

## **IN, NRCS - Wetland Determination Procedures for Agricultural Land 3/1/07**

### **I. Introduction**

This procedure applies to Agricultural Determinations as defined by the National Food Security Act Manual (NFSAM) and is consistent with the NRCS Indiana Mapping Conventions established by agreement with the Corps of Engineers, Environmental Protection Agency, and U.S. Fish & Wildlife Service in 1994. All wetland determinations shall conform to NFSAM criteria.

### **II. Slide Selection and Review**

#### **Sites without a wetland determination:**

To determine if wetland hydrology (wetland signatures or hydrology indicators as defined in the Agricultural Wetland Data Sheet) was present, review a minimum of 5 years of Farm Service Agency (FSA) slides. Aerial photographs can be used if FSA slides are not available to obtain a minimum coverage of 5 years. Additional slide years will be reviewed as necessary to determine abandonment or to document manipulation for converted wetlands. Note: Stream gauge data may also be used to determine hydrology if available.

**Step 1:** Choose all slides from 1980-1985 which are years of normal precipitation. If you have 5 years of normal precipitation slides, go to step 4, if not go to step 2.

**Note:** a 1985 and/or 1986 slide(s) must be reviewed to document land use as of December 23, 1985.

**Step 2:** Starting with the earliest available slide and working forward in time, select 5 years of slides with normal precipitation. If you have 5 years of slides with normal precipitation go to step 4, if not go to step 3.

**Step 3:** If 5 years of normal precipitation slides are not available, choose an equal number of wetter-than-normal and drier-than-normal slide years to complete a set of at least 5 slides which include the normal-year slides from step 1. Then go to step 4.

**Step 4:** Review the slides from steps 1 – 3 for wetland signatures and document the results on an “Agricultural Wetland Data Sheet” (available on the Indiana NRCS web site),

**Step 5:** Consult the attached flow chart on page 6 to determine the preliminary wetland label. All final wetland labels must meet the criteria in this document and NFSAM.

#### **Sites with ONLY prior non-certified wetland determinations designated as Prior Converted (PC or PC/NW):**

Wetland determinations completed before July 3, 1996 are not certified according to NFSAM policy. The following procedure can be utilized to certify existing non-certified wetland determinations (**only** those with a PC or PC/NW label) that were completed between August 1994 and July 2, 1996. Determinations completed before August 1994 cannot be certified and a new determination shall be completed.

Sites that do not contain potholes, are not located in a natural floodplain, or do not contain wetlands identified on US Fish and Wildlife Service National Wetland Inventory Maps (NWI) can be certified if the existing wetland determination is PC or PC/NW. Follow the steps below to determine if a new wetland determination must be completed.

## IN, NRCS - Wetland Determination Procedures for Agricultural Land 3/1/07

**Step 1:** Is the site(s) located on a US Fish and Wildlife Service National Wetland Inventory Map (NWI). If no, go to step 2; if yes, the determination cannot be certified and a new wetland determination must be completed.

**Step 2:** Review a 1985 and/or 1986 FSA slide as appropriate to determine if the site meets the PC definition as of Dec. 23, 1985. Does the site meet the PC definition? If yes, go to step 3; if no, the determination cannot be certified and a new wetland determination must be completed.

**Step 3:** Is the site(s) located in the Wisconsin glaciated region? If yes, go to step 5, if no go to step 4.

**Step 4:** Is the site(s) located in a natural flood plain using the NRCS soil survey and/or USGS Topographic Map? If yes, go to step 6; if no certify the determination as PC or PC/NW as appropriate.

**Step 5:** Complete a site visit to determine if the site(s):

A. Contain pothole(s)? see definition on page 8.

If yes, go to Step 6; if no, go to step 4B.

B. Is the site(s) located in a natural flood plain? If yes, go to step 6. If no, certify the exiting wetland determination with a PC or PC/NW label as appropriate.

**Step 6:** Sites that are potholes or located in a natural floodplain cannot be certified using procedures in this section, and a new wetland determination must be completed.

### III. Prior Converted Cropland

Prior Converted Cropland (PC) is a converted wetland that meets all of the following:

- The conversion occurred prior to December 23, 1985
- An agricultural commodity had been produced on the site at least once before December 23, 1985
- As of December 23, 1985 the converted wetland did not support woody vegetation.

PC areas do not meet Farmed Wetland (FW) hydrology criteria as defined in NFSAM and this document. Wetland signatures on FSA slides, if present, will be less than or equal to 50% of all reviewed slides and/or scope and effect criteria (page 3) indicates hydrology is removed. PCs are not subject to abandonment under provisions of the Food Security Act of 1985.

