

# Updating the National Wetland Plant List

The screenshot shows the website interface for the National Wetland Plant List. At the top, there is a navigation bar with 'Home Page' and 'Plant Search' buttons. Below this is a header banner for the 'US Army Corps of Engineers North American Digital Flora: National Wetland Plant List'. A secondary navigation bar includes 'NWPL Home Page', 'Plant Lists', 'Documents', 'Information', and 'Testing ...'. The main content area features a large grid of plant images, with a prominent red columbine in the center. To the right, a 'NWPL Partners' sidebar lists several organizations with their respective logos: US Army Corps of Engineers, US Fish & Wildlife Service, Environmental Protection Agency, BONAP, and NRCS. At the bottom of the image grid, it states 'Images courtesy of BONAP et. al.'

Robert Lichvar  
ERDC/Cold Regions Research  
and Engineering Laboratory (CRREL)



US Army Corps of Engineers

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# NWPL is Authorized: Start Date: 1 June 2012

So where do I get a List?

- State and Regional Lists are posted on the homepage of NWPL: <https://rsgis.crrel.usace.army.mil/apex/f?p=703:1>
- All input is transparent and hosted on the web site by regions and species
- You can challenge a rating and we have a process to handle simple to complex rating change requests

# Acknowledgements

- A national effort lead by the Corps of Engineers
- National Panel (4 botanists) from the four Federal agencies; Corps, FWS, EPA, and NRCS
- 65 Regional Panel members and their alternates from the same four agencies
- 30 external professional botanists; museums and universities
- 377 public participants in the process; 6 other federal agencies, states, and professional ecologists

# National Wetland Plant List

- What is it?
  - The National Wetland Plant List is a Federal species list that is used in a three factor approach with hydric soils, wetland vegetation and evidence of hydrology to make wetland determinations for the purposes of the CWA Section 404 program and other purposes
  - The NWPL is an independently derived list of wetland plant ratings for each species that is used within the wetland delineation protocols for the vegetation factor

# Background

- The NWPL was transferred from the U.S. Fish and Wildlife Service to the Corps of Engineers in December 2006
- Management of the list, including updating the scientific names, is an interagency effort of the Corps, FWS, EPA, and NRCS
- A National Panel, comprising botanists from the four agencies, was established in 2007; Regional Panels were established in 2008
- 1988 list had 6,728 species, 1996 had 7,662 and 2012 has 8,200
- Increase in NWPL species over 25 years is dominated by scientific nomenclature changes and only 70 newly proposed additions in 2012

