		
3. <u>Meadow Fescue</u>		<u>FACU</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 85%

Remarks: Vigorous vegetative growth

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>N/A</u> (in.) Depth to Free Water in Pit: <u>N/A</u> (in.) Depth to Saturated Soil: <u>N/A</u> (in.)	Remarks: <u>SOIL SAMPLES NOT OBTAINED; DRAINAGE PATTERN NOTED</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-22-02</u> Applicant/Owner: <u>LOS ALAMOS NATL LAB</u> Investigator: <u>EDDIE FOMBARO</u>	Date: <u>7-12-05</u> County: <u>LOS ALAMOS</u> State: <u>NM</u>						
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width:100%; border: none;"> <tr> <td style="text-align: center;"><input checked="" type="radio"/> Yes</td> <td style="text-align: center;"><input type="radio"/> No</td> </tr> <tr> <td style="text-align: center;"><input type="radio"/> Yes</td> <td style="text-align: center;"><input checked="" type="radio"/> No</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="radio"/> Yes</td> <td style="text-align: center;"><input type="radio"/> No</td> </tr> </table>	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Yes	<input checked="" type="radio"/> No	<input checked="" type="radio"/> Yes	<input type="radio"/> No
<input checked="" type="radio"/> Yes	<input type="radio"/> No						
<input type="radio"/> Yes	<input checked="" type="radio"/> No						
<input checked="" type="radio"/> Yes	<input type="radio"/> No						
Community ID: _____ Transect ID: _____ Plot ID: <u>TA-22-02-17</u>							

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus Balticus</u>		<u>obl</u>	9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Vigorous hydrophytic vegetation, meadow sedge interspersed with Juncus but not dominant

HYDROLOGY

<p><input type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p style="margin-left: 20px;"><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p style="margin-left: 20px;"><input type="checkbox"/> Aerial Photographs</p> <p style="margin-left: 20px;"><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>N/A</u> (in.)</p> <p>Depth to Free Water in Pit: <u>N/A</u> (in.)</p> <p>Depth to Saturated Soil: <u>N/A</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Remarks: <u>Wetland drainage pattern observed</u></p>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-22-02</u> Applicant/Owner: <u>Los Alamos Nat'l Lab</u> Investigator: <u>Eddie Paulsarove</u>	Date: <u>7-12-05</u> County: <u>Los Alamos</u> State: <u>New Mexico</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TA-22-02-1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus Balticus</u>		<u>obl</u>	9. _____		
2. <u>Carex Sp.</u>		<u>obl.</u>	10. _____		
3. <u>Cattails</u>		<u>obl</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Vigorous hydrophytic growth

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<p>Field Observations:</p> <p>Depth of Surface Water: <u>N/A</u> (in.)</p> <p>Depth to Free Water in Pit: <u>N/A</u> (in.)</p> <p>Depth to Saturated Soil: <u>N/A</u> (in.)</p>	<p>Secondary Indicators (2 or more required):</p> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<p>Remarks: <u>Soil samples not obtained; Drainage pattern noted</u></p>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-22-01</u> Applicant/Owner: <u>Los Alamos Nat'l Lab</u> Investigator: <u>Eddie Faulkner</u>	Date: <u>7-12-05</u> County: <u>LOS ALAMOS</u> State: <u>NEW MEXICO</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TA-22-01-D7</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus Balticus</u>		<u>obl.</u>	9.		
2. <u>Carex Sp.</u>		<u>obl.</u>	10.		
3. <u>Cattails</u>		<u>obl.</u>	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Vigorous hydrophytic vegetation. Grasses interspersed but not dominant

HYDROLOGY

<p><input type="checkbox"/> Recorded Data (Describe in Remarks):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>N/A</u> (in.)</p> <p>Depth to Free Water in Pit: <u>N/A</u> (in.)</p> <p>Depth to Saturated Soil: <u>N/A</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <p>Secondary Indicators (2 or more required):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<p>Remarks: <u>Soil samples not obtained, Drainage patterns in wetland noted.</u></p>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-22-01</u> Applicant/Owner: <u>Los Alamos Nat'l Lab</u> Investigator: <u>Eddie Pausagap</u>	Date: <u>7-12-05</u> County: <u>Los Alamos</u> State: <u>New Mexico</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TA-22-01-05</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Carex sp</u>		<u>obl.</u>	9. _____		
2. <u>Cattails</u>		<u>obl.</u>	10. _____		
3. <u>GRASSES</u>		<u>FACW</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 85%

Remarks: Sedg & Cattail sp. Vascular; some grasses interspersed, few prickly rose

HYDROLOGY

<p><input type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p style="margin-left: 20px;"><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p style="margin-left: 20px;"><input type="checkbox"/> Aerial Photographs</p> <p style="margin-left: 20px;"><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>N/A</u> (in.)</p> <p>Depth to Free Water in Pit: <u>N/A</u> (in.)</p> <p>Depth to Saturated Soil: <u>N/A</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Remarks: <u>Soil samples not obtained for secondary indicators; drainage pattern in wetlands noted.</u></p>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-22-01</u> Applicant/Owner: <u>Los Alamos Natl Lab</u> Investigator: <u>Eddie P. Scazaf</u>	Date: <u>7-12-05</u> County: <u>LOS ALAMOS</u> State: <u>NM MEXICO</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TA-22-01-03</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus Balticus</u>	<u>herb</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Cyperus sp</u>	<u>"</u>	<u>obl</u>	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Juncus Balticus + sedges vigorous; some grasses but no dominant.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>N/A</u> (in.) Depth to Free Water in Pit: <u>N/A</u> (in.) Depth to Saturated Soil: <u>N/A</u> (in.)	Remarks: <u>Drainage patterns observed, soil samples not obtained due to potential soil contamination. Secondary indicators as surveyed.</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA-22-01</u> Applicant/Owner: <u>Los Alamos N.H. Lab</u> Investigator: <u>Eddie Paulsarave</u>	Date: <u>7-12-05</u> County: <u>LOS ALAMOS</u> State: <u>NEW MEXICO</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>TA-22-01-01</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus Balticus</u>	<u>herb</u>	<u>obl</u>	9. _____	_____	_____
2. <u>Cattails</u>	<u>"</u>	<u>obl</u>	10. _____	_____	_____
3. <u>Carex sp</u>	<u>"</u>	<u>obl</u>	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Cattails, Juncus Balticus, sedges lush; some grasses - not dominant

