MAPPING CONVENTIONS

for the
1985 Food Security Act;
the 1990 Food, Agriculture Conservation and Trade Act;
and the 1987 Corps of Engineers Wetlands Delineation Manual

October 1994

REVISED 5/2/95

USDA Natural Resources Conservation Service
Parkade Center, Suite 250, 601 Business Loop 70 West, Columbia, Missouri 65203
from Columbia, Missouri

MISSOURI WETLAND MAPPING CONVENTIONS (OFF-SITE TECHNIQUE) FOR USE UNDER THE FOUR AGENCY MEMO OF AGREEMENT CONCERNING WETLAND DELINEATIONS FOR 404 AND FSA

INTRODUCTION

NOTE: This is a revision of the 9/1/94 document. It is updated to reflect the new appendices. The main composition of the document is not changed and did not require an update on signatures.

This document outlines the procedures and methods the SCS will use to delineate wetlands under the inter-agency (SCS, COE, EPA, FWS) Memorandum of Agreement concerning the delineation of wetlands for purposes of Section 404 of the Clean Water Act (CWA) and Subtitle B of the Food Security Act (FSA). These procedures and methods are not intended to state or document SCS policy. They are designed to ensure consistency in making wetland delineations. These procedures and methods conform to the definitions and guidelines found in the National Food Security Act Manual (NFSAM) and the 1987 Corps of Engineers Wetland Delineation Manual (COE Manual).

For agricultural lands, the signatory agencies will use the procedures for delineating wetlands as described in the NFSAM. For areas that are not agricultural lands or are deemed "questionable" by the inventory review team, the signatory agencies will use the 1987 COE Manual.

The conventions for mapping wetlands consider hydrology, soils, and vegetation within major land resource areas. The conventions for mapping will vary between areas as the materials present for use in the inventory may not be the same for each county. However, it is expected that the inventory can be carried out within the general criteria presented. It is realized that the SCS wetland inventory teams will "fine-tune" as they progress.

As the previous FSA wetlands inventory in Missouri encompassed total farm determinations - non-agricultural and agricultural lands, SCS in Missouri will conduct a new inventory under the MOA guidelines.

For the purposes of these mapping conventions the term "determination" refers to the off-site technique of designating an area a wetland. It is the determination of the presence of a wet area and the estimate of the boundary. A "delineation" usually refers to information gathered from an on-site visit and the designation of a specific wetland boundary. It is recognized that off-site techniques are

sometimes used to delineate wetlands in disturbed areas such as agricultural lands.

SCS will organize an inventory review team composed of representatives from the MOA signatory agencies and invite participation of the Missouri Department of Conservation and the Missouri Department of Natural Resources. This review team will hold periodic reviews of the wetland inventory and address specific interpretation needs as they arise.

The inventory will be conducted out of Wetland Emphasis Team offices. The purpose of these offices are to serve a region of the state for all phases of wetland assistance and programs across all agencies. It is the desire to have these offices staffed by members of the cooperating agencies as personnel ceilings and budgets allow.

The inventory team for each of these offices will consist of at least two inventory specialists supervised by a wetland program specialist. The team will have a soil scientist and biologist as members. Minimum training levels for members of the wetland inventory team will be developed by the inventory review team. The SCS State Biologist will be responsible for the technical supervision of the Wetland Emphasis Team offices and is responsible for the technical adequacy of the inventory.

State wide responsibility for the wetland inventory will reside with the SCS Assistant State Conservationist for Programs. The SCS state biologist is also responsible for coordinating the inputs of the inventory review team.

The MOA wetland inventory will be initiated with training sessions for the Wetland Emphasis Teams (WETS) with inputs from the inventory review team. This training will commence as soon as approval of these mapping conventions are obtained from the signatory agencies and the appropriate personnel are selected as team members.

As Missouri is represented by five COE districts each district will maintain a presence on the inventory review team. The Kansas City District will assume the role of clearinghouse for the other districts. The items in these conventions were developed with consensus from the signatory agencies. The COE was required to develop their own consensus, as needed, to provide for equal weight for each of the signatory agencies.

NOTE: These off-site mapping conventions will be used only if adequate information is available to identify wetland areas. On-site wetland delineations will be used if adequate information is not available or as determined necessary by the wetland inventory review team. The inventory review team will develop county specific criteria and set the minimum level of quality for wetland delineation. See Appendix 3 for documentation guidelines.

MAPPING CONVENTIONS FOR AGRICULTURAL LANDS

Wetland criteria and guidelines for mapping conventions in the NFSAM will be used to delineate wetlands on agricultural lands.

Agricultural lands means those lands intensively used and managed for the production of food or fiber to the extent that the natural vegetation has been removed and replaced with planted grasses or legumes. This definition includes intensively used and managed cropland, hayland, pastureland, orchards, vineyards, and areas which support wetland crops (e.g. cranberries, taro, watercress, rice). It also includes other lands used for the production of food and fiber to the extent that the natural vegetation has been removed and cannot be used to determine whether the area meets applicable hydrophytic vegetation criteria.

Areas that have been recently used for the production of food or fiber that do not meet the abandonment criteria are considered agricultural lands, not withstanding the fact that natural vegetation may occur on such lands. Areas that are abandoned and are not used for agricultural purposes are non-agricultural lands despite the fact they were cropped in the past.

Non-agricultural lands include range lands, forest lands, wood lots, or tree farms. Also included are lands where natural vegetation has not been removed, even though that vegetation may be regularly grazed or mowed and collected as forage or fodder (e.g. uncultivated meadows and prairies, salt hay).

Tree farms (including pecan and walnut plantations) that have the natural vegetation replaced by planted trees are considered non-agricultural lands. On-site procedures as outlined in the 1987 Manual are required in heavily managed timber stands. Off-site mapping conventions are not sensitive enough to detect differences between wetland and non-wetlands in timber production areas.

Abandonment for the purposes of these conventions is defined by the NFSAM. For FSA purposes, the enrollment of the area in a USDA set-aside program or similar program of conservation use is considered to be the same as cropped. Such areas are not considered abandoned despite the fact that production has not occurred for a five year period.

Current criteria (off-site mapping conventions) for the wetland types used in these guidelines (PC, FW, FWP, AW, NW, PW, W, CW and NI) are found in NFSAM Part 514 - Making Wetland Determinations.