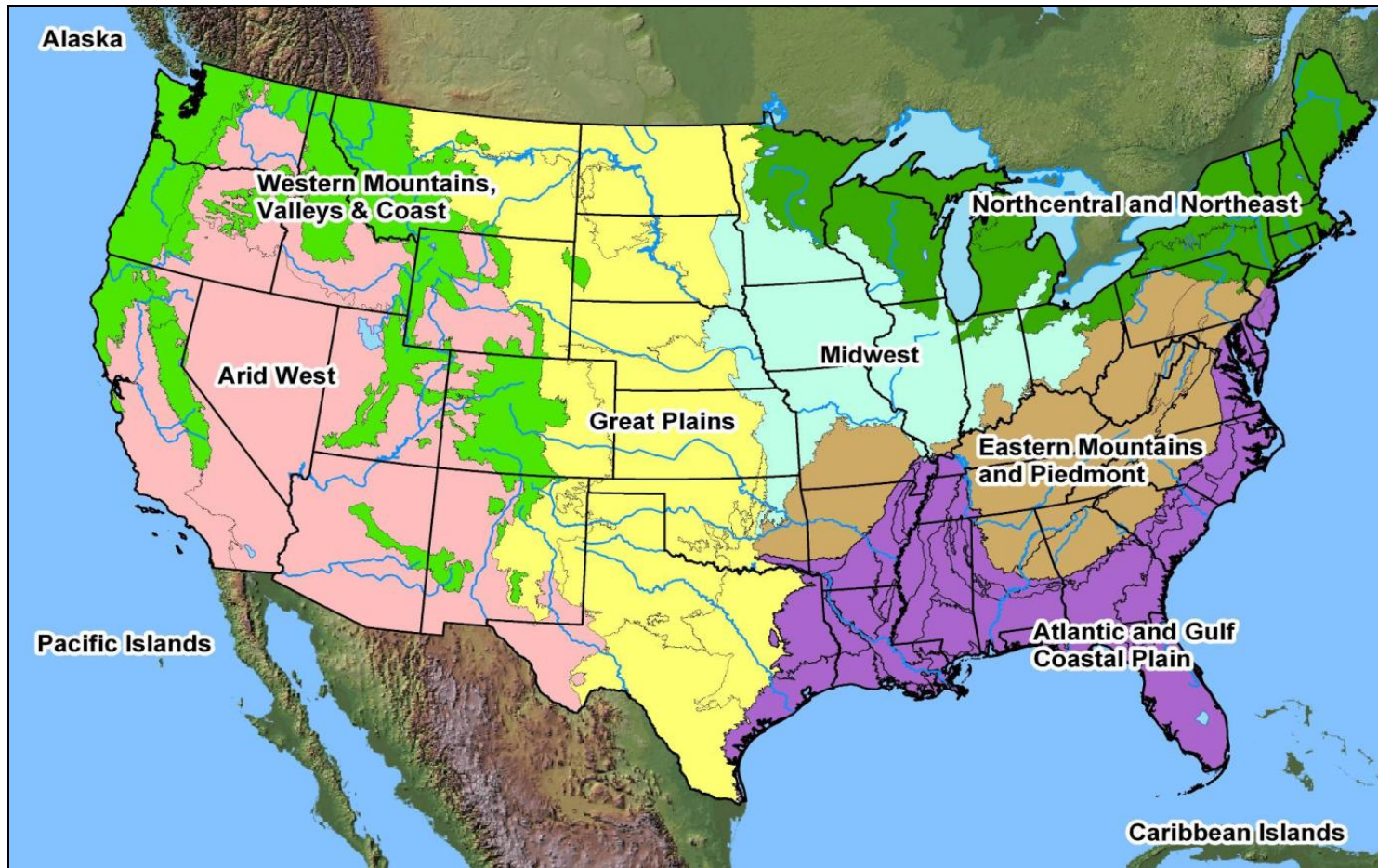


# Introduction to the National Wetland Plant List

- The NWPL contains 8200 plants and their wetland indicator status (ratings) for the U.S. and territories
- A plant's indicator status represents the probability of occurrence in a wetland or upland area (Obligate (almost always occurs), Facultative (usually occurs)). There are five indicators – OBL, FACW, FAC, FACU, UPL
- NWPL dropped + and – indicator status ratings used in previous FWS lists
- NWPL Regional boundaries updated

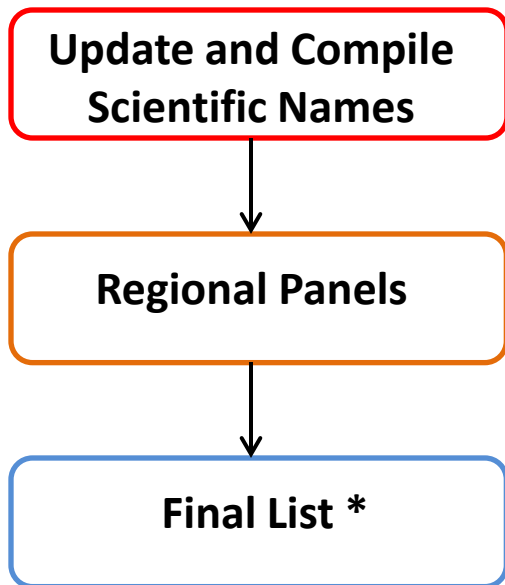


# 10 NWPL Regions



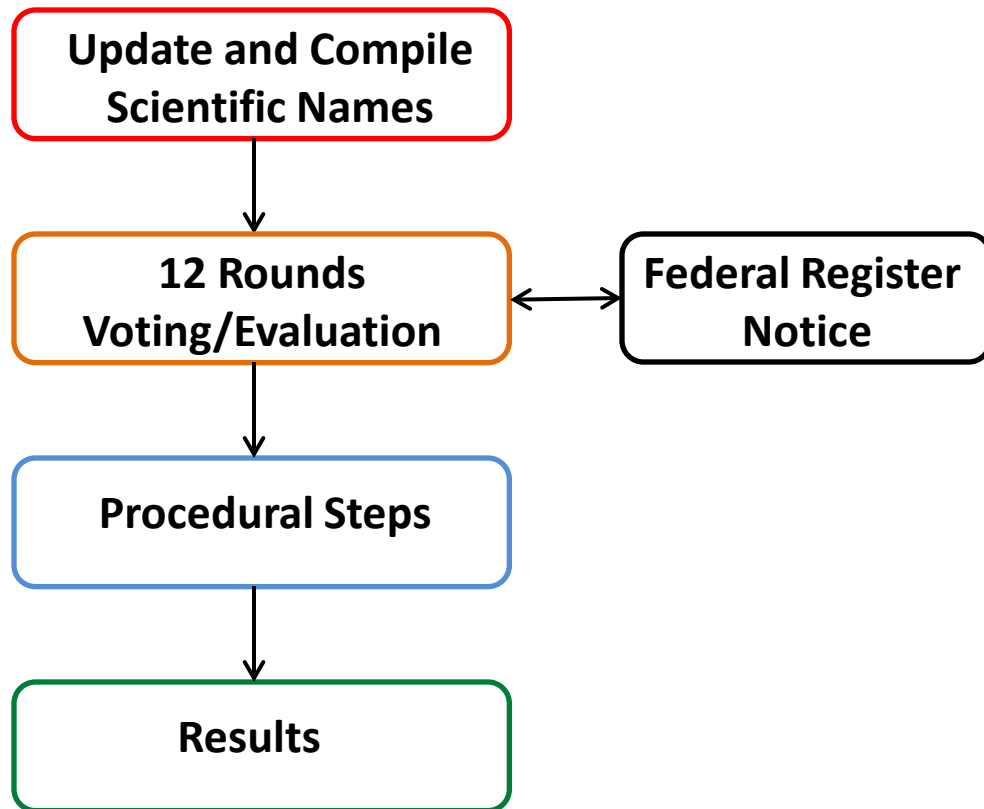


## **Former FWS 1988/1996 Lists**



*\* No ratings were ever changed*

## **2012 NWPL Processes**



# Overview

- R1 – initial review by Regional Panels (1996 list used as baseline)
- R2 – 2<sup>nd</sup> review of unresolved species by Regional Panels
- R2.5 – Review of 1700 unresolved species by national expert
- R3 – External botanists review of former FAC- species
- R4 – All species with no baseline vote.
- R5 – Regional Panel review of external botanists' input
- R6 – Federal Register Notice soliciting public comment
- R7 – Regional Panels review FR comments and newly proposed species
- R8 – Regional Panels 2<sup>nd</sup> review of unresolved species
- R9 - National Panel review of unresolved species and changes from FAC>FACU, FACU>FAC, and changes of >2 rating categories (672 species)
- R10 – National Panel quality control review of entire list (136 species)
- R11 – Regional Panel rebuttal of National Panel's R10 votes (87 species)
- R12 – National Panel rates last unrated species (34 Caribbean species)

