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Article

Mississippi State Wetlands Protection Laws and Policies: Disconnect Between Implementation and Conservation Practice

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Abstract

Mississippi wetlands provide flood storage, water-quality regulation, habitat, shoreline protection, and climate resilience, yet long-term loss and degradation continue despite an extensive body of federal and state law. This paper examines persistence as an environmental governance problem rather than as a purely doctrinal legal question. It uses a qualitative analysis of legal, policy, and agency documents relevant to Mississippi wetlands, organized around jurisdiction, institutional fragmentation, permitting, enforcement capacity, and monitoring and participation. The analysis centers on 16 core federal and Mississippi laws and policies. It supplements them with agency guidance, public permitting materials, and selected scholarly sources to assess how formal legal protections operate in practice across the state. The findings show that Mississippi has a substantial formal framework for wetland protection, but that framework remains uneven in scope, geography, and implementation. State authority is most visible in coastal wetlands, whereas many inland wetlands depend more heavily on federal jurisdiction, interagency coordination, and administrative follow-through. The review further shows that legal accumulation has not produced consistent conservation outcomes because fragmented authority, variable enforcement, limited monitoring capacity, and land-use pressures weaken implementation. Recent jurisdictional narrowing after *Sackett v. Environmental Protection Agency* intensifies that asymmetry and increases uncertainty for inland wetland protection. The paper argues that improving outcomes will require governance reform as much as legal reform. More effective protection depends on clearer jurisdictional triggers, stronger interagency coordination, more transparent permit administration, improved monitoring and compliance systems, and closer integration of regulation, restoration, and land-use planning. The study contributes to wetland governance scholarship by showing that legal accumulation alone does not secure conservation outcomes when fragmented authority, uneven implementation, and weak institutional integration persist.

Keywords: wetlands; environmental governance; Mississippi; land use policy; permitting; enforcement; restoration

1. Introduction

Wetlands sit at the intersection of ecology, land use, and public regulation. International frameworks such as the Ramsar Convention frame wetlands through the principle of wise use, but actual protection depends on how domestic institutions define jurisdiction, review land-use change, monitor impacts, coordinate agencies, and respond to noncompliance (Farrier & Tucker, 2000; Mikhailova et al., 2025). Wetland decline is therefore not only a biophysical problem. It is also a governance problem.

Mississippi provides a strong case for examining that governance problem. The state contains bottomland hardwood forests, freshwater marshes, riverine wetlands, cypress-dominated systems, estuarine wetlands, and tidal marshes that support flood attenuation, water filtration, biodiversity,

fisheries, recreation, and coastal protection (Mitsch & Gosselink, 2015; Sharma & Naik, 2024; Environmental Protection Agency [EPA], 2025). At the same time, wetlands in Mississippi have experienced long-term decline associated with drainage, conversion, altered hydrology, pollution, and coastal land loss (Lang et al., 2024; U.S. Fish and Wildlife Service [USFWS], 2024; Morton, 2008). These trends also interact with broader climatic stresses documented across the Gulf region, which heighten the stakes of wetland governance for adaptation and risk reduction (Damoah & Khalo, 2024; Damoah et al., 2024).

The state does not lack legal authority on paper. Wetland governance in Mississippi draws on federal statutes such as the Clean Water Act, the National Environmental Policy Act, the Fish and Wildlife Coordination Act, and the North American Wetlands Conservation Act, alongside Mississippi's Coastal Wetlands Protection Act, coastal program rules, and agency-specific permitting procedures (Connolly et al., 2005; Reynolds et al., 2017; EPA, 2024). The core question is not whether a legal framework exists. The more important question is how those laws and institutions operate together in practice and why they have delivered uneven conservation outcomes.

That question has become more urgent after *Sackett v. Environmental Protection Agency*, which narrowed the scope of federal jurisdiction over adjacent wetlands under the Clean Water Act. In a state where inland wetlands often depend more heavily on federal reach than on a parallel statewide permitting regime, changes in federal coverage alter the practical balance between law, administration, and land-use pressure (Gold, 2024; Lazarus, 2023).

This paper, therefore, treats Mississippi wetland protection as an environmental governance problem. I ask three linked questions: Which laws and policies structure wetland governance in Mississippi? How do jurisdiction, institutional fragmentation, permitting, enforcement, and monitoring interact in implementation? Where do those arrangements appear misaligned with conservation practice?

Existing scholarship documents wetland ecological functions, broad patterns of wetland loss, and the doctrinal evolution of federal wetland regulation, including the uncertainty produced by recent jurisdictional shifts (Connolly et al., 2005; Lang et al., 2024; Gold, 2024; Lazarus, 2023). What remains less developed is a state-level explanation of how federal statutes, Mississippi laws, agency procedures, and day-to-day administrative practice combine to shape implementation outcomes within a single land-use governance system. That gap matters in Mississippi because wetland loss persists across a legally dense but institutionally uneven setting in which coastal and inland wetlands do not receive equivalent regulatory coverage (NAWM, 2015; Reynolds et al., 2017).

