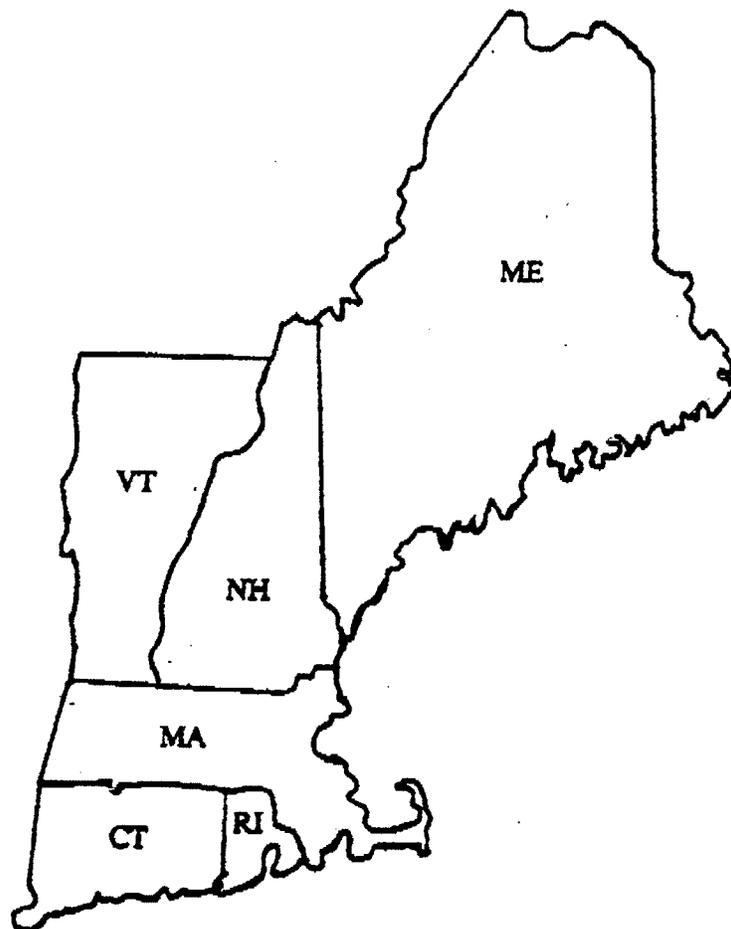


**NEW ENGLAND
SOIL CONSERVATION SERVICE
WETLAND MAPPING CONVENTIONS**



**Concerning the Determination of Wetlands
for Purposes of Section 404 of the Clean Water Act
and Subtitle B of the Food Security Act**

JULY 1994

**NEW ENGLAND SCS
WETLAND MAPPING CONVENTIONS**

PURPOSE

These mapping conventions outline the office procedures and methods SCS will use to prepare wetland determinations on agricultural land and nonagricultural land. Conventions are in accordance with the Interagency Memorandum of Agreement Concerning Wetlands Determinations for Purposes of Section 404 of the Clean Water Act and Subtitle B of the Food Security Act as agreed upon on January 6, 1994. The conventions are designed to ensure consistency among the six New England states and their respective SCS field offices. All conventions will conform to the FSA Wetland Conservation (Swampbuster) definitions. All lands on which SCS makes determinations will have a label attached in accordance with these conventions.

Onsite wetland determinations will be made when: (1) an office determination cannot be made with confidence, (2) a producer appeals a wetland determination, (3) ASCS has issued an AD-569 with regard to a potential Swampbuster violation, (4) spot checks or other quality review measures indicate potential FSA/FACTA wetland violations, (5) it is necessary to assess the effectiveness of an existing drainage system, or (6) a producer has indicated an intent to convert a non-cropland area to cropland, or to drain, fill, or otherwise modify a wet area. Onsite determinations for agricultural lands will be made using procedures described in the current SCS National Food Security Act Manual. Onsite determinations on nonagricultural lands will be made using the 1987 Corps of Engineers Wetland Delineation Manual.