### IV. Farmed Wetland

According to the NFSAM, the following four criteria must be met and the **scope and effect criteria** of pre-1985 drainage does not remove wetland hydrology for a site to be considered Farmed Wetland (FW).

1) The area must have been manipulated prior to December 23, 1985.

The manipulation could be hydrologic, such as installation of tiles, ditches, etc., and/or vegetative such as removal of trees. Unless physical evidence exists, FSA slides, aerial photographs, or soil survey atlas sheets must show evidence of the manipulation. Examples of physical evidence include “as built” tile construction plans, installed tile, etc.

## IN, NRCS - Wetland Determination Procedures for Agricultural Land 3/1/07

- 2) An agricultural commodity was produced once before December 23, 1985.

The FSA slides, aerial photographs, or other documentation must show that the area had been planted to an agricultural commodity e.g., corn, soybeans, or wheat in any one year prior to December 23, 1985. An aerial photograph, FSA slide, or soil survey atlas sheet that shows the area as cropland may be used to document cropping history. If the above documentation is not available, then written documentation from the producer or other people knowledgeable about the situation stating that the area was cropped may be used if it does not conflict with evidence from FSA slides, aerial photographs, or from an on-site investigation. Note: A field entered into a set aside program in any year prior to December 23, 1985, as determined by FSA, is considered cropped regardless of actual field conditions that may have existed at that time.

- 3) The area meets the required hydrology criteria for FW.

Review FSA slides from section II and the flowchart on page 6 and 7 to determine if hydrology criteria (page 8) have been met. Review **scope and effect criteria** on page 3 to determine the effect of pre-1985 drainage. If scope and effect criteria (page 3) indicate hydrology is removed label the area as PC, or non-wetland (NW) as applicable.

- 4) The site has not been abandoned.

Review criteria for abandonment.

### Criteria for Abandonment

Abandonment is the cessation of management on FW or FWP for 5 consecutive years. PC areas are not subject to abandonment under provisions of the Food Security Act of 1985. Abandonment can apply to Non Wetlands (NW) on hydric soils if the vegetation reverts to a dominance of hyrophytic plants from lack of management over a five year period. Note: Sites enrolled in a conservation set-aside program are not subject to abandonment while they are enrolled in the set-aside program, e.g. CRP.

If one of the following applies the site meets abandonment criteria:

- A 5-year coverage (span of time) of aerial photography documents that the site is dominated with woody vegetation.
- An on-site investigation documents that the site is dominated by woody vegetation greater than 5 years old.
- Site(s) have been dominated by obligate wetland vegetation (e.g. cattails) for 5 consecutive years. Documentation using slides or aerial photographs must show that the site had the same or similar condition for 5 consecutive years.
- Areas of water on greater than 50% of FSA slides.

### Scope and Effect Criteria

If wetland hydrology criteria have been met from remote sensing data, consider the effects of pre-1985 drainage by consulting the NRCS Engineering Field Handbook, Chapter 19, Hydrology Tools for Wetland Determinations. If the scope and effect methods conclude that drainage was adequate to remove the wetland hydrology, the site can be considered PC. Only the portion of the area affected by the drainage, according

## IN, NRCS - Wetland Determination Procedures for Agricultural Land 3/1/07

to the scope and effect methods, can be considered PC. Methods or equations used to determine scope and effect must be documented. **Note:** the effects of pre-1985 drainage are not considered on FW and FWPs that are abandoned. If the site is abandoned, label the site with the appropriate wetland label.

Before using Chapter 19, pre-1985 drainage must be documented as being present according to NFSAM. A determination of prior manipulation can only be made if there is supportable documentation or evidence.

- Narrative evidence from the USDA program participant is not sufficient, by itself, to support a determination of prior manipulation.

Evidence of prior manipulation must be supported by one of the following:

- As-built set of plans prior to December 23, 1985 from a contractor or NRCS.
- Landowner probing and flagging the tile in enough locations to confirm that the tile exists. NRCS must determine adequacy of the tile outlet and also confirm the presence of tile as noted by landowner. The landowner must also provide written documentation in the form of a letter, contractor bill, etc. that the tile was installed before December 23, 1985.
- Presence of an open ditch constructed before December 23, 1985 that is close enough to the site to remove wetland hydrology.