# Update and Compile

- The list was updated using a web-based system to track input from the National and Regional Panels, states, Tribes, and all others
- Obtained all FWS datasets
- Rearranged list by 10 new regions based on ecological instead of geographic boundaries
- Updated scientific names following The Biota of North America Program (BONAP)



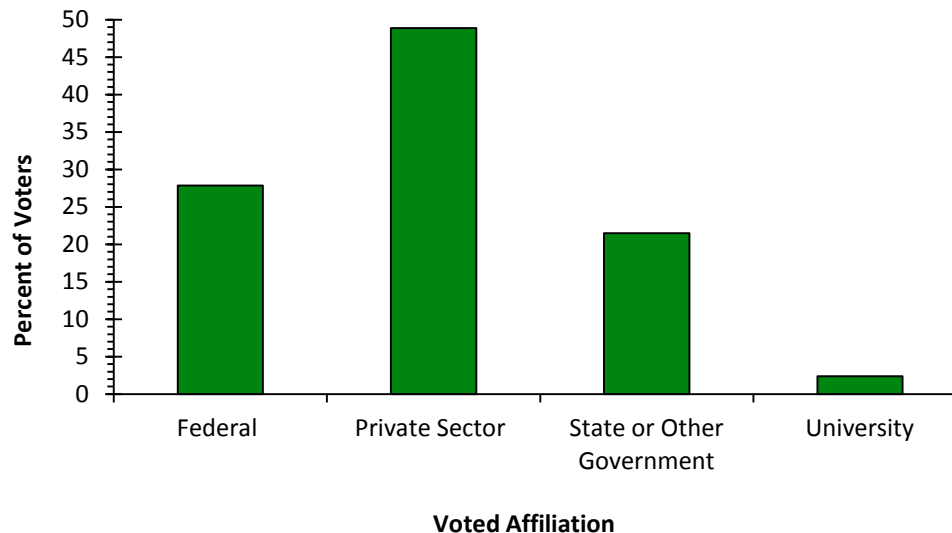
# Scientific Method: Reviewers

- 65 Regional Panel and National Panel members selected using technical credentials
- Thirty professional external botanists from museums and universities were contracted to participated in the update
- The botanical nomenclature used in the NWPL update represents the most current scientific interpretation nationally
- All others: 377 people (explained later)



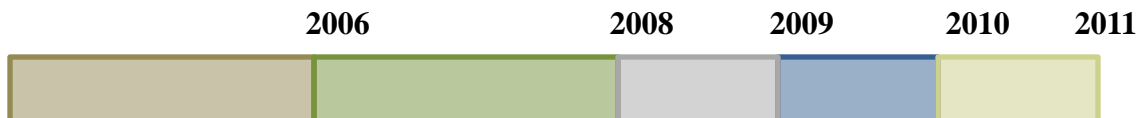
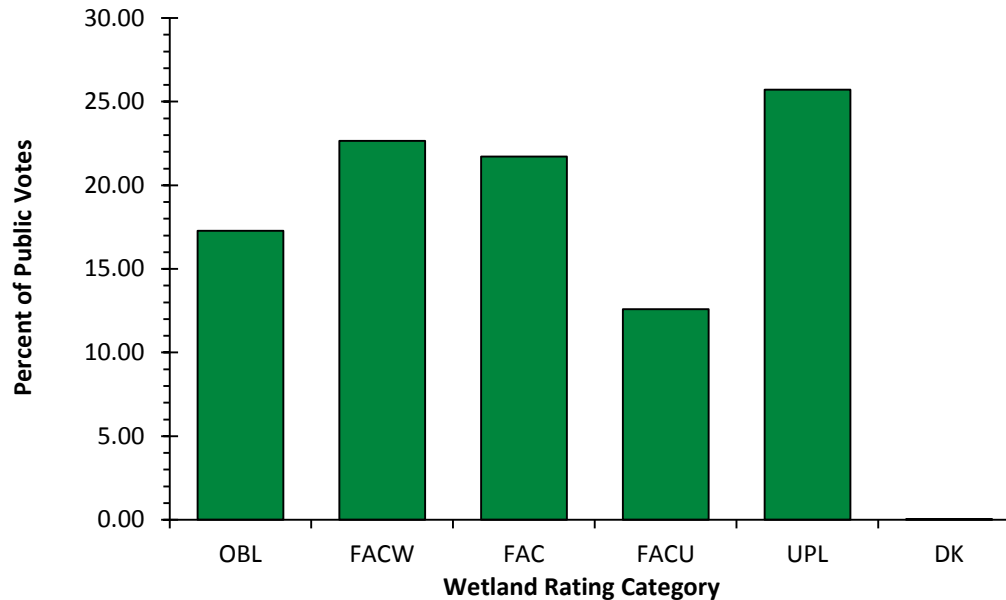
# Input Received During the Federal Register Announcement

- 377 people made technical comments
- Those people placed 16,432 species specific input ratings
- They also wrote 1,159 technical comments on the web site
- 35 written comment letters were received