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>N/A</u> (in.) Depth to Free Water in Pit: <u>N/A</u> (in.) Depth to Saturated Soil: <u>N/A</u> (in.)	Remarks: <u>Soil Samples not taken, Evidence of Drainage pattern in wetlands; secondary indicators assumed.</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 21-357 ACTIVE OUTFALL</u> Applicant/Owner: <u>LANL</u> Investigator: <u>CG. SS</u>	Date: <u>6/23/05</u> County: <u>LA</u> State: <u>Nm</u>
Do Normal Circumstances exist on the site? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the area a potential Problem Area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. _____	_____	_____	9. _____	_____	_____
2. _____	_____	_____	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): L 50%

Remarks: NOT ACTIVE DURING VISIT NO WETLANDS
2 photos 2:45 P.M.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: <u>No hydrology</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

WETLAND 6

Project/Site: <u>LANC TAZ6 / Paparito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7-13-05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>6-1</u>

Points 6-1 thru 6-42

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus balticus</u>		<u>OBL</u>	9. _____		
2. <u>Hordeum jubatum</u>		<u>FACW</u>	10. _____		
3. <u>Panicum sp.</u>		<u>OBL</u>	11. _____		
4. <u>Eleocharis sp.</u>		<u>OBL</u>	12. _____		
5. <u>Yucca americana</u>		<u>OBL</u>	13. _____		
6. <u>Salix exigua</u>		<u>OBL</u>	14. _____		
7. <u>Agrostis sp. ^{alba}</u>		<u>FACW</u>	15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input checked="" type="checkbox"/> Inundated (portions) <input type="checkbox"/> Saturated in Upper 12 Inches <input checked="" type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

WETLAND 7

Project/Site: <u>LANL TA-36 Pajarito Cyn.</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/14/05</u> County: <u>CA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

Points 7-1 thru 7-14

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Veronica americana</u>		<u>OBL</u>	9. _____		
2. <u>Hordeum jubatum</u>		<u>FACW</u>	10. _____		
3. <u>Carex sp (2 I.D.)</u>		<u>~OBL</u>	11. _____		
4. <u>Sagittaria arifolia</u>		<u>OBL</u>	12. _____		
5. <u>Arctostaphylos</u>		<u>FACW+</u>	13. _____		
6. <u>Salix exigua</u>		<u>OBL</u>	14. _____		
7. <u>Typha (nonbulent)</u>		<u>OBL</u>	15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: _____

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p><input type="checkbox"/> Aerial Photographs</p> <p><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
Remarks: <u>mud cracks / evidence of ponding</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

WETLAND 8

Project/Site: <u>LAWL TA-36 Upper Papavito</u> Applicant/Owner: <u>(left bank ddy)</u> Investigator: _____	Date: <u>7-14</u> County: <u>LA</u> State: <u>Nm</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

Points 8-1 thru
8-49

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Typha latifolia</u>		<u>OBL</u>	9. _____		
2. <u>Sagittaria</u>		<u>FACW</u>	10. _____		
3. <u>Sagittaria americana</u>		<u>OBL</u>	11. _____		
4. <u>Carex sp.</u>		<u>NOBL</u>	12. _____		
5. <u>Salix exigua</u>		<u>OBL</u>	13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>36-8</u> Applicant/Owner: _____ Investigator: <u>CG</u>	Date: <u>7/19/85</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>CATTAIL</u> <u>NIL.</u>	<u>H</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>C. Willow</u>	<u>S</u>	<u>OBL</u>	10. _____	_____	_____
3. <u>C. WILD RYE</u>	<u>H</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Musk WILLOW</u>	<u>H</u>	<u>NI</u>	12. _____	_____	_____
5. <u>P. SP.</u>	<u>H</u>	<u>FACW</u>	13. _____	_____	_____
6. <u>Am. SPEEDWELL</u>	<u>H</u>	<u>OBL</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 83%

Remarks: S/E

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>6"?</u> (in.)	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>36-9-</u> Applicant/Owner: _____ Investigator: <u>CG</u>	Date: <u>7/19/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>C. ...</u>	<u>S</u>	<u>OBL</u>	9. _____	_____	_____
2. _____	<u>Crispus H</u>	<u>FACW</u>	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: DEPRESSION AREA

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>N/A</u> (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: <u>6"</u> (in.)	
Remarks: <u>MOIST Soil Conditions AT SURFACE</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

LA Canyon

Project/Site: <u>TA-43-1</u> Applicant/Owner: _____ Investigator: <u>CG</u>	Date: <u>6/22/05</u> County: <u>San Diego</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the site significantly disturbed (Atypical Situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Is the area a potential Problem Area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus BACILLIS</u>	<u>H</u>	<u>OBL</u>	9. _____		
2. <u>CATAWA</u>	<u>H</u>	<u>OBL</u>	10. _____		
3. <u>Quercus wislizeni</u>	<u>SEC</u>	<u>OBL</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>2-30"</u> (in.)	Remarks: <u>4 photos taken around 2:30 pm 6/22/05 from 145-145</u>

DATA FORM 1
WETLAND DETERMINATION

26 55

Applicant Name: Land Application Number: _____ Project Name: _____
 State: NM County: LA Legal Description: _____ Township: _____ Range: _____
 Date: 6/23/85 Plot No.: 43-2 Section: _____

Vegetation [list the three dominant species in each vegetation layer (5 if only 1 or 2 layers)]. Indicate species with observed morphological or known physiological adaptations with an asterisk.