GENERAL INFORMATION

Wetland determinations made in the office will use, where available: soil survey maps, hydric soil lists, National Wetlands Inventory (NWI) maps, USGS topographic maps, ASCS color slides, color infrared (CIR) photos, black and white photos, other tools including long term climatological data to determine normal weather conditions at the time of aerial photography, and personal knowledge of an area. Soil survey maps will be the primary data source used for making office determinations throughout the six state area. Use other tools to: (1) support the soil survey information, (2) locate hydric inclusions in predominantly non-hydric soil mapping units, (3) provide information on past hydrology and cropping history, and (4) identify wet area photo signatures. All wetlands, regardless of size, will be labelled in accordance with these mapping conventions.

ASCS will provide SCS with an AD-1026 and three photocopies of the tracts and fields in question. SCS will record wetland determinations on the SCS CPA-026 and will enter the appropriate wetland label on the photocopies provided by ASCS. SCS will return one copy to ASCS, and a copy will be retained by SCS for its files. SCS will send one copy of the photo to the producer along with the landuser copy of the CPA-026. If a photo provided by ASCS shows an area as cropland that was in some other land use (for example, pasture or woodland) before December 23, 1985, SCS will request additional information from ASCS and the producer as needed to determine whether a wetland conversion has occurred. ASCS color slides and other photography will be used, as appropriate to determine land use, crop history, and/or crop management history.

LOCAL OPERATING PROCEDURES

The Interagency Memorandum of Agreement requires the signatory agencies to coordinate on such issues as periodic oversight reviews, reporting suspected violations, and outreach to the agricultural community, among others. The agencies will develop local operating procedures to address these and other issues related to the mapping conventions being addressed here.

MAPPING CONVENTIONS

Cropland

Cropland which meets cropping history^{2/} and has not been abandoned^{3/} + meets hydric soil^{4/} criteria according to the National Food Security Act Manual (NFSAM) + with* or without wet signature^{5/} on CIR photo, black & white photo, or other photos or color slides, and does not flood or pond for 15 consecutive days during the growing season in most years = PC. *(Requires documentation that the site does not pond or flood for greater than 15 consecutive days during most years.)

Cropland which meets cropping history^{2/} and has not been abandoned^{3/} + non-hydric soil that has hydric soil^{4/} inclusions + wet signature^{5/} on CIR photo, black & white photos, or other photos or color slides + ponding or flooding for less than 15 consecutive days = PC. (Requires documentation that the site does not pond or flood for greater than 15 consecutive days during most years.)

Cropland which meets cropping history^{2/} and has not been abandoned^{3/} + meets hydric soil^{4/} criteria according to the NFSAM + wet signature^{5/} on CIR photo, black & white photos, or other photos or color slides + may pond or flood for at least 15 consecutive days during the growing season in most years = FW or PC. An onsite evaluation may be necessary to determine extent of ponding or flooding.

Cropland without cropping history^{2/} prior to 12/23/85 + meets hydric soil^{4/} criteria according to the NFSAM or nonhydric soil + wet signature^{5/} + no manipulation^{6/} after December 23, 1985 (farmed under natural conditions) = W.

Cropland without cropping history^{2/} prior to 12/23/85 + meets hydric soil^{4/} criteria according to the NFSAM + no wet signature^{5/} + manipulated^{6/} prior to 12/23/85 + no wetland criteria = NW (for FSA only). A PC which meets wetland criteria + five years without annually planted crop + used at least once every five years for livestock grazing or hay harvesting = FWP (may require an onsite investigation).

A FW + five years without annually planted crop + used at least once in five years for pasture or hay = FWP.

A PC or FW which meets wetland criteria + five years without annually planted crop + not used at least once every five years for livestock grazing or hay harvesting = W.

Cropland which meets cropping history^{2/} and has not been abandoned^{3/} + no hydric soil^{4/} + no wet signature^{5/} = NW.

Cropland or any other agricultural land^{1/} use which never met wetland criteria = NW.