### V. Farmed Wetland Pasture

According to the NFSAM, the following four criteria must be met and the **scope and effect criteria** of pre-1985 drainage does not remove wetland hydrology for a site to be considered Farmed Wetland Pasture (FWP).

- 1) The area must have been manipulated prior to December 23, 1985.  
The manipulation could be hydrologic, such as installation of tiles, ditches, etc., and/or vegetative such as removal of trees. Unless physical evidence exists, FSA slides, aerial photographs, or soil survey atlas sheets must show evidence of the manipulation. Examples of physical evidence include “as built” tile construction plans, installed tile, etc.
- 2) The area was managed for pasture or hayland in any year prior to Dec. 23, 1985.  
Indicators of pasture or hayland include evidence of mowing, livestock trails, fences, or the site was manipulated e.g. trees and stumps removed prior to Dec. 23, 1985, and not abandoned. If the above documentation is not available, then written documentation from the producer or other people knowledgeable about past management of the site may be used as supporting documentation if it does not conflict with evidence from FSA slides, aerial photographs, or from an on-site investigation. If the site does not have pasture or hayland history available from FSA or the landowner, then management is assumed to have taken place, if the site was manipulated prior to Dec. 23, 1985, and not abandoned.
- 3) The area meets the required hydrology criteria for FWP.  
Use FSA slides from section II and the flowchart on page 6 and 7 to determine if hydrology criteria have been met. Review **scope and effect criteria** on page 3 to determine the effects of pre-1985 drainage. If hydrology is removed label the site as NW.

## **IN, NRCS - Wetland Determination Procedures for Agricultural Land 3/1/07**

Sites dominated by permanent vegetative cover meet the saturation criteria for FWP if:

- They are dominated by hydrophytic vegetation from an on-site visit that appears similar or the same as the December 23, 1985 condition.

4) The site has not been abandoned.

Review abandonment criteria from page 3.

### **VI. Non-Wetland**

Areas that were not cropped and did not meet wetland criteria on December 23, 1985 and do not currently exhibit wetland criteria are labeled as non-wetland (NW). NW's can be abandoned as described on page 3, Criteria for Abandonment.

### **VII. Agricultural Land with Narrow Fence Rows**

Narrow fence rows are less than 15 feet wide measured from tree trunk to tree trunk. They are NW if both sides of the fence row has a certified determination of PC or PC/NW or if the area on both sides of the fence row is documented as PC or PC/NW using the procedures in this document. Fence rows wider than 15 feet wide will be evaluated using the 1987 COE Manual.

### **VIII. Herbaceous Sites That Appear to Meet Wetland Criteria**

Sites that currently meet wetland criteria from a site visit will require additional remote sensing analysis to determine if wetland conditions were present on December 23, 1985. Current imagery and FSA slide(s) should be obtained to document the current "foot print" as the base line condition of the site under consideration.

