

Q. Why is this plant list important to the Federal government?

A. This list describes one component (plants) used in the process of determining Federal wetland delineation for purposes of Section 404 of the Clean Water Act and the Wetland Conservation Provisions of the Food Security Act.. It is also used by some state agencies for their requirements. It is important that the list use the best scientific and technical information available.

Q. Why does the plant list need updating?

A. The list was originally published by the U.S. Fish & Wildlife Service (FWS) in 1988. The FWS realized that subsequent editions of the list would be inevitable and an appeal procedure was established for submitting proposed changes to the list (e.g. additions, deletions, and changes in indicator statuses). Since the original publication of the 1988 list, many changes to the taxonomy and nomenclature of wetland plants have been proposed and accepted. Following the original publication of 1988 list, the FWS adopted a revised taxonomic standard, *Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland* (Kartesz 1994), as a basis for the names included within the proposed list, *National List of Vascular Plant Species that Occur in Wetlands*.

Q. Didn't the FWS proposed to update the list in 1997?

A. Yes, the FWS published proposed changes to 1988 list in the *Federal Register* (Volume 62, Number 12) on January 17, 1997, in compliance with a 1996 Memorandum of Agreement between the FWS, the U.S. Army Corps of Engineers (Corps), the U.S. Environmental Protection Agency (EPA), and the Natural Resources Conservation Service (NRCS). The inter-agency National Panel, composed of representatives of all four Federal agencies, received comments and, in conjunction with the Regional Panels, reviewed and considered all comments in developing the final draft of list in 1998. For a variety of reasons, the 1996 list was never finalized, and 1988 list remains the only approved list of wetland plant indicator statuses.

Q. Why is the Corps of Engineers leading this effort?

A. In 2006, Corps, along with EPA, FWS, and NRCS, signed a Memorandum of Agreement in which responsibility for updating the *National List of Plant Species that Occur in Wetlands*, now called the *National Wetland Plant List (NWPL)*, was transferred from the FWS to the Corps.

Q. What steps have been included in the updating process so far?

A. Here are the inter-agency steps that have occurred to date:

1. The National Panel, with representatives from the Corps, FWS, NRCS, and EPA, has provided oversight of the entire development and updating of the NWPL. The initial updating process was developed by the National Panel and was approved by each agency's headquarters. The resulting draft list was reviewed by an independent external scientific.

2. Regional Panels composed of agency nominated representatives were assembled. Representatives met stipulated qualifications for botanical and wetland experience and expertise.

3. The NWPL was re-sorted to reflect the same new regional boundaries used to produce the regional supplements to the 1987 Corps Wetland Manual. The NWPL taxonomy and nomenclature updates were completed during this process, and all updated taxa had their previous wetland ratings from the 1996 list assigned to them as a default starting point to take advantage of those previous update efforts, as well as any geographic modifications due to regional realignments. Plants newly proposed as wetland plants were added to the list as they were received from the panels, or from additional scientific information. The currently accepted nomenclature for each of these plants was reviewed for accuracy, and supporting data were added to the web site to assist the panels with assigning a wetland rating.

4. Regional Panels, using the web-based system, developed a first draft of the updated regional lists in their first round (R1) of the draft list. The agency representatives voted on the web site by species in their region. In addition to developing regional ratings, there was an effort to develop subregional lists within the new regions. Only Alaska and the Eastern Mountains and Piedmont chose to subdivide a small number of species for separate subregional ratings. The subregional lists for these two regions are shown in the geographic query when either of these two regions is selected on the web site query page.

5. The Regional Panels conducted a second round of input (R2) to discuss those plants for which there were disagreements in R1, or where votes of the four agencies were ties between inputs of panel assignments. From this second review, a revised draft (R3) of the updated regional lists was developed.