This study addresses that gap by integrating historical legal-policy analysis with environmental governance analysis. It makes three contributions. First, it reconstructs the legal and policy architecture relevant to Mississippi wetlands across federal and state scales and shows how authority is distributed across institutions, places, and wetland types. Second, it demonstrates that the central policy problem is not a simple absence of law, but a mismatch among jurisdiction, enforcement, monitoring, and interagency coordination. Third, it extends land-use scholarship by showing how wetland decline is mediated by routine land-use decisions, administrative practices, and institutional geography rather than by environmental law in the abstract. The study's novelty lies in linking historical legal development to contemporary implementation weaknesses within one environmental governance framework.

The paper proceeds as follows. Section 2 summarizes the wetland context and why it matters for governance. Section 3 explains the methodology, data sources, coding procedure, and methodological limitations. Section 4 presents the legal-policy architecture and identifies the main governance weaknesses. Sections 5 and 6 discuss the implications and limitations. Section 7 concludes, and Section 8 presents governance recommendations derived from the analysis.

2. Mississippi Wetlands and the Governance Problem

Mississippi's wetland geography is diverse, and that diversity matters for governance. Inland systems include bottomland hardwood wetlands, riverine corridors, forested swamps, cypress

domes, and freshwater marshes. Along the Gulf Coast, estuarine and tidal systems intersect with coastal infrastructure, navigation, fisheries, tourism, and disaster risk reduction (EPA, 2025; Fagorite et al., 2019). The ecological variety of these wetlands means that a single regulatory approach rarely covers every site, use, or hydrologic condition.

Wetlands in Mississippi also generate multiple categories of public value. They store floodwaters, improve water quality, stabilize shorelines, support habitat, and provide direct and indirect economic benefits through fisheries, hunting, recreation, and avoided damage costs (Mitsch & Gosselink, 2015; De Felipe et al., 2024). Those values make wetlands a land-use issue as much as an ecological issue because permitting, drainage, infrastructure, development, and restoration decisions outside the wetland boundary often determine what happens within it.

The governance problem arises because these values are distributed across institutions rather than concentrated in a single authority. Coastal permitting, federal dredge-and-fill regulation, wildlife management, watershed planning, restoration funding, and environmental review do not operate through a single decision center. Shared authority can improve expertise, but it can also create overlap, delay, inconsistent enforcement, and gaps in accountability (Gunningham, 2011; Waylen et al., 2010; Fariss et al., 2022).

For that reason, this paper uses ecological context to explain governance variation rather than to build a comprehensive ecological inventory. The argument is narrower: Mississippi's implementation gap is most visible where authority is fragmented, federal and state coverage are asymmetric, monitoring is incomplete, and restoration programs are not fully integrated with regulation and compliance (National Association of Wetland Managers [NAWM], 2015; Reynolds et al., 2017; USFWS, 2024).

3. Methodology

3.1. Research Design and Source Selection

This study uses a qualitative environmental governance methodology based on a structured review of legal, policy, and agency documents. The design is appropriate because the paper asks how authority, institutions, and implementation mechanisms interact in practice across a mixed coastal and inland landscape. It does not estimate causal effects statistically or conduct a systematic review of empirical intervention studies. Instead, it analyzes the legal architecture of governance and the implementation signals visible in official documents, administrative materials, and selected scholarly sources.

Document collection covered five source categories: federal statutes and case law; Mississippi statutes, code provisions, and regulations; state and federal agency guidance and public program materials; public permitting documents; and scholarly literature used to interpret governance performance. The review centered on 16 core federal and Mississippi laws and policies that structure wetland governance in the state, including the Swamp Land Acts, the Clean Water Act, the National Environmental Policy Act, the Fish and Wildlife Coordination Act, the Coastal Wetlands Protection Act, the Coastal Zone Management Act, the Emergency Wetlands Resources Act, the North American Wetlands Conservation Act, and recent Mississippi code provisions and post-Sackett jurisdictional developments. I included documents that met three conditions: direct relevance to wetland governance, direct application to Mississippi or the Gulf Coast, and substantive content on authority, implementation, or conservation implications.

3.2. Coding Framework and Analytical Procedure

The unit of analysis was the governing instrument or implementation source rather than the individual empirical study. I coded each source across five governance dimensions: jurisdictional scope, institutional fragmentation, permitting, enforcement capacity, and monitoring and participation. I then compared the coded materials to identify where legal authority was concentrated, where responsibilities overlapped, where implementation depended on interagency

coordination, and where available evidence pointed to administrative weakness or uneven coverage. Figure 1 summarizes that workflow.