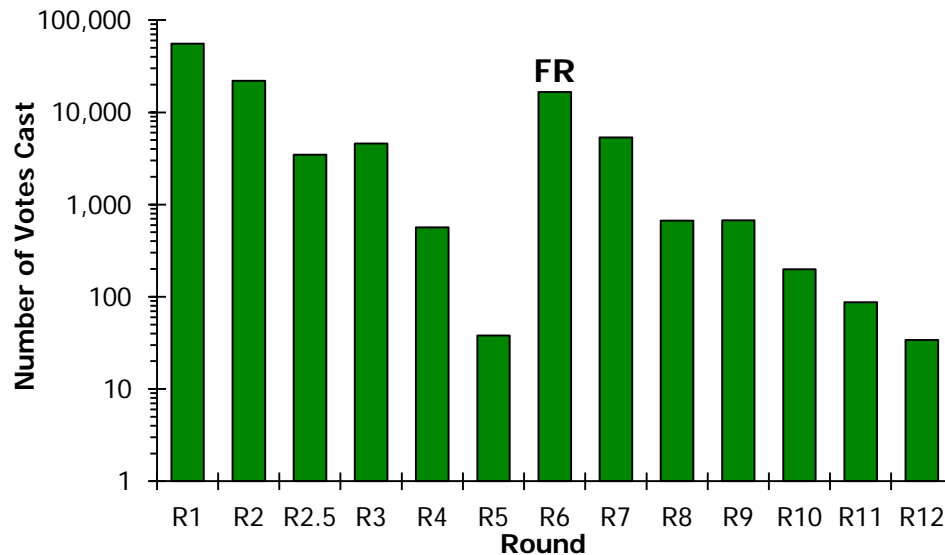
# Federal Register Rating Inputs

- Distribution of Federal Register 16,432 sets of input on wetland ratings across 5,315 species

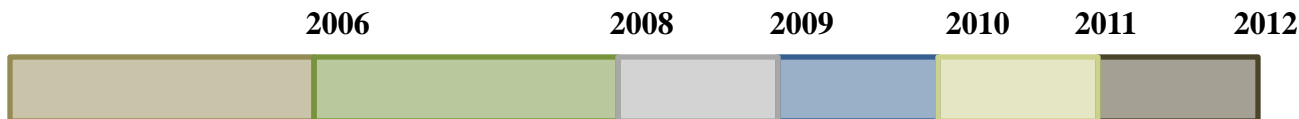


# Overview of all 12 Rounds of Voting and Evaluation

- A total of 130,000 individual ratings made as species ratings
- 442 individuals participated from Federal, state, and all others
- Federal Register Round resets a second series reevaluation rounds

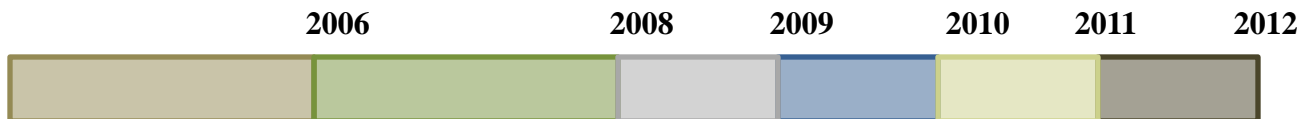
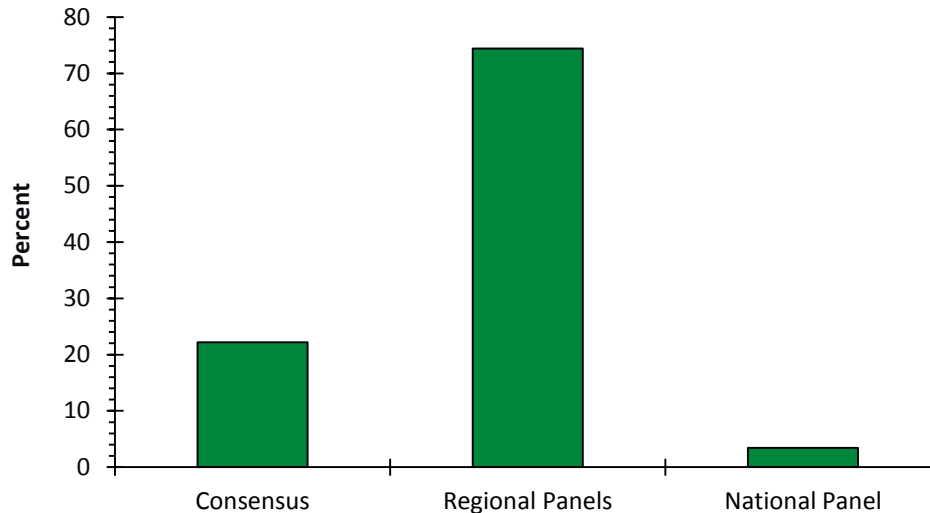


\* FR = Federal Register



# Procedural Steps

- Final wetland ratings were assigned using consensus input or 18 weighted algorithms to analysis various levels of input and best professional judgment
- For those species lacking consensus at any level, the National Panel assigned ratings using newly published protocols
- The public input resolved 93.4% of the species they commented on

