IMPLICATIONS OF THE REVOCATION OF THE "TULLOCH RULE"

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(ABSTRACT)

The regulation of wetlands by the federal government has evolved in a peculiar manner. Today, the United States Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA) regulate wetlands through the 404 permitting process in the Clean Water Act. A section 404 permit is required for those activities resulting in the discharge of dredge and fill material. In 1986, in an effort to determine which activities were regulated under the Clean Water Act the Corps and the EPA changed the regulations excluding activities that only resulted in "de minimus incidental soil movement".

In an attempt to settle a dispute over regulated activities, the federal government adopted the "Tulloch Rule," effective on August 25, 1993. The Tulloch Rule required a section 404 permit for activities resulting in "incidental fallback". The Tulloch rule was invalidated on June 19, 1998 by the United States Court of Appeals for the District of Columbia.

The invalidation of the Tulloch Rule caused different results across the United States. Those states with strong state wetlands regulation felt little or no impact. Those states that relied on federal regulation of wetlands saw rapid destruction of wetlands. The latter states reacted in different ways to the revocation of the Tulloch Rule. Stakeholder reactions to the revocation of the Tulloch Rule have also been varied.

Regulation of wetlands should come at the state level to offset this loophole in the Clean Water Act. The revocation of the Tulloch Rule has shown the impacts a reactive approach can have on wetlands protection. States should learn from this experience and begin to implement proactive planning approaches in order to protect their natural resources in the future.

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Section 1: Introduction

In the past, many people believed that wetlands had undesirable qualities, and no efforts were made to protect them for future generations. In 1900, the United States Supreme Court characterized wetlands as "…the cause of malarial and malignant fevers" and opined that "…the police power is never more legitimately exercised than in removing such nuisances". (177 U.S. 621, 636, 20 S.Ct. 797, 803, 44 L.Ed. 914, 1900).

As individuals became more aware of the importance of natural resources, the importance of wetlands also became apparent. Individuals became conscious of the important and desirable qualities wetlands did indeed have, such as controlling floods, reducing soil erosion, trapping sediment, filtering water, and accommodating fish and wildlife habitat (69 N.D.L.Rev.873, 1994). As the view towards wetland qualities has changed, the approaches toward wetland regulation have also evolved.

The federal government enacted the Rivers and Harbors Act (RHA) and the Federal Water Pollution Control Act (FWPCA), later renamed the Clean Water Act (CWA) to regulate waters in relation to commerce. These statutes were established to restrict those activities that obstruct or alter navigable waters with relation to commerce. The jurisdiction of these regulations originally pertained only to navigable waters.

Wetlands are regulated under the RHA and the Clean Water Act (CWA) today. The U.S. Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA) have expanded the definition of regulated waters from navigable waters to "waters of the United States," which includes wetlands. As the jurisdiction has expanded with these regulations, so have the activities that are regulated. One of the changes in regulated activities was the enactment of the Tulloch Rule. The Tulloch Rule relates to the regulation of incidental fallback[1] involved in the ditching and draining of wetlands. This paper discusses federal wetland regulations, the background of the Tulloch Rule, the adoption of the Tulloch Rule, and the subsequent revocation of the Tulloch Rule. Additionally, this paper describes state wetland regulations and the impact the revocation of the Tulloch Rule has had on various states.

[1] "Incidental fallback" occurs when the excavated material returns to almost the exact same spot as where it was removed.

Examples of Massachusetts, Maryland, Pennsylvania, North Carolina and Virginia wetland regulations will be presented. Finally, this paper examines the various positions and interests in relation to the revocation of the Tulloch Rule. The purpose of this paper is to examine the impacts and implications the revocation of the Tulloch Rule has had on wetlands and what can be done to offset these impacts in the future.

Section 2: The History of Federal Wetlands Regulations

Federal regulation of waterways and wetlands has changed over time. The history of federal regulation of wetlands, outlined in Table 2.1, is closely tied to interstate commerce and the operation of navigable waterways. The regulation of wetlands can be traced to the RHA of 1899 (33 U.S.C. § 403 et. seq.) and then later to the FWPCA (33 U.S.C. § 1251 et. seq.).

Early regulatory interests were focused on the ability to navigate through national waterways, which was critical to a growing industrial economy in the United States. Under the RHA, any activity that obstructed or altered navigable waterways – because they might interrupt the transport of goods and services – required a permit from the Corps. The RHA focused on the "use and development of national waterways" (69 N.D.L. Rev. 873, 1994). As concern for the protection of natural resources began to grow in the mid-twentieth century the RHA was changed to protect "U.S. waterways against pollution" (69 N.D.L. Rev. 873, 1994). At this time the many qualities that wetlands provide was recognized. Even so, the RHA did not protect many wetlands, since they were not typically part of the system of navigable waterways.

In an effort to further increase federal pollution control regulation the FWPCA of 1948 was enacted (69 N.D.L. Rev. 873, 1994). The FWPCA was established to "…restore and maintain the chemical, physical, and biological integrity of the nation's waters" (69 N.D.L. Rev. 873, 1994). Similar to the RHA, the FWPCA only covered navigable waters. In 1972 in an effort to amend this Act, both the House and the Senate
agreed that navigable waters had been defined too narrowly in the past. Navigable waters were redefined as "the waters of the United States, including the territorial seas" (69 N.D.L. Rev. 873, 1994). This broader definition of navigable waters was an increased effort to decrease

pollution and now included many wetlands. Waters that were adjacent to navigable waters that did not meet the definition of navigable waters in the past could increase the pollutants in navigable waters if they were not regulated. *Natural Resources Defense Council, Inc. v. Callaway* (524 F.2d 79; 1975 U.S. App.) further expanded the regulatory definition of jurisdictional waters. The broadening of this definition allowed for more wetlands to be regulated under this Act. The FWPCA was renamed the CWA (33 U.S.C § 1251 et. seq.) and regulates most wetlands today. Under the CWA, the Corps was given the responsibility of wetland regulation with oversight from the EPA.

Several criteria have to be established to determine if the Corps has the authority to regulate a specific area. In the case of wetlands protection, the area must first be designated as a wetland. The Corps and EPA have established specific qualities that an area must possess to be considered a wetland. As defined by the Corps, a wetland consists of "…areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3, 1999). Secondly, if the area is determined to be a wetland, it must be determined to be a "jurisdictional wetland." If the area is a "jurisdictional wetland," the Corps regulates any activity that discharges "dredge or fill material" into the wetland and, more generally, the "waters of the United States." The definition of a jurisdictional wetland has continued to change over time. A jurisdictional wetland is a wetland that the Corps and the EPA have the authority to regulate. A section 404 permit is required to discharge dredge or fill material into the waters of the United States. Section 404 regulations are provided in Appendix A.

In order to determine if a permit should be issued, the Corps conducts a test, which weighs the public, and the applicant's need for the proposed activity. The Corps also ascertains the activity's positive and negative impacts and whether or not a better alternative is available to the applicant.

Historically, the EPA and the Corps have disagreed on which activities constitute the discharge of dredge or fill materials requiring a section 404 permit. The agencies have differed on whether a section 404 permit is required for activities removing soil and dredge material from

a wetland and moving it to upland areas in order to drain the wetland. Despite this disagreement, the agencies do agree that "…it is [not] possible to conduct mechanized landclearing, ditching, channelization, or other excavation activities in waters of the United States without at least some incidental discharge of dredged material" (57 FR 26894, 1992). Further, the agencies agree that it is not possible to completely remove all excavated material to uplands. The agencies also agree that the act of "sidecasting"(the deposition of excavated material from wetland drainage ditches to an area next to the ditch in order to drain a wetland) is regulatable under the CWA and requires a section 404 permit.[2]

Since its inception, the 404 permitting process has undergone a number of changes. These changes include the move to national, regional, or statewide general permits; changes to 404 permit criteria; and the allowance for state administration of individual and general permits. Court cases have also played a key role in identifying those activities that are regulated. Additionally, efforts by different administrations have been made to expand or narrow the definition of regulated waters. These modifications redefined the role of the Corps and the EPA, and attempted to clarify circumstances under which a permit would be required.

[2] However, the 4th District ruled in U.S. v. Wilson (December 23, 1997) that "sidecasting" does not constitute the discharge of dredge or fill material.

Table 2.1: Chronology of Wetland Regulation

Date	Event
1899	Rivers and Harbor Act (RHA) enacted
1948	Federal Water Pollution Control Act passed covering only navigable waters.
1960s	RHA focus changed from "promoting commerce to controlling pollution" (69 N.D.L. Rev. 873, 1994).
1970s	The United States Court of Appeals for the Fifth Circuit in *Zabel v. Tabb* (430 F.2d 199, 1970 U.S. App.) stated that the Corps "was entitled, if not required, to consider ecological factors" when determining whether a RHA permit should be issued (69 N.D.L. Rev. 873, 1994).
1972	Federal Water Pollution Control Act Amendments (FWPCAA) broaden the definition of navigable waters to include "waters of the United States," including the territorial seas.
1975	Corps further expands the definition of "waters of the United States" as a result, of the court's decision in *Natural Resources Defense Council v. Callaway* (524 F.2d 79; 1975 U.S. App.). As a result more wetlands are now regulated under the FWPCA.
1977	FWPCA amended and renamed the Clean Water Act (CWA). Congress changed the 404-permitting program in three ways: "First, Congress authorized the issuance of general permits on a national, regional or statewide basis. Second, Congress provided certain exemptions from the program: for normal farming, silviculture, ranching, [etc.]. And third, Congress added section 404(g), which authorizes a state to administer its own individual and general permit program for the discharge of dredge or fill material" (69 N.D.L.Rev.873, 1994). If the discharge of dredge or fill material qualifies under one of these exemptions or qualifies for a nationwide, regional, or general permit, a section 404 permit is not required.
1980	Water Bank Act – expanding the definition of wetlands under the CWA.
1983	The Fifth Circuit U.S. Court of Appeals in *Avoyelles Sportsmen's League, Inc. v. Marsh* attempted to delineate activities requiring a section 404 permit for the discharge of dredge or fill material. In this case, Avoyelles used landclearing activities to transform their property to agricultural use. Avoyelles cut timber and vegetation, and "the trees were then raked into windrows, burned, and the stumps and ashes were disced into the ground by other machinery" (715 F.2d 897, 1983 U.S. App.). The Fifth Circuit Court of Appeals ruled that the landclearing activities resulted in the discharge of dredge or fill material requiring a section 404 permit. While these activities that alter a wetland require a section 404 permit activities that alter a wetland through draining that only result in incidental fallback do not (September 26).
1986	Corps adds the de minimis exception to the regulatory definition of "discharge of dredge and fill material." The 1986 amendments to the regulation states, that "de minimis incidental soil movement that occurs during normal dredging" is exempt from regulation (57 FR 26894, 1993).
1987	Wetland Delineation Manual created
1989	No-net loss of wetlands goal became a federal policy (January 18).
1989	Wetland Delineation Manual created to replace the 1987 Manual.
1992	The North Carolina Wildlife Federation and the National Wildlife Federation file suit against the Corps due to a North Carolina developer draining 700 acres of wetland. In an attempt to settle the dispute between the North Carolina Wildlife Federation, the National Wildlife Federation and the Corps, the federal government decided to adopt a stricter rule to become known as the "Tulloch Rule" (February 28).

1992	*Save Our Community v. U.S. Environmental Protection Agency* established that the draining of a wetland does not require a section 404 permit. In this case In *Save Our Community v. U.S. Environmental Protection Agency*, (971 F.2d 1155, 1992 U.S. App.) the United States Circuit Court of Appeals for the Fifth Circuit stated, "we have found no suit in which the Corps undertook to prevent the removal of water from wetlands" (971 F.2d 1155, 1992 U.S. App.). Save Our Community filed suit against the EPA, disputing the EPA's determination that the draining of wetlands by Trinity Valley Reclamation, Inc. did not require a section 404 permit. Trinity Valley Reclamation, Inc. drained several ponds to expand their 73-acre landfill (971 F.2d 1155, 1992 U.S. App.). The United States District Court for the Northern District of Texas Dallas Division held that the draining of the ponds required a section 404 permit but on appeal the U.S. Court of Appeals for the Circuit reversed the lower court's decision. The Circuit ruled that the draining of wetlands did not require a section 404 permit because it did not constitute the discharge of an effluent. However, if Trinity had attempted to alter the ponds by filling them, a section 404 permit would have been required (September 14).
1993	Tulloch Rule goes into effect regulating incidental fallback (August 25).
1997	U.S. District Court for the District of Columbia overrules the Tulloch Rule in *American Mining Congress v. U.S. Army Corps of Engineers.* The Tulloch Rule was revoked (January 23). Corps appeals the U.S. District Courts' decision.
1997	EPA and Corps granted a stay allowing incidental fallback to continue to be regulated until the appellate court's decision. However, Mike Wylie, EPA Region 4 Wetlands Enforcement Coordinator stated that ditching and draining of wetlands still occurred during this time (June 25).
1998	Clinton Administration calls for a net gain of wetlands
1998	U.S. Court of Appeals for the District of Columbia upholds *American Mining Congress* decision in *National Mining Association v. U.S. Army Corps of Engineers*, ruling that the EPA and the Corps had overreached their authority (June 19).
1999	Corps and the EPA issue a regulation excluding "incidental fallback from the list of discharges that require a permit" (Southern Environmental Law Center [SELC], 1999) (May 10).

Source: 33 U.S.C. § 403 et. seq.; 33 U.S.C. § 1251 et. seq.; 57 FR 26894; 69 N.D.L. Rev. 873; 715 F.2d 897; 430 F.2d 199; 971 F.2d 1155; Heimlich, 1998; SELC, 1999; Tolman, 1993; Want, 1989; Winston, 1997; and M. Wylie, personal communication, April 12, 2000.

Section 3: The Tulloch Rule

Adoption of the Tulloch Rule

The Tulloch Rule came about after a developer in Wilmington, North Carolina wished to fill 700 acres of wetlands to develop a golf course and housing development (Johnston, 1999). The developer applied for a section 404 permit. Fearing denial of the permit, the developer devised a plan to drain the wetlands, circumventing the need for a section 404 permit. The developer believed that a section 404 permit was not needed because the ditching and draining activities only constituted "incidental fallback" of soil and other dredged material (145 F.3d 1399, 330 U.S.App.D.C. 329, 1998). The 1986 preamble to the CWA states, that "de minimis incidental soil movement that occurs during normal dredging" is exempt from regulation (57 FR 26894, 1992). At this time dredging activities were not regulated if they only had a de minimus discharge of fallback material so long as the material was removed to an upland area.

The developer drained pocosin wetlands. Pocosin wetlands are an "unusually rare type of wetland found only in the Southeast [which provide] habitat for rare plants and animals and serves important water quality and groundwater recharge functions" (Janov, 2000, p. 6).

The Corps' determination that a 404 permit was not required resulted in the North Carolina Wildlife Federation, the National Wildlife Federation, and other environmental groups filing suit against the Corps because they believed the developer's actions would adversely affect the wetland. The Corp realized that the de minimis exception in the CWA hindered their ability to protect valuable wetlands. On February 28, 1992, the Corps and the EPA decided to settle this dispute by adopting a stricter rule. This new rule became known as the Tulloch Rule after the Corps' District Engineer Colonel Tulloch, who was named in the suit (57 FR 26894, 1992).

On August 25,1993, the Tulloch Rule went into effect. Primarily, the Tulloch Rule removed the de minimis exception that was included in the 1986 regulatory definition and replaced it with the provision of "incidental fallback." The Tulloch Rule defined the discharge of dredge or fill material as:

> Any addition of dredged material into, including any redeposit within, the waters of the United States. The term includes, but is not limited to the following: * * * any addition, including any redeposit, of dredged material, including excavated material, into waters of the United States which is incidental to any activity, including mechanized landclearing, ditching, channelization, or other excavation (58 FR 45008, 1993).

The preamble to this Rule stated:

> [The Corps and the Environmental Protection Agency (EPA)] believe that it is appropriate to look at the environmental effect of activities that involve incidental soil movement for several reasons. First, the Federal government has broad authority under section 404 (a) to regulate any discharge of dredged or fill material into any water of the United States. This authority has been upheld by many decisions of the Federal courts. Second, the CWA contains no explicit exemption for de minimis discharges: any inference of one would need to be consistent with the environmental purposes of the CWA. Third, the proposed language also parallels the approach and implements the policy of section 404 (f), which generally exempts minor discharges from farming, ranching, and silvicultural activities, but "recaptures" them when the activity alters the waters of the United States (57 FR 26895, 1993).