This design has three main strengths. First, it aligns with a research question focused on how land-use regulation operates in practice rather than on whether a single intervention produced a measurable treatment effect. Second, it preserves the legal and institutional detail necessary to explain why coastal and inland wetlands are governed under different regulatory conditions. Third, it allows direct comparison between formal legal authority and the administrative signals visible in permit materials, program documents, and agency guidance.

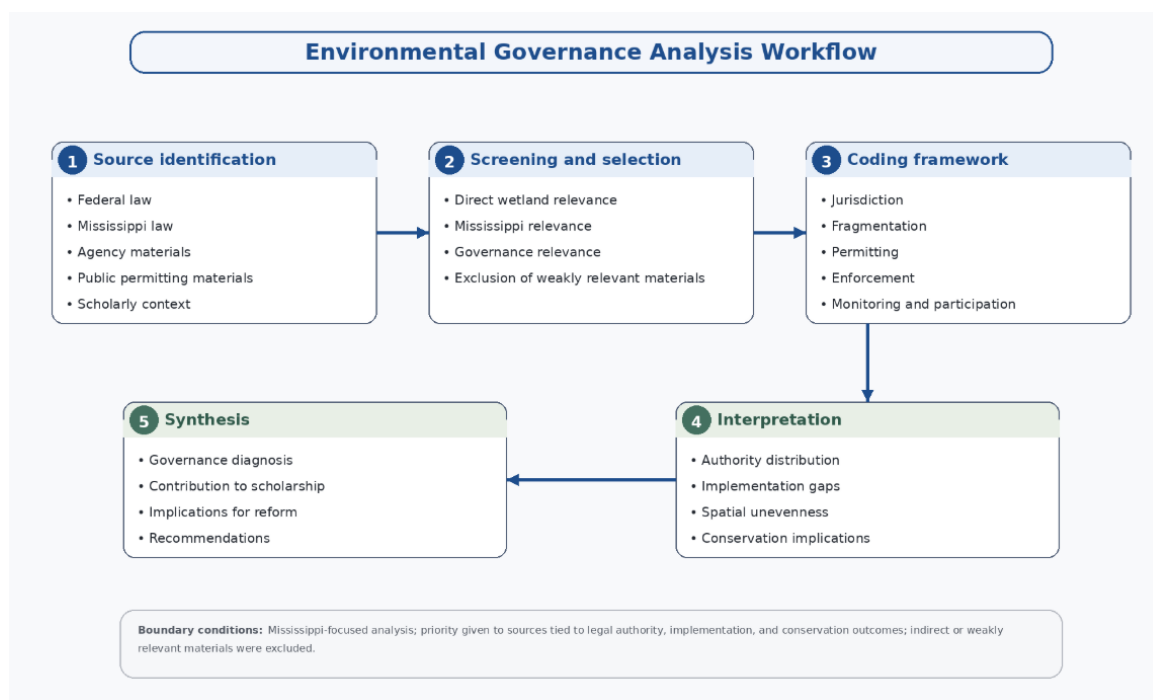


Figure 1. *Environmental governance analysis workflow.* Note. The figure summarizes how the study moved from document identification and screening to coding, interpretation, and governance synthesis.

The workflow clarifies that the paper moves from document review to interpretive governance analysis rather than from data collection to statistical testing.

3.3. Methodological Strengths and Weaknesses

The design relies heavily on publicly available materials; it cannot capture every permit negotiation, compliance review, enforcement action, or interagency disagreement that shapes implementation on the ground. The analysis is therefore stronger at identifying governance asymmetry, implementation risk, and institutional gaps than at quantifying enforcement outcomes or attributing precise causal weights to individual agencies or statutes. It also does not incorporate original geospatial modeling of wetland change. I use the method accordingly: to build a diagnostic governance argument about institutional fit and implementation capacity, not to make a definitive causal claim about the exact contribution of each regulatory actor to wetland loss (Calhoun et al., 2017; Linnenluecke et al., 2020).

4. Results: Legal-Policy Architecture and Governance Weaknesses

Table 1 organizes the major laws and policies that structure wetland governance relevant to Mississippi. The historical sequence matters because it shows a clear shift in public policy. Early law often supported drainage, conversion, navigation, or flood control. Later instruments added functions for environmental review, coastal protection, habitat conservation, restoration, and

wetland inventory. Mississippi's current governance framework is therefore cumulative and layered rather than unitary.