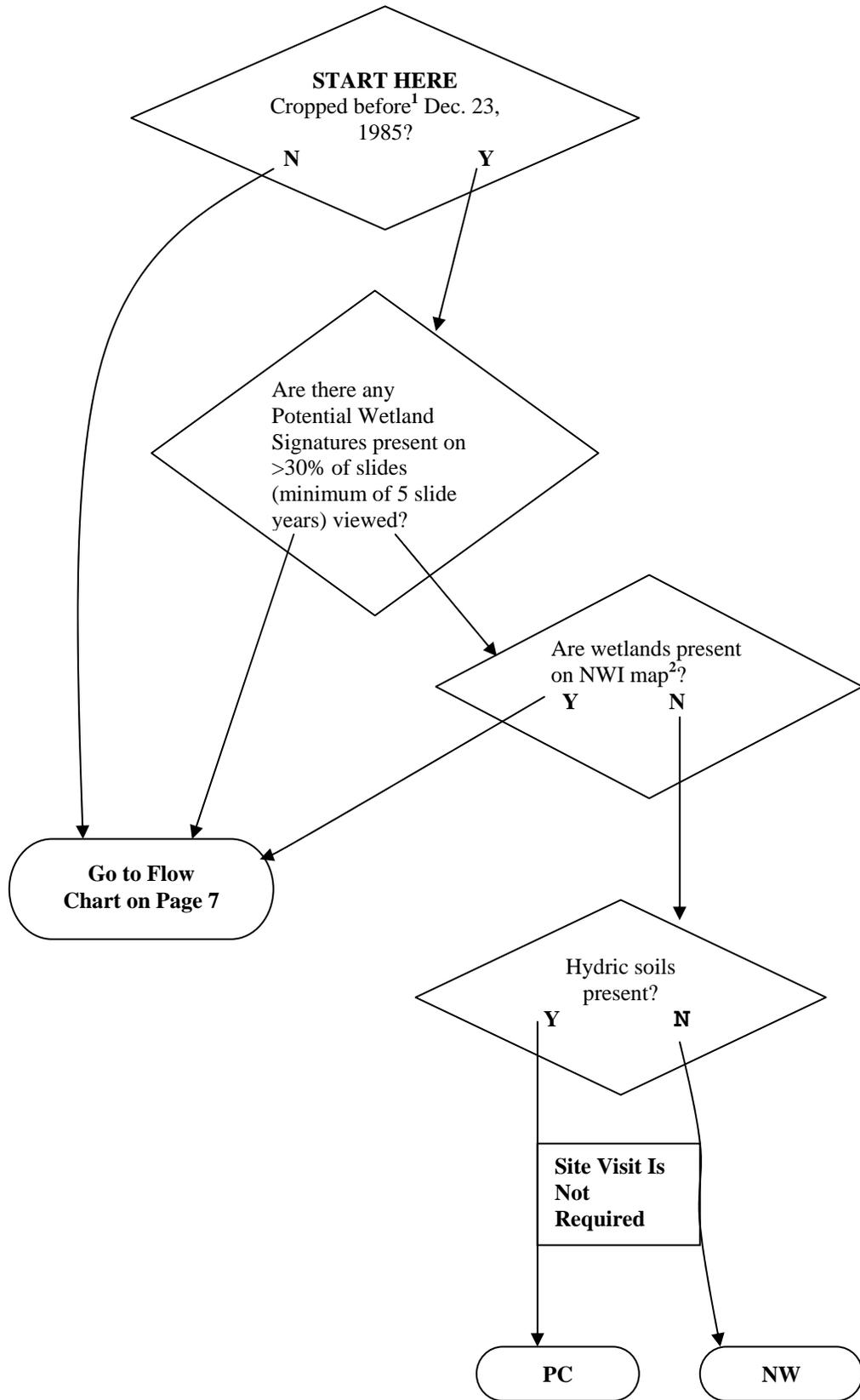
#### Remote Sensing Analysis

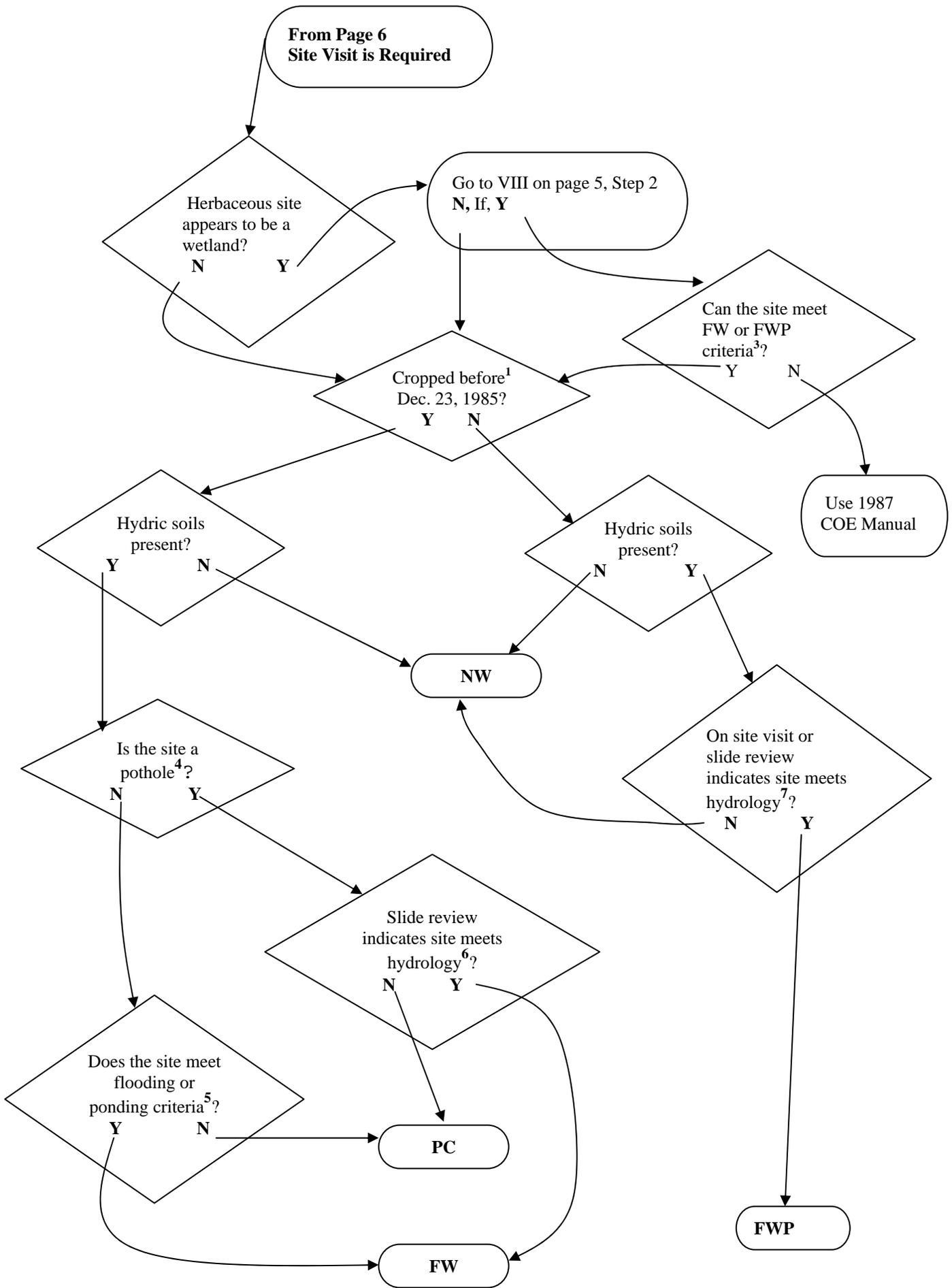
**Step 1:** Review the 1985 and/or 1986 slide(s) to determine the December 23, 1985 condition. Document the imagery data for slide(s) on an Agricultural Wetland Data Sheet.