The adoption of the Tulloch Rule represented a gigantic step forward for wetlands protection. Prior to this Rule, the Natural Resources Conservation Service estimated that 70,000 to 90,000 acres of wetlands were lost each year from 1982 to 1992 (Gardner, 1996). However, with the adoption of the Tulloch Rule, anyone involved in mechanized landclearing, ditching, channelization and other excavation activities bore the burden to prove to the Corps that these activities would not destroy or degrade the waters of the United States. "Degradation is defined as any effect on the waters of the United States that is more than de minimis or inconsequential" (145 F.3d 1399, 330 U.S.App.D.C. 329, 1998).

Revocation of the Tulloch Rule

On January 23, 1997, the Tulloch Rule was struck down. This determination came from a suit filed by the American Mining Congress (AMC) against the Corps claiming that the Tulloch Rule exceeded the range of the Corps' authority under the CWA. The AMC claimed "…fallback, which returns dredged material virtually to the spot from which it came, cannot be said to constitute an addition of anything" (951 F. Supp. 267; 1997 U.S. Dist.). The Corps

claimed that the CWA allowed them to construe "fallback" as a discharge. The preamble to the 1986 regulation defining the discharge of dredge or fill material states:

> Section 404 clearly directs the Corps to regulate the discharge of dredged material, not the dredging itself. Dredging operations cannot be performed without some fallback. However, if we were to define this fallback as a discharge of dredged material, we would, in effect, be adding the regulation of dredging to section 404 which we do not believe was the intent of Congress (145 F.3d 1399, 330 U.S.App.D.C. 329, 1998).

The CWA allows the Corps to regulate the addition of a pollutant; therefore, the Corps claimed that once the material is removed from the wetland it becomes a pollutant. The agencies stated that during the dredging process the material removed from the wetland undergoes a "legal metamorphosis" therefore becoming an addition of a pollutant. The United States District Court for the District of Columbia disagreed. The court stated that since Congress used the term "specified disposal sites" in the CWA, to be considered an addition of a pollutant material must be removed from one location and relocated elsewhere within the wetland. The court ruled that since "incidental fallback" is not relocated elsewhere within the wetland it could not be considered an addition of a pollutant.

The court referred to the opinion in *North Carolina v. Federal Energy Regulatory Commission* (112 F.3d 1175, 1998) in which the court stated "…the nearest evidence we have of definitional intent by Congress reflects, as might be expected, that the word discharge contemplates the addition, not the withdrawal, of a substance or substances" (112 F.3d 1175, 1998). The District Court for the District of Columbia in the AMC case additionally noted that it was not the intent of Congress to regulate incidental fallback. The court referenced Senator Ellender of Louisiana in which he stated in the 1972 congressional CWA debate,

> The disposal of dredged material does not involve the introduction of new pollutants; it merely moves material from one location to another. Thus, incidental fallback associated with excavation or land clearing does not add material or remove it from one location to another; some material simply falls back in the same general location from which most of it was removed (Aston, 1998, p. 32JJ).

Furthermore, the Corps and the EPA excluded incidental fallback from regulation for 17 years. The 1986 preamble to the CWA stated that de minimis soil movements would not be regulated under the CWA. Taking this into consideration the court further stated, "Although the CWA included dredged spoil in its list of pollutants…, Congress could not have contemplated that the

attempted removal of 100 tons of that substance could constitute an addition simply because 99 tons of it were actually taken away" (951 F. Supp. 267; 1997 U.S. Dist.). The Corps has the authority to regulate dredge and fill material not the act of dredging itself.

The court further stated that excavation activities are regulated by the RHA not the CWA. The CWA regulates discharges of dredge and fill materials. The RHA regulates dredging but only reaches those waters that are navigable, which excludes most wetlands. The CWA does not regulate dredging but regulates waters that are not navigable. In *United States v. Cumberland Farms of Connecticut Inc.* (826 F.2d 1151, 1158, 1987) the United States Court of Appeals for the First Circuit stated, "the principal difference between the two statutes is that section 404 reaches only discharges while RHA section 10 applies to activities modifying channels without regard to whether there has been a discharge" (Hollins, 1999). Appendix B illustrates section 10 of the RHA.

Usually courts give deference to an agency's interpretation of a statutory provision so long as it is a reasonable interpretation. "By invalidating the Tulloch Rule the D.C. Circuit Court did something the Supreme Court has never done: it found an agency interpretation of an admittedly ambiguous statutory construct to be so unreasonable as to be impermissible. Once one acknowledges that the CWA sets out no bright line between incidental fallback on the one hand and regulable redeposits on the other, it seems hard to understand why the agencies cannot conclude that the statute covers all redeposits, whether de minimis or not" (Johnston, 1999, p.87).

Following the district court's decision, the government appealed the case to the United States Court of Appeals for the District of Columbia. During the period between the court's decision in AMC and the case being heard by the Court of Appeals, the Corps and the EPA were bound to the lower courts decision. The Corps gave applicants three choices for activities only resulting in incidental fallback three choices:

1. Withdraw the permit application
2. Request the Corps to retain the permit application without processing it pending a ruling on any motion to stay the court's decision
3. Request in writing that the Corps process the permit application (in which case the Corps will process the application and issue the permit, with any necessary conditions, if appropriate (Permits, 1997)

On January 9, 1998 the United States Court of Appeals for the District of Columbia heard the appeal of the American Mining case in *National Mining Association v. United States Army Corps of Engineers* (145 F.3d 1399, 330 U.S.App.D.C.329, 1998). On June 19, 1998 the Court of Appeals unanimously affirmed the lower court's decision. The decision conceded that the Corps and the EPA could regulate some deposits of dredge and fill material, but not all deposits which they were doing with the enactment of the Tulloch Rule (145 F.3d 1399, 330 U.S.App.D.C. 329, 1998). After the *National Mining Association v. U.S. Army Corps of Engineers* decision, the Corp and the EPA may no longer regulate:

- Scraping or displacing soils, sediments, debris, or vegetation at or along the surface, penetration surface soils and sediments with machines, and movement of soils and sediments incidental to such activity;
- Excavating, removing, or disturbing root systems or knocking down or uplifting tree stumps;
- Windrowing in a manner that pushes fallen vegetation with machines;
- Excavating or dredging soils and sediments;
- Displacing and redepositing of soils and sediments by use of backhoes, draglines, bulldozers, or cutterhead dredges, including the pushing of sediment during stream channelization (Albrecht, 1999, p. 100).

On May 10, 1999, following the court's decision, the Corps and EPA issued a rule excluding "…incidental fallback from the list of discharges that require a permit" (SELC, 1999). To adhere to the courts' decision, the Corps and the EPA changed the definition of the

discharge of dredge or fill material and removed the word “any” from addition and removal. Incidental fallback was completely removed from the definition as well.

> To conform our regulation to [the Court’s decision] we have made two modifications to the [Tulloch] Rule. First, today's rule deletes use of the word ``any'' as a modifier of the term ``redeposit.'' Second, today's rule expressly excludes ``incidental fallback'' from the definition of ``discharge of dredged material.'' Today's rule does not alter the well-settled doctrine, recognized in NMA, that some redeposits of dredged material in waters of the United States constitute a discharge of dredged material and therefore require a section 404 permit.
> Deciding when a particular redeposit is subject to CWA jurisdiction will require a case-by-case evaluation, based on the particular facts of each case. Judicial decisions have established, and the D.C. Circuit recognized in NMA, that redeposits associated with the following are subject to CWA jurisdiction: mechanized landclearing, redeposits at various distances from the point of removal (e.g., sidecasting), and removal of dirt and gravel from a streambed and its subsequent redeposit in the waterway after segregation of minerals. (64 FR 25121, 1999)

Those activities requiring a case-by-case evaluation are:

- Mining activities, including sand and gravel mining, aggregate mining, precious metals and gem mining, recreational mining, and small instream hydraulic dredges
- Ditching and draining activities, including ditching to lower the water table, ditching to drain wetlands, and removal of beaver dams
- Maintenance dredging activities and excavation for currently used flood control projects or for previously abandoned flood control, and irrigation or drainage projects
- Channelization and the reconfiguring or straightening of streams
- Other excavation activities (Corps of Engineers/EPA Guidance, 1997)

Loren Sweatt, Director of Environmental Congressional Relations for the Associated General Contractors believes that the Corps and the EPA have “…created a burden by requiring a case-by-case evaluation review for deciding whether a redeposit of dredged material requires a permit under section 404” (“Corps restricts Tulloch Rule,” 1999).

The agencies are currently trying to develop a bright line rule to determine which activities require a section 404 permit. The United States Court of Appeals for the District of Columbia stated that they would give “considerable deference” to the EPA and the Corps if they were to develop a bright line rule determining regulatable redeposits. “The National Association of Home Builders cautions the agencies to avoid a narrow, legalistic interpretation that would effectively gut the National Mining Association decision” (Downs, 1999). On October 13, 1999 J. Charles Fox, assistant administrator for water for the EPA stated before the Committee on Environment and Public Works, U.S. Senate, “the administration is ready to work with this Committee and Congress to strengthen the CWA.”

Two bills have been brought before the House and the Senate to incorporate the Tulloch Rule into the CWA:

> H.R. 2762: This bill was introduced into the House in 1997 after the Tulloch Rule had been revoked (HR 2762, 1997). It is referred to as the Wetlands and Watershed Management Act. This bill would include, "without imitation, any addition (including redeposit) of dredged material (including excavated material) into such waters which is incidental to any activity (including mechanized landclearing, ditching, channelization, or other excavation) that has or would have the effect of destroying or degrading…wetlands" (HR 2762, 1997). No action has been taken on this bill.
>
> H.R. 3465: This bill was introduced into the House on November 8, 1993 after the Tulloch Rule had been enacted (Janov, 2000). This bill "…would require a permit for any significant disruption of wetlands and would redefine the term discharge of dredged or fill material to include any addition or redeposit of dredge or fill material which is incidental to draining, dredging, excavation, channelization, flooding, pumping, driving of pilings, diversion of water, mechanized landclearing, or ditching. This definition would also include these activities if they significantly impair the flow or change the hydrologic regime of water without the addition of materials. H.R. 3465 was referred to the House Subcommittee on Trade on March 20, 1998, but failed to make it out of the committee" (Janov, 2000, p. 9).

The United States Court of Appeals for the District of Columbia stated "… if any party believes the Clean Water Act does not adequately protect waters and wetlands, Congress is the appropriate body to address" (Karkowsky, 1998, p. 54). However, Carol Browner, EPA administrator stated, "…given Congress's hostility to federal wetlands protections, it is unlikely the fix will be quick or easy" ("Natural resources – Wetlands regulatory loophole," 1999). Pete Ruane, president of the American Road and Transportation Builders Association stated, "it is time for the federal government to stop wasting taxpayer money and accept the court's ruling" ("Slants and Trends," 1998).

Impact on Wetlands Generally due to the Revocation of the Tulloch Rule

The invalidation of the Tulloch Rule has had a tremendous effect on wetland protection as well as an impact on our rivers and streams. Many see the CWA as one of the most successful of the environmental laws. However, Representative Sherwood Boehlert and Representative Robert A. Borski stated that the two shortcomings in the CWA were with the

reduction of nonpoint source pollution and the protection of wetlands (1999). They go on further to say "if an amendment to reinstate the Tulloch Rule could be matched with an effective nonpoint source program, the effects on restoring and maintaining the nation's water resources would be dramatic" (Boehlert & Borski, 1999).

The total amount of wetlands "…at the time of European settlement is estimated to have been about 221 million acres" (Heimlich, 1998, p. 21). In 1998, estimates place the total amount of wetlands at 124 million acres (Heimlich, 1998). Since the functions of wetlands have been deemed important and the nation has seen an overwhelming loss of wetland acres over the years, the "no net loss" of wetlands became a Federal policy goal in 1989 (Heimlich, 1998). This policy means that existing wetlands must be protected and that any wetlands that are destroyed must be restored elsewhere to offset the loss. In 1998, Clinton Administration modified the no net loss policy by calling for a net gain of wetlands (Heimlich, 1998, p. 20).

The no net loss and net gain goals are achievable through mitigation requirements in the 404 program. Those individuals granted a section 404 permit are required to mitigate the loss by restoring or creating wetland acres elsewhere. The Corps requires restoration or creation of an average of 1.5 to 2 acres of wetlands for every wetland acre destroyed (Baker, 1999).

When the Tulloch Rule was enacted it looked as if the nation would meet the no net loss goal. The revocation of the Tulloch Rule makes the possibility of achieving the net gain or even the no net loss of wetlands more difficult. Since the revocation of the Tulloch Rule, landowners no longer need to apply for a section 404 permit if their activities only result in incidental fallback. If a section 404 permit is not necessary then landowners may destroy by ditching or draining wetlands without any mitigation unless otherwise prohibited by state law. Without the Tulloch Rule or strong state regulation a net loss of wetlands may occur. However, the invalidation of the Tulloch Rule did not create a new loophole, it just reinstated the loophole that was apparent in the CWA prior to the adoption of the Tulloch Rule in 1993. Many believe that developers and landowners interpret the invalidation of the Tulloch Rule to mean that they can conduct activities that are still regulated by the CWA without a section 404 permit.

Steve Martin, wetland scientist for the Norfolk district Army Corps of Engineers, believes that more wetlands are being drained since the revocation of the Tulloch Rule (personal

conversation, March 13, 2000). He further opines that prior to the enactment of the Tulloch Rule, draining impacted few wetlands. Even though prior to the Tulloch Rule developers could drain a wetland without a permit, the Corps failed to notice a large amount of wetland losses due to draining. Draining is very expensive and prior to the Tulloch Rule there were many upland areas that were still available for development. Since the revocation of the Tulloch Rule in 1997, Martin believes that scarce buildable upland area available prompts developers to seek wetlands for development (personal conversation, March 13, 2000).

Section 4: Impact of the Revocation of the Tulloch Rule on State Wetlands Regulations

State Wetlands Regulations

States also possess the authority to regulate wetlands whether through environmental protection powers or through state police power.[3] Section 404(g) of the CWA gives states the authority to administer 404 permits (See Appendix A for the full text of section 404). States may take over the entire section 404 permitting process but may not opt to take over a portion of the program. As of August 21, 1997 Michigan and New Jersey were the only two states that have chosen to take over the authority to issue section 404 permits (40 CFR Part 233, 1997). Additionally, states may choose to implement laws that are more stringent than the federal regulations. States that decide to implement more stringent wetland programs do not receive additional oversight from the federal government. Many states chose to implement regulations more stringent than the federal government prior to 1993's adoption of the Tulloch Rule. Massachusetts, Maryland, and Pennsylvania are a few examples of some of the states that implemented a proactive approach to wetland protection.

401 State Water Quality Certification

Other states choose to let the federal government administer 404 permits while the state regulates water quality through their section 401 state water quality certification. Section 401

[3] Police power is "the government's right and power to set up and enforce laws to provide for the safety, health, and general welfare of the people" (West Legal Directory, 1999).

regulations under the CWA are available in Appendix C. Section 404 permits issued by the Corps must pass state 401 water quality certification, a public interest review, and EPA review before being issued. Through section 401 of the CWA, states have the power to review section 404 permits that would result in the discharge of dredge or fill material to wetlands and other waters to ensure that the permit is consistent with state water quality standards. Section 404 permits will not be granted to those activities that do not meet these standards. The agencies that primarily administer section 401 state water quality certification are the same agencies that regulate water quality. North Carolina and Virginia are examples of states that relied on section 401 state water quality certification to protect their wetlands prior to the enactment of the Tulloch Rule in 1993.

State Impact

The invalidation of the Tulloch Rule has impacted particular states differently. Some states have not been affected at all from the revocation while others have considerable amounts of wetland acres that have been drained or are in danger of being drained. Table 4.1 illustrates the estimates of wetland acres due to the revocation of the Tulloch Rule around the country from January 23, 1997 to June 1999 (M. Wylie, personal communication, April 12, 2000). However, it is difficult to determine the amount of acres lost in individual states. The geographic areas are not uniform in size therefore making it difficult to compare the different areas. For example, the Southeast region consists of nine states whereas, the Lower Midwest region only consists of two states. Additionally, states that have had zero wetland acres lost since the revocation of the Tulloch Rule that are grouped with states that have lost a considerable amount of wetland acres will be misleading. These numbers may be low as there was a year stay, allowing for the Corps and the EPA to continue to regulate incidental fallback during the AMC decision and the NMA decision. However, Mike Wylie, EPA Region 4 Wetlands Enforcement Coordinator stated that ditching and draining still occurred during this period (personal communication, April 12, 2000).