Cropland which has been abandoned^{3/} will be mapped according to the conventions for pasture and hayland, or wetlands, as appropriate. Prior converted cropland, which has been abandoned^{3/}, but which does not meet wetland criteria remains labelled as PC.

Pasture and Hayland

Permanent pasture or permanent hayland which meets wetland criteria and has not been abandoned^{3/} = FWP.

Permanent pasture or permanent hayland which meets wetland criteria and has not been abandoned^{3/} + non-hydric soil^{4/} that has hydric inclusions + wet signatures^{5/} on CIR photo, black & white photos, or other photos or color slides = FWP.

FWP + abandoned^{3/} = W.

Permanent pasture or permanent hayland + non-hydric soil^{4/} + no soil survey wetness symbols + no evidence of manipulation^{6/} + no wet signatures^{5/} on CIR photo, black & white photos, or other photos or color slides = NW.

Permanent pasture or permanent hayland + meets cropping history^{2/} prior to 12/23/85 + meets hydric soil^{4/} criteria according to the NPSAM + no wet signature^{5/} + manipulation^{6/} prior to 12/23/85 and has not been abandoned^{3/} = PC.

Wetlands

Other agricultural land^{1/} (excluding pasture, hayland, and cropland) + meets hydric soil^{4/} criteria according to the NPSAM or wet signature^{5/} on CIR photo, black & white photos, or other photos or color slides = W.

Other agricultural land^{1/} (excluding pasture, hayland, and cropland) + non-hydric soil^{4/} + no wet signatures^{5/} on CIR photo, black & white photos, or other photos or color slides, and no soil survey wetness symbols + no evidence of drainage = NW.

Woodland/natural area (narrow bands, strips, small pockets of nonagricultural land^{1/}) + meets hydric soil^{4/} criteria according to the NPSAM or wet signature^{5/} on CIR photo, black & white photos, or other photos or color slides = W.

Woodland/natural area (narrow bands, strips, small pockets of nonagricultural land^{1/}) + non-hydric soil^{4/} + no wet signatures^{5/} on CIR photo, black & white photos, or other photos or color slides, and no soil survey wetness symbols + no evidence of manipulation^{6/} = NW.

Impoundments constructed on undrained hydric soils^{4/} or in existing wetlands = W.

Wetlands created by beaver activities or other natural events + any soil + present for at least five years = W.

Wetlands created by human activities on non-hydric soil^{4/}, active (or not abandoned^{3/}) prior converted cropland, or in other non-wetland situations = AW.

Manipulated Wetlands

Any wetland that was manipulated^{5/} after December 23, 1985, but the manipulation did not make production of an agricultural commodity possible = WX.

Converted Wetlands

Any wetland that was converted^{6/}, between December 23, 1985 and November 28 1990 which made the production of an agricultural commodity crop possible = CW.

Any wetland that was converted^{6/}, after November 28, 1990 which made the production of an agricultural commodity crop possible = CW+year.

Any wetland that was converted^{6/}, prior to December 23, 1985, has not been used for cropland, and wetland criteria have not returned = NW.

* * * * *

KEY TO SYMBOLS

- PC = Prior Converted Cropland
- FW = Farmed Wetland
- FWP = Farmed Wetland - Pasture or Hayland
- NW = Non-wetland
- W = Wetland
- AW = Artificial Wetland
- CW = Converted Wetland
- CW+year = Converted Wetland and year of conversion after 1990
- WX = Manipulated wetland after 1985

FOOTNOTES

Wet signature^{1/} is a sign of a water-stressed crop, no crop growing, or standing water. A wet signature on a fallow field or recently tilled field is identified by a darker reflection than the surrounding soil color reflection. Textural or color contrast against an otherwise uniform area may indicate wetness. Tire marks, mowing, and plowing patterns which show avoidance of a wet feature on the map are other signs that may be indicative of wetness. Stereoscopic aerial photography can show relief and vegetation strata.

Other agricultural land^{2/} is land other than for cropping, hayland, or pasture. Examples are orchards, vineyards, and other perennial crops that are not annually tilled.