Areas will be mapped as follows:

1) Saturated soils-- areas saturated to the surface at least 14 days (during the growing season - as defined by the NFSAM) 50% of the time (5 out of 10 years).
2) Flooded or ponded soils--areas inundated for a period of time - at least 7 consecutive days (during the growing season - as defined by NFSAM) for 50% of the time (5 out of 10 years) are mapped as follows:

a. Areas manipulated and cropped before December 23, 1985, have not been abandoned to wetland conditions, and do not meet farmed wetland criteria will be mapped as Prior Converted Cropland (PC).

b. Cropland manipulated and cropped before December 23, 1985, and has surface water present for 15 consecutive days or more 50% of the time during the growing season will be mapped as farmed wetland (FW).

c. Areas manipulated, but still meet wetland criteria of hydric soils, hydrology and can support hydrophytes if abandoned, and used for pasture or hayland prior to December 23, 1985 and are not abandoned, or were FW that have not been cropped for 5 successive years, but were used for forage production during that time and are not abandoned or, were PC that meet wetland criteria have not been cropped for 5 successive years, but were used for forage production during that time and have not been abandoned will be mapped as Farmed Wetland Pasture or Hayland (FWP).

d. Areas now exhibiting wetland

characteristics (levee/road construction borrow pits, ponds, lakes, flowage easement areas, and other areas due to human activities) that were non-wetland or prior converted cropland will be mapped as artificial wetland (AW).

e. Areas that under natural conditions never did and currently do not meet wetland criteria; or were converted prior to December 23, 1985, to the extent that wetland criteria was/is not present, but were not cropped and the area has not been abandoned will be mapped as non-wetland (NW).

f. Areas that were W, FW, or FWP, but after December 23, 1985 have been altered so that they no longer meet hydrology criteria and/or woody vegetation, including stem and stumps, was removed and the production of an agricultural commodity was made possible will be mapped as converted wetland (CW).

g. Areas that were substantially altered by the Flood of 1993 and are newly developed wetlands will be mapped as potential wetlands (PW). See Appendix 4. PW areas will be re-evaluated in five years to determine if wetland criteria are present.
NOTE: PW designations may be subject to CWA jurisdiction.

h. Areas of non-agricultural lands meeting wetland criteria that occur as inclusions in agricultural lands will be mapped as wetland (W). See Appendix 1. This includes wetlands farmed under natural conditions, wooded wetlands, emergent wetlands, etc..

i. Areas to be determined as "waters of the United States" will be mapped when the inventory review team has agreed on appropriate local procedures for guidance. See Appendix 5.

j. Areas shown as "NI" refer to those areas that are non-agricultural lands requiring an on-site delineation. These areas occur on soils requiring an on-site

visit to verify wetland criteria. See Appendix 6.

GENERAL GUIDANCE

Wetlands are defined by the NFSAM as areas having a predominance of hydric soils, and that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.

Wetlands are identified through the confirmation of three criteria - hydric soil, hydrology, and hydrophytic vegetation. All three criteria must normally be met for an area to be identified as a wetland.

Ponding and saturation can occur anywhere in the landscape while flooding is restricted to reaches of streams and rivers. Each area inventory team will be provided a set of flooding maps displaying the 7 and 15 day flood elevation, where this information is available.

The inventory teams will be cautioned to consider other sources of hydrology in combination with flooding information. Inventory teams will use all available information to determine hydrology conditions.

These conventions direct wetland determinations that will be made on all agricultural lands with hydric soils or areas meeting the criteria for hydric soils; on all agricultural lands with non-hydric soils with hydric inclusions; on narrow bands of non-agricultural lands immediately adjacent to agricultural land; and on inclusions of non-agricultural lands within agricultural fields.

Minimum size of an area is not part of wetland criteria but is a limitation when only areas large enough to be detected by remote sensing are mapped using off-site conventions. On-site visits may lead to additional wetlands being added to determinations.

Off-site techniques as outlined by these conventions can be used on the inclusions of non-agricultural - see Appendix 1. The size of inclusions of non-agricultural lands to be identified by off-site conventions will be determined by the inter-agency inventory review team on a county by county basis. This decision will be based on the scale and accuracy of the photo base as well as landscape and soils variability.

Artificial wetlands are those areas that were formerly non-wetland in its natural state or were prior converted cropland that now exhibits wetland characteristics because of human activities. Borrow-pits, impoundments, dug-out ponds placed in undrained wetland areas will remain as wetlands after construction. Similar areas on non-wetlands or prior converted cropland will constitute artificial wetlands.

Frequent field review by the wetland inventory team and/or inventory review team will be employed until the reviewing person or teams are proficient in using these off-site wetland mapping techniques. Documentation of the areas field checked will be kept in the county wetland inventory file.

Any questionable areas such as artificial vs. natural wetland, size of non-agricultural land inclusions in agricultural lands, etc., identified by the wetland inventory teams will be held for consultation with the wetland inventory review team.

The previous FSA wetland inventory will serve as the photo base for the mapping to be done under these conventions. These mapping conventions will serve as a quality check and update of the earlier inventory. The mapping techniques (pen colors, symbols, check system, quality control, etc.) will be developed by the wetlands inventory review team and will be added as a technical appendix.

Natural streams and stream channels (includes straightened/channelized natural channels) will be delineated and mapped as wetlands or as waters of the United States. (See Appendix 5). Adjacent lands will be mapped according to the criteria in these conventions.

The principal tools used to make the off-site wetland delineations are correlated soil surveys, USGS quads, weather data, USFWS National Wetland Inventory (NWI) maps, ASCS color crop compliance slides, black and white aerial photos, high altitude color infrared photography, ASCS cropping history records, Missouri River COE 2 foot contour maps, SCS Wetland Inventory flood elevation maps, Heritage database printouts, COE field investigators notes, 1993 flood video and photos, and personal knowledge of the area by personnel from cooperating agencies.

Any changes made to the wetland inventory photos will follow the procedure as outlined in the NFSAM - Section 513.31, concerning changes in wetland determinations. No changes can be made without the concurrence of the inventory review team.

PROCEDURES

Review NWI maps where available. NWI maps will give an excellent overview of the wetlands in the area. The NWI maps identify forested wetland and ponded wetlands dominated by emergent and submergent herbaceous plants. NWI maps do not identify "Ag" wetlands. The NWI maps will be useful for identifying the inclusions of non-agricultural lands in agricultural fields.

Step 1

Wetlands on the NWI maps will be considered wetlands unless the review of these procedures fail to confirm the areas as meeting wetland criteria.

Outline in black pen on the photo base map the wetlands that are found as inclusions on the NWI maps and place a red check in the outlined area or checkmark next to the area if small.

Step 2

NOTE: The most recently published National Hydric Soils List will serve as the base document.

Prior to use of a county's Hydric Soils List the wetland inventory review team will review and sign off on each list. Any additions or deletions to the county hydric soils lists will be documented and subject to review and approval by the wetland inventory review team. A standard format will be developed and used to develop each county list. This list is essential to continue the inventory process.

Items this review will consider:

1. Listed hydric map units for the county.

2. Map units with hydric soils as part of their name.

3. Map units with hydric soils as inclusions.

NOTE: Any map unit may have inclusions of hydric soil or areas meeting the criteria for seasonal flooding or ponding for extended periods during the growing season. County hydric soils lists will be revised when necessary to reflect non-hydric map units with hydric inclusions.

