

NRCS State-level Farmed Wetland Hydrology Indicators – Response to Comments

June 2023

Summary

The regulations for the wetland conservation (WC) provisions of the Food Security Act of 1985, as amended, are provided in Title 7 of the Code of Federal Regulations (CFR) [part 12](#), “Highly Erodible Land and Wetland Conservation.” The regulations’ broad definition of “wetland determination” describe a farmed wetland (FW) as including the following criteria. First, a FW is a wetland that prior to December 23, 1985, was manipulated and used to produce an agricultural commodity at least once before December 23, 1985. Second, FWs are wetlands that on December 23, 1985, did not support woody vegetation, and met the following hydrologic criteria: If not a playa, pocosin, or pothole, experienced inundation for 15 consecutive days or more during the growing season or 10 percent of the growing season, whichever is less, in most years (50-percent chance or more).

USDA published a final rule in the Federal Register ([85 FR 53137–53152](#)) on August 28, 2020, which clarified how the Natural Resources Conservation Service (NRCS) determines the hydrology requirements for FWs to bring transparency to USDA program participants. Those regulations provided that the observation of wetland hydrology indicators as identified in the local NRCS Field Office Technical Guide was one of three ways that NRCS could use to decide if an area supports the required inundation for a FW that is not identified as a playa, pocosin, or pothole.

NRCS provided notice in the FR ([86 FR 52632-52634](#)) on September 22, 2021 that it was proposing to include FW hydrology indicators as revisions to the Field Office Technical Guides in Alabama, Alaska, Arizona, Arkansas, California, Caribbean Area, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii and Pacific Islands Area, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. NRCS received three responses to the notice which provided 28 comments. The comments were generally supportive, and a summary of comment topics and responses is below.

Comment Topics and Responses

General Comments

NRCS received 5 comments that generally supported the establishment of FW hydrology indicators, including that they increase clarity for agricultural producers, reduce confusion related to the FW requirements among regulated stakeholders, and help acknowledge the unique regional characteristics of wetlands across the country. NRCS appreciates this support for the establishment of the FW indicators.

Implementation

NRCS received 3 comments seeking clarity on how the FW indicators are to be implemented in the NRCS wetland determination process. The FW indicators will be used when conducting new certified wetland determinations. The wetland determination process for implementation of the WC provisions includes three distinct steps, described at Title 7 CFR Part 12.31(c)(7). In Step 1, wetland identification, it is

determined if an area is or is not a wetland (whether it supports a prevalence of hydrophytic vegetation, a predominance of hydric soils, and wetland hydrology under normal circumstances). During this step, areas can meet the wetland hydrology factor, even though they are not inundated for 15 consecutive days (for example, some sites can meet wetland hydrology only due to saturation long enough to support hydrophytic vegetation). Step 2 is where the determination of wetland type (or exemption) is made. Here is where these FW hydrology indicators will be used on areas that were determined to be a wetland in Step 1, to determine if the area supports the unique 15 days of inundation required for the farmed wetland type to apply. The Step 2 decision is uniquely different from the Step 1 decision, even though they may both be based on indicators (in Step 1, hydrology indicators from the Regional Supplements to the 1987 United States Army Corps of Engineers Wetland Delineation Manual (Corps Manual) may be used to document wetland hydrology). In summary, if NRCS finds that an area meets the 3 wetland factors (hydrophytic vegetation, hydric soils, and wetland hydrology) in step 1, then NRCS can use these FW indicators for wetlands that are not playas, pocosins, or potholes to decide if the 15-day inundation requirement is met as part of the criteria for the area to be determined a FW in Step 2. In general, only one FW hydrology indicator is sufficient to document the 15-day inundation requirement, although some States have adopted the secondary indicator concept in which case one primary, or two secondary indicators would be required. In most cases, wetlands that do not meet the 15-day inundation requirement in Step 2 will be considered prior converted (PC) cropland provided that all the other conditions of the PC designation are met. If an area does not meet all three wetland factors in Step 1, then the FW indicators are never applied.