The following footnotes follow the definitions as found in the National Food Security Act Manual (NFSAM):

Cropping history^{2/}

Abandonment^{1/}

Hydric soil^{4/}

Manipulation^{6/}

Converted wetland^{8/}

The following footnote further defines the definition as found in the Interagency Memorandum of Agreement Concerning Wetlands Determinations for Purposes of Section 404 of the Clean Water Act and Subtitle B of the Food Security Act.

Nonagricultural land^{1/} is land that has greater than 50% aerial coverage of non-grasses and non-legumes within a distinct plant community. This definition applies to aerial photo interpretation or field observation.

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ADDENDUM

The following statement is a disclaimer to be made available to all USDA participants for whom SCS provides wetland determinations.

DISCLAIMER

THE FOOD SECURITY ACT OF 1985, AMENDED BY THE FOOD, AGRICULTURE, AND CONSERVATION TRADE ACT OF 1990, REQUIRES THAT A WETLAND DETERMINATION BE DONE ON YOUR TRACT OR TRACTS AS PART OF MAINTAINING ELIGIBILITY FOR USDA PROGRAM BENEFITS.

THE DETERMINATION FOR YOUR TRACT OR TRACTS WAS MADE ACCORDING TO OFF-SITE PROCEDURES BASED ON CURRENT CONDITIONS. THE DETERMINATION IS ONLY AN INDICATION OF THE APPROXIMATE LOCATION OF WETLANDS AND THEIR BOUNDARIES.

THIS DETERMINATION IS NOT AN EXEMPTION FROM ACTIVITIES COVERED BY THE CLEAN WATER ACT OR OTHER FEDERAL, STATE, OR LOCAL REQUIREMENTS. BEFORE YOU DISTURB WETLANDS ON AGRICULTURAL OR NON-AGRICULTURAL LAND, YOU WILL REQUEST AN ON-SITE DELINEATION FROM SCS OR THE CORPS OF ENGINEERS, RESPECTIVELY, FOR THOSE ACTIVITIES COVERED UNDER SECTION 404 OF THE CLEAN WATER ACT.

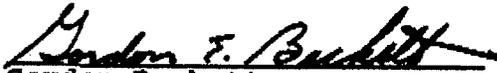
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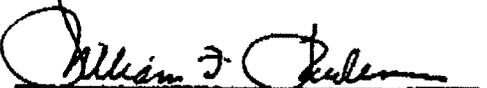
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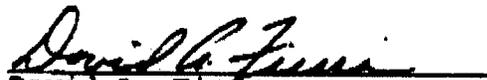
MAPPING CONVENTIONS FOR WETLAND DETERMINATIONS

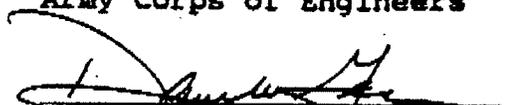
In January 1994, the Department of Agriculture, Department of Interior, Department of the Army and Environmental Protection Agency (EPA) signed a Memorandum of Agreement (MOA) concerning the delineation of wetlands for purposes of section 404 of the Clean Water Act and Subtitle B of the Food Security Act. Section V.A.1. of the MOA required each USDA-Soil Conservation Service (SCS) State Conservationist to take the lead in working with the Army Corps of Engineers (Corps), EPA and Fish and Wildlife Service (FWS) to develop mapping conventions for use by SCS field staff in making wetland determinations.

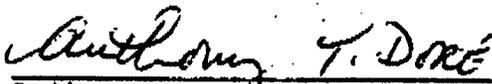
The SCS State Conservationists for the six New England states; the New England Division of the Corps; the New England Area Office of the FWS; and the New England Regional Office of the EPA have cooperated and developed the mapping conventions in accordance with the terms of the MOA. The undersigned officially concur with and endorse these mapping conventions, which are attached.

