# THE WILDLIFE SOCIETY

NORTHWEST SECTION

HC33, Box 3228
Boise, Idaho 83706


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BOI220.22

Mr. Gregory Peck
Chief, Wetlands and
Aquatic Resources Regulatory Branch
Mail Code (A-104F)
U.S. EPA
401 Main Street S.W.
Washington, DC 20460

Dear Mr. Peck:

The Northwest Section of The Wildlife Society is an organization of professional wildlife biologists representing over 800 members in Montana, Idaho, Oregon, Washington, Alaska, and three Canadian provinces. The Wildlife Society is an international nonprofit scientific and educational organization dedicated to the wise management and conservation of wildlife resources of the world.

Two of the principal objectives of The Wildlife Society are to develop and promote sound stewardship of wildlife resources and of the environments upon which wildlife and humans depend and to undertake an active role in preventing human-induced environmental degradation. It is in consideration of these two objectives that the Northwest Section of The Wildlife Society (Society) offers the following comments on the proposed changes to the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989 Manual).

The 1989 Manual was a technical document based on sound, scientifically-based principles. It was intended to be a technical guide to permit uniform identification of wetlands across the country. The proposal changes to the 1989 Manual would throw out much of the sound science upon which wetland identification should be based and would instead interject policy decisions into the wetland identification process. This policy change would be accomplished through greater reliance on the hydrology indicators to identify wetlands. This is in spite of the fact that wetland hydrology is the least understood and most variable of the three accepted wetland identification criteria of soils, vegetation, and hydrology.

The 1989 Manual placed greater emphasis on the hydrophytic vegetation and hydric soils criteria as wetland indicators. This emphasis is soundly based in both well-established science and in common sense. Hydrophytic vegetation can only be present in an area if the proper hydrologic conditions are present for an adequate length of time to cause anaerobic conditions in the plant root zone. Hydric soils can only develop during extended or repeated conditions of soil saturation at or near the surface for many years. These facts have long been accepted by the U.S. Army Corps of Engineers and Soil Conservation Service, two agencies that do not stand out as federal agencies with a strong interest in protection of natural resources.

The only conclusion that can be reached from a review of the literature regarding the relationship between hydrophytic plants, hydric soils, and wetland hydrology is that the plants and soils cannot be present without sufficiently wet hydrologic conditions. Therefore, reliance on the presence of hydrophytic plants and hydric soils as indicators of wetlands should continue. Shifting emphasis away from plants and soils to hydrology, as proposed, makes little scientific or common sense. Evidence of wetland hydrology can be inconclusive and is difficult, if not impossible, to document during long, dry summers in the West.

The proposed change in the depth of soil saturation or inundation required for wetlands is not based on sound science; rather, it is a policy decision. Hydrophytic plants are commonly found in areas where soil saturation only reaches the upper 6 to 12 inches of soil. This is the primary root zone of most plants. Saturated, anaerobic conditions in the root zone will kill most upland plants. Only wetland plants, which are adapted to growing in saturated soil conditions, can survive when the root zone is saturated.

Research has shown that low oxygen levels in the root zone prevent aerobic root respiration, affect nutrient uptake by plants, and mobilize reduced forms of elements (iron, manganese, sulfur, and carbon) in the soil that are toxic to most plants. Even a day of flooding during a period of active plant growth can have a limiting effect on all plants not adapted to such conditions. Requiring that this zone of saturation extend all the way to the surface for at least 15 days is not justified by research results and will eliminate many extremely valuable wetlands from being classified as wetlands.

The proposed changes to the 1989 Manual would also place greater reliance on the presence of wetland hydrologic conditions for extended periods during a "growing season" defined by agronomists. The problem with this limitation is that the growth of hydrophytic plants does not adhere to the limits of this agronomically-defined

growing season. Many hydrophytic plants are actively growing long before and after conditions are suitable for most crops. In fact, many persistent sedges and evergreen trees and shrubs continue growth year-round or virtually so. Reliance on a hydrologic indicator that can only be observed during an artificially defined "growing season" fails to recognize the special adaptations of many wetland plants.

In summary, the proposed changes to the 1989 Manual are not based on well-established science but, rather, are an attempt to interject an anti-wetland, policy-based bias into the process of identifying and delineating wetlands. The result of the proposed changes would be a significant reduction in the number of acres of wetlands subject to the current limited protection from filling offered under Section 404 of the Clean Water Act.

Estimates from our Society members who have tested the proposed changes in the field are that between 50 and 80 percent of the wetlands that presently fall under the jurisdiction of Section 404 would no longer be covered if the proposed changes to the 1989 Manual are implemented. This would represent an almost unimaginable potential loss of wetland and wildlife habitat (to say nothing about lost flood control, water quality, or other values) in the Northwest, Alaska, and the rest of the country. Over 50 percent of our nation's wetlands have already been lost. These proposed policy-driven changes in the wetland delineation process would be devastating to much of the remaining wetland resource in this country, a public resource subject to the whims of private development.

In conclusion, the Northwest Section of The Wildlife Society is strongly opposed to the proposed changes in the 1989 Manual. We hope that the Environmental Protection Agency will recognize the error of its ways and put a stop to the proposed changes in the process by which wetlands are identified.

Sincerely,

Charles L. Blair
President
Northwest Section
The Wildlife Society

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