The table also clarifies an important analytical point. Mississippi's governance problem is not a complete absence of law. The problem is that the legal framework distributes authority unevenly across wetland types, agencies, and implementation stages. Coastal wetlands benefit from a more visible state permitting regime, while many inland wetlands still depend more heavily on federal jurisdiction, project-by-project permitting, and interagency coordination.

Table 1. Selected laws and policies structuring wetland governance relevant to Mississippi.

No.	Year	Law or policy	Level	Primary governance function
1	1849-1860	Swamp Land Acts	Federal	Transferred wetlands for drainage and conversion to agriculture and settlement.
2	1918	Migratory Bird Treaty Act	Federal	Protected migratory birds and reinforced habitat significance.
3	1954	Watershed Protection and Flood Prevention Act	Federal	Linked flood control, watershed management, and land-use intervention.
4	1958	Fish and Wildlife Coordination Act	Federal	Required wildlife review in federal water-resource projects.
5	1969	National Environmental Policy Act	Federal	Required environmental review for major federal actions.
6	1972	Clean Water Act	Federal	Established the core federal framework for water pollution control and Section 404 permitting.
7	1972	Coastal Zone Management Act	Federal	Connected coastal resource management to land-use planning and state coastal programs.
8	1973	Mississippi Coastal Wetlands Protection Act	State	Created Mississippi's principal coastal wetland preservation and permitting framework.

9	1982	Coastal Barrier Resources Act	Federal	Restricted federal incentives that encourage development on protected coastal barriers.
10	1986	Emergency Wetlands Resources Act	Federal	Strengthened wetland inventory, planning, and conservation priorities.
11	1989	North American Wetlands Conservation Act	Federal	Supported partnership-based wetland conservation and restoration funding.
12	2000	Estuaries and Clean Water Act	Federal	Expanded estuary restoration tools and program support.
13	2024	Miss. Code Ann. § 49-27-57	State	Provides penalties and enforcement authority for coastal permits.
14	2024	Miss. Code Ann. § 49-27-65	State	Requires evaluation and charting of coastal wetlands.
15	2025	MDMR wetlands permitting process	State/administrative	Operationalizes application review, public notice, and agency coordination in the coastal zone.
16	2023	Sackett v. EPA	Federal judicial	Narrowed federal jurisdiction over adjacent wetlands and intensified inland governance gaps.

Note. Compiled from the legal and administrative instruments analyzed in this manuscript, including the federal and Mississippi sources discussed in Sections 4.2 and 4.3.

Taken together, the instruments in Table 1 show that Mississippi's framework evolved from conversion-oriented land policy toward a more layered regulatory and conservation regime, but without eliminating major differences between coastal and inland governance.

4.1. Regional Context and Long-Term Wetland Decline

Recent federal reporting confirms that wetland loss remains a national and regional concern, including in the Southeast (Lang et al., 2024; USFWS, 2024). Table 2 and Figure 2 situate Mississippi within that regional pattern. The purpose of the table and figure is contextual rather than inferential. They show that long-term wetland decline remains substantial across the southeastern states and that Mississippi is part of a broader regional land-use and hydrologic problem.

Figure 3 serves a similar function for Mississippi. The exact acreage depends on inventory method, time period, and classification rules, so the figure should be read as an indicative long-run trend rather than as a single definitive measurement. Even with that caution, the directional pattern remains important: when long-term decline persists under a dense legal framework, the relevant question becomes how governance arrangements filter, dilute, or fail to translate formal legal protection into conservation performance (Lang et al., 2024; Morton, 2008; USFWS, 2024).

Table 2. Contextual comparison of wetland loss across selected southeastern states.

State	Original acreage	Remaining acreage	Acreage lost	Percent lost
Georgia	6,843,200	5,298,200	1,545,000	23%
South Carolina	6,414,000	4,659,000	1,755,000	27%
Louisiana	16,194,500	8,784,200	7,410,300	46%
Florida	20,325,013	11,038,300	9,286,713	46%
North Carolina	11,089,500	5,689,500	5,400,000	49%
Alabama	8,000,000	>4,000,000	4,000,000	50%
Tennessee	1,937,000	787,000	1,150,000	59%
Mississippi	13,680,000	5,580,000	8,100,000	59%
Arkansas	7,527,200	2,092,700	5,434,500	72%
Kentucky	4,083,000	780,000	3,303,000	81%

Note. Data presented in Table 2 were compiled from records reported by the U.S. Fish and Wildlife Service (USFWS, 2024), Lang et al. (2024), and the National Association of Wetland Managers (NAWM, 2015).

Table 2 establishes the comparative backdrop for the argument: Mississippi should be read as part of a broader southeastern pattern of wetland decline rather than as an isolated outlier.

Figure 2 reinforces the point that regional wetland loss persists even where multiple legal instruments exist, strengthening the case for examining implementation rather than law on paper alone.