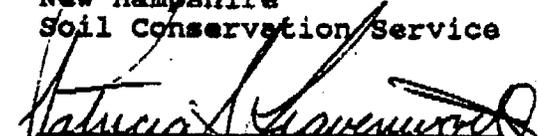

Gordon Beckett
Supervisor
New England Area Office
Fish & Wildlife Service

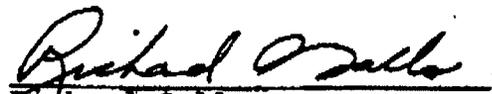

William F. Lawless, P.E.
Chief, Regulatory Division
New England Division
Army Corps of Engineers


David A. Fierro
Director
Water Management Division
Environmental Protection Agency

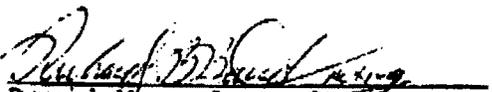

Dawn Genes
State Conservationist
New Hampshire
Soil Conservation Service


Anthony Dore
State Conservationist
Rhode Island
Soil Conservation Service


Patricia Leavenworth
State Conservationist
Connecticut
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Richard Gallo
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Massachusetts
Soil Conservation Service


John Titchner
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Vermont
Soil Conservation Service


David Mussulman
State Conservationist
Maine
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Last signature affixed:
August 10, 1994

DRAFT

DRAFT

**VERMONT MATRIX FOR USING THE
NEW ENGLAND WETLAND MAPPING CONVENTIONS**

The New England Wetland Mapping Conventions are to be followed for all in-office wetland determinations. This matrix is intended to be used as a quick and easy guide for deciding upon the appropriate wetland label for an area under these conventions. This matrix will not cover all situations encountered in the field. Definitions of terms can be found in the third edition of the National Food Security Act Manual (NFSAM). If you have questions or problems concerning the use of this matrix please contact the state office. An asterisk (*) after the label indicates a field verification of this determination may be needed to ascertain if wetland criteria are met on the site.

CROPLAND

Meets Crop History	Abandoned	Hydric Soil Map Unit	Wet Symbol or Signature	Flooding/ Pooling	Designation
Y	N	Y	Y OR N	N	PC
Y	N	N	Y	N	PC
Y	N	Y	Y OR N	Y	FW*
Y	N	N	N	Y	FW*
Y	N	N	N	N	NW

HAYLAND AND PASTURE

Meets Crop History	Manipulated and Used Before 12/85	Abandoned	Hydric Soil Map Unit	Wet Symbol or Signature	Designation
N	Y	N	Y	Y	FWP
N	Y	N	N	Y	FWP*
N	Y	N	Y	N	FWP* or NW*
N	Y	N	N	N	NW

OTHER LAND COVER TYPES

Meets Crop History	Manipulated and Used Before 12/85	Abandoned	Hydric Soil Map Unit	Wet Symbol or Signature	Designation
N	N	-	Y	N OR Y	W
N	N	-	N	Y	W* or NW*
N	N	-	N	N	NW

MANIPULATED WETLANDS

After 12/23/85	Between 12/23/85 - 11/28/90	After 11/28/90	Made Ag Commodity Crop Possible	For Non-Ag Purpose	Designation
Y	Y	-	Y	-	CW
Y	-	Y	Y	-	CW+YR
Y	-	-	N	-	WX
Y	-	-	N	Y	CWNA

REVIEW OF EXISTING DETERMINATIONS (ABANDONMENT)

Designation	Meets Wetland Criteria	5 Yrs. W/O Annual Crop	5 Yrs. W/O Grazing or Haying	New Designation
PC	Y	N	-	PC
PC	Y	Y	N	FWP
PC	Y	Y	Y	W
PC	N	-	-	PC*
FW	Y	N	-	FW
FW	Y	Y	N	FWP
FW	Y	Y	Y	W
FW	N	-	-	NW* or CW*
FWP	Y	N	N	FWP
FWP	Y	Y	Y	W
FWP	N	-	-	NW* or CW*
NW	N	N	N	NW*
NW	Y	Y	N	FWP*
NW	Y	N	Y	W*
NW	Y	Y	Y	W*