6. In R3, thirty external professional botanists evaluated individual plant statuses with tied ratings resulting from the Regional Panel (R1 and R2) efforts and a final evaluation of plants formerly having the facultative minus (FAC-) rating. Because plus or minus designations have been eliminated from the update of the NWPL, this group of wetland plants (which had formerly been treated as upland plants) warranted a higher level of evaluation to properly assign the new wetland ratings. Additional, Robert Mohlenbrock, who the National Panel agreed was qualified to work at the national level, assigned wetland ratings to 1700 species that the Regional Panels failed to resolve or provide wetland ratings for in their regions.

7. After R1–3, there were still 700 species lacking wetland ratings. A special review (R4) by John Kartesz (BONAP), Mary Butterwick (EPA), and Robert Lichvar (Corps) provided wetland ratings for these less-well-known species. Once R4 was completed, the entire list of 8,558 wetland species had received specific wetland ratings, which were displayed on the NWPL web site.

8. In the final interagency review (R5), the Regional Panels evaluated the wetland ratings of the 14 species changed by the external professional botanists and those R1-2 species that were tied or formerly listed as FAC-, and the 700 species assigned by Mohlenbrock, Kartesz, Butterwick, and Lichvar to the regional lists. There were 338 species changed by the external botanists. Of these, the Regional Panels appealed the results for 78 species. The National Panel evaluated the

appeals and decided that at this point it would not be appropriate to select wetland ratings until all input is made through the FR process. Consequently, no changes were made to any appealed ratings during this step.

9. The draft wetland plant list posted on the NWPL web site for the open comment period of the Federal Register shows all progress to date. On each wetland plant “species page” on the web site, a summary of the votes from R1-5 by the panels and the external botanists are presented. At this point in the update, all wetland ratings are open for input by the states and the public so neutrality is maintained and the input is considered equally for the final phase of updating.

Q. Who, outside the four Federal agencies, has been involved in developing this draft list?

A. Besides the external academic botanists (3 for each of the 10 regions for a total of 30), a contract was initiated by the Corps with the Battelle Memorial Institute to provide an independent peer review of the list, as required by the Information Quality Guidelines. As well as reviewing the final draft, this contract required the review and comment on intermediate steps in the process of developing a final draft List, such as how to scientifically determine an indicator status, how to collect and analyze data on plant occurrence, and other technical/scientific questions.

Q. What are the figure steps to finalizing the indicator status of this list?

A. Public comments received through the web-based system will be compiled and tracked to provide an administrative record which will be maintained on the website and available for viewing by the public. Regional Panels, in conjunction with the National Panel, will review comments from the Tribes, states, and the public and will develop the final regional lists. The majority of final wetland ratings will be developed based on the consensus of all input. For those remaining species without consensus, the National Panel will assign ratings using a specific protocol developed for this purpose. The protocol will be reviewed and input taken from the multi-agency/academic National Technical Committee on Wetland Vegetation. After the National Panel assigns wetland ratings to non-consensus species and reviews all regional lists, it will develop the final NWPL. Notice of the final NWPL will be published in the *Federal Register* along with the web address. Maintenance and annual reviews and updates of the NWPL will be done using the web-based system.

Q. What happened to the (+) and (-) modifiers.

A. The plus and minus modifiers were dropped, and only five indicator designations (OBL, FACW, FAC, FACU, UPL) will be used in the final published document. Because the National Panel has shifted the definitions from a series of numerical categories to written definitions, the use of plus and minus suffixes are difficult to apply accurately. All plants previously assigned these modifiers will be automatically merged into their broader indicator category during the review and revision process, with the exception of those plants assigned FAC-. The National and Regional Panels will be required to review all species from 1996 list that were assigned FAC- to appropriately categorize their wetland fidelity.