4. Wet miscellaneous areas or spot symbols, such as depression areas, riverwash, and beaches, or areas that meet hydric water table, ponding or flooding criteria.

5. Hydrology criteria is met for soils when an area is flooded or ponded for at least 7 consecutive days during the growing season. Soils are also considered hydric when saturated to the surface for at least 14 consecutive days during the growing season.

Any area meeting this criteria will be considered as meeting the hydrology criteria, regardless if the area does not occur within a named hydric soil.

6. Mapping units meeting the flooding criteria will be considered hydric for the county, unless the area is protected from flooding. The adequacy of flood protection will be assessed on an individual levee unit system by the inventory review team. (Wetland criteria for these areas may also be met by ponding, saturation, or subsurface hydrostatic pressure.)

Outline in black pen on the base photo areas other than above listings under Step 1, that appear as possible wetlands on the soil survey. Place a green check on or beside all outlined areas that are on a hydric soil map unit or on a map unit with hydric inclusions, or spot symbols. See NFSAM PART 527 - APPENDIX for hydric soil criteria.

STEP 3

Review the base photos and USGS quad sheets (all available years) for areas that resemble depressions, oxbows, old stream channel cut-offs, waters of the U. S., etc. Outline in black pen on the base map areas other than outlined under Steps 1 and 2.

Step 4

(A) Climatological data review -

Climatological data will be reviewed to determine that the adopted conventions are reflective of long term hydrological conditions, using the following procedure:

1. Ascertain the date of exposure of aerial photography or ASCS slides. A minimum of 5 years of precipitation data and aerial photos or slides shall be used.

2. Obtain precipitation data for the growing season for each year's flight. The precipitation data can be obtained from the SCS Climatic Data Access Facility (CDAF) or the National Climatological Data Center. Check with the CDAF liaison in the SCS State Office when obtaining the precipitation data.

3. Determine if the monthly precipitation total (by growing season) is plus or minus 10% of the 30-year normal for the date of the slide (day/month/year). A wet month is equal to or greater than the normal plus 10%. A dry month is equal to or less than the normal less 10%.

4. If the signature occurred in only wet years, more detailed hydrologic analysis is needed. If the signature occurs in both wet and dry years, the hydrology of the site has been confirmed. If possible select an equal number of wet and dry years. Years of significant flood events and drought must be discounted as agreed by the inventory review team.

5. If there is not a conclusive indication as determined by the inventory review team that the signatures occurred in both wet and dry years, alternative detailed analysis are appropriate as explained in the NFSAM - The Hydrology Tools for Wetland Delineation.

When viewing slides, start with the wettest slide. Outline in black pen areas not already outlined that have any of the above indicators. If areas are outlined by use of the ASCS slides use the average size of the wetland in a normal precipitation year. Place the year of the slide in or by all outlined areas that have the above indicators of a wetland. Mark all cropland areas that meet the above indicators with a blue check mark. Repeat this process for each year until all areas have been marked with 50% or more of all years for the slides reviewed.

(B) ASCS Crop compliance slide review -

Review a minimum of 5 years of ASCS crop compliance color slides. If more than 5 years of ASCS slides are available, all years will be reviewed. These slides were taken to document crop production usually June - August. The Bootheel area has slides covering two periods - early in growing season and mid-summer. For the Bootheel region both sets of slides will be used for documenting ponded conditions. As outlined above the NWI maps and ASCS slides can be compared to document wetlands that have been cleared and/or drained and converted for commodity production or some other land use.

ASCS slides will also indicate areas that flood for long or very long duration. These areas may be large, flat expanses of land subject to back-water inundation or small depressional areas that pond water caused by headwater flooding.

For farmed wetlands one of the following must be observed:

1. Vegetation in the area in question must show signs of different color than surrounding crops due to crop stress or in a dry year areas that appear lush.

2. Drowned out crops or water areas that are not planted due to wetness (mud flats).

3. Difference in crop or cultivation patterns (not cropped, etc.) due to different planting dates.

4. Other indicators as determined by the inventory review team.

The above observations must occur on at least 50% of the number of slides observed. If observations show the area is questionable (2 out of 5 years) these areas should be designated as questionable areas that may require additional data or an on-site investigation to make the wetland delineation.

USGS or U.S. Weather Service precipitation and gauge data should be used where available in conjunction with ASCS slides to estimate frequency and duration of flooding as well as use of the 7/15 day flood elevation maps.

Make note of any indications of wetland manipulation and the questionable areas (< 50%) by circling the area in red. The red indicates that further review is necessary before a final decision can be made.

NOTE: A form to document decisions reached for each wetland designated will be developed. See Appendix 2 for examples.

Step 5

ASCS records may be used to determine cropping history on possible wetlands, such as set aside acres, etc.. Cropping history is used to differentiate wetlands on both agricultural and non-agricultural lands.

Step 6

Black and white and color infrared photos should be used where available to help outline the wetland. Photos can be used to determine the land use during specific periods of time. This can help substantiate cropping history and when a wetland was converted. Photos taken just prior to and after 1985 may provide important documentation for some delineations.

COE river photos can be used as needed for instances of further data needs.

Step 7

Agency personnel may use personal knowledge of the area to help make a wetland delineation. Documentation of this knowledge will be placed in the county wetland inventory file. Personal knowledge can be a valuable tool in the wetland identification process, especially if SCS has developed a conservation plan and has designed and installed conservation practices on the land in question.

NOTE: Converted wetlands will be outlined and circled in red. Procedures for reporting converted wetlands are found in the NFSAM.

Step 8

Other map inventory items will be outlined on the base photos. SCS minimal effect wetlands, EWRP and WRP restoration sites, SCS mitigation/replacement wetlands, 404 (CWA) mitigation sites, MDC/FWS Partners for Wildlife restoration areas, and other items as identified by the inventory review team. It will be the responsibility of the cooperating agencies to provide SCS with the necessary information to keep the inventory maps current. Information will be placed on the inventory maps on a quarterly basis. Designations will be developed for each category by the inventory review team.

SIGNATORY SHEET

It is understood that these mapping conventions may need to be amended as the inventory process proceeds. If the inventory review team reaches consensus on items to be amended, it is agreed that an up-date of the signatory sheet will not be needed. Any amendments will be clearly marked and noted as to the date of amendment.

Should agreement not be reached on items to be amended then these items will be elevated to each agencies respective national headquarters.