<u>Species</u>	<u>Indicator Status</u>	<u>Species</u>	<u>Indicator Status</u>
<u>Trees</u>		<u>Herbs</u>	
1.		7. <u>NL COTYLED</u>	<u>SAL</u>
2.		8. <u>PLUMIX</u>	<u>FACW</u>
3.		9. <u>...</u>	<u>NI</u>
<u>Saplings/shrubs</u>		<u>Woody vines</u>	
4. <u>...</u>		10.	
5.		11.	
6.		12.	

% of species that are OBL, FACW, and/or FAC: 66. Other indicators: _____
 Hydrophytic vegetation: Yes No Basis: ...

Soil
 Series and phase: _____ On hydric soils list? Yes ; No
 Mottled: Yes ; No . Mottle color: _____; Matrix color: _____
 Gleyed: Yes ; No Other indicators: _____
 Hydric soils: Yes ; No ; Basis: _____

Hydrology
 Inundated: Yes ; No . Depth of standing water: 2"
 Saturated soils: Yes ; No . Depth to saturated soil: _____
 Other indicators: _____
 Wetland hydrology: Yes ; No . Basis: _____
 Atypical situation: Yes ; No
 Normal Circumstances? Yes ; No
 Wetland Determination: Wetland ; Nonwetland

Comments: _____
 Determined by: _____

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Non-wetland

Project/Site: <u>TA43 - Outfall next to</u> Applicant/Owner: <u>bridge</u> Investigator: _____	Date: <u>6/8/05</u> County: <u>IA</u> State: <u>IA</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>(1)</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Festuca sp.</u>		<u>NI</u>	9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0%

Remarks: _____

HYDROLOGY

<p><input type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p style="margin-left: 20px;"><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p style="margin-left: 20px;"><input type="checkbox"/> Aerial Photographs</p> <p style="margin-left: 20px;"><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>~1-2"</u> (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
Remarks: <u>channel ~1' deep/2' wide exits outfall area</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

WETLAND upstream of

Project/Site: <u>TA-48 WETLAND 1</u> Applicant/Owner: <u>Upper Merced</u> Investigator: _____	Date: <u>6/9/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>(51)</u>

data taken by change on 6/3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Poa sp.</u>		<u>FACU</u>	9. _____		
2. <u>Salix exigua</u>		<u>OBL</u>	10. _____		
3. <u>Cirsium sp.</u>		<u>~FAC</u>	11. _____		
4. <u>(Thistle)</u>			12. _____		
5. <u>Yarrow</u>		<u>FAC-</u>	13. _____		
6. <u>Festuca sp.</u>		<u>NI</u>	14. _____		
7. <u>Wild rose</u>		<u>FACU</u>	15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 40%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>soil dry/moist. 0 to 14"</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 18 WETLAND 4</u> Applicant/Owner: <u>OUTFALL</u> Investigator: _____	Date: <u>6/9/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Typha sp.</u>		<u>OBL</u>	9. _____		
2. <u>(narrowleaf)</u>			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Pit not dug - PRS</u> <u>soil appeared wet at surface</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

UPLAND

Project/Site: <u>TA 48 Outfall</u> Applicant/Owner: <u>SS1985/EPA04A131 (Deleted)</u> Investigator: _____	Date: <u>6/9/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

inactive outfall - prior delin. shows as wetland

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Salix elaeagnifolia</u>		<u>OBL</u>	9. _____		
2. <u>Mullein (Verbascum thapsus)</u>		<u>NI/UPL</u>	10. _____		
3. <u>Festuca sp.</u>		<u>NI</u>	11. _____		
4. <u>Bromus inermis</u>		<u>UPL</u>	12. _____		
5. <u>wild rose</u>		<u>FACU</u>	13. _____		
6. <u>Box elder (Acer negundo)</u>		<u>FACW</u>	14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 33%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>soil pit not dug - PRS</u> <u>very dry at surface</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>53-1</u> Applicant/Owner: _____ Investigator: <u>CC, SS</u>	Date: <u>6/23/85</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>T. BALTICUS</u>	<u>H</u>	<u>OBL</u>	9. _____	_____	_____
2. _____	_____	_____	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: 100% OBL wetland in LA Canyon

HYDROLOGY

<input type="checkbox"/> Recorded Date (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input checked="" type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>1"</u> (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: <u>0</u> (in.)	
Remarks: <u>1st 2 photos on case file 6/23</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 53 ^{ACTIVE} OUTFALL NEAR BLDG</u> Applicant/Owner: <u>TA 53-1098</u> Investigator: <u>CG SS</u>	Date: <u>22 JUN 05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

OUTFALL DOWNS A STEEP SLOPE INTO LA CANYON

VEGETATION

COULD BE IMP. WATER SOURCE FOR LA CANYON WETLANDS

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>NO hydrophytic VEG</u>			9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: steep slope

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: <u>2 photos @ 11:30</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 53 ACTIVE OUTFALL</u> Applicant/Owner: _____ Investigator: <u>CG</u>	Date: <u>6/23/03</u> County: <u>LA</u> State: <u>LA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the area a potential Problem Area? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

NEAR ^{BLDG} 53-960

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>NO HYDRIC VEG</u>			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): _____

Remarks: NO WETLANDS
NO VEG.