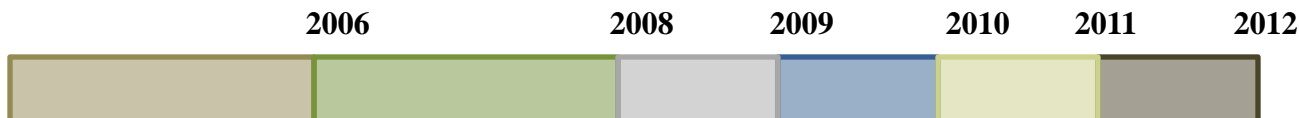




# NWPL Results

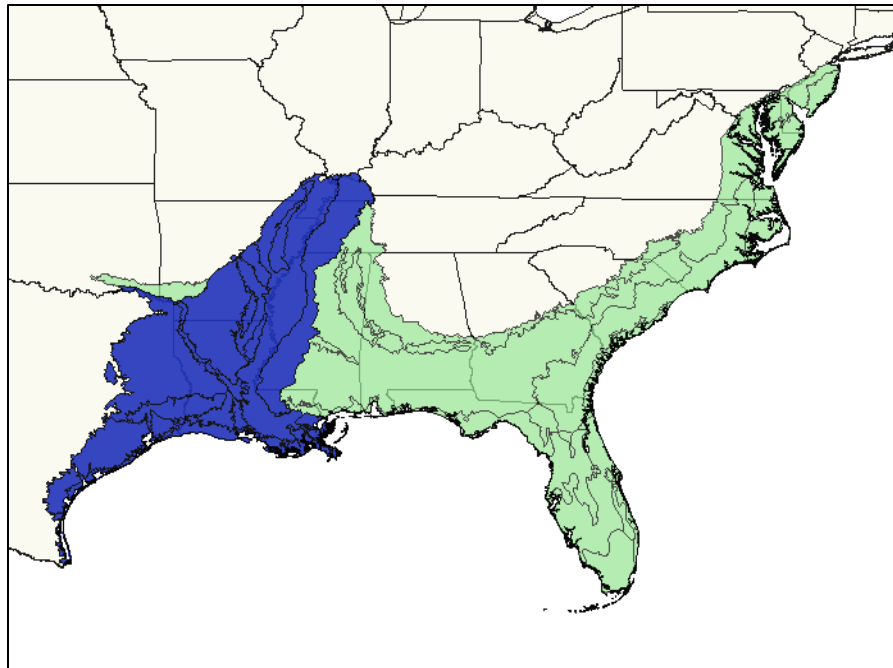
- 444 former FAC- species were equally split into updated ratings of FAC and FACU categories
- For each of the 8,200 species it is possible to review how each received their rating
- Estimated 12% overall change from 1988-2012 (issues with new Corps boundaries and changes in nomenclature)
  - 4% went wetter, 4% drier and 4% were former FAC- which went almost 50% wetter and 50% drier

1996 Default	2012 NWPL Draft Final					
