

An Evaluation of Wetland Mitigation Banking in the United States: Positives and Negatives

For thousands of years the wetlands of North America have provided critical habitat for the sustenance of humans and animals. Wetlands play a crucial role in numerous ecological functions, including water purification and biological diversity. They are reliable indicators of the status of ecosystems, providing evidence of positive or negative changes in the environment, and are highly morphological by nature, subject to the fluctuations in climate that have occurred in perpetuity. Today, however, the variability of wetland health is affected by drastically varying factors that have steadily lead to their disappearance and disintegration. Within the last century, a series of wetland mitigation policies were implemented because of increased wetland losses due to transportation and construction expansions, agricultural impediment, and global warming, leading to state specific wetland mitigation policies—without which wetlands would be unprotected in most cases. This paper will demonstrate the necessity of wetland mitigation policy and its success nationwide and statewide (in Washington State) by weighing the positive indicators of policy against the contending arguments in light of current political and climatic changes.

The efficacy of current mitigation policies in the United States is a result of several federal and state acts that have enabled a level of interagency cooperation necessary for successful regulation. Section 404 of the Clean Water Act (CWA) created a permitting program to offset environmental impacts of pollution in the waters of the United States, and differentiated the types of wetland that are federally protected from “navigable waters” to bodies of water impacted by highways systems or other transportation construction projects.ⁱ Following the Shoreline Management Act, Washington’s Water Quality Standards, and the Growth Management Act that essentially resulted from federal enactment of the CWA, the broader definition of wetlands in Washington state expanded to include swamps, marshes, and bogs.ⁱⁱ The

significance of these wetland policies in relation to current wetland mitigation lies in their categorization of lawfully protected waters, which has enabled Washington State agencies—the Department of Ecology in particular—to enforce mitigation requirements on private entities and governmental agencies where wetland losses have occurred. ⁱⁱⁱThus, by nature, wetland mitigation policy is inherently environmental, built to offset destruction of wetlands and bolster “no net loss” under the CWA.^{iv} There are weaknesses within mitigation policy and implementation, however, that must be examined.

Most arguments against wetland mitigation policy have been directed towards government allocation of funding, public land disputes, and its overall efficiency in relation to steep credit costs. In several key states across the nation that have experienced the most net loss of wetlands, mitigation banking and governmental regulation is sometimes a contentious issue.^v It is argued that in these states, such as Florida, that there is a disparity in the allocation of benefits when moving wetlands due to varying urban and rural property values and governmental regulations over stakeholders in the process.^{vi} An assumption of a regulatory “data vacuum” lies at the crux of the issue for such contenders.^{vii}

A study done in 2015 that was published in the National Wetlands Newsletter exemplified several key points aiming to debunk governmental successes in mitigation: namely by compiling statistical evidence that the majority of studies that argue positives of mitigation policy are government published, with the majority of case studies focusing on simpler wetland mitigation projects as opposed to less successful cases involving more sensitive sites. In summary, this study found that particularly since the issuance of the 2008 Mitigation Rule immediately preceding the Great Recession, large evaluation and research gaps on part of the federal governments publications on successful mitigation existed in multiple regions, including the Pacific Northwest.^{viii} Furthermore, claims exist that “federal and state wetland mitigation banking programs do not assemble data about the land values of development project and bank sites or the price of credit sales, and they do not collect and manage ecological, economic, or demographic data associated with the projects and the banks.”^{ix}

Other arguments include land use effects of mitigation, particularly on agricultural land. In Washington state, this has been a contentious issue for several farmers who perceive wetland mitigation projects as connected to a host of problems encroaching otherwise useful agricultural land.^x For example, farmers in Skagit County, Washington State produce an impressive amount of crops considering the county's limited space, including one third of the world's beet seed.^{xi} Opposition to mitigation banking exists on a large scale here due to the fear that farmers in Skagit county could "lose the economies of scale necessary to sustain commercial agriculture."^{xii} This is one representation of similar clashes throughout the state where farmers are targeting mitigation banking as a source of agricultural loss.