HYDROLOGY

<input type="checkbox"/> Recorded Date (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: <u>photo at 1:15 pm</u> <u>no hydrology</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____		
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No		
Profile Description:				
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast
				Texture, Concretions, Structure, etc.
Hydric Soil Indicators:				
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <i>SOILS DRY COBBLY</i>				

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	No (Circle)	
Wetland Hydrology Present?	Yes	No (Circle)	
Hydric Soils Present?	Yes	No (Circle)	
			Is this Sampling Point Within a Wetland? Yes No (Circle)
Remarks:			

Approved by HQUSACE 3/92

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

Project/Site: <u>TA 53 L SHAPED WETLAND</u> Applicant/Owner: _____ Investigator: <u>CE</u>	Date: <u>6/23/85</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

NEAR TA 33 0003

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>NO HYDRO VEG</u>			9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: NO VEG, Hydrology, Soils

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: <u>photo 1/35</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>TA 59 outfall</u> Applicant/Owner: _____ Investigator: <u>CG EP</u>	Date: <u>6/20/85</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Cogate willow</u>	<u>S</u>	<u>OBL</u>	9. _____		
2. <u>CHERT</u>	<u>H</u>	<u>NI</u>	10. _____		
3. <u>Common Milkweed</u>	<u>H</u>	<u>NI</u>	11. _____		
4. <u>Fossil Barley</u>	<u>H</u>	<u>FACW</u>	12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: REMNANT Willows From when outfall was Active

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: <u>No surface water observed</u> <u>2 pits - 10' & 15' deep</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

UPLAND inned.
 dunstrm of Wetland
 SS-

Project/Site: <u>MORTANDAD CYN. TA-55</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/26/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>(1)</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Salix exigua</u>		<u>OBL</u>	9. _____		
2. <u>Catarrhus / <u>Polemonium</u> sp</u>		<u>FAC/FACW</u>	10. _____		
3. <u>Heb's Ladder? (H)</u>			11. _____		
4. <u>Bromus tectorum</u>		<u>UPL</u>	12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 67%

Remarks: _____

HYDROLOGY

<p><input type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p style="padding-left: 20px;"><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p style="padding-left: 20px;"><input type="checkbox"/> Aerial Photographs</p> <p style="padding-left: 20px;"><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>0</u> (in.)</p> <p>Depth to Saturated Soil: <u>0</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
Remarks: <u>soil dry/moist to 16"</u>	

UTM

382756 / 3969763

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
D-13"	10YR 4/3			None	
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <i>Frable, crumbly</i>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input checked="" type="radio"/> No (Circle)	Is this Sampling Point Within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input checked="" type="radio"/> No (Circle)	
Hydric Soils Present? <input checked="" type="radio"/> Yes <input checked="" type="radio"/> No (Circle)	
Remarks: <i>Soil pit immed. west of dirt road xing + gas pipeline.</i> <i>Driveway of dirt road, channel becomes, narrow, deeply incised w/ large rock-lined banks + walls.</i>	

Approved by HQUSACE 3/92

Photos: 9/24 Test Hole 1
 8/9/25 Looking S at Test Hole + creek
 26: looking N at road xing + riparian/

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

UPLAND

Project/Site: <u>TASS OUTFALL</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/26/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>①</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Salix exigua</u>		<u>OBL</u>	9. _____		
2. <u>Chenopodium</u>		<u>UPL</u>	10. _____		
3. <u>Melilotus sp.</u>		<u>FACW</u>	11. _____		
4. <u>Rhus copallina</u>		<u>UPL</u>	12. _____		
5. <u>Chicory (Cichorium)</u>		<u>UPL</u>	13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 20%

Remarks: _____

HYDROLOGY

<p>___ Recorded Data (Describe in Remarks):</p> <p style="padding-left: 20px;">___ Stream, Lake, or Tide Gauge</p> <p style="padding-left: 20px;">___ Aerial Photographs</p> <p style="padding-left: 20px;">___ Other</p> <p>___ No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12 inches</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
Remarks: <u>Dry - none</u>	

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

Project/Site: <u>LANL - TA-61</u> Applicant/Owner: <u>SANDIA WETLANDS AREA</u> Investigator: _____	Date: <u>5/24/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>①</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Bromus inermis</u>		<u>UPL</u>	9. _____		
2. <u>TYPHA sp.</u>		<u>OBL</u>	10. _____		
3. <u>1. D. GRASS - Poa sp.</u>		<u>FACW</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>16"</u> (in.) Depth to Saturated Soil: <u>0</u> (in.)	Remarks: <u>Soil dry to 16" moist</u>

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>JA-61</u> Applicant/Owner: <u>LANL-SANDIA</u> Investigator: _____	Date: <u>5-24-05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>(2)</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Bromus tectorum</u>		<u>UPL</u>	9. _____		
2. <u>Aster (tall)</u>		<u>UPL</u>	10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks: DEAD CATTAILS LYING FLAT THROUGHOUT SITE
one sm. patch Juncus sp. + Rumex sp.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>SOILS DRY ON SURFACE</u> <u>HOLE NOT DUG. DUE TO 100% UPLAND SPP.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>LANL-SANDIA TA-61</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/24</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the area a potential Problem Area? <input checked="" type="radio"/> Yes <input type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>3</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Agrostis spiontera</u>	<u>4</u>	<u>NI</u>	9. _____		
2. <u>(Spreading)</u>			10. _____		
3. <u>Typha latifolia</u>	<u>H</u>	<u>OBL</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): ~~100%~~ 50%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches: <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>5"</u> (in.) Depth to Saturated Soil: <u>surface</u> (in.)	Remarks: _____

1771
381419
3970893

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	
Profile Description:			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)
	5-16"	10YR 2/1	None
Hydric Soil Indicators:			
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)	
Remarks: <i>gravelly</i>			

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No (Circle)	
Wetland Hydrology Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Hydric Soils Present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
			(Circle) Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks:			

Approved by HQUSACE 3/92

*Point 104 - Test Hole #3 (at upper extent of wetland)
103 - taking core from Test Hole 3*

**DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)**

Project/Site: <u>TA-61</u> Applicant/Owner: <u>SANDIA</u> Investigator: _____	Date: <u>5/24</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>(A)</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Typha angustifolia</u>		<u>OBL</u>	9. _____		
2. <u>(Narrowleaf)</u>			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): _____