Figure 3 sharpens the state-level diagnosis by showing why Mississippi cannot be understood solely through statutory text; the durability of decline requires attention to how institutions govern land-use change over time.

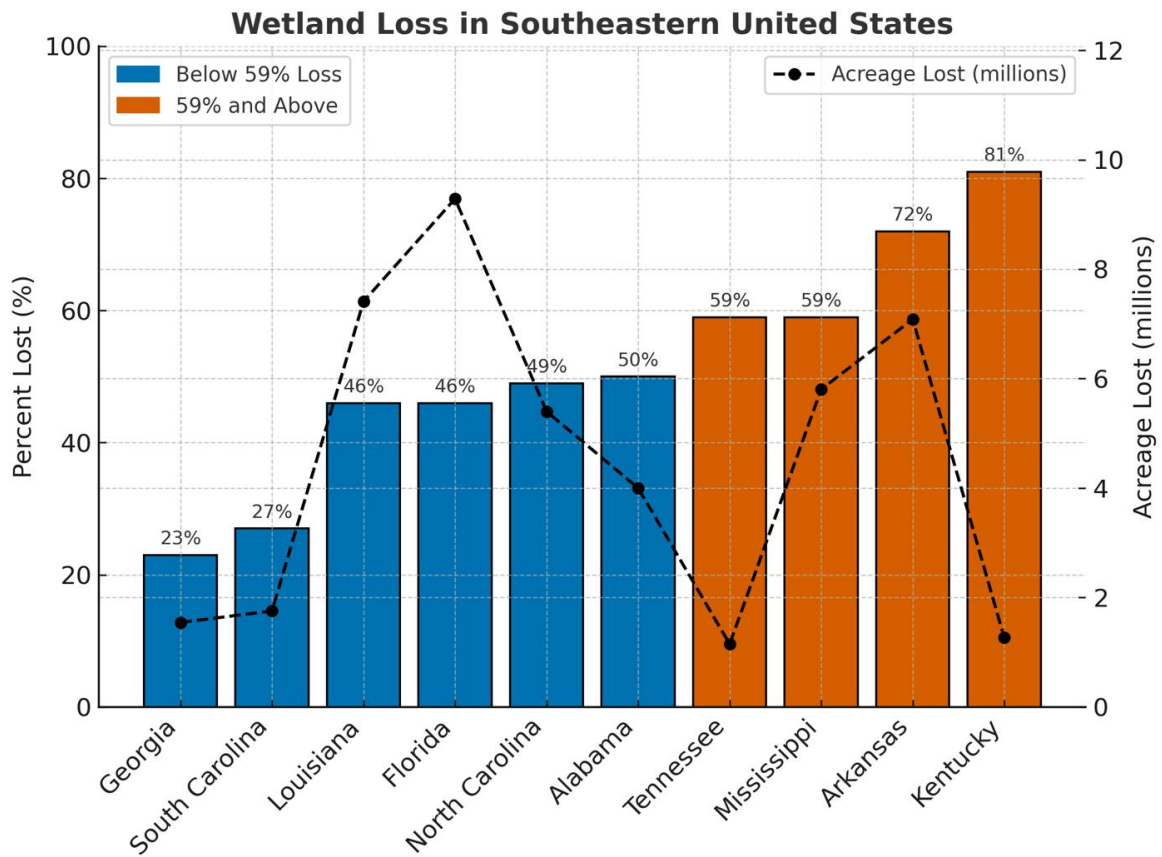


Figure 2. Contextual regional comparison of wetland loss in selected southeastern states. Note. The figure is retained as an illustrative regional summary and is used for contextual comparison rather than for formal statistical analysis.