USDA - Soil Conservation Service

Russell C. Mills
State Conservationist

9-12-94
Date

SIGNATORY SHEET

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U. S. Army Corps of Engineers

Steven J. Vander Horn P.E. Sept 26, 1994

Steven J. Vander Horn
Regulatory Functions Branch Chief
Rock Island District

Date

SIGNATORY SHEET

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U.S. Army Corps of Engineers

Richard H. Goring
Colonel, Corps of Engineers
District Engineer
Kansas City District

27 Sep 94
Date

SIGNATORY SHEET

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U. S. Army Corps of Engineers

Thomas C. Suermann

Thomas C. Suermann
Colonel, District Engineer
St. Louis District

9/30/94
Date

SIGNATORY SHEET

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U. S. Army Corps of Engineers

B. G. Williams — 22 Sep 94

for Theodore C. Fox III
Colonel, District Engineer
Memphis District

Date

SIGNATORY SHEET

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Pursuant to Section V.A.3 of the MOA, these mapping conventions become effective the date of this concurrence.

U.S. Army Corps of Engineers

David R. Ruf
Colonel, District Engineer
Little Rock District

1 Nov 94
Date

SIGNATORY SHEET

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U. S. Environmental Protection Agency
Region 7 - Kansas City, Kansas

Delores J. Platt

Delores J. Platt
Acting Assistant Regional Administrator
for Policy and Management

9/30/94
Date

SIGNATORY SHEET

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Should agreement not be reached on items to be amended then these items will be elevated to each agencies respective national headquarters.

U. S. Fish and Wildlife Service
Region 3 - Columbia Field Office

Gary D. Frazer
Field Supervisor

10/18/94
Date

APPENDIX

Appendix 1 - Wetland Mapping Conventions for Off-site Wetland Determination of Small Areas and Narrow Strips of Non-agricultural Lands Within/Adjacent to Agricultural Lands

Appendix 2 - Examples of Off-site Documentation Forms

Appendix 3 - COE Requirements for Documentation Concerning Wetland Activities

Appendix 4 - Procedures for Wetland Determinations in the Midwest Flood Damage Area

Appendix 5 - Procedures for Use of the "Waters of the United States Stamp" on NRCS Wetland Determination forms

Appendix 6 - Procedures for Use of the Non-inventory (NI) Wetland Designation

5/2/95

APPENDIX 1

WETLAND MAPPING CONVENTIONS FOR OFF-SITE WETLAND DETERMINATION OF SMALL AREAS AND NARROW STRIPS OF NON-AGRICULTURAL LANDS WITHIN/ADJACENT TO AGRICULTURAL LANDS

REFERENCE: 1987 COE Wetland Delineation Manual

Small areas and narrow strips are inclusions of 5 acres or less. Narrow strips are linear-shaped areas of 150 feet or less in width and total less than 15 acres.

NOTE: Any areas larger than above limits require an on-site delineation with use of the 1987 COE Wetland Delineation Manual. These delineations require the 45 day review/coordination with the COE before they can be certified as wetland delineations.

A positive indicator of <u>hydric soils</u> include, but are not limited to:

1. Stream gauge data compared to USGS or other topographic maps which demonstrate frequesnt flooding or ponding of long duration during the growing season.

2. Hydrologic evaluation of precipitation and topography which demonstrates hydrology sufficient to promote the development of hydric soils.

3. Location within a map unit named for a hydric soil or within a map unit with hydric inclusions where the site in question is consistent with the map unit description of the hydric portion.

Positive indicators of <u>wetland hydrology</u> include, but are not limited to:

1. Stream gauge data in combination with USGS or other topographic maps which demonstrate a 50 percent chance of ponding, flooding, or soil saturation to the surface (including capillary fringe) equal to or longer than 5 percent of the growing season (consecutive days). The growing season may be approximated as the last "5 out of 10 years" 32 degree F day in the spring through the first "5 out of 10 years" 32 degree F day in the fall as contained in the county NRCS Field Office Technical Guide.

2. Employment of NRCS hydrology tools handbook procedures which demonstrate that an area meets the minimum hydrology criteria listed in (1) above.

3. Observation of surface water in 50 percent or more of a representative sample of CFSA growing season slides, or observation of significant wetland signatures in agricultural land adjacent to the subject site where the subject site is the same elevation or lower.

4. Other supporting information:

a. Aerial photography
b. Wetland or depression features on USGS topographic maps.

Positive indicators of <u>hydrophytic vegetation</u>:

1. The site in question occupies the same landscape position as similar sites within the same watershed where an on-site investigation has determined a predominance of hydrophytic vegetation.

2. The WETS may, on a county basis, propose changes to the procedures for documentation and to the limits on area and width of the small areas and narrow strips. Proposed changes will be sent to the state interagency oversight team for approval.

3. All wetland determinations/delineations will be documented on an appropriate data form.

4. All non-wetland determinations/delineations will be documented on an appropriate form that the area fails to meet at least one of the three wetland criteria.

NOTE: The data forms will be the COE 1987 Wetland Delineation Manual forms, or the NFSAM forms, as needed for on-site visits. Off-site documentation forms will be developed for use in each county as the wetland inventory is conducted. See Appendix two for examples of off-site documentation forms.

ANY QUESTIONABLE AREA THAT CAN NOT BE INTERPRETED FROM USE OF OFF-SITE MAPPING CONVENTIONS REQUIRES AN ON-SITE VISIT TO VERIFY ALL THREE WETLAND CRITERIA.

5/2/95

APPENDIX 2

EXAMPLES OF OFF-SITE DOCUMENTATION FORMS

1/12/95

OFFSITE WETLAND DETERMINATION STATUS SUMMARY (For Ag Lands)

HYDRIC MAP UNIT	MAP UNIT WITH HYDRIC INCLUSIONS	NWI WETLAND	OTHER INFORMATION DEMONSTRATING THAT SITE IS A WETLAND+	NO. OF YEARS OF ASCS SLIDES AND OTHER AERIAL PHOTOS WITH WETLAND SIGNATURES	STATUS
Y	Y	Y	Y	≥0	W
Y	Y	Y	N	≥1	W
Y	Y	Y	N	≤1	PW*
Y	Y	N	Y	≥1	W
Y	Y	N	Y	≤1	PW*
Y	Y	N	N	≥2	W
Y	Y	N	N	1	PW*
Y	Y	N	N	0	NW
Y	N	Y	Y	≥0	W
Y	N	N	Y	≥1	W
Y	N	N	N	≥2	W
Y	N	N	N	1	PW*
Y	N	N	N	0	NW
N	Y	Y	Y	≥1	W
N	Y	Y	N	≥2	W
N	Y	N	Y	≥1	W
N	Y	N	Y	≤1	PW*

HYDRIC MAP UNIT	MAP UNIT WITH HYDRIC INCLUSIONS	NWI WETLAND	OTHER INFORMATION DEMONSTRATING THAT SITE IS A WETLAND+	NO. OF YEARS OF ASCS SLIDES AND OTHER AERIAL PHOTOS WITH WETLAND SIGNATURES	STATUS
N	Y	N	N	≥3	W
N	Y	N	N	1 or 2	PW*
N	Y	N	N	0	NW
N	N	Y	Y	≥2	W
N	N	Y	Y	≤1	PW*
N	N	Y	N	≥3	W
N	N	Y	N	1 or 2	PW*
N	N	Y	N	0	NW
N	N	N	N	≥3	W
N	N	N	N	2	PW*
N	N	N	N	≤1	NW