Remarks: wetland complex became sicker due to w/standing water ~3-4" deep, cattail, willow

AT
SOIL
PIT

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>7</u> (in.) Depth to Free Water in Pit: <u>0</u> (in.) Depth to Saturated Soil: <u>0</u> (in.)	Remarks: <u>soils moist to wet</u>

returning blackbirds

UTM

381418

3970879

SOILS

Map Unit Name (Series and Phase): _____ Drainage Class: _____
 Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16"		10YR 3/2	10YR 6/6	2/0	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input checked="" type="checkbox"/> Gleyed or Low-Chrome Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Remarks: _____	

Approved by HQUSACE 3/92

Photo 102 - Test Hole 4
 101 - Dunston from #4
 100 - Fromy dunston / lowest wetland battery
 looking up stream

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

WE

Project/Site: <u>TA-61 SANDIA</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/24/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>(5)</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Typha sp.</u>		<u>OBL</u>	9. _____		
2. <u>angustifolia</u>			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: some new growth; stalks mostly dead

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>Ø</u> (in.) Depth to Free Water in Pit: <u>30"</u> (in.) Depth to Saturated Soil: <u>~10"</u> (in.)	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

WETLAND 1

Project/Site: <u>TATA-PUEBLO CYN. (Lower)</u> Applicant/Owner: _____ Investigator: <u>LESLIE M. [unclear]</u>	Date: <u>6/1/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>T-1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Phalaris arundinacea</u>		<u>OBL</u>	9. _____		
2. <u>Echinochloa crusgalli</u>		<u>FACW</u>	10. _____		
3. <u>Cynox crispus</u>		<u>FACW</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

(same)

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: monoculture of seed canopy grass

HYDROLOGY

<p>Recorded Data (Describe in Remarks):</p> <p><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p><input type="checkbox"/> Aerial Photographs</p> <p><input type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>16"</u> (in.)</p> <p>Depth to Saturated Soil: <u>surface</u> (in.) <u>to 10"</u></p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input checked="" type="checkbox"/> Inundated</p> <p><input checked="" type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p><input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches</p> <p><input type="checkbox"/> Water-Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> FAC-Neutral Test</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

UPLAND bdry.

Project/Site: <u>TA-74 Pueblo Cyn</u> Applicant/Owner: _____ Investigator: <u>LM</u>	Date: <u>6/1/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>1-2</u> (adj. to 1-1)

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Bromus inermis</u>		<u>UPL</u>	9. _____		
2. <u>Bromus tectorum</u>		<u>UPL</u>	10. _____		
3. <u>Suaeda sp.</u>		<u>OBL</u>	11. _____		
4. <u>Arthrocnemum (Fragaria) (Fragaria)</u>		<u>UPL</u>	12. _____		
5. <u>Phalaris arvensis</u>		<u>OBL</u>	13. _____		
6. <u>Big sagebrush (Artemisia tridentata)</u>		<u>UPL</u>	14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 33%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>0</u> (in.) Depth to Saturated Soil: <u>0</u> (in.)	
Remarks: <u>moist/dry 0-16"</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

upland ERM

Project/Site: <u>TA 74 Pueblo Cyn</u>	Date: <u>6/1/05</u>
Applicant/Owner: _____	County: <u>LA</u>
Investigator: <u>AM</u>	State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: _____
Is the area a potential Problem Area? Yes No	Plot ID: <u>1-3</u>
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Phalaris arundinacea</u>		<u>OBL</u>	9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): _____

Remarks: Veget. is shorter w/a lot of dead vegn mixed w/live

HYDROLOGY

<input type="checkbox"/> Recorded Date (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>0</u> (in.) Depth to Saturated Soil: <u>0</u> (in.)	Remarks: <u>DRY 0-14"</u> <u>4' looking up stream</u>

PHOTO 2: Looking at soil pit
3: looking thru stream at narrow channel

Deleted (see back)
 PULLED
 3/24/05

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>TATA-1 Pueblo Cyn</u>	Date: <u>6/1/05</u>
Applicant/Owner: _____	County: <u>LA</u>
Investigator: <u>LM</u>	State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes No	Transect ID: _____
Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Plot ID: <u>T-4</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Phalaris arundinacea</u>		<u>OBL</u>	9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: <u>B" ↓</u> (in.)	Remarks: _____

checked by [unclear] included with [unclear] weather
 WETLAND 1 on left bank starts w/1-33
 WETLAND 2 on right bank
 1-32

Photo 5: Looking at soil pit
 6: Looking down stream
 [unclear]

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	
Profile Description:			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)
15"	10YR 2/1	None	Mottle Abundance/Contrast
			Texture, Concretions, Structure, etc.
Hydric Soil Indicators:			
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input checked="" type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)	
Remarks: <i>silty clay</i>			

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	(Circle) Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: <i>Data pts. recorded on LANE Triangle GPS</i>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Downstream end of Wetland 1

Project/Site: <u>TAT4-1 Pueblo Cyn.</u> Applicant/Owner: _____ Investigator: <u>LM</u>	Date: <u>6/2/05</u> County: <u>LA</u> State: <u>LA</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator
1. _____	9. _____
2. _____	10. _____
3. _____	11. _____
4. _____	12. _____
5. _____	13. _____
6. _____	14. _____
7. _____	15. _____
8. _____	16. _____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): _____

Remarks: _____

HYDROLOGY

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ___ No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ___ Oxidized Root Channels in Upper 12 Inches ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

sewage treatment plant & Uppermost Pond

Project/Site: <u>TA94 Pueblo Cyn</u> Applicant/Owner: _____ Investigator: <u>LM</u>	Date: <u>6/2/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>22</u> <u>1</u>

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator
1. _____	9. _____
2. _____	10. _____
3. _____	11. _____
4. _____	12. _____
5. _____	13. _____
6. _____	14. _____
7. _____	15. _____
8. _____	16. _____
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). <u>0%</u>	
Remarks: _____	