**Step 2:** Is the current "foot print" similar or the same as the December 23, 1985 condition? If no go to step 3, if yes see flow chart on page 7 and determine if the site can meet FW or FWP criteria. If the site cannot meet FWP criteria use the 1987 COE Manual to make the wetland determination based upon current site conditions.

**Step 3:** Continue with the Flow Chart on page 7 and complete the determination as an agricultural determination.

**IN, NRCS - Wetland Determination Procedures for Agricultural Land 3/1/07**





## Attachment - Footnotes for Wetland Flow Chart

<sup>1</sup> Flowchart assumes the site was manipulated prior to December 23, 1985 for agricultural purposes and the site is not a wetland using the NFSAM and the 1987 COE Manual.

<sup>2</sup> US Fish and Wildlife Service National Wetland Inventory Map (NWI)

<sup>3</sup> For example a site dominated with Reed Canary Grass that was used for hay and/or pasture.

<sup>4</sup> A pothole is a symmetrical closed depression that ponds water greater than 1 foot deep if not drained, with side slopes dominantly greater than 2%. Potholes only occur in the Wisconsin glaciated region.

<sup>5</sup> Flooding or ponding criteria, NFSAM, **non-pothole site** that has a 50% or more chance of being inundated for at least 15 consecutive days during the growing season, or 10% of the growing season whichever is less. FSA slides must show water and/or a drowned out spot indicative of inundation on greater than 50% of all slide years viewed. In addition stream gage data can be used to document flooding or ponding criteria if available.

<sup>6</sup> Wetland hydrology criteria, NFSAM, for **potholes**, is inundation for at least 7 consecutive days or saturation during the growing season for at least 14 consecutive days. To meet saturation criteria wetland signatures must be present greater than 50% of all FSA slides viewed. To meet inundation criteria, FSA slides must clearly show water and/or a drowned out spot indicative of inundation greater than 50% of all slide years viewed.

<sup>7</sup> Wetland hydrology criteria, NFSAM, **FWP** is inundation for at least 7 consecutive days during the growing season or saturation for at least 14 consecutive days during the growing season. To meet inundation criteria, FSA slides must clearly show water and/or a drowned out spot indicative of inundation greater than 50% of all slide years viewed. To meet saturation criteria an on-site visit documents that the plant community was dominated by hydrophytic vegetation in 1985 (see page 4 item 3) or wetland signatures are present greater than 50% of all FSA slides viewed.

<p><b>NOTE:</b> Before issuing a wetland determination, if applicable consider scope and effect criteria from page 3 and abandonment criteria for NW, FW and FWP from page 3.</p>
---