

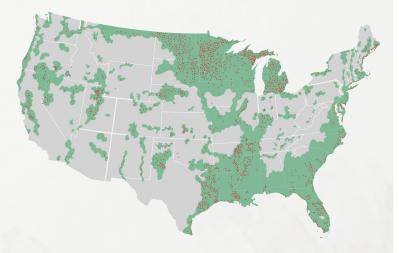
Wetland Conservation in the Farm Bill

THE IMPORTANCE OF SWAMPBUSTER

A Pact with America

There are many types of wetlands in the U.S., but all have one thing in common: they provide numerous benefits to people and wildlife. Wetlands purify our water, reduce flooding, recharge our aquifers, provide habitat for hundreds of species, and afford recreational opportunities for millions of people. Once widespread throughout the country, well over half of our wetlands have now been lost to drainage and filling. Those that remain are mostly on private land, where they are at continuing risk of destruction.

To help conserve the many public benefits that wetlands provide, the 1985 Food Security Act ("Farm Bill") created a pact between farmers and the American public: in exchange for publicly-funded subsidies on commodities, crop insurance premiums and conservation programs, producers agreed to conserve their wetlands.



LOCATIONS OF MAJOR REMAINING WETLANDS (GREEN)
AND SITES CRITICAL TO WILDLIFE (RED DOTS).



Often referred to as the "Swampbuster" provision, this pact has worked successfully for over 30 years. Flexibility has been key to its success; farmers are allowed to grow crops in wetlands when they are naturally dry because of drought, certain types of wetlands are exempt from Swampbuster regulations, and there are mechanisms for mitigation when wetland loss is unavoidable.

As Congress drafts a new Farm Bill, it's important to reflect on the significance of wetlands and understand how proposals to modify Swampbuster rules may impact wetland resources and the many benefits they provide.

Wetlands Are Not Always Wet

Some of the most valuable wetlands are temporary or seasonal in nature, meaning they may not retain water in some years or may dry naturally during late spring or summer. This periodic drying releases nutrients that become bound up during prolonged wet periods, allowing wetlands to become hyper-productive when they reflood. The most important area for wetlands of this type is the Prairie Pothole Region (PPR) of the northern Great Plains. In this critical landscape for migratory birds, over three million wetlands exist on private land. Oftentimes they occur in "wetland communities" that contain a diversity of wetlands with differing hydrology and water chemistry. These communities provide the variety of habitats critical to breeding migratory birds and other wildlife.

Were it not for conservation provisions in the Farm Bill, many of these PPR wetlands would have been drained long ago. In the eastern Dakotas alone, such a loss would be devastating to the 2.8 million ducks that nest in the region, along with countless other wetland-dependent species. Moreover, if these wetlands

didn't exist, flooding in the region would be more frequent and severe, and water quality would be a more widespread and serious issue than it is today.

Small wetlands often dry up early enough to be planted. This does not mean they should be exempted from Swampbuster.

Rainfall patterns fluctuate greatly in some areas. As a compromise, current Swampbuster rules allow farmers to plant crops in wetlands when they go dry naturally, but those areas still retain floodwater storage and water quality values during wetter years.

Is It a Wetland or Not?

One might imagine that in the absence of standing water, a wetland would be difficult to identify. However, that's not the case. Wetlands – even those that dry frequently – develop signature ("hydric") soils and unique ("wetland-dependent") plant communities that enable experts to delineate wetland boundaries even in the absence of water. The ability to reliably determine if a wetland exists and to accurately delineate its boundary has been key to helping landowners avoid inadvertent impacts and ensuring compliance with Swampbuster provisions. A scientifically-sound, objective process to determine and delineate wetlands is key to the integrity of conservation compliance.

Wet-dry cycles are natural.

It does not make sense to arbitrarily designate some percentage of time that water must be present in a wetland to deserve protection under Swampbuster.

Proper Timing is Key

Wetlands expand and contract with precipitation and evaporation as part of their natural cycle. In delineating wetlands, the Natural Resources Conservation Service (NRCS) typically uses aerial photography taken during the hottest months of the year (July and August) when evaporation is highest, so even in a "normal" year some wetlands are undetected or their area is underestimated. Many wetlands that are inundated more than half of the year are being misclassified because the

date of the images being used is too late. In eastern South Dakota, the heart of the Prairie Pothole region, an analysis of U.S. Fish and Wildlife Service waterfowl and pond surveys conducted in May and July each year from 1974-2003 found that the number of wetland basins containing water is 73% lower in July than in May.