HYDROLOGY

<input type="checkbox"/> Recorded Date (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

UPLAND below Wetland 2

Project/Site: <u>TAT4 Pueblo Cyn</u> Applicant/Owner: _____ Investigator: <u>LM</u>	Date: <u>6/1</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>2-1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Phal Arun.</u>		<u>OBL</u>	9. _____		
2. <u>(Phalaris arundinacea)</u>			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>0</u> (in.) Depth to Saturated Soil: <u>0</u> (in.)	Remarks: <u>Very dry 0-15"</u>

Photo 3: Looking upstream at lg. reed canopy grass area + soil pit location

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	
Profile Description:			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)
15"		10YR 4/2	None
Hydric Soil Indicators:			
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)	
Remarks: _____			

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)	Is this Sampling Point Within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Wetland Hydrology Present?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Hydric Soils Present?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Remarks: Broad expanse of reed canarygrass monoculture. Braided, narrow channels thruout -- dry at time of visit. Upstream of Wetland 1 / Downstream of Wetland 2.		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

WETLAND 2

Project/Site: <u>TA 74-Upper Pueblo Canyon</u> Applicant/Owner: _____ Investigator: <u>LMM</u>	Date: <u>6/2/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>2-2</u>

VEGETATION

Dominant Plant Species Stratum Indicator	Dominant Plant Species Stratum Indicator
1. <u>Phalaris arundinacea</u> _____ <u>OBL</u>	9. _____
2. _____	10. _____
3. _____	11. _____
4. _____	12. _____
5. _____	13. _____
6. _____	14. _____
7. _____	15. _____
8. _____	16. _____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>soil moist 0-16"</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Uplandst adj. to 2-2

Project/Site: <u>TA 74 Pueblo Cyn</u> Applicant/Owner: _____ Investigator: <u>LM</u>	Date: <u>6/2/05</u> County: <u>LA</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>2-3</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Phalaris arundinacea</u>		<u>OBL</u>	9. _____		
2. <u>Rumex crispus</u>		<u>FACW</u>	10. _____		
3. <u>Brodiaea tectorum</u>		<u>UPL</u>	11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 67%

Remarks: *monogran less robust and drier/stressed.*

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <i>Dry</i>	

DATA FORM
ROUTINE WETLAND DETERMINATION
 (1987 COE Wetlands Delineation Manual)

Adj to channel in upper reach of Phal. Arroyo

Project/Site: <u>TAT4 Pueblo Cyn 74-2</u> Applicant/Owner: _____ Investigator: <u>LESLIE McWhorter</u>	Date: <u>6/2/05</u> County: <u>BADIA FE</u> State: <u>NM</u>
Do Normal Circumstances exist on the site? Yes No Is the site significantly disturbed (Atypical Situation)? Yes No Is the area a potential Problem Area? Yes No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>2-2</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Phalaris arundinacea</u>		<u>OBL</u>	9. _____		
2. <u>BARNYARD GRASS</u>		<u>FACW</u>	10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

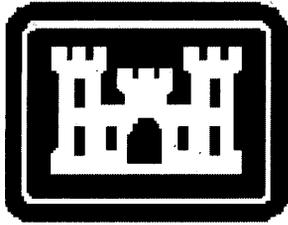
Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: _____

HYDROLOGY

Recorded Date (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>0</u> (in.)	Remarks: <u>soil moist</u> <u>74238 is lower end of ... soil site 6/1/05</u> <u>74239 lower end of ... picture taken</u>

Appendix C
Scope of Work and Workplan



**US Army Corps
of Engineers®
Albuquerque District**



**Wetlands Delineation Report
Los Alamos National Laboratory
Los Alamos, New Mexico**

Submitted to:

**U. S. Department of Energy
National Nuclear Security Administration
Los Alamos Site Office**

October 2005

Authors and Delineation Team

**Champe Green, Ecologist, USACE
Lesley McWhirter, Biologist, USACE
Eddie Paulsgrove, Geologist, USACE
Jim Wood, Biologist, USACE**

Appendix C
Scope of Work and Workplan

Corps of Engineers

**Statement of Work
Regarding Wetland Determinations and Delineations at
Los Alamos National Laboratory,
Los Alamos, New Mexico**

March, 2005

**U. S. Department of Energy
National Nuclear Security Administration
Los Alamos Site Office,
Los Alamos, New Mexico**

1.0 INTRODUCTION

The Department of Energy (DOE), National Nuclear Security Administration (NNSA), Los Alamos Site Office (LASO) needs to identify and delineate wetlands at Los Alamos National Laboratory (LANL). This work is intended to support the preparation of the Supplemental Site-wide Environmental Impact Statement (S-SWEIS) and various mitigative measures that may become part of that National Environmental Policy Act (NEPA) compliance process for LANL. This Scope of Work describes in detail the U.S. Army Corps of Engineers, Albuquerque District (Corps), Environmental Resources Section, Environmental Studies Unit services that will be required to meet NNSA's needs for wetland identification and delineation at LANL.

2.0 Task Description

2.1 Background Information

LANL occupies about 40 square miles of land in northwestern New Mexico and is located on the eastern flank of the Jemez Mountains along the Pajarito Plateau, which is characterized by a series of finger-like mesas and steep canyon drainages. The LANL reservation is divided into 49 Technical Areas (TAs) with over 2,000 structures. Much of the LANL site is forested with structures largely grouped together according to the type of work performed within.

During the early to mid-1990s, LANL staff biologists undertook the identification and delineation of wetlands at LANL, and the creation of computerized inventory records of the LANL wetlands and Geographic Information System (GIS) maps. The U.S. Fish & Wildlife Service, as part of their National Wetlands Inventory project, identified about 39 acres of wetlands at LANL; this wetlands inventory was based on aerial photography interpretations. In 1996, field surveys performed by LANL biologists resulted in the identification of about 50 acres of wetlands at LANL based on the presence of wetland vegetation. About 13 acres of wetlands then located within the LANL boundaries were either created or enhanced by process effluent wastewater from 38 of LANL's National Pollutant Discharge Elimination System (NPDES) permitted outfalls. The 1996 LANL wetlands information was used, in part, to support the preparation of an environmental assessment of a proposed industrial outfall effluent reduction program (DOE/EA- 1156), for which a Finding of No Significant Impact was issued in 1996. This effluent reduction program has since been initiated at LANL facilities.