Q. What are the new definitions of the plant categories?

A. In 1988 list, there are five indicator statuses, or ratings, used to describe a plant's likelihood for occurrence in a wetland versus an upland: Obligate Upland (UPL), Facultative Upland (FACU), Facultative (FAC), Facultative Wetland (FACW), and Obligate Wetland (OBL). These statuses represent the estimated probability of a species occurring in wetlands versus nonwetlands in a region. This method is problematic for two reasons: the ratings are not supported by numerical data, and the previous FWS definition of frequency (which was the numerical division of groups that the wetland plant ratings were tied to) did not include a mathematical expression useful for testing the wetland ratings. These issues have led to misinterpretations of the frequency formula. To address some of these problems, the National Panel modified the definitions for the indicator status categories to increase clarity and to better describe species occurrences. The ones developed recently by the National Panel for updating the NWPL are

- OBL: Almost always is a hydrophyte, rarely in uplands;
- FACW: Usually is a hydrophyte but occasionally found in uplands;
- FAC: Commonly occurs as either a hydrophyte or non-hydrophyte;
- FACU: Occasionally is a hydrophyte but usually occurs in uplands;
- UPL: Rarely is a hydrophyte, almost always in uplands.

The original information supporting indicator status assignments, from the 1988 list through the 1996 list, was qualitative and not quantitative. To better reflect the supporting information, the new category definitions are based on qualitative descriptions. The percentage frequency categories used in the older definitions will be used for testing problematic or contested species being recommended for indicator status changes.

Q. How can I comment on this draft list?

A. Commenters will make input using the web address: http://wetland_plants.usace.army.mil/ When visiting the web site the first time, the user will have to accept the Department of Defense (DoD) certificate associated with the secure web site. Once on the web site, the user needs to click on the link titled "PARTICIPATE IN THE NWPL UPDATE". The commenter will be sent to a login page where they will enter their name, a user name (first initial and last name), password, e-mail address and select their institutional affiliation. The automatic login generator will, by e-mail, confirm the registration of the user name and password and the user can then login and proceed to the query page. The Corps wetland supplement regions map is shown in a color-coded format. Comments may be made on one or multiple wetland supplement regions. The entire wetland plant list for each wetland supplement region is shown on the results page after a region is chosen and accepted. All prior votes associated with the update can also be shown on the query results page by selecting the "Yes" "Show All Votes?" radio button at the top of the page. Each species has a red "vote" link in each row. Clicking on the red word "VOTE" for that species will send the commenter to the species page where a vote may be made. The species page includes scientific and common names, synonyms, voting history by the panels, 1988 and 1996 statuses and maps based on North American distributions and counties. This information can be considered when submitting comments on the wetland rating for the species. Comments including literature citations, experiential references, monitoring data and other relevant reports should be submitted through the "Questions or Comments? Contact us!" link on the homepage. All votes and comments will be compiled and sent to the Regional Panel for their consideration. In the Atlantic and Gulf Coastal Plains region, "more input needed" is marked in red for 75 species. The Corps is requesting assistance in

the form of comments, literature references, data or experience for these species in the comment box to help clarify their status.

Q. Once the final list is published, what is the future for the *National Wetland Plant List*?

A. Protocols were developed to ensure that updates to the NWPL will occur biennially or as necessary and that they will follow scientifically acceptable procedures. The updating process will provide guidelines established by the National Panel for testing wetland indicator status ratings for future recommended changes and additions to the NWPL. The process will be supported by an interactive web site where all procedures and supportive information will be posted. Information on this searchable web site will include the names of all National and Regional Panel members, prior ecological information obtained by the FWS or Kartesz (BONAP) for each species, any input previously made by others that was retained in the FWS database on the NWPL, and links to botanical literature and plant ecology information to support assignment of wetland indicator statuses of all species under consideration.

Once the NWPL is initially updated, this web site will facilitate regular updates as additional information is submitted and nomenclature changes. These changes will be generated through a modification of the web-based process outlined above. Regular updates based on nomenclature changes will be developed on a biennial basis. Anyone may petition for a change in indicator status for any taxon by submitting appropriate data. This will include frequency and abundance data for the taxon in wetlands and uplands in a broad range of the region or subregion for which the change is proposed. Such data will be reviewed and evaluated by the appropriate Regional Panel, and any changes they recommend will go through a vetting process similar to the initial NWPL update. The web site will contain the most recent, currently valid indicator statuses.