Table 4.1: Estimates of Tulloch Losses around the Country

Geographic Area	States Included	Acreage Lost
New England	CT,MA, ME, NH, RI, VT	0
North Atlantic	NJ,NY,Eastern PA	71
Mid-Atlantic	DE,MD,VA,WV,Western PA	7,714
Southeast	AL,GA,FL,KY,LA,MS,NC,SC,TN	20,243
Great Lakes and Ohio River Areas	WI,IL,IN,OH,MI,Western NY,KY,TN	80
Midwest and Northern Rockies	ND,SD,NE,KS,MN,IA,MO,AR,MT,WY	27
Lower Midwest	TX,OK	1,183
Southern Rockies and Southwest	NM,Southern CO, Southern CA,West TX	No Data
California and the Great Basin	Northern CA, NV, UT	23
Pacific Northwest	OR,WA,ID,AK	172
Totals		29,512

Source: "Impacts to public health," 1999.

The Corps and the EPA differ on the impact of the revocation of the Tulloch Rule. Table 4.2 displays the Corps, EPA, and the North Carolina Department of Environment and Natural Resources different estimates of wetland acres lost since the revocation of the Tulloch Rule. The Corps' data was obtained by contacting the Corps' Wilmington and Norfolk District Regulatory Offices and the North Carolina Division of Water Quality offices. Michael D. Smith, Program Manager/Biologist, Policy Development Section of the Regulatory Branch, U.S. Army Corps of Engineers Headquarters, provided the 8,000 acre estimate to John Studt. Table 4.3 shows the individual state estimates for both Virginia and North Carolina that were used to obtain the 8,000 acre estimate used by John Studt. J. Charles Fox, assistant administrator for water for the EPA states that the revocation of the Tulloch Rule is a "…virtual blank check for [developers] in trying to get around the wetlands laws" ("Loophole again threatens wetlands," 1999).

Table 4.2: Estimates of Wetland Acres Lost since the Revocation of the Tulloch Rule

	Estimate of Wetland Acres Lost Due to the Revocation of the Tulloch Rule	Date
Greg Peck, associate director of the EPA's Wetland Division	30,000 acres	June 1998 – September 1999
John Studt, chief of the regulatory branch of the Corps	8,000 acres in Virginia and North Carolina where most of the ditching has occurred	June 1998 – Mid-August 1999
North Carolina Department of Environment and Natural Resources	20,000 acres	Dates not available

Source: Peck, 1999; Baker, 1999, M. Smith, personal conversation, April 11, 2000.

The states most directly impacted by the revocation of the Tulloch Rule are those, which used section 401 state water quality certification for wetland protection. States, which already had comprehensive wetland regulatory programs in place, were impacted less dramatically, if at all. State 401 certification allows states to review approved 404 permits to determine if they are consistent with state water quality standards. Since the revocation of the Tulloch Rule, individuals no longer needed to apply for section 404 permits for activities resulting only in incidental fallback. Therefore, if no section 404 permit is needed, individuals did not need to pass state 401 water quality certification either. Many of these states, seeing the potential risk that the invalidation of the Tulloch Rule will have on wetlands, have enacted their own "ditching and draining" regulations using existing programs to further this effort or designing new programs to protect their wetlands from further destruction. Corps officials state, "southeastern states' soil conditions and previous dependence on federal protection have left them particularly vulnerable" (Powers & Winston, 1999, p. 12). North Carolina and Virginia relied on 401 certification to protect wetlands and were subsequently affected by the revocation of the Tulloch Rule. Table 4.3 shows the Corps' estimate of wetland acres lost due to ditching and draining since the revocation of the Tulloch Rule. States like Massachusetts, Maryland, and Pennsylvania, who already had stringent regulations in place prior to the repeal of the Tulloch Rule, were not greatly impacted.

Table 4.3: Wetland Acres Destroyed in Virginia and North Carolina since the Revocation of the Tulloch Rule

Virginia	**1998 - Mid-August 1999**	**Mid-August 1999 - April 2000**
Wetland acres destroyed	2,221 acres	2,666 acres
North Carolina	**1998 - Mid-August 1999**	**Mid-August 1999 - October 1999**
Wetland acres destroyed	5,627 acres	
Wetland acres disturbed		9,200 acres

Source: M. Smith, personal conversation, April 11, 13, 2000

It is important to note that the estimate of wetland acres lost in North Carolina from the revocation of the Tulloch Rule to October 1999 in Table 4.3 is for disturbed wetland acres. Disturbed does not necessarily mean that the activity has had an adverse impact on the wetland (M. Smith, personal conversation, April 13, 2000). These figures may also be skewed in that they represent an entire site, which may not consist entirely of wetlands. Also, this estimate does not take into account any wetland acres that have been restored during this period. Michael D. Smith, Program Manager/Biologist, Policy Development Section of the Regulatory Branch, U.S. Army Corps of Engineers Headquarters states that the North Carolina Division of Water Quality believes that the estimate of wetland acres adversely affected by the revocation of the Tulloch Rule will be reduced significantly once they have had an opportunity to investigate them further (personal conversation, April 13, 2000).

States that relied primarily on 401 certification to regulate wetlands may additionally have an impact on water quality in other states as well. A proactive approach taken by one state may be offset by a reactive approach taken by another state. Since water does not have jurisdictional boundaries, a state that has been greatly impacted by the revocation of the Tulloch Rule will have an impact on surrounding states as well. The large amounts of wetland acres that have been drained in those states that relied on state 401 water quality certification will adversely impact water quality in surrounding states as well.

States possess the authority to regulate wetlands as long as the regulations are at least as stringent as the federal regulations. In an effort to expand those areas that are regulated some states have chosen to develop their own wetland definitions to encompass more wetlands

than the federal definitions. Other states use the same definitions as developed by the Corps and the EPA. Examples of different state definitions of wetlands are provided in Appendix D.

Many have stated that North Carolina was the state that would be the most severely impacted from the revocation of the Tulloch Rule (Carter, 1999). North Carolina is grouped with other states in the Southeast region in Table 4.1 but is the geographic area with the most wetland acres lost since the revocation of the Tulloch Rule. The southeast region makes up 68.6 percent of the wetland acres lost since the revocation of the Tulloch Rule. As a result, North Carolina responded quickly to the revocation of the Tulloch Rule. Other states like Virginia have not responded by enacting wetland protection laws thus far. The Virginia legislature is presently considering several bills to regulate Tulloch type ditching. If the new laws are passed they would not go into affect until October 2001. The Mid-Atlantic region including Virginia in Table 4.1 is illustrated as having a wetland acre loss of 7,714 since the revocation of the Tulloch Rule.

One response to Tulloch type ditching is to let states fill the regulatory gap until federal action is taken. However, Brenda Mallory argues in her article *To Address the Tulloch Decision* that the appropriate response to the revocation of the Tulloch Rule is not state regulation of ditching and draining activities. She believes that the advice given by the Corps and the EPA, as well as environmental groups encouraging states to use their land use authorities to avoid the ditching and draining of wetlands, is misguided. She states, "while there may be policy reasons that states should consider this step, focusing on this issue out of context is unlikely to produce thoughtful and effective policy making" (Mallory, 1999, p.3).

Mallory further suggests that at present it is still unclear what activities the Corps and the EPA are regulating. Therefore, many developers still apply for section 404 permits regardless of whether their activities are regulated under the CWA in order to avoid possible litigation. Johnathan Adler gives another perspective in his article "Swamp rules: The end of federal wetland regulations?"(1999) He states that studies show that states are in a constant "race to the bottom." This theory implies that in an effort to attract industries to a state, states will soften their environmental regulations. States will compete with one another in an effort to attract these businesses. He goes on to state further that this "race to the bottom" theory is why many

believe that the federal government is the only entity that can adequately protect environmental resources.

Adler's research, however, shows this theory does not hold with regards to wetland protection. Many states had enacted wetland protection laws prior to the federal government's efforts. Many states continue to expand their laws to further protect wetlands from destruction. Also, many states have enacted laws that are more stringent than the federal regulations, which go on to further; prove that states will not try to degrade their environmental resources.

> Maryland and New York regulate wetland buffer zones; the federal government does not. Many states also protect wetlands through shoreline or coastal zone protection programs as well, and several states have critical area programs that impose special land-use controls in portions of the state deemed to have special ecological significance. In many states, wetland protection is addressed in local zoning ordinances as well. Without doubt, some state programs are more effective than others, and some of the state programs [that were in place prior to the federal regulations in 1975] were less stringent (Adler, 1999, p. 11).

In contrast, other states failed to have wetland protection statutes in place prior to the revocation of the Tulloch Rule. Adler believes that while states would protect the wetlands if no federal regulations were in place, states feel duplication of the federal program wastes time and efforts.

Many believe that the appropriate response to the revocation of the Tulloch Rule should come from Congress. However, stricter state laws guard against removal of federal regulations in the future. Others believe that the revocation of the Tulloch Rule does not have enormous implications on the amount of wetlands destroyed. Most developers would choose obtaining a 404 permit over the uncertainty of ditching and draining a wetland (Slone, 1999). "The barriers to effectively creating developable property through ditching and draining are substantial" (Slone, 1999, p. 7). However, the fact that developers would rather obtain a 404 permit over the uncertainty of ditching and draining a wetland fails to account for the measured amounts of wetlands destroyed after the Tulloch Rule was revoked.

The National Association of Home Builders has filed suit against the EPA and the Corps to narrow wetlands permitting even further. The suit aims to eliminate activities such as

sidecasting from the Corps' authority. If this suit is successful, it will have even greater implications on wetland destruction than the revocation of the Tulloch Rule.

States not directly Impacted by the Revocation of the Tulloch Rule

Massachusetts

Massachusetts, often seen as an "environmentally friendly" state, was the first state to enact a state wetland protection statute in 1963 (Adler, 1999). This statute regulated the discharge of dredge or fill with regard to coastal wetlands. In 1965, the state passed legislation to regulate inland wetlands also (Adler, 1999).

Today, Massachusetts regulates wetlands through its Wetlands and Waterways Program. This program "…ensures the protection of inland and coastal wetlands, tidelands, great ponds, rivers and floodplains" (Bureau of Resource Protection, 1997). Through the Wetlands and Waterways Program Massachusetts administers and enforces the Wetlands Protection Act (See Appendix E), which requires a permit for any activity that alters a wetland. Therefore, this statute regulates excavation activities occurring in wetlands with the intent of changing the wetland for development purposes. This proactive environmental planning response taken by Massachusetts has resulted in no impact on wetland preservation efforts since the revocation of the Tulloch Rule.

Maryland

The agency in Maryland that regulates non-tidal[4] wetlands is the Department of the Environment. This agency has developed a statute to protect Maryland's non-tidal wetlands from being drained. The Maryland Nontidal Wetlands Protection Act was developed in 1989, four years before the Tulloch Rule was ever adopted but was not made effective until January 1, 1991 (Liebesman & Witkin, 1998; Clark, 2000). This Act requires a section 404 permit for those activities that result in any changes to the hydrology of a wetland. The specific activities

[4] The Chesapeake Bay Foundation defines non-tidal wetlands as "those wetlands that exist above tidal influence in rivers, creeks, streams and those inland wetlands that are connected by groundwater" (CBF, 2000).

that are regulated within nontidal wetlands are provided in Appendix F. The protection of non-tidal wetlands will aid in lessening the decline of Maryland waters and the Chesapeake Bay.

Tidal wetlands are regulated under a separate program and are regulated through the Wetlands Administration a division of the Maryland Board of Public Works. In May 1997 Maryland's Governor Glendening developed a voluntary wetland restoration initiative to further "restore, create, or enhance" wetlands (Maryland Department of the Environment, 1999).

Stringent regulations imposed by Maryland have resulted in wetlands not being directly at risk of being drained.

Pennsylvania

Pennsylvania, like Maryland and Massachusetts, implemented wetland regulations more stringent than the CWA prior to enactment of the Tulloch Rule.

The Department of Environmental Protection is the agency responsible for protection of Pennsylvania's wetlands. In 1996, the state developed a Wetlands Protection Advisory Committee, consisting of various stakeholders that aid the Department of Environmental Protection ("Pennsylvania marks world wetlands day", 1998). In 1998, Pennsylvania declared February 3rd World Wetlands Day because the state had seen a net increase of 2,286 acres of wetlands since 1991 ("Pennsylvania marks world wetlands day", 1998). This large increase in wetland acres is due to the proactive approach Pennsylvania has had towards wetland protection.

After learning of the court's decision to invalidate the Tulloch Rule, James M. Seif, Secretary, wrote in a letter to J. Charles Fox, assistant administrator for water for the EPA, that he did not feel that the court's decision would have any effect on Pennsylvania's wetlands: "[Pennsylvania's] wetland protection and restoration efforts are yielding significant results" (2000).

States that Relied on 401 Certification

North Carolina

North Carolina is an example of a state that has relied on 401 certification in the past to protect wetlands. In North Carolina the agency responsible for overseeing wetlands protection is the Department of Environment and Natural Resources (NCDENR). Once the Tulloch Rule was revoked, NCDENR decided to react quickly to insure that state water quality was not greatly impacted. In a letter dated December 1997 NCDENR's attorneys stated that even though the agency no longer had the authority to regulate activities that only resulted in incidental fallback under the CWA NCDENR did indeed have the authority under North Carolina law (Poyner & Spruill 1998).

NCDENR's Wetlands Drainage Policy went into effect on March 1, 1999 regulating "…all forms of ditching and groundwater pumping, including construction of ponds in wetlands, ditching in isolated wetlands, rim-ditching, maintenance of existing ditches and ditch expansion" ("Federal and state agencies," 1999). North Carolina's Division of Water Quality: Wetlands Drainage Policy is provided in Appendix G. This rule requires that all construction activities, including excavation of five or more acres to obtain a federal National Pollutant Discharge Elimination System stormwater permit ("Federal and state agencies," 1999). Additionally, land disturbances of one or more acres must obtain a sedimentation and erosion control permit issued by the North Carolina local governments or the North Carolina Division of Land Resources ("Federal and state agencies," 1999).

NCDENR announced the Wetlands Drainage policy five months prior to the implementation of the policy on March 1 (Powers & Winston, 1999). Many believe that this five-month gap had tremendous impacts on wetlands within North Carolina by allowing developers to drain wetlands during this period. North Carolina admits that the announcement of this rule five months before it was implemented was a mistake (M. Wylie, personal communication, April 12, 2000). Mike Wylie, EPA Region 4 Wetlands Enforcement Coordinator, estimates that 5,000 to 6,000 acres of wetlands were drained in North Carolina during this five-month period (personal communication, April 12, 2000).

In a phone interview with Don Reuter, Public Affairs Director for NCDENR, he stated that North Carolina has seen the increasing effects of deteriorating water quality, resulting in increased fish kills within the state. Therefore, the loss of wetlands and North Carolina's inability to protect them was seen as important. Buffers and wetlands are seen as very important to increasing North Carolina's water quality. The NCDENR had already determined that water quality was a problem and needed to be protected when the Tulloch Rule was revoked. NCDENR realized that something had to be done quickly in order to prevent further damage. North Carolina's quick response was not due to pressure from environmental groups although they did receive support from such groups (D. Reuter, personal conversation, February 4, 2000).

Prior to the implementation of the Wetlands Drainage Policy, planners and commissioners in Brunswick County, North Carolina, were shocked to learn the amount of wetlands that had been drained in Brunswick County since the revocation of the Tulloch Rule. They had thought developers were avoiding these areas and were surprised to find out they were wrong after helicopter flights over these areas. Developers in southeastern North Carolina have taken advantage of the invalidation of the Tulloch Rule and have ditched and drained 14,000 acres of wetlands between the revocation of the Tulloch Rule and May 1999 (SELC, 1999).

EPA and the Corps are aiding North Carolina to ensure that individuals comply with the Wetlands Drainage Policy. EPA officials are contemplating a $30,000 grant to aid North Carolina in enforcing their policy (Feagans, 1999). Additionally, North Carolina is developing a Statewide Wetland and Stream Management Strategy. This strategy is being developed to provide both regulatory and non-regulatory alternatives to wetlands protection representing various interest groups such as agriculture, forestry, environmental coalitions, industry, development, local governments, and federal agencies (North Carolina Department of Environment and Natural Resources [NCDENR], 2000).

Although North Carolina is actively trying to protect its valuable wetlands they may still potentially be in danger. Builders, developers, and timbering interests claim that the North

Carolina Wetlands Drainage Policy is not authorized through existing state laws. The groups filed suit against NCDENR in an effort to invalidate these requirements (Harper, 1999c).

Virginia

Virginia, another state that relied on 401 certification, has yet to implement a law protecting wetlands from Tulloch ditching. Maryland and Pennsylvania are partners along with Virginia in the Chesapeake Bay Program. This program was developed to protect the Chesapeake Bay. Although, Maryland and Pennsylvania both have enacted laws to protect non-tidal wetlands, Virginia has not enacted such a law thus far.