Rating	OBL	FACW	FAC	FACU	UPL	Total
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- Within the 10 NWPL regions, 18 subregions were added for short lists of species whose wetland ratings are locally modified for better resolution



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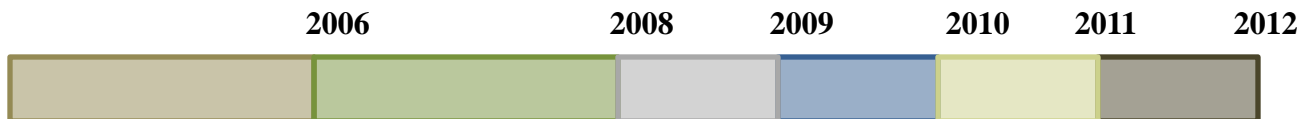
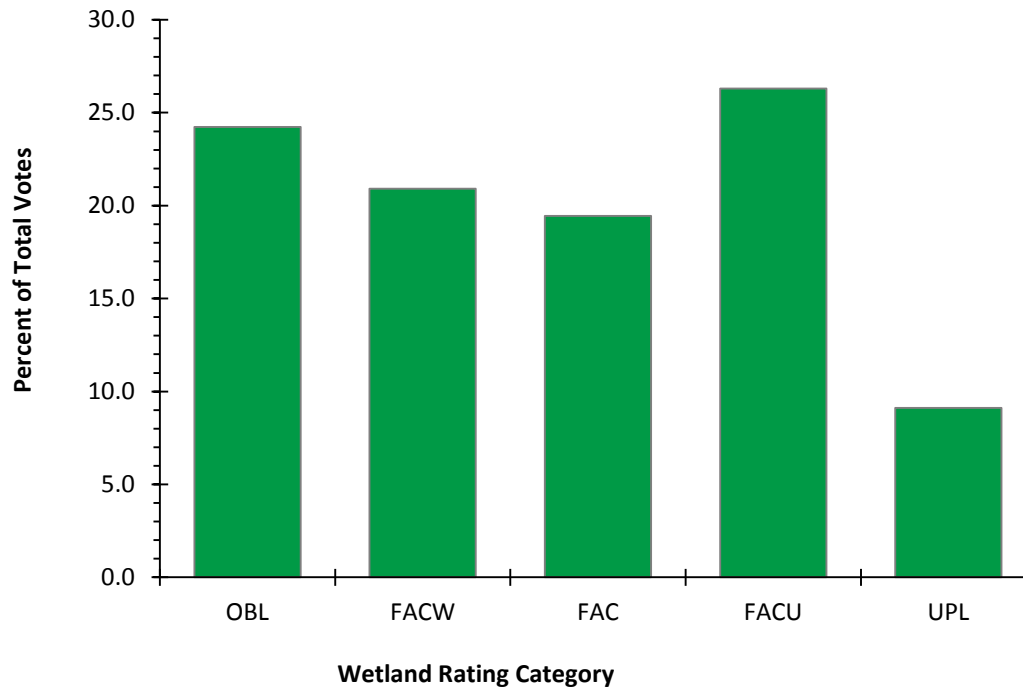
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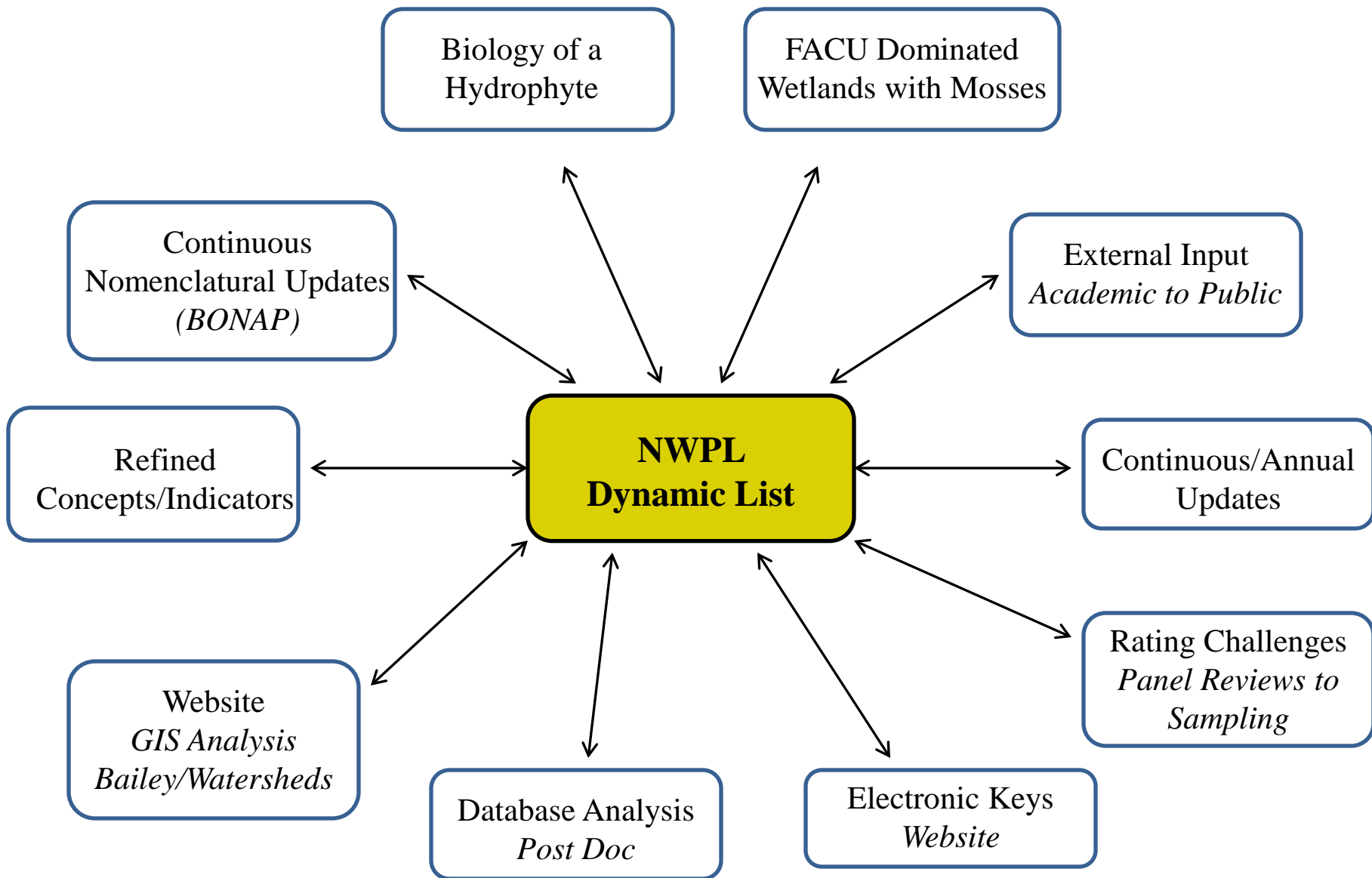
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# Future Maintenance