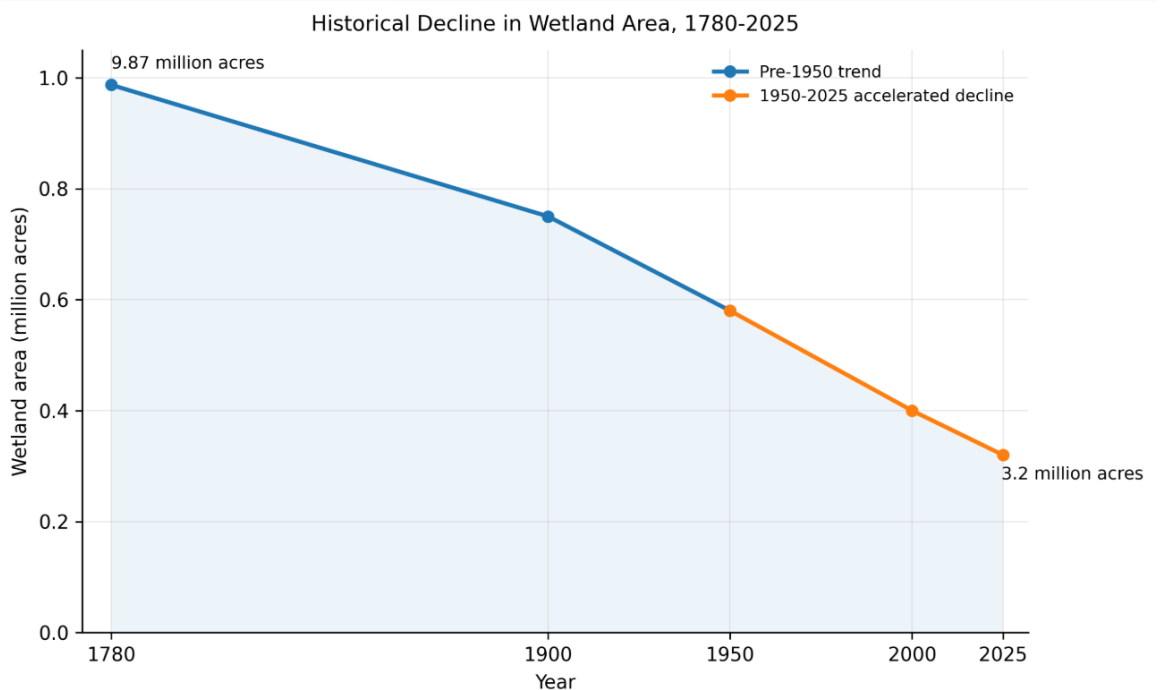


Figure 3. Indicative long-term decline in the Mississippi wetland area. Note. The trend line is retained as an indicative historical summary. Exact acreages vary across inventories and classification methods.

4.2. Historical Shift from Conversion to Protection

The historical record shows a gradual but incomplete shift from drainage and conversion toward conservation and managed use. The Swamp Land Acts supported reclamation and agricultural conversion. At the same time, later federal measures such as the Watershed Protection and Flood Prevention Act and the Fish and Wildlife Coordination Act began to account for hydrology, habitat, and project impacts. The National Environmental Policy Act widened procedural review, and the Clean Water Act supplied the core federal permitting structure that still anchors wetland regulation in the United States. This sequence also reflects the longer governance history through which drainage, reclamation, and infrastructure investment reshaped land and water management priorities before modern wetland protection became more explicit (Edwards & Thurman, 2022; Watershed Protection and Flood Prevention Act, 1954; Fish and Wildlife Coordination Act, 1958; National Environmental Policy Act, 1969; Clean Water Act, 1972).

Mississippi's Coastal Wetlands Protection Act marked a more explicit state commitment to the preservation of coastal wetlands. Its public policy language favors preservation of the natural state of coastal wetlands while allowing alteration only under defined public-interest conditions. Mississippi Code Annotated § 49-27-65 also requires the evaluation and charting of coastal wetlands. Together, these provisions give Mississippi a clear coastal instrument, but they do not create an equally comprehensive statewide regime for inland wetlands (Coastal Wetlands Protection Act, 1973; Mississippi Code Annotated § 49-27-65, 2024; MDMR, 2025; NAWM, 2015).

Later laws and programs added functions for restoration, planning, and funding. The Emergency Wetlands Resources Act reinforced inventory and conservation planning. The North American Wetlands Conservation Act expanded partnership-based funding for habitat protection and restoration. The Coastal Barrier Resources Act and the Coastal Zone Management Act further tied wetlands protection to coastal land-use governance, hazard exposure, and public investment decisions (Emergency Wetlands Resources Act, 1986; North American Wetlands Conservation Act, 1989; Coastal Barrier Resources Act, 1982; Coastal Zone Management Act, 1972; Reynolds et al., 2017; USFWS, 2024).

4.3. Federal and State Wetland Governance in Mississippi

Federal law provides the baseline architecture for wetland governance in Mississippi. The Clean Water Act remains the central federal instrument because Section 404 governs dredge-and-fill activity in covered waters and wetlands. In contrast, associated federal review processes can trigger environmental assessment, mitigation requirements, and consultation obligations. The National Environmental Policy Act and the Fish and Wildlife Coordination Act add procedural and interagency review functions, but they do not substitute for direct permitting authority (Clean Water Act, 1972; National Environmental Policy Act, 1969; Fish and Wildlife Coordination Act, 1958; Connolly et al., 2005; EPA, 2024).