Governor Jim Gilmore's wetlands committee has advised him to do something to protect Virginia's wetlands from further damage. This committee was formed by an executive order by the Governor to help devise an approach to preserving Virginia's wetlands (J. Hassell, personal conversation, April 5, 2000). Nine of the sixteen members have urged Governor Gilmore to introduce a state law requiring a permit for those activities that drain wetlands (Springston, 1999b). However, in 1991 Attorney General Mary Sue Terry opined that existing state and federal law limits the Virginia Department of Environmental Quality's authority to those activities requiring section 401 certification (Terry, 1991). In her opinion existing law does not authorize establishment of a comprehensive nontidal wetlands program beyond the authority granted in section 401. Even though Governor Gilmore claims to be committed to a no net loss of wetlands program, relying on this information he asserts that he does not possess the authority to regulate these activities under current state law. Current Attorney General for Virginia, Mark L. Earley agrees with Mary Sue Terry's opinion stating that, "…the General Assembly would have to pass new legislation" in order for the state to regulate the ditching of wetlands (Lessig, 1999). John Paul Woodley Jr., Secretary of Natural Resources, stated that he and other administration officials feel that the Governor does not have the authority under current state law to implement a state wetland law requiring developers to acquire a permit prior to draining a wetland. He further states, "…immediate action by the governor likely would lead to protracted and costly litigation that we likely could end up losing" (Harper, 1999c). In order for this not to happen John Paul Woodley Jr. believes that Virginia will have to create new

legislation regulating nontidal wetlands. The Department of Environmental Quality (DEQ) differs with this statement and wrote a letter to the governor stating that he did indeed have the authority to implement a state wetland law that would regulate Tulloch type ditching (Harper, 1999c).

The difference in the number of wetlands destroyed prior to revocation of the Tulloch Rule contrasts greatly with the acres destroyed after the invalidation. Table 4.4 outlines the number of wetland acres destroyed and restored while the Tulloch Rule was in effect and the number of wetland acres destroyed after the invalidation of the Rule. Since a 404 permit is not required for Tulloch type ditching and subsequently does not require mitigation restoration acres are not applicable after the Tulloch Rule was revoked.

Table 4.4: Comparison of Chesapeake, Virginia Wetland Acres Destroyed During and After the Tulloch Rule was in Effect

Chesapeake, Virginia	While the Tulloch Rule was in effect (1994-1998)	Nine months after the invalidation of the Tulloch Rule	Potential wetland acres planned for development
Wetland acres destroyed	214 acres	1,716 acres	4,325 acres
Wetland acres restored	384 acres	Data not available	Data not available

Source: (SELC, 1999)

Tidal wetlands have been regulated by the state for over 25 years but the state has relied on the federal government to regulate non-tidal wetlands. Since the invalidation of the Tulloch Rule, non-tidal wetlands can be drained without a section 404 permit (Winegar, 2000a). Developers believe that non-tidal wetlands should not be regulated due to the smaller benefits they believe these wetlands provide. However, research has not shown that tidal wetlands are more important than non-tidal wetlands. A study conducted by the National Academy of Sciences found "the scientific basis for policies that attribute less importance to … isolated wetlands than to other wetlands is weak" (Chesapeake Bay Foundation [CBF], 2000c).

In an effort to protect non-tidal wetlands, three bills were brought before the Virginia Legislature. House Bill (HB) 1170 and Senate Bill (SB) 648, commonly called the Virginia

Nontidal Wetlands Resources Act and Senate Bill 695. HB1170 and SB 648 are essentially the same; they both address the Tulloch loophole and other loopholes affecting destruction of wetlands. SB 695 only pertains to Tulloch ditching and does not address other loopholes. For example, this bill does not address the filling of non-tidal wetlands. The Chesapeake Bay Foundation and other conservation organization are not in support of this bill because of its limited scope and ascertain that this bill is "…merely a band aid approach to closing one of many loopholes in the federal wetlands program" (CBF, 2000b). SB 695 "prevents Virginia from taking the lead role in wetland permitting decisions, thus failing to establish a process that eliminates duplication and ensures consistency and reliability" (CBF, 2000b).

Michael Toalson, executive vice president of the Home Builders Association of Virginia, states that Congress is the appropriate body to address the issue of non-tidal wetlands not individual states (Lessig, 1999). Parks Rountrey, legislative chairman of the Coastal Conservation Association of Virginia, when discussing the need for a state law protecting non-tidal wetlands stated, "fisherman, the environment and business communities all benefit from a stable, consistent wetland regulatory program. States such as Maryland and Pennsylvania that have established wetland programs provide direct evidence that development and wetland protection can coincide" (Winegar, 2000a, p. E-5). However, not everyone feels this way. Mark Ailsworth, executive vice president of the Peninsula Housing & Builders Association, opposed the two bills. He ascertains that there is no proof that Tulloch ditching is occurring and that these bills provide environmentalists a way to further their efforts to hinder developers who are trying to provide housing for the general public. J. Roger Glunt, president of NAHB after learning of the adoption of the Tulloch Rule asserts that, the Tulloch Rule would be an obstacle for young homebuyers to acquire homes at a reasonable rate ("Home builders file suit", 1993). Wilmer Stoneman, one of the members on Gilmore's wetlands advisory committee and a member of the Virginia Farm Bureau Federation, warns against Virginia implementing a law to protect non-tidal wetlands similar to Maryland's stating that this could "become a real bureaucratic nightmare" (Harper, 1999e). He goes on to suggest that Virginia should "come up with something to solve Tulloch, [without tying] up everyone else's hands with other restrictions"

(Harper, 1999e). Approximately 578,000 acres of wetlands in Virginia are classified as non-tidal wetlands (Lessig, 1999). Presumably, not all 578,000 acres are at risk of being destroyed.

Legislative committees passed HB 1170, SB 648, and SB 695. After the three bills were passed they moved on to the opposite legislative body. During this time environmental organizations urged individuals to call Governor Gilmore requesting him to sign HB 1170 and SB 648 and reject SB 695 as they believe that SB 695's approach still leaves many wetlands at risk of destructive activities. The passing of HB 1170 and SB 648 would allow for Virginia to meet their commitments under the Chesapeake Bay Program.

On February 28, 2000, HB 1170 and SB 648 were passed while SB 695 was rejected (Peter, 2000). These bills now require Governor Gilmore's signature to become law. The bill as sent to Governor Gilmore is provided in Appendix H. The new bill would stop the "unregulated draining of nontidal wetlands" 280 days after enactment (Harper, 2000). Other loopholes addressed in the bill would be effective until October 2001 (Harper, 2000). This law would go into effect three years after the Tulloch Rule was revoked after many wetlands have been drained for development. While environmentalists see the passing of these two bills as a major step in the direction of wetland protection, it may be too late to protect many of Virginia's environmentally sensitive wetlands.

On Monday, April 10, 2000 Governor Gilmore did not sign the new bill into law. Instead he sent the bill back to state lawmakers (Harper, 2000). Governor Gilmore is requesting an amendment to the bill but is keeping most of the requirements in tact. The amendment would be to "allow sand mines to obtain general permits instead of stricter, individual ones" (Harper, 2000). Appendix H displays the changes Governor Gilmore made to the bill on April 10, 2000. Many believed that Governor Gilmore would alter this bill more drastically (Harper, 2000).

Section 5: Stakeholder Reactions to the Invalidation of the Tulloch Rule

No one stakeholder is content with the way the Corps is enforcing section 404 through the CWA. When the Tulloch Rule was passed, the development community felt that this Rule was too stringent while environmentalists felt the new Rule was still too weak. "The fear of the environmentalists is that the Tulloch Rule is just a method by which the government and developers can legitimize wetland destruction" (Lenetsky, 1994). Reaction to the repeal of the Tulloch Rule has likewise been varied among the different interest groups. "The [Tulloch] ruling has been hailed as good news for builders, but environmentalists warn of further wetland losses" (Winston, 1997, p.3).

The following sections present reactions of various stakeholder groups to the revocation of the Tulloch Rule. The viewpoints of the various groups are presented as fact. The author leaves resolution of their conflicting views to the reader.

Stakeholders with an Economic Interest

Stakeholders with an economic interest in the debate generally view the *American Mining Congress v. Army Corps of Engineers* decision as a victory for private property rights. The victory "removes another obstacle from the anti-growth community" (Winston, 1997, p. 9). Despite contrary claims in the National Wetlands Inventory (NWI), there has been a no-net-loss of wetlands. The NWI fails to account for mitigation rules that require 1.5-2 acres of wetland restoration or creation for every one acre filled under a section 404 permit (Baker, 1999). "The only thing that I can think of that has been more overhyped than Tulloch ditching in the past year is the Y2k bug" (Winegar, 2000b, p. E-5).

The invalidation of the Tulloch Rule will discourage the Corps and the EPA from further implementing regulations that do not have any "foundation in law" (Winston, 1997, p. 9). The main problem is that there has never been a specific law that protects wetlands (Baker, 1999, p. 869). If you wish to prevent the removal of soil from wetlands "…you must go to Congress and have them write a law" (Baker, 1999, p. 869).

The construction and manufacturing trade associations that brought the suit against the Corps and the EPA which resulted in the revocation of the Tulloch Rule were:

- National Association of Home Builders
- American Road and Transportation Builders Association
- National Mining Congress
- American Forest and Paper Association
- National Aggregates Association
- National Stone Association

One of the effects of the court's decision is that now activities that are for the public good, for example, affordable housing, can now take place without the burden of 404 regulations ("Circuit Court invalidates", 1998). The invalidation of the Tulloch Rule could potentially mean a loss of wetlands but this will more than likely not happen (Winston, 1997). The real issue "is keeping the aggressive regulatory tendencies of some federal agencies under control" (Winston, 1997, p. 15).

The revocation of the Tulloch Rule does not mean that a great number of wetlands are at risk (Harper, 1999d). Many times draining efforts are not sufficient enough to change a wetland's characteristics in order to evade regulations under the CWA. "Tulloch ditching is neither simple nor cheap" (Harper, 1999d).

The Corps and the EPA continue to regulate excavation activities in wetlands after the court decision in National Mining Congress. On August 13, 1999, the NAHB filed suit against the Corps and the EPA ("NAHB renews challenge," 1999). The case involves an attempt by False Cape Enterprises, to develop 240 acres in Virginia Beach, Virginia. The development would convert wetlands on this site into a lake with the removal of vegetation ("NAHB renews challenge", 1999). The Corps issued a cease and desist order against False Cape, requiring that they apply for a section 404 permit for their activities. This is the first suit of this kind since the Tulloch Rule has been revoked and is expected to "have national significance" ("Natural resources – Wetlands: home builders," 1999).

Development oriented stakeholders contend that the proposed Virginia Nontidal Wetlands Resources Act requiring those who wish to drain non-tidal wetlands in Virginia to obtain a permit, will only slow economic development. Non-tidal wetlands do not exhibit the

characteristics of normal wetlands and are not even saturated most of the time. Therefore, efforts should be made to protect those wetlands that are more important to the environment. It is often difficult to distinguish between non-tidal wetlands and dry land. "Chesapeake is suffering in economic development because every time [developers] turn around, someone says [they've] got wetlands to deal with. [Developers are] not in favor of taking away wetlands but at the same time, everything related to wetlands seems so fuzzily decided. It's almost black magic to tell what's a wetland and what isn't" (Harper, 1999d).

Many farmers also have an economic interest in the revocation of the Tulloch Rule. At present farmers are allowed to farm land that contains wetlands as long as they do not destroy the wetland. However, if there were a Congressional action to implement a Tulloch-type rule into the CWA, farmers would experience a decrease in the value of their lands. With the ability to develop in the future land is seen as a retirement package. If a Tulloch-type rule were to be implemented, it would be more difficult to develop farmland that contains wetlands.

Virginia's proposed Nontidal Wetland Resources Act exempts farming from regulation. However, as soon as a farmer wished to convert their land to development they would be required to obtain a permit.

The National Wildlife Federation states that the conversion of wetlands to agriculture production is the leading cause of wetland losses and that "farmers must find more effective ways to avoid destroying wetlands" (National Wildlife Federation [NWF], 2000). The Conservation Reserve Program and the Wetlands Reserve Program both provide incentives to farmers in an effort to preserve wetlands. These programs will pay farmers to not use "ecologically sensitive areas" (NWF, 2000).

Local governments felt both economic impacts from the adoption and the revocation of the Tulloch Rule. Since the adoption of the Tulloch Rule presumably reduced the value of affected land, income generated from real property taxes decreased as well. A study was conducted in Arkansas, a state with approximately 2.76 million acres of wetlands (Tolman, 1993). This study was conducted shortly after the Corps and the EPA enacted the Tulloch Rule and Arkansas was projected to "…lose more than $183 million in property tax revenue in the first year" (Tolman, 1993, p. A8). One may extrapolate from these findings that local

governments nationwide had the potential of losing up to $6.9 billion in property taxes in the first year of the adoption of the Tulloch Rule (Tolman, 1993). However, it should be noted that it is unclear whether this study took into account the more stringent wetland regulations already imposed in some states.

The revocation of the Tulloch Rule has also had an impact on local governments. As more wetlands are being destroyed as a result to draining efforts, localities will be forced to allocate more funds to mitigate flooding and degraded water quality as a result of the loss of wetlands. They will also incur higher storm water and sewage treatment costs (CBF, 2000a). "When wetlands are lost these costs are passed on to taxpayers, local communities and the public at large" (Swamped with Cash, 2000). It is hard to determine the larger affect on local governments whether it is in terms of loss property taxes due to the enactment of the Tulloch Rule or in the allocation of funds to offset the impacts due to the revocation of the Tulloch Rule.

While some localities purchase wetlands in an effort to preserve them, other localities promote the draining of wetlands. Some localities drain wetlands themselves. Hampton Roads is an example of a locality that has taken advantage of the revocation of the Tulloch Rule. For example, a potential threat to Virginia's non-tidal wetlands is a proposed development in Stumpy Lake. In 1918 the City acquired Stumpy Lake on the Virginia Beach/Chesapeake border as a reservoir (Harper, 1999a). The City just recently sold this land to Edward S. Garcia Sr., a developer in this area, who plans to drain 450 acres of non-tidal wetlands (Harper, 1999a). This action caused many people to voice their concerns over the potential hazard. "If [Garcia] drains that area by ditching the wetlands, most things are going to die, said Scott Eggleston, a spokesman for Citizens of Stumpy Lake, a grass-roots organization fighting development plans" (Harper, 1999a). The Chesapeake Bay Foundation considers these activities as "irresponsible [and believes] government should be a guardian of our resources" not the culprits (CBF, 2000d).

Private Property Rights Advocates

Private property rights advocates hail the revocation of the Tulloch Rule as a victory. The Tulloch Rule had an impact on their property values and they should be able to do

whatever they want with their own land. "Finally, [property owners] have a chance to recover the value of [their] land that the federal government has taken away" (Feagans, 1999, p. 1B).

Some property owners that believe that wetland regulations have an adverse impact on their enjoyment of their land have begun to file takings claims[5] and are beginning to win (Adler, 1999). Federal and state lawmakers have proposed several measures, which would allow landowners to recover losses in the event of a "taking". These proposed laws would provide a wider range of circumstances that would account for a "taking" than what is currently used. However, property owners may alternatively apply to conservation organizations to fund restoration and conservation efforts or to purchase an easement across their property. Many landowners hesitate to restore wetlands on their property, fearing that now the federal government can control their land after the restoration. Therefore, "…private wetland conservation and restoration would likely be greater were federal regulations not in the way" (Adler, 1999, p. 11).

Private property rights advocates claim that environmentalists have overestimated the number of wetlands being drained therefore; property owners should be able to drain wetlands on their own property (Springston, 1999a). "We're not going in and draining all of southeastern Virginia, said David Blevins, a supervisor with VICO Construction Corporation, a Chesapeake company that drains wetlands. "Often, the owners have been paying taxes on the property for years, and they want to drain it for farming or development. They're just trying to utilize their property" (Springston, 1999a).

Environmental Interest

There are many different environmental organizations concerned about wetland protection. Many of these organizations were already in place prior to the court's ruling in AMC. Both national and local organizations have the same goal, to protect wetlands for further generations. Congress has also created conservation programs to protect our nation's wetlands. These organizations are the North American Waterfowl

[5] "Private property shall not be taken for public use without just compensation" (Fifth Amendment to the United States Constitution).