Public skepticism of government handling of wetland mitigation is understandable, considering the cost and the extensive timeframe of most projects, the impact on landowners and businesses, and questionable performance standards in some states. However, most of these major arguments can be countered with evidence provided by sound science and recent case studies showing that mitigation in our current political and economic landscape is overall effective nationwide, and is working in Washington State.

In response to claims of corruption in government test studies, the success standards portion of a study done by WSDOT on the efficacy of wetland mitigation statewide clearly indicates the need for performance development and mitigation system improvement.^{xiii} The full content of this assessment is available for public access on the internet, and admits to both the successes and failures on part of the agency due to poor site selection, improper site design, and inadequate maintenance practices and permit requirements.^{xiv} This kind of transparency on the part of state agencies such as WSDOT, including Department of Ecology and the Department of Natural Resources, shows that governmental entities are concerned enough about their performance in wetland mitigation to admit fault, search for solutions to problems, and construct new and better ways of improving mitigation processes.^{xv}

While it is true that the federal government has to date provided no comprehensive method for compiling statistical data on average national cost analysis of wetland mitigation, several states have enacted their own regulations that provide a greater level of transparency on this issue. It should be noted that within the states that actively perform wetland mitigation, there is no uniform methodology or equal land value in relation to the purchasing of credits for wetland mitigation to provide a comprehensive picture of national banking financial information.^{xvi} Therefore, logically it would be up to individual states to streamline their own regulations and provide transparency to the public through state governmental institutions to provide statistical references of financial expenditures in wetland mitigation for the greater purpose of a national census. One example of a state that performs this well is Washington State, where interagency cooperation between state agencies and the federal regulators has produced a number of studies and documents outlining the permitting process and cost to private investors, including the *Washington State Mitigation Evaluation Study* that provides a detailed description of mitigation projects throughout the state and their performance standard achievements and failures, which is perhaps the most comprehensive national banking financial disclosure to date. Furthermore, in Washington State under RCW 42.56, any citizen can request public records that have not been published to answer these questions.

Concerning public discontent over agricultural losses due to wetland banking, there are multiple reasons why arguments like this are unlikely to be based in logic or sound science, but rather a product of the general rural dissatisfaction with how land is managed by state and federal government. Conversion of wetlands into agricultural land and draining of wetlands for crop irrigation has occurred on a mass scale for hundreds of years, representing an estimated 53-percent loss of wetlands nationwide since European colonization.^{xvii} In relation to this, only a small portion of agricultural losses have been suffered due to the re-conversion of agricultural land into wetland mitigation banks. To offset these losses, there are numerous examples of policy that supports agricultural practices in light of wetland mitigation impacts.

For example, the Prior Converted Cropland (PCC) is “identified for the purpose of implementing the Food Security Act (FSA),” and considers wetlands “converted from a non-agricultural use.... To production of a commodity crop prior to 1985” to be permanent agricultural land, meaning one cannot transfer them into mitigation sites.^{xviii} As a whole, there have more wetland losses due to agriculture than the other way around, and even with increased wetland protections in environmental policy, the disparity remains wide.

Wetlands provide important ecosystem service values to human populations, such as flood mitigation, groundwater recharge, water filtration, and sediment capture.^{xix} Wetlands existed in abundance across the landscape of the contiguous United States since before European colonization, and are useful for everyone, including the agricultural industry. Studies have repeatedly shown that wetland mitigation, while relatively new, is proving to be a successful alternative to doing nothing about wetland impacts. As the decades pass and climate change intensifies we will see that mitigation practices will evolve and adapt and become more sophisticated. In the meantime, attention to policy changes reacting to both governmental success standards and failures should be heeded to by the public, and the holistic goal should be to implement new and better ways to offset impacts to our treasured wetlands.

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