+See Table for Acceptable Types of Information
*Requires additional information such as a site visit

CODE	INFORMATION
Y	YES
N	NO
W	WETLAND
PW	POSSIBLE WETLAND
NW	NOT A WETLAND

1/12/95

1/12/95

SITE INFORMATION ON THREE CRITERIA BY PHOTOGRAPH

PHOTO>:	A	B	C	D	E	F	G	H	I	J
SITE: 1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

1/12/95

SITE INFORMATION SUMMARY

SITE>:	1	2	3	4	5	6	7	8	9	10	11	12
WETLAND HYDROLOGY CRITERIA												
HYDRIC SOIL CRITERIA												
WETLAND VEGETATION CRITERIA												
MEETS ALL 3 CRITERIA												
AREAS REQUIRING ADDITIONAL ONSITE DATA												

Potential Section 404 Violations Present? No____ Yes____ Unsure____

Adequacy of Available Data:

Are wetlands present on site? Yes____ No____ Unsure____
Are available photos adequate for identifying all wetlands?
Yes____ No____ Unsure____
What additional information for this site might be useful?

_____

_____

REMARKS: _____

_____

_____

_____

_____

_____

_____

_____

_____

County =	Map#	T. = R. = Section =	Date =	R/S by:

Wetland Mapping Site Number	NWI (Y/N)	WIT (Y/N)	FSA Slides - *Enter Wetland Signature from List Below						Meets Wetland Mapping Conv. (Y/N)	If yes, then Suspected Landuse	Conversion Identified (Y/N) and Year	Final Deter-minations (By D.C.)	Acres
			Year = W D N	Year = W D N	Year = W D N	Year = W D N	Year = W D N	Year = W D N					

*1 = Hydrophytic Vegetation (Observed as different color than crop or forage)
2 = Surface Water (Oxbows, depressions, etc.)
3 = Flooded or Drowned out Crops, wet/base soil within cropped fields
4 = Stressed Crops due to wetness (Crop stress is seen on the ASCS slides as areas of yellowish tined crop, or sparse canopy coverage of crop, that has been in stress due to wetness)
5 = Difference in vegetation within a field due to different planting dates
6 = Inclusion of wet areas as set aside (these generally show on slides as areas of close grown legumes/grasses surrounded by, or bordering areas of row crops)
7 = Patches of greener vegetation during years of below normal precipitation - use only as a signature for a "dry year" ASCS slide

1/12/95

CODE KEY

CRITERIA	SIGNATURE/OBSERVATION	CODE
WETLAND HYDROLOGY	Primary Signatures: Shallow Surface Water	sw
	Flooded or Drowned-out Crops	fd
	Visual Observation of Inundation	VI
	Visual Observation of Soil Saturation	VS
	Water Marks	WM
	Drift Lines	DL
	Sediment Deposits	SD
	Wetland Drainage Patterns	DP
	Secondary Signatures: Saturated Soil	ss
	Crop Stress	cs
	Patches of Greener Vegetation	gv
	Changes in Tillage Patterns	tp
	Unharvested Crops	uc
	Isolated Area Not Farmed with Rest of Field	ia
	Wet Areas Incorporated into Set Aside	wa
	Oxidized Root Channels	OR
	Water-stained Leaves	SL
	Morphological Plant Adaptations	PA
WETLAND SOILS	Hydric Soil	H
	Potential Hydric Soil Inclusion*	I
	Nonhydric Soil	N
WETLAND VEGETATION	Hydrophytic Plant Community	W
	Nonhydrophytic Plant Community (terrestrial)	T

CRITERIA	SIGNATURE/OBSERVATION	CODE
MISCELLANEOUS	Unsure/Uncertain*	U
	Onsite Observation	O
PHOTO TYPE	ASCS Slides	A
	Black/White Aerial	BW
	Color	C
	Infrared	IR
	Thematic Mapping	TM

* Requires additional onsite data

HYDROLOGY SUMMARY OF SITES (1/12/95)

SITE	NWI WETLAND TYPE	WETLAND ON SOIL SURVEY	GAUGE DATA			GEOMORPHOLOGY	OTHER MISC. DATA
			NO. OF YEARS	FLOOD EVENT TYPE	NO. OF DAYS FLOODED OR PONDED		
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

1/12/95

Wetland Determination Data Form
For Oversight in Missouri (Onsite and Offsite)

Date of Determination: _____ Onsite: ___ Offsite: ___

Investigators:

Team Member	Agency	Expertise

SITE INFORMATION:

Landowner/Producer: _____

County: _____ Sect.: ____ Township: ____ Range: ____

Latitude: _____ Longitude: _____

Quad Sheet Name: _____

BACKGROUND DATA:

Photography (min. 5 years): No. years available: _____

No. Years used: _____

Years Discounted and Explanation Why: _____

_____

Have soils been verified ONSITE? Yes No Sites: _____

Have plants been identified ONSITE? Yes No Sites: _____

Has hydrology been observed ONSITE? Yes No Sites: _____

Type of hydrology observed/dates observed/frequency/observer:

_____

_____

_____

1/12/95

PHOTOGRAPHIC INFORMATION SUMMARY

PHOTO ID:	A	B	C	D	E	F	G	H	I	J
PHOTO DATES:										
PHOTO SCALE:										
TYPE OF PHOTO										
TYPE OF YEAR (WET, DRY, A=AVERAGE)										
PRECIPITATION PRIOR TO PHOTO - (in inches for ___ days)										

5/2/95

APPENDIX 3

COE REQUIREMENTS FOR DOCUMENTATION CONCERNING WETLAND ACTIVITIES

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

REPLY TO
ATTENTION OF:

April 19, 1995

TO: Area Biologists, Areas 1-7
WET Leaders
Jerry Zimmerman, ARSS, St. Joseph
Henry Ferguson, ARSS, Macon
Pat Graham, State Biologists, Columbia

RE: Documentation recommendations for nonagricultural wetland delineations and for assisting landowners with COE permit applications.

I have had several requests for clarification on the requirements of the COE for documentation concerning wetland activities. I hope the enclosed material will help. Please bare in mind that this is the Kansas City District guidance but I'm quite sure the other COE Districts need similar information. You may want to contact the District(s) you work with to see if this information will suffice or if you can reduce any of it for that particular District.

The basic thing to keep in mind is to give as complete of information as you can with the location and all activities clearly and precisely stated. Remember that no matter how familiar you are with the area or the project that you are sending information to a person whom has no knowledge of the area or of the project. For expediency and concurrence on nonag. wetland delineations complete information is needed.

If you have additional questions I will try to help.