Management Plan created in 1986, the Partners for Wildlife Program created in 1987, and the Wetland Reserve Program established in 1990 (Adler, 1999). These programs wish to work with landowners in order to educate them about the benefits of wetlands and offer nonregulatory alternatives to wetland protection. The three programs created by Congress are similar in that they all provide funding to private landowners in an effort to protect those wetlands located on private lands. "Typically, the program covers the costs of restoration and the purchase of an easement[6] to ensure that the restored wetlands are protected" (Adler, 1999, p. 11). Often private conservation organizations work with these programs to help ensure that restoration efforts are successful. These programs are strictly voluntary but give landowners a means to feel that their land is not being taken without just compensation. "The most effective way to conserve wetlands is to avoid destroying them in the first place" (NWF, 2000). The court's ruling is a huge obstacle in the way of wetland protection.

Wetland acres lost to this loophole in the CWA are significant. The rate of wetlands being lost can be translated into a "loss [equivalent] to a football field of wetlands every five minutes, every hour, every day" (NWF, 2000). There is no justification for requiring permits for filling wetlands while permitting them to be drained. Rollin MacRae, of the Texas Parks and Wildlife Department asserts that he and other officials have seen many cases in Texas in which attorneys have advised landowners to drain their wetlands rather than going through the process of applying for a section 404 permit (Dawson, 1997).

In response to the Virginia non-tidal wetland dispute, non-tidal wetlands "…help maintain the quality of our drinking water as well as control floods. Some animals and plants live in non-tidal wetlands, and destroying wetlands would destroy their habitat" (Lessig, 1999). Additionally, non-tidal wetlands aid in the protection of the Chesapeake Bay.

Environmentalists contend that if draining continues along the coast of Virginia, disaster will inevitably occur. The revocation of the Tulloch Rule is "…probably one of the most significant threats to wetlands, and to water quality in the Bay, in the last 20 or 30 years" (Feagans, 1999, p. 1B). Concerned about protecting Virginia's wetlands, 11 conservation

organizations[7] wrote Governor Gilmore urging him to pass a state wetland law. Governor Gilmore does not believe that the Commonwealth has the authority under current state law to regulate the ditching and draining of nontidal wetlands. Environmental lawyers state that Gilmore does have the authority to regulate ditching and draining efforts in wetlands citing "…Virginia's State Water Control Law, which bars any activity that alters the physical, chemical and biological properties of state waters without a permit" (Harper, 1999b). Gilmore's priorities are in the wrong place (Harper, 1999c). Gilmore claims that one of his goals is to "reverse Virginia's long-term loss of wetlands" but developers are one of his biggest supporters (CBF, 2000c). Furthermore, Governor Gilmore is a supporter of property rights; therefore, this is a "politically sensitive" issue for him (Harper, 1999c). Congress will not change the CWA to further regulate wetlands because "…many members of Congress are hostile to wetlands regulations" (Cushman, 1998, p. A9).

One property owner in North Carolina is disgusted at the lack of ability the Wetland Restoration Program has had in restoring wetlands to North Carolina. Kevin L. McGuire a resident from Chapel Hill states, "as a taxpayer [I am] watching our wetlands being drained, and seeing millions in tax money go to support a Wetland Restoration Program that has yet to restore a few acres of wetlands" (McGuire, 1999, p. A17). However, it should be noted that when Mr. McGuire's editorial was printed in Raleigh, North Carolina's newspaper, *The News & Observer*, NCDENR's Wetland Drainage Policy was only in effect for 12 days.

Additionally, some property owners are in favor of protecting wetlands because they are experiencing the disadvantages of wetland destruction. The degradation of wetlands could have an impact on their property values as well. For example, Doris Wilson, a property owner in Louisville, Kentucky, states, "she hadn't been flooded after 20 years in her home – until last year. The summer after a neighboring developer destroyed a nearby wetland,

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[6] An easement allows the purchaser to use the land in a certain way. In this instance the program purchases the portion of the property where the wetland is located. The landowner sells the easement to the organization and is no longer allowed to degrade this portion of their property.

[7] These 11 organizations are the Chesapeake Bay Foundation, James River Association, the Virginia chapter of the Sierra Club, Izaak Walton League of America, Audubon Naturalist Society, Clean the Bay Day Inc., Conserve Virginia, Friends of the North Fork of the Shenandoah River, Friends of the Rivers of Virginia, Glenwood Community Association Inc., and Piedmont Environmental Council.

her yard flooded, even though it wasn't raining. When it did rain, three feet of water forced her from her home for two months" (Sierra Club, 2000). While developers are reaping the benefits nearby property owners are being adversely affected.

Section 6: Summary and Conclusion

This paper has demonstrated that federal regulation of wetlands has evolved in a peculiar fashion. Due to questionable Congressional and Constitutional authority the ability of the EPA and the Corps to regulate wetlands is unclear and protects wetlands only indirectly.

The revocation of the Tulloch Rule threatens to dramatically reduce the amount of wetlands in the United States. Some states had already implemented wetlands laws that regulated the ditching the draining of wetlands prior to the Tulloch Rule being adopted. These states subsequently were not severely impacted by the revocation of the Tulloch Rule if they were impacted at all. Other states did not have comprehensive wetland regulations prior to the revocation of the Tulloch Rule and instead relied on federal regulations. These states were severely impacted by the revocation of the Tulloch Rule.

Reactions to the revocation of the Tulloch Rule by state regulators, state legislatures, and other stakeholders have been varied. Those stakeholders with an economic interest opposed the adoption of the Tulloch Rule and generally hail the decision in *American Mining Congress* as a victory. These stakeholders contend that any action to regulate Tulloch type ditching should come at the federal level. Private property rights advocates agree that the *American Mining Congress* decision is a victory. They assert that the adoption of the Tulloch Rule was an infringement on their rights. However, those stakeholders with an environmental interest are outraged by the revocation of the Tulloch Rule and contend that action should be taken at the state level to offset further wetland losses. Some states like North Carolina acted quickly to fill the Tulloch loophole. Other states like Virginia have been slow to respond.

The invalidation of the Tulloch Rule makes the no net loss goal all the more difficult to achieve. If the 1998 net gain goal or even the no net loss goal is going to be attained, wetland regulation must be stringent. More of the nation's wetlands are in danger of being destroyed since the invalidation of the Tulloch Rule. Developers have been using equipment to drain

wetlands by removing the soil and replacing it in upland areas or by capturing it in buckets to be removed elsewhere. If these activities only result in incidental fallback, mitigation is not required. Clearly, unmitigated destruction fails to aid in achieving the net gain or no net loss goals.

Many believe that the appropriate response to the invalidation of the Tulloch Rule is at the federal level. Under this view, Congress should redefine the discharge of dredge and fill material in the CWA to account for this loophole. Any changes to the CWA by Congress, to account for this loophole will take a considerable amount of time. Likewise, no action is being taken at present by Congress to address this loophole. Given the odd origin and foundation of federal regulations to protect wetlands, state regulation may provide more logical and effective protection methods. Any state response needs to come quickly in order to protect wetlands for future generations. Additionally, stringent regulations imposed by states will offset the danger of federal regulations being overturned again.

States may be in a better position to regulate their wetlands than the federal government. Individual states may be better equipped to identify those sensitive areas that need to be protected and the proper approach to take to protect these resources. However, all states must agree to implement state wetland regulations to provide consistency between the states. If all states do not agree to enforce stringent wetland protection laws this would be detrimental to neighboring states in terms of water quality. One of the benefits of wetlands is that they help to filter pollutants therefore, if one state implements regulation to protect wetlands it could be negated by a neighboring state that chooses not to. However, in an effort to attract development and/or businesses some states may choose not to implement wetlands regulations and engage in a "race to the bottom". An effort will need to be made to ensure that there is consistency in regards to wetlands regulation among the different states.

The different approaches taken by different states have resulted in varying impacts. When comparing Massachusetts, Maryland, and Pennsylvania to North Carolina and Virginia, one can see the difference that a proactive approach can make. Those states that have planned an approach before a rule change has occurred are less likely to be severely impacted. States with proactive environmental planning are better able to protect their resources than states with

a reactive approach. Additionally, reactive approaches tend to be incremental whereas proactive approaches tend to be more comprehensive. If some states had not relied on the federal government to protect their wetlands from destruction they would not have been adversely impacted by the invalidation of the Tulloch Rule. Although the public does not always embrace these proactive approaches, planners should still attempt to incorporate these approaches into their practice.

States like North Carolina and Virginia that have chosen to take a reactive approach to wetlands regulation have been more severely impacted than the proactive states. North Carolina and Virginia taken two different reactive approaches to the revocation of the Tulloch Rule. North Carolina responded quickly to the revocation of the Tulloch Rule. However, the state still lost a large amount of wetland acres between the time the Tulloch Rule was revoked and when the state implemented their Wetlands Drainage Policy on March 1, 1999. Virginia has been slow to respond to the revocation of the Tulloch Rule. This delayed response has had a tremendous impact on Virginia's wetlands. However, if the Virginia Nontidal Wetlands Resources Act is signed into law it will be harder for those individuals who are opposed to the law to challenge the statute and associated regulations. If the Governor signs the bill, as expected the program will have a firmer foundation in the law than the program implemented by North Carolina. Opponents to the North Carolina policy brought suit against the state for implementing its wetland regulations after the revocation of the Tulloch Rule. Landowners allege that North Carolina does not have the authority under current state law to implement their Wetlands Draining Policy. Even though North Carolina's quick response has less foundation in law, it has protected many wetland acres from destruction.

A quick response taken by those states that have relied in the past on 401 state water quality certification will help to protect the nation's wetlands. If the Virginia Nontidal Wetland Recourses Act is signed by the Governor, it will have taken Virginia over two years since the National Mining Association decision to respond. North Carolina responded by implementing its Wetland Drainage Policy in less than a year after the National Mining Association decision. This quick response has protected many of North Carolina's wetlands from development. However, if both of these states had implemented proactive environmental planning practices

into their wetland programs prior to the revocation of the Tulloch Rule, they would not be faced with this problem.

It is too late to correct the impacts that have already occurred since the revocation of the Tulloch Rule in those states that relied in the past on 401 state water quality certification. However, some environmental benefits may be achieved from the revocation of the Tulloch Rule. States can learn from this example and begin to implement proactive environmental approaches to protect their natural resources in the future. A lesson that can be acquired from the revocation of the Tulloch Rule is that states cannot always rely on the federal government to protect their resources. Additionally, in regards to wetland protection if the Tulloch Rule had not been revoked states would have more than likely not designed their own wetland regulations. If indeed wetlands will be better protected at the state level then the revocation of the Tulloch Rule has given some states the push they needed in order to develop more stringent wetland regulations. While many wetland acres have been lost the implementation of wetland protection regulations at the state level will insure that more acres are not lost to development. Finally, while the Tulloch Rule is invalid on the federal level states may now step in to fill this regulatory gap. If the Tulloch Rule had not been implemented in 1993, states may still be relying on the federal government to protect their wetlands and may not have come as far as they are today in the promotion of wetland protection. The invalidation of the Tulloch Rule has led environmental interests to join together in attempts to have states act quickly to protect their wetlands. One thing is certain, more responsibility needs to be taken in order to conserve the nation's wetlands.

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APPENDICES

APPENDIX A

Clean Water Act, Section 404
(33 U.S.C. §1344, 2000)

§ 1344. Permits for dredged or fill material

(a) Discharge into navigable waters at specified disposal sites

The Secretary may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites. Not later than the fifteenth day after the date an applicant submits all the information required to complete an application for a permit under this subsection, the Secretary shall publish the notice required by this subsection.

(b) Specification for disposal sites

Subject to subsection (c) of this section, each such disposal site shall be specified for each such permit by the Secretary (1) through the application of guidelines developed by the Administrator, in conjunction with the Secretary, which guidelines shall be based upon criteria comparable to the criteria applicable to the territorial seas, the contiguous zone, and the ocean under section 1343(c) of this title, and (2) in any case where such guidelines under clause (1) alone would prohibit the specification of a site, through the application additionally of the economic impact of the site on navigation and anchorage.

(c) Denial or restriction of use of defined areas as disposal sites

The Administrator is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Before making such determination, the Administrator shall consult with the Secretary. The Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection.

(d) "Secretary" defined

The term "Secretary" as used in this section means the Secretary of the Army, acting through the Chief of Engineers.

(e) General permits on State, regional, or nationwide basis

(1) In carrying out his functions relating to the discharge of dredged or fill material under this section, the Secretary may, after notice and opportunity for public hearing, issue general permits on a State, regional, or nationwide basis for any category of activities involving discharges of dredged or fill material if the Secretary determines that the activities in such category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment. Any general permit issued under this subsection shall (A) be based on the guidelines described in subsection (b)(1) of this section, and (B) set forth the requirements and standards which shall apply to any activity authorized by such general permit.

(2) No general permit issued under this subsection shall be for a period of more than five years after the date of its issuance and such general permit may be revoked or modified by the Secretary if, after

opportunity for public hearing, the Secretary determines that the activities authorized by such general permit have an adverse impact on the environment or such activities are more appropriately authorized by individual permits.

(f) Non-prohibited discharge of dredged or fill material

(1) Except as provided in paragraph (2) of this subsection, the discharge of dredged or fill material--

(A) from normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices;

(B) for the purpose of maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structures;

(C) for the purpose of construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches;

(D) for the purpose of construction of temporary sedimentation basins on a construction site which does not include placement of fill material into the navigable waters;

(E) for the purpose of construction or maintenance of farm roads or forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained, in accordance with best management practices, to assure that flow and circulation patterns and chemical and biological characteristics of the navigable waters are not impaired, that the reach of the navigable waters is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized;

(F) resulting from any activity with respect to which a State has an approved program under section 1288(b)(4) of this title which meets the requirements of subparagraphs (B) and (C) of such section,

is not prohibited by or otherwise subject to regulation under this section or section 1311(a) or 1342 of this title (except for effluent standards or prohibitions under section 1317 of this title).

(2) Any discharge of dredged or fill material into the navigable waters incidental to any activity having as its purpose bringing an area of the navigable waters into a use to which it was not previously subject, where the flow or circulation of navigable waters may be impaired or the reach of such waters be reduced, shall be required to have a permit under this section.

(g) State administration

(1) The Governor of any State desiring to administer its own individual and general permit program for the discharge of dredged or fill material into the navigable waters (other than those waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark, or mean higher high water mark on the west coast, including wetlands adjacent thereto) within its jurisdiction may submit to the Administrator a full and complete description of the program it proposes to establish and administer under State law or under an interstate compact. In addition, such State shall submit a statement from the attorney general (or the attorney for those State agencies which have independent legal counsel), or from the chief legal officer in the case of an interstate agency, that the laws of such State, or the interstate compact, as the case may be, provide adequate authority to carry out the described program.

(2) Not later than the tenth day after the date of the receipt of the program and statement submitted by any

State under paragraph (1) of this subsection, the Administrator shall provide copies of such program and statement to the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service.

(3) Not later than the ninetieth day after the date of the receipt by the Administrator of the program and statement submitted by any State, under paragraph (1) of this subsection, the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, shall submit any comments with respect to such program and statement to the Administrator in writing.

(h) Determination of State's authority to issue permits under State program; approval; notification; transfers to State program

(1) Not later than the one-hundred-twentieth day after the date of the receipt by the Administrator of a program and statement submitted by any State under paragraph (1) of this subsection, the Administrator shall determine, taking into account any comments submitted by the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, pursuant to subsection (g) of this section, whether such State has the following authority with respect to the issuance of permits pursuant to such program:

(A) To issue permits which--

(i) apply, and assure compliance with, any applicable requirements of this section, including, but not limited to, the guidelines established under subsection (b)(1) of this section, and sections 1317 and 1343 of this title;

(ii) are for fixed terms not exceeding five years; and

(iii) can be terminated or modified for cause including, but not limited to, the following:

(I) violation of any condition of the permit;

(II) obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts;

(III) change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

(B) To issue permits which apply, and assure compliance with, all applicable requirements of section 1318 of this title, or to inspect, monitor, enter, and require reports to at least the same extent as required in section 1318 of this title.

(C) To assure that the public, and any other State the waters of which may be affected, receive notice of each application for a permit and to provide an opportunity for public hearing before a ruling on each such application.

(D) To assure that the Administrator receives notice of each application (including a copy thereof) for a permit.

(E) To assure that any State (other than the permitting State), whose waters may be affected by the issuance of a permit may submit written recommendations to the permitting State (and the Administrator) with respect to any permit application and, if any part of such written recommendations are not accepted by the permitting State, that the permitting State will notify such affected State (and the Administrator) in writing of its failure to so accept such recommendations together with its reasons for so doing.

(F) To assure that no permit will be issued if, in the judgment of the Secretary, after consultation with the

Secretary of the department in which the Coast Guard is operating, anchorage and navigation of any of the navigable waters would be substantially impaired thereby.

(G) To abate violations of the permit or the permit program, including civil and criminal penalties and other ways and means of enforcement.