NRCS received 2 comments regarding transparency and outreach, and one comment regarding training on the use of FW indicators. NRCS has publicized the proposal and adoption of these FW hydrology indicators through the FR notice and website content at the national level, including development of the frequently asked questions at <https://www.nrcs.usda.gov/farmed-wetland-hydrology-indicators>. Additional outreach will continue to occur at the State level and any questions on implementation in a State can be directed to the appropriate NRCS State Office (<https://www.nrcs.usda.gov/conservation-basics/conservation-by-state>). Training on the use of FW indicators will be conducted at the State level, with specific training targeted to the indicators applicable in that State. Additionally, NRCS has developed a new training course on wetland hydrology for WC purposes, including guidance on the use of FW indicators. All training efforts will include the important consideration of appropriate user notes and cautions, as well as the consideration of potential false positives and false negatives.

Prior Converted Cropland

NRCS received 2 comments related to how adoption of the FW hydrology indicators may affect the status of lands already determined to be PC. The establishment and use of these FW indicators will not affect areas that have already received a certified wetland determination indicating the presence of PC. According to the regulations, a prior certified determination may only be revised if a person makes a valid request for review due to a change in topography or hydrology due to a natural event, or if NRCS agrees that an error exists in the current wetland determination.

Indicator Development and Consistency

NRCS received 8 comments related to the development and consistency of the FW hydrology indicators. As a start to the process of developing the State-level indicators, States were provided a template of indicators to evaluate and modify according to each State's unique characteristics and conditions. This

national template was developed in careful consideration of FW characteristic across the country and the unique USDA FW inundation requirement. The national template also built upon longstanding wetland hydrology indicator principles established in other technical documents like the Regional Supplements to the Corps Manual. In consultation with their State Technical Committee, States considered whether each indicator was reliable for meeting the FW hydrology criteria, whether the specific criteria and user cautions needed to be modified, and whether to include additional indicators unique to certain areas. This process provided for a level of national consistency, while also allowing the necessary State-specific tailoring according to local conditions. NRCS national headquarters (NHQ) worked with States to evaluate and approve modifications to the national template indicators. This was done to ensure that they were reflective of local conditions and the unique USDA FW inundation requirement prior to adoption, as well as foster as much consistency as possible. Once States finalized their indicators in consultation with NHQ, they were reviewed with each State Technical Committee to obtain additional local input. Once any changes were finalized, the indicators were published in the FR for notice and comment. Any further questions about indicator development in a particular state can be directed to the NRCS State Conservationist.

The Indicator Based Approach

NRCS received 2 comments on the use of indicators for hydrology decisions in general and 2 comments on specific FW hydrology indicators. One comment expressed concern that the indicators must provide evidence of long-term inundation or the required “number of days” to meet FW hydrology criteria. As supported by wetland science and long-standing application, NRCS has predominantly used and continues to use the indicator-based approach to wetland identification. For wetland hydrology decisions, this means reliance on criteria that are based on observable field conditions, or in some cases conditions visible on remote resources, that result from the presence of water during the growing season. This reliance on indicators, or use of the “indicator-based-approach,” first began extensively with the development of the Corps Manual in 1987, and was further refined and expanded with the development of the Regional Supplements to the Corps Manual in the mid-2000’s. NRCS first officially started using indicators in 1994 with the signing of the Memorandum of Agreement with the Environmental Protection Agency and the Department of the Army regarding the delineation of wetlands for purposes of Section 404 of the Clean Water Act and Subtitle B of the Food Security Act. The indicators in the Regional Supplements, which replaced those in the Corps Manual, were developed and tested on a regional basis and include indicators for hydrology that are grouped by the type of evidence that they provide. Of note for the identification of FW inundation criteria are group A, which are based on the direct observation of surface water or groundwater during a site visit, and group B, which consists of evidence that the site is subject to flooding or ponding although it may not be inundated currently. In the development of the national template hydrology indicators, NRCS carefully evaluated the indicators from these groups to determine how they might be used for the identification of FW hydrology criteria either as-is or with modification. NRCS selected some of these indicators deemed appropriate for the identification of long-term inundation in an agricultural setting but made modifications to all of them to ensure that they could reliably indicate the necessary long-term inundation. For example, height requirements were added to the indicators surface water and sediment deposits to ensure that the inundation occurs over a period of at least 15 consecutive days or 10 percent of the growing season in most years, given that it takes time for greater amounts of inundation to recede. In all indicators, the user notes and cautions were specifically tailored to the identification of

long-term inundation in the agricultural settings where FWs occur. These indicators were further evaluated and modified by States to ensure that they identify only the required long-term inundation for the necessary number of days to meet the FW hydrology criteria.