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- The entire flora of North America will be posted in 2012 so the Upland plants (UPL) are available for delineation purposes

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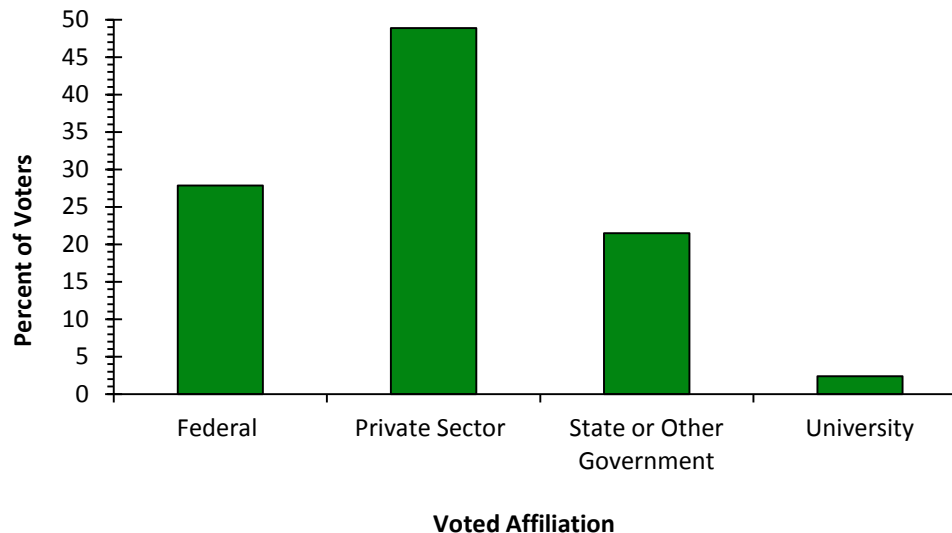
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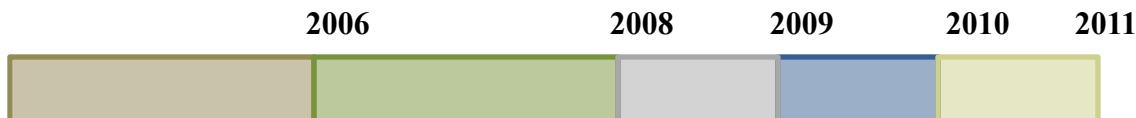
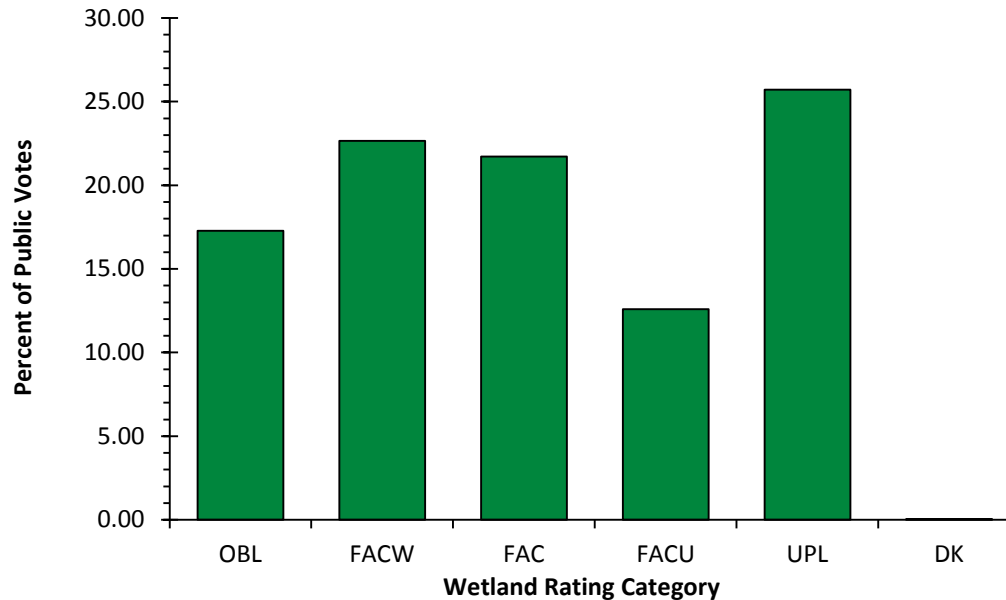
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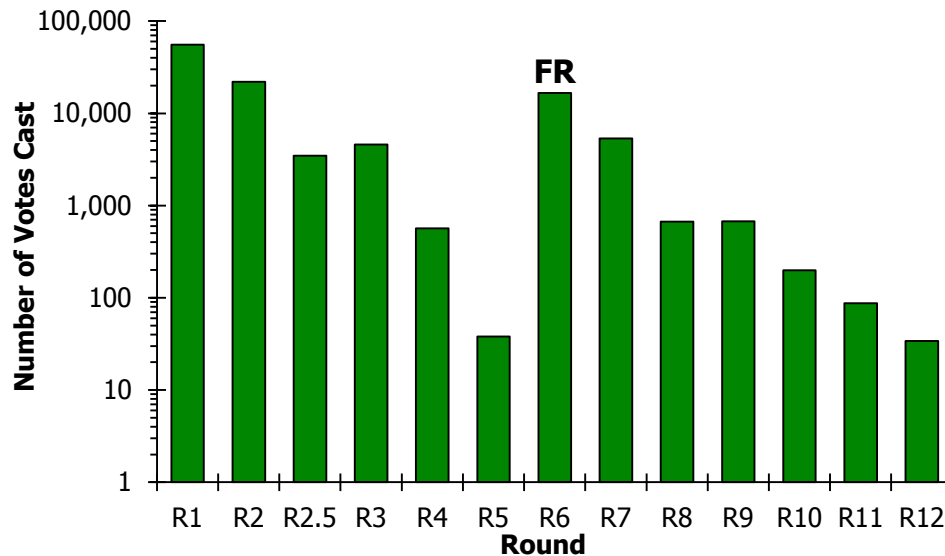
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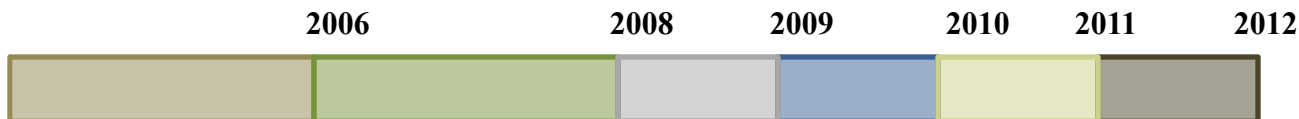


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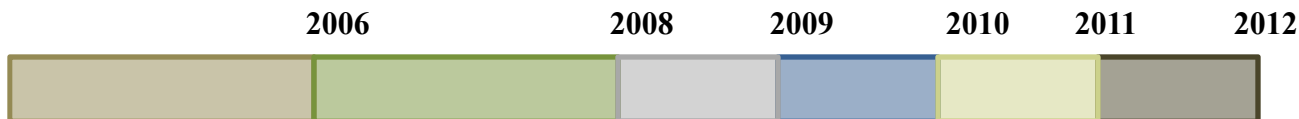
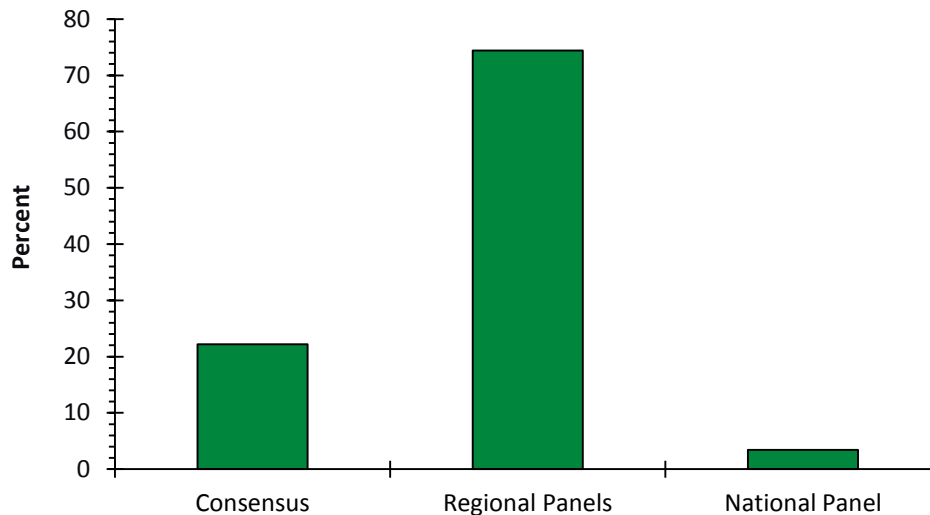