(H) To assure continued coordination with Federal and Federal-State water- related planning and review processes.

(2) If, with respect to a State program submitted under subsection (g)(1) of this section, the Administrator determines that such State--

(A) has the authority set forth in paragraph (1) of this subsection, the Administrator shall approve the program and so notify (i) such State and (ii) the Secretary, who upon subsequent notification from such State that it is administering such program, shall suspend the issuance of permits under subsections (a) and (e) of this section for activities with respect to which a permit may be issued pursuant to such State program; or

(B) does not have the authority set forth in paragraph (1) of this subsection, the Administrator shall so notify such State, which notification shall also describe the revisions or modifications necessary so that such State may resubmit such program for a determination by the Administrator under this subsection.

(3) If the Administrator fails to make a determination with respect to any program submitted by a State under subsection (g)(1) of this section within one-hundred-twenty days after the date of the receipt of such program, such program shall be deemed approved pursuant to paragraph (2)(A) of this subsection and the Administrator shall so notify such State and the Secretary who, upon subsequent notification from such State that it is administering such program, shall suspend the issuance of permits under subsection (a) and (e) of this section for activities with respect to which a permit may be issued by such State.

(4) After the Secretary receives notification from the Administrator under paragraph (2) or (3) of this subsection that a State permit program has been approved, the Secretary shall transfer any applications for permits pending before the Secretary for activities with respect to which a permit may be issued pursuant to such State program to such State for appropriate action.

(5) Upon notification from a State with a permit program approved under this subsection that such State intends to administer and enforce the terms and conditions of a general permit issued by the Secretary under subsection (e) of this section with respect to activities in such State to which such general permit applies, the Secretary shall suspend the administration and enforcement of such general permit with respect to such activities.

(i) Withdrawal of approval

Whenever the Administrator determines after public hearing that a State is not administering a program approved under subsection (h)(2)(A) of this section, in accordance with this section, including, but not limited to, the guidelines established under subsection (b)(1) of this section, the Administrator shall so notify the State, and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days after the date of the receipt of such notification, the Administrator shall (1) withdraw approval of such program until the Administrator determines such corrective action has been taken, and (2) notify the Secretary that the Secretary shall resume the program for the issuance of permits under subsections (a) and (e) of this section for activities with respect to which the State was issuing permits and that such authority of the Secretary shall continue in effect until such time as the Administrator makes the determination described in clause (1) of this subsection and such State again has an approved program.

(j) Copies of applications for State permits and proposed general permits to be transmitted to Administrator

Each State which is administering a permit program pursuant to this section shall transmit to the Administrator (1) a copy of each permit application received by such State and provide notice to the Administrator of every action related to the consideration of such permit application, including each permit proposed to be issued by such State, and (2) a copy of each proposed general permit which such State intends to issue. Not later than the tenth day after the date of the receipt of such permit application or such proposed general permit, the Administrator shall provide copies of such permit application or such proposed general permit to the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service. If the Administrator intends to provide written comments to such State with respect to such permit application or such proposed general permit, he shall so notify such State not later than the thirtieth day after the date of the receipt of such application or such proposed general permit and provide such written comments to such State, after consideration of any comments made in writing with respect to such application or such proposed general permit by the Secretary and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, not later than the ninetieth day after the date of such receipt. If such State is so notified by the Administrator, it shall not issue the proposed permit until after the receipt of such comments from the Administrator, or after such ninetieth day, whichever first occurs. Such State shall not issue such proposed permit after such ninetieth day if it has received such written comments in which the Administrator objects (A) to the issuance of such proposed permit and such proposed permit is one that has been submitted to the Administrator pursuant to subsection (h)(1)(E) of this section, or (B) to the issuance of such proposed permit as being outside the requirements of this section, including, but not limited to, the guidelines developed under subsection (b)(1) of this section unless it modifies such proposed permit in accordance with such comments. Whenever the Administrator objects to the issuance of a permit under the preceding sentence such written objection shall contain a statement of the reasons for such objection and the conditions which such permit would include if it were issued by the Administrator. In any case where the Administrator objects to the issuance of a permit, on request of the State, a public hearing shall be held by the Administrator on such objection. If the State does not resubmit such permit revised to meet such objection within 30 days after completion of the hearing or, if no hearing is requested within 90 days after the date of such objection, the Secretary may issue the permit pursuant to subsection (a) or (e) of this section, as the case may be, for such source in accordance with the guidelines and requirements of this chapter.

(k) Waiver

In accordance with guidelines promulgated pursuant to subsection (i)(2) of section 1314 of this title, the Administrator is authorized to waive the requirements of subsection (j) of this section at the time of the approval of a program pursuant to subsection (h)(2)(A) of this section for any category (including any class, type, or size within such category) of discharge within the State submitting such program.

(l) Categories of discharges not subject to requirements

The Administrator shall promulgate regulations establishing categories of discharges which he determines shall not be subject to the requirements of subsection (j) of this section in any State with a program approved pursuant to subsection (h)(2)(A) of this section. The Administrator may distinguish among classes, types, and sizes within any category of discharges.

(m) Comments on permit applications or proposed general permits by Secretary of the Interior acting through Director of United States Fish and Wildlife Service

Not later than the ninetieth day after the date on which the Secretary notifies the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service that (1) an application for a permit under subsection (a) of this section has been received by the Secretary, or (2) the Secretary proposes to issue a general permit under subsection (e) of this section, the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, shall submit any comments with respect to such application or such proposed general permit in writing to the Secretary.

(n) Enforcement authority not limited

Nothing in this section shall be construed to limit the authority of the Administrator to take action pursuant to section 1319 of this title.

(o) Public availability of permits and permit applications

A copy of each permit application and each permit issued under this section shall be available to the public. Such permit application or portion thereof, shall further be available on request for the purpose of reproduction.

(p) Compliance

Compliance with a permit issued pursuant to this section, including any activity carried out pursuant to a general permit issued under this section, shall be deemed compliance, for purposes of sections 1319 and 1365 of this title, with sections 1311, 1317, and 1343 of this title.

(q) Minimization of duplication, needless paperwork, and delays in issuance; agreements

Not later than the one-hundred-eightieth day after December 27, 1977, the Secretary shall enter into agreements with the Administrator, the Secretaries of the Departments of Agriculture, Commerce, Interior, and Transportation, and the heads of other appropriate Federal agencies to minimize, to the maximum extent practicable, duplication, needless paperwork, and delays in the issuance of permits under this section. Such agreements shall be developed to assure that, to the maximum extent practicable, a decision with respect to an application for a permit under subsection (a) of this section will be made not later than the ninetieth day after the date the notice for such application is published under subsection (a) of this section.

(r) Federal projects specifically authorized by Congress

The discharge of dredged or fill material as part of the construction of a Federal project specifically authorized by Congress, whether prior to or on or after December 27, 1977, is not prohibited by or otherwise subject to regulation under this section, or a State program approved under this section, or section 1311(a) or 1342 of this title (except for effluent standards or prohibitions under section 1317 of this title), if information on the effects of such discharge, including consideration of the guidelines developed under subsection (b)(1) of this section, is included in an environmental impact statement for such project pursuant to the National Environmental Policy Act of 1969 [42 U.S.C.A. § 4321 et seq.] and such environmental impact statement has been submitted to Congress before the actual discharge of dredged or fill material in connection with the construction of such project and prior to either authorization of such project or an appropriation of funds for such construction.

(s) Violation of permits

(1) Whenever on the basis of any information available to him the Secretary finds that any person is in violation of any condition or limitation set forth in a permit issued by the Secretary under this section, the Secretary shall issue an order requiring such person to comply with such condition or limitation, or the Secretary shall bring a civil action in accordance with paragraph (3) of this subsection.

(2) A copy of any order issued under this subsection shall be sent immediately by the Secretary to the State in which the violation occurs and other affected States. Any order issued under this subsection shall be by personal service and shall state with reasonable specificity the nature of the violation, specify a time for compliance, not to exceed thirty days, which the Secretary determines is reasonable, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements. In any case in which an order under this subsection is issued to a corporation, a copy of such order shall be served on

any appropriate corporate officers.

(3) The Secretary is authorized to commence a civil action for appropriate relief, including a permanent or temporary injunction for any violation for which he is authorized to issue a compliance order under paragraph (1) of this subsection. Any action under this paragraph may be brought in the district court of the United States for the district in which the defendant is located or resides or is doing business, and such court shall have jurisdiction to restrain such violation and to require compliance. Notice of the commencement of such action [FN1] shall be given immediately to the appropriate State.

(4) Any person who violates any condition or limitation in a permit issued by the Secretary under this section, and any person who violates any order issued by the Secretary under paragraph (1) of this subsection, shall be subject to a civil penalty not to exceed $25,000 per day for each violation. In determining the amount of a civil penalty the court shall consider the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator, and such other matters as justice may require.

(5) Redesignated (4)

(t) Navigable waters within State jurisdiction

Nothing in this section shall preclude or deny the right of any State or interstate agency to control the discharge of dredged or fill material in any portion of the navigable waters within the jurisdiction of such State, including any activity of any Federal agency, and each such agency shall comply with such State or interstate requirements both substantive and procedural to control the discharge of dredged or fill material to the same extent that any person is subject to such requirements. This section shall not be construed as affecting or impairing the authority of the Secretary to maintain navigation.

APPENDIX B

Rivers and Harbors Act, Section 10

(33 U.S.C. §403, 1999)

§ 403. Obstruction of navigable waters generally; wharves; piers, etc.; excavations and filling in

The creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of the Army; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army prior to beginning the same.

APPENDIX C

Clean Water Act, Section 401 Certification
(33 U.S.C. §1341, 2000)

§ 1341. Certification

(a) Compliance with applicable requirements; application; procedures; license suspension

(1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title. In the case of any such activity for which there is not an applicable effluent limitation or other limitation under sections 1311(b) and 1312 of this title, and there is not an applicable standard under sections 1316 and 1317 of this title, the State shall so certify, except that any such certification shall not be deemed to satisfy section 1371(c) of this title. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirement in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

(3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate

agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State, or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with respect to which a construction license or permit has been granted, which changes may result in violation of section 1311, 1312, 1313, 1316, or 1317 of this title.

(4) Prior to the initial operation of any federally licensed or permitted facility or activity which may result in any discharge into the navigable waters and with respect to which a certification has been obtained pursuant to paragraph (1) of this subsection, which facility or activity is not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State, or, if appropriate, the interstate agency or the Administrator to review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated. Upon notification by the certifying State, or if appropriate, the interstate agency or the Administrator that the operation of any such federally licensed or permitted facility or activity will violate applicable effluent limitations or other limitations or other water quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such license or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 1311, 1312, 1313, 1316, or 1317 of this title.

(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under this chapter that such facility or activity has been operated in violation of the applicable provisions of section 1311, 1312, 1313, 1316, or 1317 of this title.

(6) Except with respect to a permit issued under section 1342 of this title, in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit a certification and otherwise meets the requirements of this section.

(b) Compliance with other provisions of law setting applicable water quality requirements

Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements. The Administrator shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations, or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

(c) Authority of Secretary of the Army to permit use of spoil disposal areas by Federal licensees or permittees

In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensees or permittees, and to make an appropriate charge for such use.

Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts.

(d) Limitations and monitoring requirements of certification

Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 1311 or 1312 of this title, standard of performance under section 1316 of this title, or prohibition, effluent standard, or pretreatment standard under section 1317 of this title, and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

APPENDIX D

Examples of Wetland Definitions used by State agencies

Connecticut (CT General Statutes, Sections 22a-36 to 45, inclusive, 1972, 1987)	Wetlands mean land, including submerged land which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, by the Soil Conservation Service of the United States Department of Agriculture. Watercourses are defined as rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, public or private.
Connecticut (CT General Statutes, Sections 22a-28 to 35, inclusive 1969)	Wetlands are those areas which border on or lie beneath tidal waters, such as, but not limited to banks, bogs, salt marshes, swamps, meadows, flats or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters, and whose surface is at or below an elevation of one foot above local extreme high water. (Also includes a list of plants capable of growing in tidal wetlands.)
Rhode Island Coastal Resources Management Council (RI Coastal Resources Management Program as amended June 28, 1983)	Coastal wetlands include salt marshes and freshwater or brackish wetlands contiguous to salt marshes. Areas of open water within coastal wetlands are considered a part of the wetland. Salt marshes are areas regularly inundated by salt water through either natural or artificial water courses and where one or more of the following species predominate: (8 indicator plants listed). Contiguous and associated freshwater or brackish marshes are those where one or more of the following species predominate: (9 indicator plants listed).
Rhode Island Department of Environmental Management (RI General Law, Sections 2-1-18 et seq.)	Fresh water wetlands are defined to include, "but not be limited to marshes; swamps; bogs; ponds; river and stream flood plains and banks; areas subject to flooding or storm flowage; emergent and submergent plant communities in any body of fresh water including rivers and streams and that area of land within fifty feet (50') of the edge of any bog, marsh, swamp, or pond." Various wetland types are further defined on the basis of hydrology and indicator plants, including bog (15 types of indicator plants), marsh (21 types of indicator plants), and swamp (24 types of indicator plants plus marsh plants).
New Jersey (Pinelands Protection Act, N.J. STAT. ANN. Section 13:18-1 to 13:29.)	Wetlands are those lands which are inundated or saturated by water at a magnitude, duration and frequency sufficient to support the growth of hydrophytes. Wetlands include lands with poorly drained or very poorly drained soils as designated by the National Cooperative Soils Survey of the Soil Conservation Service of the United States Department of Agriculture. Wetlands include coastal wetlands and inland wetlands, including submerged lands. Coastal wetlands are banks, low-lying marshes, meadows, flats, and other lowlands subject to tidal inundation which support or are capable of supporting one or more of the following plants: (29 plants are listed). "Inland wetlands" are defined as including, but not limited to, Atlantic white cedar swamps (15 plants listed), hardwood swamps (19 plants specified), pitch pine lowlands (10 plants listed), bogs (12 plants identified), inland marshes (6 groups of plants listed), lakes and ponds, and rivers and streams.

New Jersey (Coastal Wetland Protection Act - N.J. STAT. ANN. Section 13:18-1 to 13:9A-10)	"Coastal wetlands" are any bank, marsh, swamp, meadow, flat or other low land subject to tidal action in the Delaware Bay and Delaware River, Raritan Bay, Sandy Hook Bay, Shrewsbury River including Navesink River, Shark River, and the coastal inland waterways extending southerly from Manasquan Inlet to Cape May Harbor, or at any inlet, estuary, or those areas now or formerly connected to tidal areas whose surface is at or below an elevation of 1 foot above local extreme high water, and upon which may grow or is capable of growing some, but not necessarily all, of the following:" (19 plants are listed.) Coastal wetlands exclude "any land or real property subject to the jurisdiction of the Hackensack Meadowlands Development Commission....
Massachusetts (MA General Law Chapter 131, Section 40)	The term 'freshwater wetlands' shall mean wet meadows, marshes, swamps, bogs, areas where groundwater, flowing or standing surface water or ice provides a significant part of the supporting substrate for a plant community for at least five months of the year; emergent and submergent plant communities in inland waters; that portion of any bank which touches any inland waters. Various wetland types are further defined on the basis of hydrology and indicator plants and include bogs (19 types of indicator plants), swamps (22 types of plants), wet meadows (12 types of plants), and marshes (22 types of indicator plants).
Maryland (Annotated Code of MD Environment § 16-101)	“Private wetlands” means any land not considered “State wetland” bordering on or lying beneath tidal waters, which is subject to regular or periodic tidal action and supports aquatic growth. “State wetlands” means any land under the navigable waters of the State below mean high tide, affected by the regular rise and fall of the tide.
Maryland (Annotated Code of MD Environment § 5-901)	"Nontidal wetland" means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation. The determination of whether an area is a nontidal wetland shall be made in accordance with the publication known as the "Federal Manual for Identifying and Delineating Jurisdictional Wetlands", published in 1989 and as may be amended. "Nontidal wetlands" do not include tidal wetlands regulated under Title 16.
U.S. Army Corps of Engineers (33 CFR 328.3) U.S. Environmental Protection Agency (40 CFR 230.3)	Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Please note these next definitions do not differ with the Corps and the EPA regulations	
Pennsylvania (PA General Law Chapter 105.1)	Wetlands-Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.
North Carolina (NC General Law 15A NCAC 2B.202)	Wetlands are "waters" as defined by G.S. 143-212(6) and are areas that are inundated or saturated by an accumulation of surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.
Virginia*	*Wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Source: Division of Water Quality, 1998; Gilinsky, personal communication, March 21, 2000; Annotated Code of Maryland Environment, 5-901, 16-101, 2000;Tiner, 2000; and Pennsylvania General Laws, 105, 2000.