Sincerely,

Douglas R. Berka

Douglas R. Berka
Project Manager, COE
PH. (816) 426-2116

(DRAFT)

DOCUMENTATION REQUIREMENTS AND RECOMMENDATIONS
FOR WETLAND DETERMINATIONS ON NONAGRICULTURAL LANDS
PREPARED BY NRCS (SCS) FOR KANSAS CITY DISTRICT REVIEW

Purpose: All four of the National MOA signatory Federal agencies benefit from thorough and organized wetland delineation reports. The MOA requires that the Kansas City District, or EPA, as appropriate, review nonagricultural land wetland determinations within 45 days of receipt of all necessary information. Well documented reports can insure that most reports are reviewed in a much shorter period of time. Because one of the goals of the MOA is to provide rapid wetland identification services to USDA participants, well documented reports help achieve this goal.

Wetland reports should contain the following information:

a. The names of all persons involved in data collection and report preparation with a point of contact or team leader identified.

b. A narrative description of the specific delineation methods used, vegetative plot sizes/sampling procedures, reasons for any deviation from standard methods, general site conditions (wet, dry, grazed, mowed, burned, ...), general topography including any manmade features (levees, ditches, lakes, terraces, ...), and any other relevant information that will describe the subject site to persons who have never been to the site.

c. A list of supplemental resources used for preliminary investigation or post onsite conformation (Maps, aerial photography, gage data, other reports, ...). Generally, copies of appropriate portions of the following maps, with the boundary of the examined area marked, should be included: USGS topographic survey, NWI map, soil survey with legend/map unit descriptions, and county highway maps. Other maps, such as Flood Insurance Rate Maps (FIRM), river hydrographs or special topographic surveys should be included if available.

d. Complete, legible data forms with sample sites, transacts, topographic features, landmarks, vegetative and/or wetland boundaries identified on an appropriately scaled base map. The limits of the area examined should also be shown. Approval of determinations will be limited only to those areas examined and may not necessarily include the entire tract. Use scientific names for vegetation, not common names.

e. Ground photography, preferably color, sufficient to depict each vegetative community and wetland area with the direction and location of each photograph indicated on the base map should be included.

f. For complex areas, a summary table by sample/plot number providing and/or identifying each area as wetland/nonwetland/ other water of the United States, plot acreage, and impacted acreage where the landowner has described a proposed project.

KANSAS CITY DISTRICT CORPS OF ENGINEERS

PRELIMINARY JURISDICTIONAL WETLAND DETERMINATION DATA FORM

SAMPLE

TABLE OF CONTENTS

1. Letter of Authorization from Land Owner 1

2. Project/Site Description and Location . . . . . .

3. Maps:
   a. County and/or Location Map . . . . . .
   b. SCS Wetland Inventory Map . . . . . .
   c. County Soil Survey with Legend and Map Units . . . . . .
   d. USGS Topographic Map . . . . . .
   e. National Wetlands Inventory Map . . . . . .
   f. National Flood Insurance Map . . . . . .

4. Photography:
   a. Aerial Photography . . . . . .
   b. Ground Photography . . . . . .

5. Other Information . . . . . .

6. Narrative
   a. Wetland Delineation Method . . . . . .
   b. Results, Discussion and Conclusions . . . . . .
   c. Delineation Team Profiles . . . . . .

7. Delineation Map with sample points, vegetation communities and photograph locations . . . . . .

8. Wetland Delineation Data Forms
   a. Site/Plot 1 . . . . . .
   b. Site/plot 2 . . . . . .
   c.
   d.

1. A Table of Contents must be included when more than one project site or sample site are submitted together. Add or delete sections in this sample Table of Contents as appropriate to any specific delineation.
2. Each preliminary jurisdictional determination must include a letter from the property owner authorizing Corps of Engineers personnel to enter the determination site to verify the determination.

KANSAS CITY DISTRICT CORPS OF ENGINEERS
PRELIMINARY JURISDICTIONAL WETLAND DETERMINATION DATA FORM

PROJECT PROPONENT

NAME: _____
ADDRESS: _____
_____
_____
_____

TELEPHONE: ( ) _____ HOME
( ) _____ OFFICE

CONSULTANT

NAME: _____
ADDRESS: _____
_____
_____
_____

TELEPHONE: ( ) _____ HOME
( ) _____ OFFICE

LOCATION

WATER BODY: _____ RIVER/LAKE MILE: _____
SECTION: _____ TOWNSHIP: _____ RANGE: _____
COUNTY: _____ STATE: _____
LATITUDE: ____° ____' ____" N LONGITUDE: ____° ____' ____" W
GENERAL DIRECTIONS:

COUNTY MAP[1] ATTACHED? ___YES___NO LOCATION MAP ATTACHED? ___YES___NO

SOIL CONSERVATION SERVICE CONSULTATION

SCS WETLAND INVENTORY AVAILABLE? ____YES ____NO
INVENTORY MAP[1] ATTACHED? ____YES ____NO
SCS CPA 026 ATTACHED? ____YES ____NO
CROP HISTORY ATTACHED? ____YES ____NO
SCS DESIGNATION: _____
NOTES:

COUNTY SOIL SURVEY

PUBLISHED SURVEY AVAILABLE? ____YES ____NO
MAP[1] AND LEGEND ATTACHED? ____YES ____NO

SOIL MAPPING UNITS (SYMBOL AND NAME) IN DELINEATION AREA:
A.
B.
C.

U.S. GEOLOGICAL SURVEY (USGS) TOPOGRAPHIC MAPS

MAP NAME: _____ COPIES[1] ATTACHED? ____YES ____NO
NOTES: _____

[1] Photocopy (8.5" X 11") of appropriate portion. A list of sources for maps and photography is listed in Appendix A.

NATIONAL WETLANDS INVENTORY (NWI) MAPS

NWI MAPS AVAILABLE? ____YES ____NO COPIES[1] ATTACHED? ____YES ____NO

NWI DESIGNATIONS IN DELINEATION AREA:
A.
B.
C.

NATIONAL FLOOD INSURANCE MAPS: FEDERAL EMERGENCY MANAGEMENT AGENCY

MAPS AVAILABLE? ____YES ____NO COPIES[1] ATTACHED? ____YES ____NO

AERIAL AND GROUND PHOTOGRAPHY

DESCRIBE ALL PHOTOGRAPHY EXAMINED. LIST THE SOURCE, DATE AND SCALE OF THE PHOTOGRAPHY. ATTACH ALL PHOTOGRAPHS INCLUDED WITH THIS DETERMINATION TO THE KANSAS CITY PHOTOGRAPH RECORD FORM.

OTHER PRIMARY SOURCES OF INFORMATION

RIVER, STREAM OR LAKE GAUGE DATA, REGIONAL HYDROLOGY STUDIES, STATEMENTS OR OBSERVATIONS FROM THE LAND OWNER OR ADJACENT PROPERTY OWNER, LOCAL PLANNING AND ZONING MAPS, OTHER MAPS, INFORMATION COLLECTED FOR RELATED OR ADJACENT PROJECTS, ETC.