During the late 1990s, LANL biologists prepared and implemented a Threatened and Endangered Species Habitat Management Plan at LANL. During this same time period, DOE undertook the preparation of the LANL Site-wide Environmental Impact Statement (SWEIS). In 1999, DOE

issued a Record of Decision and Mitigation Action Plan (MAP) based on information provided by the SWEIS that required the preparation of various LANL natural and cultural resource management plans under an overarching master plan. Most of these plans have been completed and implementation has commenced at LANL. In the case of the Threatened and Endangered Species Habitat Management Plan, it is now time to update this plan with information obtained during the past 10 years of field surveys.

Now, in 2005, the NNSA (a semi-autonomous administration within the DOE founded by Act in 2000) is preparing the S-SWEIS in accordance with DOE NEPA implementing regulation requirements that require the review of site-wide NEPA documents every 5 years. In part, NNSA's reason for supplementing the 1999 SWEIS is due to changes to the LANL environmental setting that have occurred since 1999. These changes are due to: the 2000 Cerro Grande Fire, which burned over about one quarter of the LANL reservation; subsequent post-fire forest recovery activities, including actions taken to install new culverts and clear out existing culverts and ditches, together with the construction of various surface water flow control features and retention structures; forest thinning actions conducted over an expedited schedule during the past 3 years; and tree and vegetation die-off that has occurred directly and indirectly as a result of drought conditions extending over a broad portion of the Southwest during the past 5 years. Other changes to the LANL environmental setting have also occurred since 1999. These changes have resulted from implementation of the aforementioned LANL effluent reduction program, which has eliminated numerous industrial effluent outfalls to the canyon watershed systems at LANL; as a result of new construction at LANL that may have added or eliminated facilities and redistributed waste effluent between canyons; and as a result of transfers and conveyances of land tracks away from the LANL reservation. The number of outfalls present at LANL in 1998 was 66; there are now 21 outfalls at LANL. Outfall effluent has fluctuated over the past six years from a high of 317 million gallons per year (mgy) in 1999 to a low of 124 mgy in 2001. The 2003 discharge was approximately 210 mgy.

2.2 Work Scope

To support the S-SWEIS in preparation, as well as supporting updates to various LANL natural and cultural resource management plans and various project activities, NNSA now needs to re-evaluate the occurrence of wetlands at LANL, their locations and size, and to update the existing LANL wetlands geographic mapping data. To accomplish this task, a new set of aerial photographs of LANL has been prepared for use that will be orthorectified, and the existing LANL wetland maps (based on the 1990 and 1996 wetland surveys, these have been corrected in piecemeal fashion over the past 9 years to account for outfall eliminations and other factors that may have eliminated or altered existing wetlands) are available for review and use. LANL biologists would identify any LANL specific site security badging, training requirements and provide that training to individuals identified by the Corps that would be performing work within LANL. LANL biologists would provide all work permits and so forth (such as excavation

permits) required by the University of California (UC) at LANL. LANL biologists would consult with the Corps staff and establish Corps work times so as to maximize the satellite availability needed for Global Positioning System (GPS) data collection and would supply UC escorts as appropriate for certain worksites within the LANL boundaries.

Task Elements:

The service performance task elements NNSA is requesting of the Corps of Engineers includes the following:

- Development of a simple work plan (or equivalent planning document) for executing work within LANL boundaries. The work plan shall include a sampling and analysis plan for site soil sampling and plant collection actions as appropriate. The Corps shall submit a health and safety plan that strictly adheres to all applicable and appropriate DOE and Corps health and safety and quality requirements.
- Identification of potential LANL wetlands using orthorectified aerial photographs and existing wetland maps and other similar information furnished to the Corps by LANL staff biologists.
- Field verification (routine method) of possible wetland areas with appropriate wetland determinations (including non-jurisdictional wetlands) based on the presence of hydric soils, hydrophytic vegetation, or wetland hydrology features or conditions as specified in the Corps' 1987 Wetlands Delineation Manual. Dry arroyos will not be considered as wetlands, but pond impoundments on stream courses will be considered and evaluated.
- Wetland delineations, including the collection of GPS delineation data for each wetland and perimeter flagging using pin flags, stakes or other similar identifying material.
- A simple work report detailing all field findings and results that would include photographs of wetlands identified, list of dominant plant species (including complete scientific names with authority information) found at each wetland, information regarding soils and hydrology conditions present at each wetland, and other information as appropriate.
- Electronic GPS data collected would be provided in a timely fashion to LANL biologists for incorporation into the LANL GIS and imported into the ARC/INFO mapping software.

2.3 Equipment Needs

Certain pieces of equipment will be provided by the Corps to facilitate performance of the outlined tasks. These include:

- vehicle(s) appropriate for field transportation of Corps workers
- all necessary GPS data collection equipment
- all wetland determination equipment (such as: shovels, trowels, or soil augers, flagging material, and so forth)

Certain pieces of necessary equipment will be provided by LANL biologists including:

- camera and equipment for photographing wetland sites
- cell phone, radio, and/or pager
- site maps and aerial photographs as identified
- other miscellaneous tools or equipment needed to meet UC requirements specific to LANL as identified and negotiated with the Corps

3.0 Technical Requirements

These general requirements are applicable to the Corps and any sub-contractors hired by the Corps to execute this work.

