

Definitions and Delineations

1) Scientific (Wetland Scientific)

Definition: (Hydric Soil) - Soil that is saturated, flooded or ponded long enough in growing season to develop anaerobic conditions in the upper part.
(Hydrophytic plants) from Reed's List
(Water) Standing water for all or part of year

2) Legal: U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
E.P.A.

Problems that arise between the three interpretations:

- 1) variability in flooding-How long is standing water there?
- 2) margins ecotone between aquatic and terrestrial
- 3) legal problems when people want to change or modify the area. (human impact)
(no problem doing research there)
- 4) hydrophytes- Which ones are? Which ones are not? (obligate or facultative)
- 5) hydric and or hydrophytes and/or flooding- What happens when you only have two out of the three characteristics?
- 6) Not all wetlands are the same. Is it possible to have only one set of criteria? (several agencies)

Up until the 1960's, government actually encouraged destruction. Do something useful with it! -Department of Agriculture, Bureau of Reclamation.

1972: Clean Water Act: water quality maintenance in waters of the US

1972: Coastal zone management act that had some legal responsibilities with the Dept. of Commerce and wetlands: Congress or courts involved in designating responsibilities among government agencies.

1975: National Resource Defense Council vs Calloway. Decided wetlands were included in navigable waters.

1985: U.S. vs. Riverside Bayview Homes: jurisdictional wetlands are areas that are legally defined as protected areas by government agencies. Corps of Engineers responsibilities as far as protecting areas- responsibility for groundwater.

1985: Swamp Buster Act: Part of the Food Safety Bill: any farms who developed land in a jurisdictional wetland could not participate in any government support programs.

1987: meeting of National Wetland Policy Forum- advisory board put together by Reagan: make policies and regulations regarding wetlands. Conservative groups (mostly

farmers and land developers) came out with radical policy of No Net Loss after seeing scientific information about wetlands.

1988: Bush added this to his platform during his election campaign: Eventually issued executive directive instructing agencies that No Net Loss would be federal policy for each agency.

Agencies became more proactive. The E.P.A., USFWS, and the Corps of Engineers each created their own definition and put out handbooks on delineations (setting boundaries for wetlands). Big Problem: the definitions did not match. Example: how often would lands have to be flooded to be considered a wetland? One said 7 days straight. Another said 12.5% of the year or 5% of the growing season. One said 15 days out of the year. Example: how deep is the saturated zone? One said 30 cm, another 15 to 36 cm, and another said at the surface.

1989: Agencies got together to do one technical manual: they agreed upon all things. Took this to Congress and Congress did not accept. But the manual was already distributed, so people had already begun using it like an informal manual.

1991: Tried to redo the manual but it got shot down again (mostly through special interest groups). Still had the federal policy of No Net Loss.

Clinton renewed Executive Order supporting No Net Loss- further enhancing and protecting wetlands.

Tricky areas:

Private Property: A great amount of the wetlands are on private land: brings up the takings issue. (5th Amendment)

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; **nor shall private property be taken for public use, without just compensation.** -

So if Government tells you what you can and cannot do on your own property. Does that represent a "taking" of private property, if so the owners should be compensated.

Lucas vs. S. Carolina: a tough case, undeveloped beach where owner planned to build houses was ripped out by a storm. Went to get a new building permit but the state said it was a protected coastal area and could not build homes there. The owner said fine but pay me for it. State said no. Took it to a local court, they said pay him for it. The state and the Supreme Court decided nothing had been taken and to not give him the money.

Delineations- Lots of problems with this: some tools to help make it easier for us:

1) Geographic Information Systems: wetland inventories put out to help people know where these areas are

2) Global Positioning Systems: hand held computers which tell you exactly where you are by latitude and longitude. Good for field work- delineate work with much greater accuracy.

Both help others with knowledge and better accuracy.

3) Hydrophyte list: basically everyone uses the same list by Reed in 1988: agreement of what types of plants are in wetlands. Reed broke it up into Obligate Wetland, Facultative Wetland, Facultative Upland Plants, and Obligate Upland Plants. Look at % of plants to see if you have a wetland, no more trying to define water depth and water saturation questions to make determination.

Another Problem:

Tucson in E.P.A. region 9 (out of 10): Office in San Francisco
problems arise between Tucson ideas and San Francisco ideas.

Army Corps has 36 regions: Tucson office in Los Angeles

U.S.F.W.S. has 7 regions: Tucson office in Albuquerque

U.S.D.A. has an office in every county in the country.