NRCS received one comment regarding how the FW hydrology indicators will be used in comparison to a scope and effect analysis when drain tile information and data are available. Conducting a scope and effect analysis based on soil properties and the specific drainage characteristics affecting a site is a valid method for estimating the duration of inundation that occurs. However, in some cases indicators may be more reliable depending on the specific site characteristics, such as the landform (a closed depression vs. floodplain) or the presence of highly variable soil characteristics. In some cases both may be used and considered, and decisions made on the preponderance of evidence. As such, it is impossible to say that one method will always take precedence over another.

NRCS received one comment regarding the use of aerial imagery analysis as an indicator of FW hydrology. The use of aerial imagery analysis is a longstanding process used by NRCS in wetland identification. This is due in part to the abundance of aerial imagery obtained by USDA over the past 40 years, and the fact that in an agricultural landscape signatures of wetness often remain visible long after the wet portion of the growing season. Such signatures can include crop stress or drowned-out crops, but it is important to note that such signatures are not used in the FW hydrology indicator that relies on aerial photos. Only the actual observation of ponding on aerial images taken during the growing season is used as a signature of FW hydrology. Meeting this indicator also requires the observation of ponding on at least two years of photography representative of normal or drier than normal climatic conditions, which increases confidence that the inundation occurs on a regular basis and for the requisite time. As with any indicator, NRCS must consider whether the inundation is the result of normal climatic conditions, if the inundation corresponds with the contributing watershed size, and other important considerations that are included in the user notes and cautions for every FW hydrology indicator. As an additional note, while in the vast majority of places NRCS knows the month that the aerial photography was taken, for older images in some select areas that must be estimated by NRCS based on the photo characteristics and knowledge of crop and other vegetative conditions that occur over a season in an area. The inundation in the FW hydrology indicator must be observed during the growing season, and NRCS can confidently determine when the growing season is occurring based on aerial photography.

NRCS received one comment regarding the use of the FW indicator which relies on the presence of perennial obligate plant species. While NRCS is cautious against conflating wetland factors (using vegetation as proof of hydrology, for example), NRCS disagrees with the comment that asserts the use of this indicator practically eliminates the hydrology requirement altogether. It is important to remember that the wetland determination process includes three distinct steps, described at Title 7 CFR Part 12.31(c)(7). In the first step, NRCS makes decisions on each of the 3 wetland factors and only when all 3 are met is a site determined to be a wetland. The second step, determination of wetland type, is where the FW hydrology indicators are used on sites that have already been determined to meet hydrophytic vegetation, hydric soils and wetland hydrology. Given that the site has already met wetland hydrology, coupled with the fact that this indicator requires the presence of only obligate plant species (almost always occur in wetlands) that are perennial (subsist from one year to the next for many years) and emergent (known to grow in ponded or flooded conditions), NRCS is confident that this indicator is indicative of long-term inundation.

Interagency Concerns

NRCS received 3 comments related generally to jurisdictional wetland delineation among the agencies responsible for implementing the requirements of the Clean Water Act, including the identification of Waters of the United States (U.S. Army Corps of Engineers and the Environmental Protection Agency), and the WC provisions of the Food Security Act of 1985, as amended (NRCS). NRCS appreciates the comments which recognize the coordination that has occurred between these agencies and the suggestions received to continue this coordination, particularly in the identification and treatment of PC. To this effect, in the Fall of 2022 USDA signed a revised memorandum to the field with the U.S. Army Corps of Engineers and the Environmental Protection Agency which furthered the cooperation between the agencies to the extent allowable, given the requirements of the different laws. NRCS looks forward to continuing this cooperation in order to lessen the confusion and burden on those affected by these requirements.