At the state level, the strongest direct wetland permitting authority is concentrated in the coastal zone. The Mississippi Department of Marine Resources administers wetland permitting in the Mississippi Coastal Zone and uses public notice procedures, joint application materials, and coastal rules to process regulated activities. Mississippi Code Annotated § 49-27-65 requires charting and evaluation of coastal wetlands, and Mississippi Code Annotated § 49-27-57 authorizes penalties for violations. Those are important tools, but they operate most clearly in coastal wetlands and do not create an equivalent statewide permit system for all inland wetlands (MDMR, 2025; NAWM, 2015).

This asymmetry is central to the governance diagnosis. Mississippi has a visible state wetland framework on the coast, but inland wetland protection remains more dependent on federal jurisdiction, federal-state coordination, and general land and water governance instruments. That division leaves the state's overall framework uneven across space, wetland type, and implementing authority (NAWM, 2015; Reynolds et al., 2017).

4.4. Governance Weaknesses: Fragmentation, Jurisdiction, Enforcement, and Integration

The first major weakness is jurisdictional fragmentation. Different agencies control different parts of the decision chain: dredge-and-fill regulation, coastal permitting, water-quality oversight, wildlife management, restoration planning, and public trust or coastal program functions. Shared authority can be useful, but it raises transaction costs and makes responsibility harder to locate when implementation fails (Gunningham, 2011; Reynolds et al., 2017).

The second weakness is legal uncertainty after Sackett. By limiting federal jurisdiction over adjacent wetlands to those with the required continuous surface connection, the decision narrows coverage for some wetlands that formerly might have been reviewed under the broader significant-nexus approach. In Mississippi, that shift matters most where inland wetlands do not benefit from a similarly robust state permitting backstop (Gold, 2024; Lazarus, 2023).

The third weakness is the gap between administrative formality and implementation strength. Mississippi has identifiable permit pathways, public notices, statutory charting duties, and sanction provisions. Those features matter because they show that wetland governance is not entirely informal. However, formal process alone does not establish monitoring intensity, deterrence, cumulative-impact control, or follow-through after permits are issued (Gunningham, 2011; MDMR, 2025).

The fourth weakness is limited integration across regulation, restoration, and land-use planning. Restoration initiatives and partnership programs support valuable on-the-ground work, but project-based restoration does not automatically solve jurisdictional gaps, uneven permit coverage, or weak compliance systems. Where restoration and regulation operate on separate tracks, gains in one area may not offset continuing loss in another (North American Wetlands Conservation Act, 1989; Ducks Unlimited, 2022; Nature Conservancy, 2020; Reynolds et al., 2017).

4.5. Monitoring, Participation, and Administrative Practice

Monitoring and information infrastructure represent a fifth weakness. Wetland governance requires timely information about location, status, conversion, mitigation, and compliance. Remote sensing and geospatial inventories can strengthen that capacity, but public decision systems often lag behind technological capability (Adeli et al., 2021; Mathiyalagan et al., 2005; Vanderhoof et al., 2020). In Mississippi, more integrated monitoring would improve not only mapping but also permit review, cumulative-impact analysis, and post-permit accountability.

Figure 4 illustrates a more modest point. Public permit materials show that the state has a visible administrative process in the coastal zone. They do not, by themselves, demonstrate strong enforcement or favorable ecological outcomes. I therefore use those materials as evidence of administrative structure, not as proof that the implementation gap has been solved (MDMR, 2025).

Figure 4 is most useful as evidence of administrative visibility. It shows that a permitting apparatus exists, but it also underscores the distinction between making the procedure visible and ensuring its effective implementation.

The combined evidence supports a governance interpretation of the implementation gap. Mississippi has substantial wetland law, but the framework is spatially uneven, administratively fragmented, and only partially equipped to monitor land-use change and post-permit outcomes. Those weaknesses are most consequential where jurisdiction is uncertain, restoration and regulation are disconnected, and public oversight depends on difficult-to-use administrative records.

siting, and restoration investment all change wetland conditions through institutions that allocate land, water, risk, and public authority. In that sense, wetland governance is a question of legal geography: where jurisdiction attaches, where permitting applies, where monitoring occurs, and where land-use pressure exceeds regulatory reach.

A second implication concerns the limits of formal legal accumulation. Mississippi's wetland regime has expanded over time through federal statutes, state coastal legislation, restoration programs, and administrative procedures. However, legal accumulation has not produced a unitary system. Instead, it has produced a patchwork in which restoration initiatives may coexist with uncertain inland coverage, public permitting may exist without robust post-permit follow-up, and visible administrative processes may mask uneven enforcement capacity. This distinction matters because it cautions against equating legal density with implementation strength (Farrier & Tucker, 2000; Gunningham, 2011; Reynolds et al., 2017). It also reflects a broader development-governance tension in which economic expansion can proceed alongside formal environmental commitments unless institutions are designed to reconcile growth pressures with ecological safeguards (Damoah & Boglo, 2025).