Better Information is Available – Let's Use It

Remote sensing technology, including aerial photography and satellite imagery like LANDSAT and LiDAR, has the potential to enhance the speed and accuracy of wetlands delineation. In addition, the National Wetlands Inventory (NWI) has, over the last 30 years, produced wetland distribution maps for most of the country. Currently, remote sensing technology and the NWI are underutilized by NRCS staff charged with wetlands delineation. Rather than weaken the current standard even further, Congress should require that NRCS staff employ good science using hydrology, soil data, vegetation, landscape position, the National Wetlands Inventory, spring imagery (when migratory birds are breeding), and the most current digital elevation data like LiDAR to identify a possible wetland and its size, rather than relying on aerial imagery taken in the summer of a dry or normal year.

No arbitrary time limit should be imposed on NRCS to complete wetland determinations.

Staffing limitations and weather conditions can make it hard to conduct the on-site visits that are sometimes necessary to make an accurate wetland determination. Expediency should not come at the expense of accuracy.

Mitigation requirements should be based on science.

Current requirements are that wetland mitigation not exceed a one-to-one ratio unless more acres are needed to make up for functions and values that were lost. Limiting mitigation to acre for acre would result in losses of valuable wetland functions and values.

It Takes an Expert

As good as remote sensing has become, sometimes site visits are necessary to verify the existence of wetlands and delineate their boundaries. It requires expertise to understand the natural hydrology of a wetland or, if it's dry, to identify hydric soils and wetland-dependent plants indicative of a wetland. The NRCS has staff with extensive training in this area, but increasingly these on-site visits are being contracted out to third party, certified "experts". However, "wetland certifications" (e.g., Society of Wetland Scientists) only certify that someone has completed minimum education and experience requirements, but doesn't assess whether they can accurately make a wetland determination that meets NRCS standards. NRCS is ultimately responsible for protecting taxpayers from having tax dollars subsidize wetland destruction. It would be bad policy to have NRCS delegate that responsibility to private consultants without having NRCS review and approval as a back-stop to ensure the wetland determination is accurate and the law is followed.

NRCS must retain the authority to make final calls on wetland determinations.

Third parties, including certified wetland specialists, do not necessarily have the skills needed to make accurate determinations. A review by agency staff who are charged with conservation compliance only makes sense and will help ensure consistency.



"Minimal Effects" May Not Be So Minimal

In an effort to accommodate producers, Swampbuster allows for certain activities if they are deemed to have "minimal effects" on wetlands. To expedite these allowances, categorical minimal effects criteria are developed for activities considered to have very minor impacts, when taken individually, or cumulatively. However, the prairie wetlands that provide the greatest ecological benefits to wildlife and people are often very small (less than one acre), shallow (under 24 inches deep), and with a hydrology heavily dependent on receiving moisture from within the small catchment (mini-watershed) surrounding the wetland. Consequently, the natural hydrology of prairie wetlands, and therefore the environmental benefits they provide, are often disrupted by seemingly subtle activities within the catchment. It is therefore important to allow sufficient public consultation, and even NEPA and ESA review, to ensure that categorical minimal effects are truly "minimal" and account for the cumulative impact of small changes made to potentially many wetlands.

Any implementation of the minimal effects provision of Swampbuster must be science-based, including a meaningful review of environmental impacts, full consideration of public comment and consultation with resource agencies.

Effective Motivators are Critical

Since 1985 when conservation compliance became part of the Farm Bill, U.S. agricultural output and productivity have increased some 50%, underscoring the fact that Swampbuster has not been an economic deterrent to agribusiness. Indeed, Swampbuster has been effective because it is workable for producers yet provides the appropriate motivators for conservation compliance. These motivators work at the right scale, balancing the economic consequences of non-compliance with the practical realities of agribusiness and political acceptability.

Reducing Swampbuster penalties, such as by limiting the loss of subsidies to only apply to the field where the violation occurred, would break the compact farmers and taxpayers have had since 1985.

Not only would it be difficult to administer, but it would allow farmers to game the system and would significantly reduce the motivation for compliance.

Swampbuster Could Be Even Better

Swampbuster has proven effective at protecting wetlands while allowing farmers to improve their productivity and production. The 2018 Farm Bill is an opportunity to make this good conservation provision even better. Let's utilize information like the National Wetlands Inventory and make better use of remote sensing technology to increase the speed and accuracy of wetland determinations. Let's also employ the staff necessary to conduct site visits in a timely manner and invest in their training to enhance their wetland expertise. Most importantly, let's maintain the good faith pact between the public, which reaps the many benefits that wetlands provide, and our agricultural producers who are subsidized to help their operations remain profitable.





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PHOTOS: JIM RINGELMAN