*Virginia currently does not have an official wetland definition but if the Virginia Nontidal Wetland Resources Act becomes law Virginia's wetland definition will be the same as the federal definition.

APPENDIX E

Excerpt from Massachusetts Wetlands Protection Act
(Massachusetts General Laws Annotated, 131 § 40, 2000)[8]

No person shall remove, fill, dredge or alter any bank, riverfront area, fresh water wetland, coastal wetland, beach, dune, flat, marsh, meadow or swamp bordering on the ocean or on any estuary, creek, river, stream, pond, or lake, or any land under said waters or any land subject to tidal action, coastal storm flowage, or flooding, other than in the course of maintaining, repairing or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, water, telephone, telegraph and other telecommunication services, without filing written notice of his intention to so remove, fill, dredge or alter, including such plans as may be necessary to describe such proposed activity and its effect on the environment and without receiving and complying with an order of conditions and provided all appeal periods have elapsed.

[8] Please note that this is only a portion of this law.

APPENDIX F

Excerpt from Maryland's Code of Regulations Regarding Regulated Activities in Nontidal Wetlands

(Annotated Code of Maryland Environment § 5-901 (h)(3), 2000)

"Regulated activity" means any of the following activities in a nontidal wetland or within a 25 foot buffer of the nontidal wetland:

(i) The removal, excavation, or dredging of soil, sand, gravel, minerals, organic matter, or materials of any kind;
(ii) The changing of existing drainage characteristics, sedimentation patterns, flow patterns, or flood retention characteristics;
(iii) The disturbance of the water level or water table by drainage, impoundment, or other means;
(iv) The dumping, discharging of material, or filling with material, including the driving of piles and placing of obstructions;
(v) The grading or removal of material that would alter existing topography; and
(vi) The destruction or removal of plant life that would alter the character of a nontidal wetland

(2) "Regulated activity" does not include an agricultural activity or forestry activity as defined in this section.
(j) Soil conservation and water quality plan. -- "Soil conservation and water quality plan" means a land use plan for a farm that shows a farmer how to make best possible use of soil and water resources while protecting and conserving those resources for the future.
(k) Compensation ratio. -- "Compensation ratio" means the ratio of the area of wetland restored, created, or enhanced to the area of wetland for which mitigation is required.

APPENDIX G

Division of Water Quality: Wetlands Draining Policy
(NCDENR, 1999)

1. Any new or continued ditching after March 1st, 1999 is a violation of state wetland standards unless as otherwise specified in this policy. Any ditches dug after March 1, 1999 must be filled, using Nationwide Permit 27.
2. Ditches impacting wetlands that were installed prior to October 1, 1998 are not covered by this policy.
3. DWQ will not initiate a wetland standard enforcement action for drainage systems installed before March 1, 1999.
4. If the project is not in compliance with its Sediment and Erosion Control Plan approved prior to March 1, 1999, (i.e., the ditch sides were not appropriately sloped, appropriate BMP's were not installed, ditching went beyond that which was approved or was not installed as approved) and, as appropriate, the National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharge associated with construction activities, then DWQ and DLR will examine the project to determine which of the following actions may be appropriate:
   a. bring the approved ditches into compliance without additional wetland fill, except for sediment and erosion control measures approved by DLR, DWQ and the US Army Corps of Engineers; or
   b. Fill in the ditch using Nationwide Permit 27.
   c. DWQ and DLR will also determine whether to assess civil penalties.

1. Any ditch installed between October 1, 1998 and March 1, 1999 without an approved Erosion and Sediment Control Plan, where required, is in violation of the Sedimentation and Pollution Control Act, NC General Statute 143.215.1, for failure to obtain a NPDES stormwater permit, and may be in violation of water quality standards. DWQ and DLR will examine the site and where appropriate the landowner will be notified in writing and required to fill the ditch and restore the natural hydrology. The landowner is also subject to possible civil penalties. If the Division of Land Resources determines that any of these projects did not require a Sediment and Erosion Control Plan, then these ditches are acceptable as long as downstream water quality standards are protected.
2. Agricultural ditches that impact wetlands will be treated as any other ditches under this policy. "Farmed wetlands" as designated by the Natural Resources Conservation Service may be managed as desired by the owner without violating wetland standards since these wetlands have severely altered wetland hydrology and biological integrity.
3. Maintenance of ditches constructed before March 1, 1999 is allowed if the original dimensions of the ditch, when it was initially constructed are not exceeded. Additions, including deepening, to any existing drainage system beyond maintenance will be considered as a new activity if it drains wetlands. DWQ will consult with the Division of Forest Resources in determining whether forestry operations comply with this provision.
4. Ditches installed for silvicultural purposes after March 1, 1999 must be part of a Forest Management Plan prepared or approved by a Registered Forester and must have water management structures in place that maintain the hydrology of the wetland area. These structures may be managed to temporarily drain the wetland during harvest, planting, and early tree growth for up to three years. If after the three-year period the wetland area is not reforested, the ditches shall be filled and the wetland hydrology restored. Any significant alterations to the biological integrity of the wetland are not allowed. For sites where ditching occurred between October 1, 1998 and March 1, 1999, and the landowner claims that the ditches were installed for silvicultural purposes, the Division of Forest Resources and Division of Land Resources will examine the sites to determine if they are eligible for a silvicultural exemption from the Sediment Pollution Control Act.
5. Consistent with water quality regulations and DWQ policy, wetland draining activities, which were allowed prior to March 1, 1999, may be examined by DWQ staff for compliance with downstream water

quality standards including turbidity, salinity, and dissolved oxygen. If the wetland draining causes violations of water quality standards, DWQ will take appropriate enforcement action.

6. Temporary ground water pumping is allowed since it will not permanently alter the wetland hydrology as long as the pumping is in compliance with the following Best Management Practices. Following written approval from DWQ of an operation and monitoring plan , a maximum of three days of pumping followed by seven days of non-pumping is allowed., The applicant shall also install monitoring wells along a transect or in several directions of the pumping and supply data to DWQ for review in order to demonstrate the effect of the pumping. If these monitoring wells demonstrate the adverse impacts of the pumping on adjacent wetland hydrology or biological integrity, the pumping regime shall be altered to reduce the impact. The discharge location for water shall be into adjacent, upslope wetlands as much as possible in order to maintain their hydrology and must be shown on the applicant's plan. As an alternative to this pumping and monitoring regime, DWQ may approve a site specific plan which will protect wetland hydrology.

APPENDIX H

Virginia Bill's 1170 and 648 as passed by the 2000 General Assembly

VIRGINIA ACTS OF ASSEMBLY –– CHAPTER

An Act to amend and reenact §§ 62.1-44.3, 62.1-44.5, 62.1-44.15, 62.1-44.15:5, and 62.1-44.29 of the Code of Virginia, relating to wetlands. [H 1170]

Approved

Be it enacted by the General Assembly of Virginia:

1. That §§ 62.1-44.3, 62.1-44.5, 62.1-44.15, 62.1-44.15:5, and 62.1-44.29 of the Code of Virginia are amended and reenacted as follows:

§ 62.1-44.3. Definitions.

Unless a different meaning is required by the context the following terms as used in this chapter shall have the meanings hereinafter respectively ascribed to them:

"Board" means the State Water Control Board;

"Member" means a member of the Board;

"Certificate" means any certificate issued by the Board;

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction*, including wetlands*;

"Owner" means the Commonwealth or any of its political subdivisions, including, but not limited to, sanitation district commissions and authorities, and any public or private institution, corporation, association, firm or company organized or existing under the laws of this or any other state or country, or any officer or agency of the United States, or any person or group of persons acting individually or as a group that owns, operates, charters, rents, or otherwise exercises control over or is responsible for any actual or potential discharge of sewage, industrial wastes, or other wastes to state waters, or any facility or operation that has the capability to alter the physical, chemical, or biological properties of state waters in contravention of § 62.1-44.5;

"Pollution" means such alteration of the physical, chemical or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety or welfare, or to the health of animals, fish or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses; provided that (i) an alteration of the physical, chemical, or biological property of state waters, or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution, but which, in combination with such alteration of or discharge or deposit to state waters by other owners is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state waters; and (iii) contributing to the contravention of standards of water quality duly established by the Board, are "pollution" for the terms and purposes of this chapter;

"Sewage" means the water-carried human wastes from residences, buildings, industrial establishments or other places together with such industrial wastes and underground, surface, storm, or other water as may be present;

"Industrial wastes" means liquid or other wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resources;

"Other wastes" means decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offal, tar, oil, chemicals, and all other substances, except industrial wastes and sewage, which may cause pollution in any state waters;

"Establishment" means any industrial establishment, mill, factory, tannery, paper or pulp mill, mine, coal mine, colliery, breaker or coal-processing operations, quarry, oil refinery, boat, vessel, and every other industry or plant or works the operation of which produces industrial wastes or other wastes or which may otherwise alter the physical, chemical or biological properties of any state waters;

"Sewerage system" means pipelines or conduits, pumping stations, and force mains, and all other

construction, devices, and appliances appurtenant thereto, used for conducting sewage or industrial wastes or other wastes to a point of ultimate disposal;

"The law" or "this law" means the law contained in this chapter as now existing or hereafter amended;

"Rule" means a rule adopted by the Board to regulate the procedure of the Board pursuant to § 62.1-44.15 (7);

"Special order" means a special order issued under subdivisions (8a), (8b), and (8c) of § 62.1-44.15;

"Ruling" means a ruling issued under § 62.1-44.15 (9);

"Regulation" means a regulation issued under § 62.1-44.15 (10);

"Standards" means standards established under subdivisions (3a) and (3b) of § 62.1-44.15;

"Policies" means policies established under subdivisions (3a) and (3b) of § 62.1-44.15;

"Person" means an individual, corporation, partnership, association, a governmental body, a municipal corporation or any other legal entity;

"Pretreatment requirements" means any requirements arising under the Board's pretreatment regulations including the duty to allow or carry out inspections, entry or monitoring activities; any rules, regulations, or orders issued by the owner of a publicly owned treatment works; or any reporting requirements imposed by the owner of a publicly owned treatment works or by the regulations of the Board; and

"Pretreatment standards" means any standards of performance or other requirements imposed by regulation of the Board upon an industrial user of a publicly owned treatment works*.;*

"Excavate" or "excavation" means ditching, dredging, or mechanized removal of earth, soil or rock;

"Normal agricultural activities" means those activities defined as an agricultural operation in § 3.1-22.29, and any activity that is conducted as part of or in furtherance of such agricultural operation, but shall not include any activity for which a permit would have been required as of January 1, 1997, under 33 U.S.C. § 1344 or any regulations promulgated pursuant thereto;

"Normal silvicultural activities" means any silvicultural activity, as defined in § 10.1-1181.1, and any activity that is conducted as part of or in furtherance of such silvicultural activity, but shall not include any activity for which a permit would have been required as of January 1, 1997, under 33 U.S.C. § 1344 or any regulations promulgated pursuant thereto; and

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

§ 62.1-44.5. Prohibition of waste discharges or other quality alterations of state waters except as authorized by permit; notification required.

A. Except in compliance with a certificate issued by the Board, it shall be unlawful for any person to (i*):*

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances, or (ii*);*

2. Excavate in a wetland;

3. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the uses of such waters for domestic or industrial consumption, or for recreation, or for other uses*; or*

4. On and after October 1, 2001, conduct the following activities in a wetland:

a. New activities to cause draining that significantly alters or degrades existing wetland acreage or functions;

b. Filling or dumping;

c. Permanent flooding or impounding; or

d. New activities that cause significant alteration or degradation of existing wetland acreage or functions.

B. Any person required to obtain a permit or certificate pursuant to this chapter, who discharges or

53 causes or allows (i) a discharge of sewage, industrial waste, other wastes or any noxious or
54 deleterious substance into or upon state waters or (ii) a discharge that may reasonably be expected to
3
1 enter state waters, in violation of the provisions of subsection A shall, upon learning of the discharge,
2 promptly notify, but in no case later than 24 hours the Board, the Director of the Department of
3 Environmental Quality, or the coordinator of emergency services appointed pursuant to § 44-146.19
4 for the political subdivision reasonably expected to be affected by the discharge. Written notice to the
5 Director of the Department of Environmental Quality shall follow initial notice within the time frame
6 specified by the federal Clean Water Act.
7 § 62.1-44.15. Powers and duties.
8 It shall be the duty of the Board and it shall have the authority:
9 (1) [Repealed.]
10 (2) To study and investigate all problems concerned with the quality of state waters and to make
11 reports and recommendations.
12 (2a) To study and investigate methods, procedures, devices, appliances, and technologies which
13 could assist in water conservation or water consumption reduction.
14 (2b) To coordinate its efforts toward water conservation with other persons or groups, within or
15 without the Commonwealth.
16 (2c) To make reports concerning, and formulate recommendations based upon, any such water
17 conservation studies to ensure that present and future water needs of the citizens of the
18 Commonwealth are met.
19 (3a) To establish such standards of quality and policies for any state waters consistent with the
20 general policy set forth in this chapter, and to modify, amend or cancel any such standards or policies
21 established and to take all appropriate steps to prevent quality alteration contrary to the public interest
22 or to standards or policies thus established, except that a description of provisions of any proposed
23 standard or policy adopted by regulation which are more restrictive than applicable federal
24 requirements, together with the reason why the more restrictive provisions are needed, shall be
25 provided to the standing committee of each house of the General Assembly to which matters relating
26 to the content of the standard or policy are most properly referable. The Board shall, from time to
27 time, but at least once every three years, hold public hearings pursuant to subsection B of § 9-6.14:7.1
28 but, upon the request of an affected person or upon its own motion, hold hearings pursuant to
29 § 9-6.14:8, for the purpose of reviewing the standards of quality, and, as appropriate, adopting,
30 modifying, or canceling such standards. Whenever the Board considers the adoption, modification,
31 amendment or cancellation of any standard, it shall give due consideration to, among other factors, the
32 economic and social costs and benefits which can reasonably be expected to obtain as a consequence
33 of the standards as adopted, modified, amended or cancelled. The Board shall also give due
34 consideration to the public health standards issued by the Virginia Department of Health with respect
35 to issues of public health policy and protection. If the Board does not follow the public health
36 standards of the Virginia Department of Health, the Board's reason for any deviation shall be made in
37 writing and published for any and all concerned parties.
38 (3b) Except as provided in subdivision (3a), such standards and policies are to be adopted or
39 modified, amended or cancelled in the manner provided by the Administrative Process Act (§ 9-6.14:1
40 et seq.).
41 (4) To conduct or have conducted scientific experiments, investigations, studies, and research to
42 discover methods for maintaining water quality consistent with the purposes of this chapter. To this
43 end the Board may cooperate with any public or private agency in the conduct of such experiments,
44 investigations and research and may receive in behalf of the Commonwealth any moneys which any
45 such agency may contribute as its share of the cost under any such cooperative agreement. Such
46 moneys shall be used only for the purposes for which they are contributed and any balance remaining
47 after the conclusion of the experiments, investigations, studies, and research, shall be returned to the
48 contributors.
49 (5) To issue, *revoke or amend* certificates *under prescribed conditions* for*: (a)* the discharge of
50 sewage, industrial wastes and other wastes into or adjacent to or *state waters; (b)* the alteration
51 otherwise of the physical, chemical or biological properties of state waters under prescribed conditions

and to revoke or amend such certificates*; (c) excavation in a wetland; or (d) on and after October 1, 2001, the conduct of the following activities in a wetland: (i) new activities to cause draining that significantly alters or degrades existing wetland acreage or functions, (ii) filling or dumping, (iii) permanent flooding or impounding, or (iv) new activities that cause significant alteration or degradation of existing wetland acreage or functions*.

(5a) All certificates issued by the Board under this chapter shall have fixed terms. The term of a Virginia Pollution Discharge Elimination System permit shall not exceed five years. *The term of a Virginia Water Protection Permit shall be based upon the projected duration of the project, the length of any required monitoring, or other project operations or permit conditions; however, the term shall not exceed fifteen years.* The term of a Virginia Pollution Abatement permit shall not exceed ten years, except that the term of a Virginia Pollution Abatement permit for confined animal feeding operations shall be ten years. The Department of Environmental Quality shall inspect all facilities for which a Virginia Pollution Abatement permit has been issued at least once every five years, except that the Department shall inspect all facilities covered by the Virginia Pollution Abatement permit for confined animal feeding operations annually. Department personnel performing inspections of confined animal feeding operations shall be certified under the voluntary nutrient management training and certification program established in § 10.1-104.2. The term of a certificate issued by the Board shall not be extended by modification beyond the maximum duration and the certificate shall expire at the end of the term unless an application for a new permit has been timely filed as required by the regulations of the Board and the Board is unable, through no fault of the permittee, to issue a new permit before the expiration date of the previous permit.