NARRATIVE

DESCRIBE IN DETAIL THE METHODS EMPLOYED IN THIS DETERMINATION, THE RESULTS AND THE CONCLUSIONS. REFER TO SITE NUMBERS AND ATTACH THE SITE DATA FORMS AND DELINEATION MAP. ALSO INCLUDE A SUMMARY OF WETLAND RELATED EDUCATION, TRAINING AND EXPERIENCE FOR EACH INDIVIDUAL INVOLVED IN THE DETERMINATION. ATTACH CONTINUATION SHEETS AS NECESSARY.

WETLAND DELINEATION MAP

PRELIMINARY JURISDICTIONAL WETLAND DELINEATION MAP OR MAPS IDENTIFYING WETLANDS, SAMPLE POINTS, PHOTOGRAPH LOCATIONS AND DIRECTIONS, VEGETATION COMMUNITY BOUNDARIES, SOIL BOUNDARIES AND OTHER IMPORTANT NATURAL FEATURES.

[1] Photocopy (8.5" X 11") of appropriate portion. A list of sources for maps and photography is listed in Appendix A.

ROUTINE WETLAND DETERMINATION DATA FORM

(1987 COE Wetlands Delineation Manual)

Project/Site:_____ Date:_____

Investigator(s):_____

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____

Explain below or on continuation sheet, if necessary.

Remarks:_____

VEGETATION

List the three (or more) dominant species in each vegetative layer (list 5 if only 1 or 2 layers). Indicate species with observed hydrophytic morphological or known physiological adaptions with an asterisk.

Dominant Plant Species	Indicator Status	Indicator Stratum	Dominant Plant Species	Indicator Status	Indicator Stratum
1.			11.		
2.			12.		
3.			13.		
4.			14.		
5.			15.		
6.			16.		
7.			17.		
8.			18.		
9.			19.		
10.			20.		

Percent of Dominant Species that are OBL, FACW and/or FAC (Excluding FAC-):_____%

Hydrophytic vegetation: Yes____ No____. Basis:_____

Remarks:_____

SOILS

Map Unit Name (Series and Phase):_____ Drainage Class (Field Observation):_____

Taxonomy (Subgroup):_____ Confirmed Mapped Type? Yes____ No____

Profile Description:

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

Hydric Soil Indicators:

____Histosol
____Aquic Moisture Regime
____Concretions
____Listed on National Hydric Soils List
____Histic Epipedon
____Reducing Conditions
____Organic Streaking in Sandy Soils
____High Organic Content in Surface Layer in Sandy Soils
____Sulfidic Odor
____Gleyed or Low Chroma Colors
____Listed on Local Hydric Soils List
____Other (Explain in Remarks)

Is the hydric soil criterion met? Yes_____ No_____

Remarks:_____

SITE NUMBER:_____.

HYDROLOGY

___Recorded Data (Describe in Remarks): ___ Stream or Lake Gauge ___ Aerial Photographs ___ Other
___No Recorded Data Available

Field Observations: Depth of Surface Water: ___" Depth of Free Water in Pit: ___" Depth to Saturated Soil: ___"

Wetland Hydrology Indicators:

Primary Indicators:

___Inundated
___Drift Lines
___Saturated in Upper 12 Inches
___Sediment Deposits
___Water Marks
___Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

___Oxidized Root Channels in Upper 12 Inches
___FAC Neutral Test
___Water-Stained Leaves
___Other (Explain in Remarks)
___Local Soil Survey Data

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ___Yes ___No
Hydric Soils Present? ___Yes ___No
Wetland Hydrology Present? ___Yes ___No

Is this Sampling Point Within a Wetland? ___Yes ___No

Remarks:

CEMRK-OD-P

_____
Report No.

PHOTOGRAPH RECORD
(Kansas City District, Regulatory Branch)

Name: _____ Applicable Section: _____

Location: _____ _____ _____ _____ _____
(State) (County) (Water) (Mile) (Bank, Arm, Cove, or Branch)

_____ of _____ of Sec. _____, T _____, R _____

Date photos were taken _____ Time _____ a.m. p.m. Water Surface elev. _____

Photos inside line

Briefly describe what photos depict and direction camera is pointed. _____

_____

_____

_____

_____

Cameraman: _____ Signature: _____

Page _____ of _____

MRK FORM SEP 91 1303 (Rev)

APPENDIX A

DATA NAME	SOURCE
Topographic Maps	U.S. Geological Survey (USGS) (Call 1-800-USA-MAPS)
National Wetlands Inventory Maps	U.S. Fish and Wildlife Service (Call 1-800-USA-Maps) Cost: $1.75 paper, $3.50 mylar, $6.50 Shipping & Handling
County Soil Survey Reports Official Soil Series Descriptions Soil Drainage Guides	U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS)
National Hydric Soils List	National Technical Committee for Hydric Soils Soil Conservation Service P.O. Box 2890 Washington, DC 20013
State/County Hydric Soils Lists	State and Local SCS Offices
National Flood Insurance Maps	Federal Emergency Management Agency, Local Planning and Zoning Agencies
Local Wetland Maps	State and Local Agencies
Land Use and Land Cover Maps	U.S. Geological Survey (Call 1-800-USA-MAPS)
Aerial Photography	ASCS Aerial Photo Field Office P.O. Box 30010 Salt Lake City, UT 84130 801-524-5856 USGS EROS Data Center Sioux Falls, SD 57198 605-594-6151 USGS National Cartographic Information Center 507 National Center Reston, VA 22092 703-860-6045
Agricultural Stabilization and Conservation Service (ASCS) Compliance Slides	USDA ASCS County Offices

Satellite Imagery	EOSAT Corporation, SPOT Corporation, and others
National List of Plant Species That Occur in Wetlands (Stock No. 024-010-00682-0)	Superintendent of Documents U.S. Government Printing Office Washington, DC 20402
Regional Wetland Plant Lists	Publications Request Manager National Ecology Research Center U.S. Fish and Wildlife Service 2627 Redwing Road, Creekside One Fort Collins, CO 80526-2899 303-226-9300
	U.S. Fish and Wildlife Service National Wetlands Inventory 9720 Executive Center Drive Suite 101, Monroe Building St. Petersburg, FL 33702
	National Technical Service 5285 Port Royal Head Springfield, VA 22161 703-487-4650
Nation Wetland Plant Database	U.S. Fish and Wildlife Service
National List of Scientific Plant Names Publ. No. SCS-TP-159 (1982)	USDA SCS Office of Ecological Sciences P.O. Box 2890 Washington, DC 20013 202-447-2587
Stream Gauge Data	Corps of Engineers District Offices and the USGS
Keys to Soil Taxonomy	International Soils Department of Agronomy Bradfield Hall Cornell University Ithaca, NY 14853 Cost: $12.00
Corps of Engineers Wetlands Delineation Manual January 1987 Technical Report Y-87-1 Document No. ADA 176 734	National Technical Information Service (NTIS) Attn: Order Department Springfield, VA 22161 Cost: $26.00 + $3.00 S & H 703-487-4650 Fax: 703-321-8547

OPTIONAL NEW DATA FORM, APPROVED MARCH 1992

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

Project/Site: _____ Applicant/Owner: _____ Investigator: _____	Date: _____ County: _____ State: _____
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

Field Observations:

Depth of Surface Water: _____(in.)