A third implication concerns the post-Sackett landscape. When federal jurisdiction narrows in a state that lacks an equally comprehensive statewide regime for inland wetlands, the burden of governance shifts to state institutions, interagency coordination, and administrative discretion. That shift does not merely reduce coverage in a technical sense. It also redistributes risk across wetland types and places greater importance on state capacity, public transparency, and monitoring systems that can identify where regulatory protections have become thin (Gold, 2024; Lazarus, 2023; NAWM, 2015).

Taken together, these patterns support a measured but consequential argument. The evidence does not show that any single statute, agency, or court decision alone explains Mississippi's wetland decline. It shows that uneven jurisdiction, fragmented administration, limited monitoring, and weak integration across regulation, restoration, and land-use planning make it difficult for formal legal protection to translate into durable conservation performance consistently. In that sense, the study contributes a governance-based explanation of wetland loss that moves beyond listing legal instruments or treating implementation failure as a purely administrative afterthought. Its novelty lies in demonstrating how historical legal accumulation, institutional fragmentation, and post-Sackett jurisdictional narrowing interact within one state case to shape land-use outcomes and constrain conservation practice.

6. Limitations

This study relies primarily on legal, policy, and agency materials, supplemented by selected scholarly sources. That design is appropriate for diagnosing governance structure, but it cannot fully capture the internal dynamics of enforcement discretion, interagency negotiation, or local political pressure. The method, therefore, privileges institutional explanation over causal measurement and should be read as a structured governance diagnosis rather than as a permit-level impact evaluation.

The analysis also depends on publicly available information. Public permit notices and program documents reveal the administrative architecture, but they do not always capture the full record of compliance reviews, mitigation performance, or cumulative-impact tracking. A stronger next step would pair this governance analysis with permit-level administrative data and geospatial change detection.

Finally, wetland jurisdiction remains legally dynamic. Federal definitions, agency guidance, and implementation practices can shift after major judicial decisions or administrative revisions. The paper, therefore, offers a policy-relevant diagnosis of the current governance configuration rather than a settled account of wetland jurisdiction in Mississippi (Gold, 2024).

7. Conclusion

Mississippi wetlands remain ecologically and economically important, but their protection cannot be understood solely through legal texts. The analysis developed here shows that the state's implementation gap is best explained as a governance problem shaped by uneven jurisdiction, fragmented authority, incomplete monitoring, and the weak integration of regulation with restoration and land-use planning.

The paper's main contribution is diagnostic, but the diagnosis is consequential. Mississippi does not lack wetland law in any simple sense. Rather, the state operates through a layered set of federal statutes, state coastal authorities, code provisions, permitting procedures, and restoration initiatives that distribute power unevenly across landscapes and institutions. A governance lens, therefore, explains the persistence of wetland decline more effectively than a simple claim that the state lacks law altogether.

The broader implication is that effective protection will depend less on legal accumulation alone than on institutional fit. Clearer jurisdictional triggers, stronger coordination across agencies, better permit transparency, more credible compliance tracking, and tighter integration of regulation with restoration and land-use planning are all governance reforms aimed at improving that fit. Mississippi, therefore, illustrates a wider lesson for wetland governance: formal protection matters, but conservation outcomes depend on whether institutions can translate legal authority into consistent administrative practice.

For that reason, the paper does not advocate a single universal instrument. It argues instead for a more coherent governance architecture in which state and federal authorities, administrative procedures, public oversight, and monitoring systems work on the same problem at the same geographic and institutional scales.

8. Governance Recommendations

Clarify residual wetland coverage after Sackett. Mississippi should identify which inland wetlands are least likely to receive reliable federal protection and determine whether state law, rulemaking, or coordinated guidance can close the most consequential gaps.

Strengthen interagency coordination. Coastal, water-quality, wildlife, and federal permitting authorities should use formal coordination protocols for review timing, data sharing, and cumulative-impact assessment.

Improve permit transparency and follow-up. Permit applications, mitigation requirements, status updates, and post-approval compliance information should be easier for the public to access and interpret.

Invest in monitoring infrastructure. Remote sensing, GIS-based change detection, and linked agency databases should be treated as core governance tools rather than as optional technical add-ons.

Align restoration with regulation. Restoration funding and partnership programs should complement, not substitute for, clear jurisdiction, credible permit review, and compliance oversight.

Support watershed-scale planning. Parcel-by-parcel review often misses cumulative impacts, especially in hydrologically connected landscapes.

Build administrative capacity and public oversight. Staffing, technical expertise, and accessible public participation can improve both the legitimacy and the practical effectiveness of wetland governance.

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Data availability: This study relies on publicly available laws, agency materials, public permitting documents, and published secondary sources. No proprietary dataset was used.

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