General Requirements

- Integrated Safety Management is an absolute requirement for work performance at LANL on behalf of NNSA and the Los Alamos Site Office.
- COE will ensure that all of their personnel, including sub-contractor personnel, meet minimum personnel qualification requirements, as deemed appropriate or necessary.
- COE personnel will follow applicable procedures and Integrated Work Management documents for performing field working within the LANL site; these documents will be provided to COE by UC staff at LANL.
- All work shall be performed by the COE personnel in accordance with UC's Quality Management Plan (QMP) or Quality Assurance Program that meets the requirements of DOE Order 414.1; copies of appropriate documents will be provided by UC staff at LANL. Quality Assurance will be reviewed by the NNSA prior to commencement of work.
- COE will prepare a work plan and sampling and analysis plan, and will submit these plans for NNSA review and approval prior to commencement of work; no deviations will be made from the approved work plan without written approval from NNSA.
- COE will take care to protect NNSA project information and data generated during execution of this work in accordance with the applicable implementing procedure to prevent unauthorized use, destruction or loss.
- COE shall provide three hard copies and two electronic copies of all reports including analytical results (but excluding the GPS data collected). The electronic (disc) versions of all final plans and report shall be submitted in Microsoft Office software.
- COE shall validate the GPS data information supplied to LANL staff biologists.

4.0 Schedule

Corps of Engineers

Field work planning, wetland identification and delineation work would commence upon execution of the appropriate Amendment to the Interagency Agreement between DOE and the Corps. A final scope of work (SOW) will be provided to the Corps within 15 days following acceptance of this Amendment. The Corps will submit a detailed cost estimate for review and approval by NNSA along with a schedule for work within 15 days of receiving the SOW. NNSA recommends that the Corps schedule a site visit prior to submitting the final cost estimate. If NNSA approves the cost estimate and proposal, notice to proceed will be given within 7 days. In order to meet the NNSA's schedule for its S-SWEIS and other needs, all field work will have to be completed by September 15, 2005 with all required reports completed and submitted to NNSA by October 15, 2005.

Financial Point of Contact for the Corps for this contract will be:

Ms. Barbara Bernal,
CESPA-RMB
4101 Jefferson Plaza NE
Albuquerque, NM 87109
Phone 505-342-3238
Fax 505-342-3193

Technical POC for the Corps for this contract will be:

Ms. Julie Hall
CESPA-PM-LE
4101 Jefferson Plaza NE
Albuquerque, NM 87109
Phone 505-342-3281
Fax 505-342-3668

Or

Mr. Champe Green
CESPA-PM-LE
4101 Jefferson Plaza NE
Albuquerque, NM 87109
Phone 505-342-3357
Fax 505-342-3668

Work Plan
U.S. Army Corps of Engineers, Albuquerque District
Wetlands Delineation of Los Alamos National Laboratory
May 20, 2005

Reference: Scope of Work between USACE Albuquerque District Environmental Resources Section and Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, Los Alamos, NM, March 4, 2005.

Methods

All sites indicated as wetlands from historical surveys on Map 05-0009-01 will be site visited by Corps wetland team and determination/delineation made. Incidental observations of other potential wetlands (e.g., outfalls designated on Map 04-0045-01) will be noted and visited/field delineated as security and safety considerations permit. LANL/DOE will provide color aerial photography for site visits, which will be returned upon completion of work at site.

Due to safety and health risks concerns of Corps personnel and consistent with Notice No. 133, January 16, 2004, Workers Rights and Responsibilities for Performing Radiological Work, Corps wetland team will request at each worksite information regarding whether the site is known to be contaminated, unknown, or known to be free of contaminants. If the site is known to be contaminated, Corps staff will reserve the option of refusing to enter the site and conducting the delineation. If status of the site is unknown (not previously surveyed for HTRW), Corps staff reserve the option of making a wetland determination at the site based solely on presence of obligate or facultative wet hydrophytic vegetation and hydrology (if present); at the option of the Corps staff, soil sampling for hydric soil determination may not be conducted at such sites. This option extends to chemical and biological contaminant situations as well as radiological. At sites documented to be free of contamination, Corps staff will collect data on soils, hydrology, and vegetation as per the 1987 Corps Wetlands Delineation Manual, routine method.

All Corps staff will be issued dosimeters by LANL/DOE for wear during site visits.

Field data sheets will be Data Forms 1 and 3 (atypical situations) from the Corps 1987 Wetlands Delineation Manual; originals will be turned into DOE as appendices of final report.

For soils that are sampled for hydric characteristics when it cannot be assumed that the soils are hydric based on obligate or facultative wet vegetation, soils will be sampled according to methods in Appendix D Section 1 of the 1987 Corps Wetlands Delineations Manual and the Munsell Color Book.

Schedule

Note: Following is subject to change, some staff may be onsite during portions of week only. If delays to Corps work schedule occur because of security issues, delay in obtaining of excavation permits, or other access delays not in the control of the Corps, Corps reserves the right to modify budget estimate if cost overruns are inevitable.

Corps Personnel

Champe Green, Senior Ecologist, Environmental Studies Unit, CESPA-PM-LE
Lesley McWhirter, Biologist, Regulatory Branch, CESPA-OD-R
Eddie Paulsgrove, Biologist, Regulatory Branch, CESPA-OD-R
James Wood, Biologist, Regulatory Branch, CESPA-OD-R

Work Dates

May 23rd – May 27th, Wood, McWhirter
May 31- June 4 Wood, McWhirter, Green
June 6-June 10 Green, McWhirter
June 13-June 17 Green, Paulsgrove, McWhirter
June 20-June 24 Green, Wood, Paulsgrove
June 27-July 1 Green
July 5-July 8 Wood
July 11-July 15 Wood, Paulsgrove, McWhirter
July 18-July 22 (if needed) Green, Paulsgrove, McWhirter

Coordination of daily schedules and Corps staff on site will be made with Sam Loftin of LANL.

Field Work should be completed by July 15.

Final Report Due by October 15, 2005.