Depth to Free Water in Pit: _____(in.)

Depth to Saturated Soil: _____(in.)

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)

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:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

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

Remarks:

Approved by HQUSACE 3/92

(DRAFT)
RECOMMENDATIONS FOR INFORMATION
REQUIRED BY (COE) KANSAS CITY DISTRICT
FROM NRCS WHEN ASSISTING LAND
OWNER WITH CWA PERMIT APPLICATION

PURPOSE:

The Corps of Engineers - Kansas City District requests the following information from NRCS field offices in order to determine the type of Section 404 permit required for the proposed activity of the applicant.

LOCATION OF PROJECT:

Detailed information such as:

1. County Name
2. Section, Township and Range
3. Maps - USGS Quadrangle, County Road Map, Plat Maps etc.. Any maps that clearly show location. ASCS maps do not do this.

WETLANDS AND WATERS OF THE US:

1. A signed and dated NRCS-CPA-026 with map attached.

2. If a CPA-026 has not been completed, we request a copy of the wetland inventory map (dated) with wetlands, prior converted cropland, artificial wetlands and non-wetland areas clearly labeled.

3. Soil survey map and soil legend with work location labeled.

4. Hydric soils list for the county.

5. Water body names identified on photocopy map. ie. Grand River, Brush Creek, etc. Even if names are obvious to you, please include them on the map.

DESCRIPTION OF WORK:

1. Give a brief overview of the scope and effect of the proposed work.

   Information to be included:

   a. Quantities (cu. yds.) of dredged or fill material in project.
   b. Wetland acreage converted in proposed work.
   c. Distance (ft.) of ditch excavation and yardage of material.

Description of work continued.

2. Provide an explanation as to how the proposed work will affect the applicants compliance with FSA/FACTA and their eligibility for USDA program benefits.

   a. If mitigation/replacement plan has been developed, please submit it as part of the package. If NRCS will not allow replacement of wetland values let us know.

These are just some examples. Each project will have its own specific details. Relay these details to us.

5/2/95

APPENDIX 4

PROCEDURES FOR WETLAND DETERMINATIONS IN THE MIDWEST FLOOD DAMAGE AREA

Procedures for Wetland Determination in the Midwest
Flood Damage Area

Policy: All flood damaged agricultural lands will be evaluated and mapped to compare previously mapped FSA wetlands with post-flood conditions prior to any on-farm (EWP/ECP) emergency work beginning:

1. Existing wetland inventory and/or wetland determination maps will be assembled for each area of flood damage.

   All existing inventories and/or determinations will be reviewed in consultation with the FWS, EPA, and COE and corrected, if needed, to be consistent with the provision of the Third Edition of the Food Security Act Manual. For areas that are not covered by existing determinations or inventories, pre-flood conditions will be determined from existing data consistent with the Third Edition of the Food Security Act Manual, and in consultation with FWS, EPA, and COE.

2. These maps will be used as a base to map "Potential Wetlands" newly developed by the recent floods, or to remove wetland originally mapped that are completely filled and are no longer expected to meet wetland criteria.

3. Potential wetlands (PW) expected to meet wetland criteria will be delineated on the wetland maps and dated to reflect the date of development.

4. FWS, EPA, and COE will be consulted on making wetland determinations and encouraged to participate in the process.

5. Persons will be provided with the new wetland determinations prior to the commencement of any on-farm emergency work--ECP/EWP. Individuals not participating in emergency programs will be provided new determinations during recertification or as they are required.

6. Farmed wetlands (FW's) may be maintained to the original scope and effect of the previous modifications; however, additional filling or alternations by mechanical means will not be allowed.

7. A statement will be placed in the "remarks" section of the SCS-CPA-026 to the effect that "Potential Wetlands" (PW) areas will be re-evaluated in five years to determine if wetland criteria is present. If present, the area will be considered "abandoned" and will be determined wetland or farmed wetland. Persons have five years to return these areas to pre-flood conditions without jeopardy to USDA program benefits, or persons may enter these areas into the Emergency Wetland Reserve Program.

8. Maintenance and clean out of all drainage ditches and other drainage facilities based upon original SCS scope and effect determinations will be allowed.

9. Major flood damage, i.e. new channels, may be restored to pre-flood conditions and location which must include restoration of PC's, FW's, W's, etc., associated with the original condition.

10. FSA/FACTA Swampbuster rules apply as shown in the following table:

Original FSA Delineation:	New FSA Delineation and Uses	
	Flood Scour [1/]	Flood Deposition
PC	PW -maintain, fill, farm or abandon	PC - maintain, remove, fill and farm
W	W	Partial filling - farm under natural conditions / completely filled NW <W>[2/]
FW	FW -maintain, farm or abandon	Partial filling – maintain, farm or abandon / completely filled PC <FW>[2/]
NW	PW -maintain, fill, farm under natural conditions or abandon	NW - any activity permitted
CW CW + YR	Treat as prior to flood [3/] (delineate on new maps)	Treat as prior to flood [3/] (delineate on new maps)

Note: FW and W areas removed from wetland maps will be "X'ed" out on the base map, dated, and an explanation included on the reverse stating: "Removed due to Flood of '93."

1/ Abandonment rules apply after 5 years; if wetland criteria returns. PW areas will be re-evaluated in 5 years.

2/ < > - A re-evaluation after 5 years may show that wetland criteria is lost. Remap as PC or NW.

3/ Flood does not relieve person from past decisions, however, the flood may have restored a converted wetland. A restoration agreement is required.

5/2/95

APPENDIX 5

PROCEDURES FOR USE OF THE "WATERS OF THE UNITED STATES STAMP" ON NRCS WETLAND DETERMINATION FORMS

NOTE: This procedure is to be developed when NRCS intiates the wetland inventory under the MOA mapping conventions.

5/2/95

APPENDIX 6

PROCEDURES FOR USE OF THE NON-INVENTORY (NI) WETLAND DESIGNATION

Under the MOA mapping conventions only agricultural lands and small areas and narrow strips can be designated by the use of off-site mapping conventions. All other areas will be shown as non-inventory (NI) on wetland determination photos/maps provided to persons requesting a certified wetland determination.

Non-inventory (NI) areas will include both wetland and non-wetland areas. The NI designation means that on on-site or further investigation is necessary before the appropriate wetland delineation can be made.