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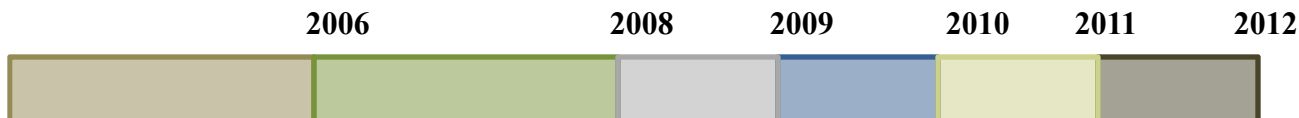
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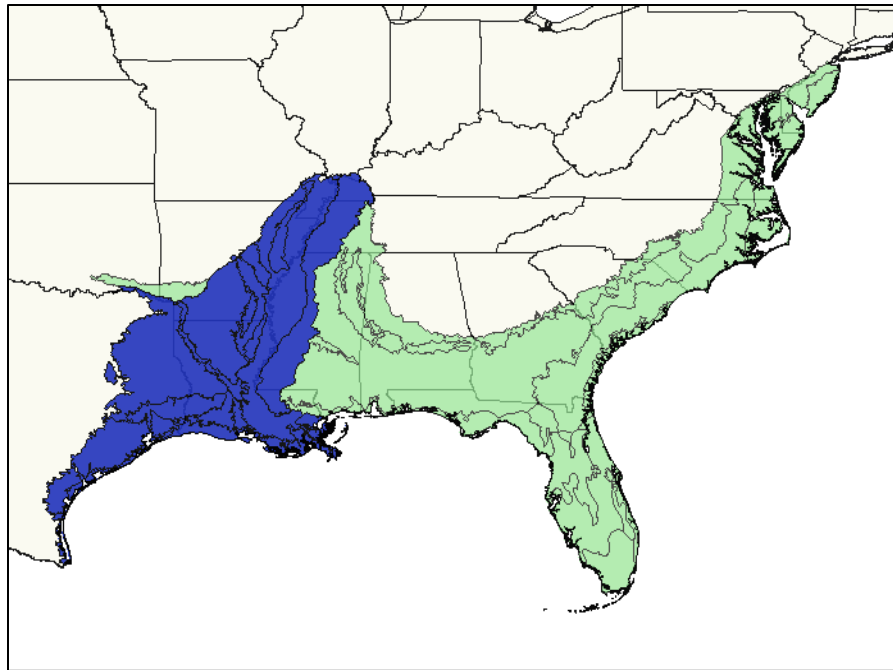
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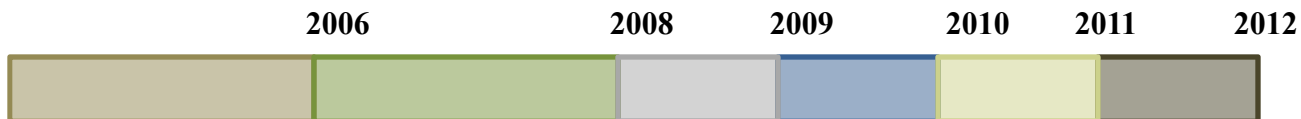
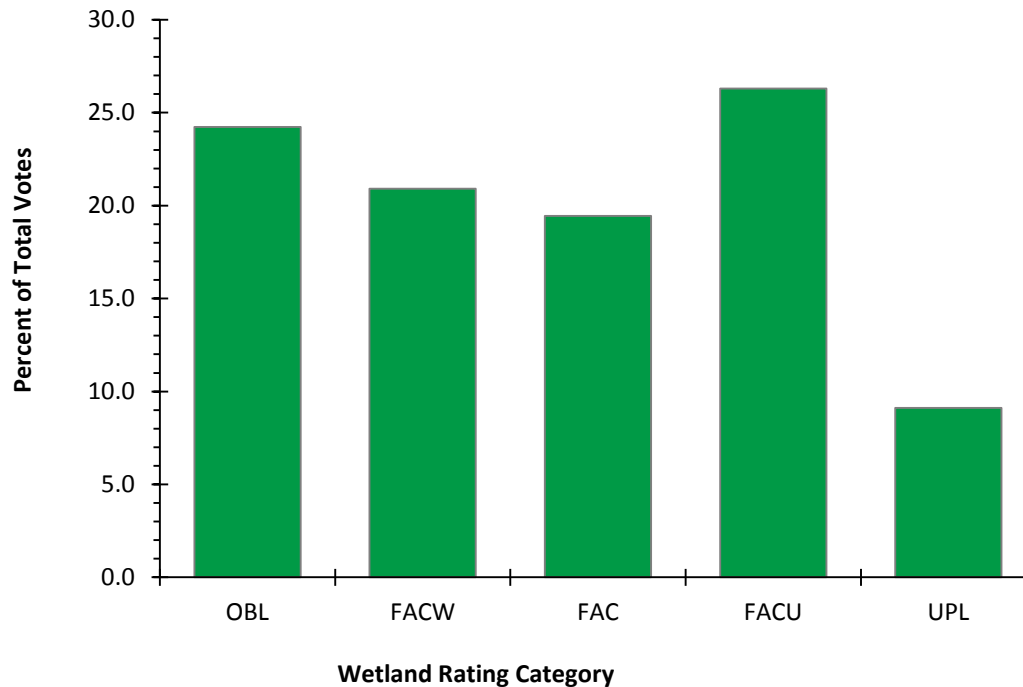
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