(5b) Any certificate issued by the Board under this chapter may, after notice and opportunity for a hearing, be amended or revoked on any of the following grounds or for good cause as may be provided by the regulations of the Board:

1. The owner has violated any regulation or order of the Board, any condition of a certificate, any provision of this chapter, or any order of a court, where such violation results in a release of harmful substances into the environment or poses a substantial threat of release of harmful substances into the environment or presents a hazard to human health or the violation is representative of a pattern of serious or repeated violations which, in the opinion of the Board, demonstrates the owner's disregard for or inability to comply with applicable laws, regulations, or requirements;

2. The owner has failed to disclose fully all relevant material facts or has misrepresented a material fact in applying for a certificate, or in any other report or document required under this law or under the regulations of the Board;

3. The activity for which the certificate was issued endangers human health or the environment and can be regulated to acceptable levels by amendment or revocation of the certificate; or

4. There exists a material change in the basis on which the permit was issued that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the certificate necessary to protect human health or the environment.

(6) To make investigations and inspections, to ensure compliance with any certificates, standards, policies, rules, regulations, rulings and special orders which it may adopt, issue or establish and to furnish advice, recommendations, or instructions for the purpose of obtaining such compliance. In recognition of §§ 32.1-164 and 62.1-44.18, the Board and the State Department of Health shall enter into a memorandum of understanding establishing a common format to consolidate and simplify inspections of sewage treatment plants and coordinate the scheduling of the inspections. The new format shall ensure that all sewage treatment plants are inspected at appropriate intervals in order to protect water quality and public health and at the same time avoid any unnecessary administrative burden on those being inspected.

(7) To adopt rules governing the procedure of the Board with respect to: (a) hearings; (b) the filing of reports; (c) the issuance of certificates and special orders; and (d) all other matters relating to procedure; and to amend or cancel any rule adopted. Public notice of every rule adopted under this section shall be by such means as the Board may prescribe.

(8a) To issue special orders to owners (i) who are permitting or causing the pollution, as defined by § 62.1-44.3, of state waters to cease and desist from such pollution, (ii) who have failed to

construct facilities in accordance with final approved plans and specifications to construct such facilities in accordance with final approved plans and specifications, (iii) who have violated the terms and provisions of a certificate issued by the Board to comply with such terms and provisions, (iv) who have failed to comply with a directive from the Board to comply with such directive, (v) who

have contravened duly adopted and promulgated water quality standards and policies to cease and desist from such contravention and to comply with such water quality standards and policies, (vi) who have violated the terms and provisions of a pretreatment permit issued by the Board or by the owner of a publicly owned treatment works to comply with such terms and provisions or (vii) who have contravened any applicable pretreatment standard or requirement to comply with such standard or requirement; and also to issue such orders to require any owner to comply with the provisions of this chapter and any decision of the Board.

(8b) Such special orders are to be issued only after a hearing with at least thirty days' notice to the affected owners, of the time, place and purpose thereof, and they shall become effective not less than fifteen days after service as provided in § 62.1-44.12; provided that if the Board finds that any such owner is grossly affecting or presents an imminent and substantial danger to (i) the public health, safety or welfare, or the health of animals, fish or aquatic life; (ii) a public water supply; or (iii) recreational, commercial, industrial, agricultural or other reasonable uses, it may issue, without advance notice or hearing, an emergency special order directing the owner to cease such pollution or discharge immediately, and shall provide an opportunity for a hearing, after reasonable notice as to the time and place thereof to the owner, to affirm, modify, amend or cancel such emergency special order. If an owner who has been issued such a special order or an emergency special order is not complying with the terms thereof, the Board may proceed in accordance with § 62.1-44.23, and where the order is based on a finding of an imminent and substantial danger, the court shall issue an injunction compelling compliance with the emergency special order pending a hearing by the Board. If an emergency special order requires cessation of a discharge, the Board shall provide an opportunity for a hearing within forty-eight hours of the issuance of the injunction.

(8c) The provisions of this section notwithstanding, the Board may proceed directly under § 62.1-44.32 for any past violation or violations of any provision of this chapter or any regulation duly promulgated hereunder.

(8d) With the consent of any owner who has violated or failed, neglected or refused to obey any regulation or order of the Board, any condition of a permit or any provision of this chapter, the Board may provide, in an order issued by the Board against such person, for the payment of civil charges for past violations in specific sums not to exceed the limit specified in § 62.1-44.32 (a). Such civil charges shall be instead of any appropriate civil penalty which could be imposed under § 62.1-44.32 (a) and shall not be subject to the provisions of § 2.1-127. Such civil charges shall be paid into the state treasury and deposited by the State Treasurer into the Virginia Environmental Emergency Response Fund pursuant to Chapter 25 (§ 10.1-2500 et seq.) of Title 10.1, excluding civil charges assessed for violations of Article 9 (§ 62.1-44.34:8 et seq.) or 10 (§ 62.1-44.34:10 et seq.) of Chapter 3.1 of *this* title 62.1, or a regulation, administrative or judicial order, or term or condition of approval relating to or issued under those articles.

The amendments to this section adopted by the 1976 Session of the General Assembly shall not be construed as limiting or expanding any cause of action or any other remedy possessed by the Board prior to the effective date of said amendments.

(9) To make such rulings under §§ 62.1-44.16, 62.1-44.17 and 62.1-44.19 as may be required upon requests or applications to the Board, the owner or owners affected to be notified by certified mail as soon as practicable after the Board makes them and such rulings to become effective upon such notification.

(10) To adopt such regulations as it deems necessary to enforce the general water quality management program of the Board in all or part of the Commonwealth, except that a description of provisions of any proposed regulation which are more restrictive than applicable federal requirements, together with the reason why the more restrictive provisions are needed, shall be provided to the standing committee of each house of the General Assembly to which matters relating to the content of the regulation are most properly referable.

(11) To investigate any large-scale killing of fish.

(a) Whenever the Board shall determine that any owner, whether or not he shall have been issued a certificate for discharge of waste, has discharged sewage, industrial waste, or other waste into state waters in such quantity, concentration or manner that fish are killed as a result thereof, it may effect such settlement with the owner as will cover the costs incurred by the Board and by the Department of Game and Inland Fisheries in investigating such killing of fish, plus the replacement value of the fish destroyed, or as it deems proper, and if no such settlement is reached within a reasonable time, the Board shall authorize its executive secretary to bring a civil action in the name of the Board to recover from the owner such costs and value, plus any court or other legal costs incurred in connection with such action.

(b) If the owner is a political subdivision of the Commonwealth, the action may be brought in any circuit court within the territory embraced by such political subdivision. If the owner is an establishment, as defined in this chapter, the action shall be brought in the circuit court of the city or the circuit court of the county in which such establishment is located. If the owner is an individual or group of individuals, the action shall be brought in the circuit court of the city or circuit court of the county in which such person or any of them reside.

(c) For the purposes of this subsection the State Water Control Board shall be deemed the owner of the fish killed and the proceedings shall be as though the State Water Control Board were the owner of the fish. The fact that the owner has or held a certificate issued under this chapter shall not be raised as a defense in bar to any such action.

(d) The proceeds of any recovery had under this subsection shall, when received by the Board, be applied, first, to reimburse the Board for any expenses incurred in investigating such killing of fish. The balance shall be paid to the Board of Game and Inland Fisheries to be used for the fisheries' management practices as in its judgment will best restore or replace the fisheries' values lost as a result of such discharge of waste, including, where appropriate, replacement of the fish killed with game fish or other appropriate species. Any such funds received are hereby appropriated for that purpose.

(e) Nothing in this subsection shall be construed in any way to limit or prevent any other action which is now authorized by law by the Board against any owner.

(f) Notwithstanding the foregoing, the provisions of this subsection shall not apply to any owner who adds or applies any chemicals or other substances that are recommended or approved by the State Department of Health to state waters in the course of processing or treating such waters for public water supply purposes, except where negligence is shown.

(12) To administer programs of financial assistance for planning, construction, operation, and maintenance of water quality control facilities for political subdivisions in this Commonwealth.

(13) To establish policies and programs for effective area-wide or basin-wide water quality control and management. The Board may develop comprehensive pollution abatement and water quality control plans on an area-wide or basin-wide basis. In conjunction with this, the Board, when considering proposals for waste treatment facilities, is to consider the feasibility of combined or joint treatment facilities and is to ensure that the approval of waste treatment facilities is in accordance with the water quality management and pollution control plan in the watershed or basin as a whole. In making such determinations, the Board is to seek the advice of local, regional, or state planning authorities.

(14) To establish requirements for the treatment of sewage, industrial wastes and other wastes that are consistent with the purposes of this chapter; however, no treatment shall be less than secondary or its equivalent, unless the owner can demonstrate that a lesser degree of treatment is consistent with the purposes of this chapter.

(15) To establish and implement policies and programs to protect and enhance the Commonwealth's wetland resources. Regulatory programs shall be designed to achieve no net loss of existing wetland acreage and functions. Voluntary and incentive-based programs shall be developed to achieve a net resource gain in acreage and functions of wetlands. The Board shall seek and obtain advice and guidance from the Virginia Institute of Marine Science in implementing these policies and

programs.

§ 62.1-44.15:5. Virginia Water Protection Permit.

A. After the effective date of regulations adopted by the Board pursuant to this section, Issuance of a Virginia Water Protection Permit shall constitute the certification required under § 401 of the Clean Water Act.

B. The Board shall*, after providing an opportunity for public comment,* issue a Virginia Water Protection Permit for an activity requiring § 401 certification if it has determined that the proposed

activity is consistent with the provisions of the Clean Water Act *and the State Water Control Law* and will protect instream beneficial uses.

C. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural, and aesthetic values is a beneficial use of Virginia's waters. Conditions contained in a Virginia Water Protection Permit may include, but are not limited to, the volume of water which may be withdrawn as a part of the permitted activity. Domestic and other existing beneficial uses shall be considered the highest priority uses.

D. Except in compliance with an individual or general Virginia Water Protection Permit issued in accordance with this subsection, it shall be unlawful to excavate in a wetland. On and after October 1, 2001, except in compliance with an individual or general Virginia Water Protection Permit issued in accordance with this subsection, it shall also be unlawful to conduct the following activities in a wetland: (i) new activities to cause draining that significantly alters or degrades existing wetland acreage or functions, (ii) filling or dumping, (iii) permanent flooding or impounding, or (iv) new activities that cause significant alteration or degradation of existing wetland acreage or functions.

Permits shall address avoidance and minimization of wetland impacts to the maximum extent practicable. A permit shall be issued only if the Board finds that the effect of the impact, together with other existing or proposed impacts to wetlands, will not cause or contribute to a significant impairment of state waters or fish and wildlife resources. Permits shall contain requirements for compensating impacts on wetlands. Such compensation requirements shall be sufficient to achieve no net loss of existing wetland acreage and functions, and may be met through wetland creation or restoration, purchase or use of mitigation bank credits pursuant to subsection E, or contributing to a fund that is approved by the Board and is dedicated to achieving no net loss of wetland acreage and functions. When utilized in conjunction with creation, restoration or mitigation bank credits, compensation may incorporate (i) preservation or restoration of upland buffers adjacent to wetlands or other state waters or (ii) preservation of wetlands. The Board shall assess compensation implementation, inventory permitted wetland impacts, and work to prevent unpermitted impacts.

Within 15 days of receipt of an individual permit application, the Board shall review the application for completeness and either accept the application or request additional specific information from the applicant. Within 120 days of receipt of a complete application, the Board shall issue the permit, issue the permit with conditions, deny the permit or decide to conduct a public meeting or hearing. If a public meeting or hearing is held, it must be held within 60 days of the decision to conduct such a proceeding and a final decision as to the permit shall be made within ninety days of completion of the public meeting or hearing.

The Board shall develop general permits for such activities in wetlands as it deems appropriate. General permits shall include such terms and conditions as the Board deems necessary to protect state waters and fish and wildlife resources from significant impairment. The Board shall deny, approve or approve with conditions any application for coverage under a general permit within forty-five days of receipt of a complete preconstruction application. The application shall be deemed approved if the Board fails to act within forty-five days. The Board is authorized to waive the requirement for a general permit, or deem an activity in compliance with a general permit, when it determines that an isolated wetland is of minimal ecological value.

The Board shall develop general permits for:

1. Activities causing wetland impacts of less than one-half of an acre;

2. Facilities and activities of utilities and public service companies regulated by the Federal Energy Regulatory Commission or State Corporation Commission. No Board action on an individual

or general permit for such facilities shall alter the siting determination made through Federal Energy Regulatory Commission or State Corporation Commission approval. The Board and the State Corporation Commission shall develop a memorandum of agreement pursuant to §§ 56-46.1, 56-265.2, 56-265.2:1 and 56-580 to ensure that consultation on wetland impacts occurs prior to siting determinations;

3. Coal, natural gas, and coal bed methane gas mining activities authorized by the Department of Mines, Minerals and Energy;[9]

4. Virginia Department of Transportation or other linear transportation projects; and

5. Activities governed by nationwide or regional permits approved by the Board and issued by the U.S. Army Corps of Engineers. Conditions contained in the general permits shall include, but not be limited to, filing with the Board copies of any preconstruction notification, postconstruction report and certificate of compliance required by the U.S. Army Corps of Engineers.

The Board shall utilize the U.S. Army Corps of Engineers' "Wetlands Delineation Manual, Technical Report Y-87-1, January 1987, Final Report" as the approved method for delineating wetlands. The Board shall adopt appropriate guidance and regulations to ensure consistency with the U.S. Army Corps of Engineers' implementation of delineation practices. The Board shall also adopt guidance and regulations for review and approval of the geographic area of a delineated wetland. Any such approval of a delineation shall remain effective for a period of five years; however, if the Board issues a permit pursuant to this subsection for an activity in the delineated wetland within the five-year period, the approval shall remain effective for the term of the permit. Any delineation accepted by the U.S. Army Corps of Engineers as sufficient for its exercise of jurisdiction pursuant to § 404 of the Clean Water Act shall be determinative of the geographic area of that delineated wetland.

This subsection shall not apply to activities governed under Chapter 13 (§ 28.2-100 et seq.) of Title 28.2 or normal agricultural activities or normal silvicultural activities. This subsection shall also not apply to normal residential gardening, lawn and landscape maintenance, or other similar activities which are incidental to an occupant's ongoing residential use of property and of minimal ecological impact; the Board shall develop criteria governing this exemption and shall specifically identify the activities meeting these criteria in its regulations.

No locality may impose wetlands permit requirements duplicating state or federal wetlands permit requirements.

E. When a Virginia Water Protection Permit is conditioned upon compensatory mitigation for adverse impacts to wetlands, the applicant may be permitted to satisfy all or part of such mitigation requirements by the purchase or use of credits from any wetlands mitigation bank, including any banks owned by the permit applicant, that has been approved and is operating in accordance with applicable federal and state guidance, laws or regulations for the establishment, use and operation of mitigation banks as long as: (1) the bank is in the same U.S.G.S. cataloging unit, as defined by the Hydrologic Unit Map of the United States (U.S.G.S. 1980), or an adjacent cataloging unit within the same river watershed, as the impacted site, or it meets all the conditions found in clauses (i) through (iv) and either clause (v) or (vi) of this subsection; (2) the bank is ecologically preferable to practicable on-site and off-site individual mitigation options, as defined by federal wetland regulations; and (3) the banking instrument, if approved after July 1, 1996, has been approved by a process that included public review and comment. When the bank is not located in the same cataloging unit or adjacent cataloging unit within the same river watershed as the impacted site, the purchase or use of credits shall not be allowed unless the applicant demonstrates to the satisfaction of the Department of Environmental Quality that (i) the impacts will occur as a result of a Virginia Department of Transportation linear project or as the result of a locality project for a locality whose jurisdiction crosses multiple river watersheds; (ii) there is no practical same river watershed mitigation alternative; (iii) the impacts are less than one acre in a single and complete project within a cataloging unit; (iv) there is no significant harm to water quality or fish and wildlife resources within the river watershed

[9] Governor Gilmore's recommendation was to add sand mining at line 53 on page 7.

of the impacted site; and either (v) impacts within the Chesapeake Bay watershed are mitigated within the Chesapeake Bay watershed as close as possible to the impacted site or (vi) impacts within U.S.G.S. cataloging units 02080108, 02080208, and 03010205, as defined by the Hydrologic Unit Map of the United States (U.S.G.S. 1980), are mitigated in-kind within those hydrologic cataloging units, as close as possible to the impacted site. After July 1, 2002, the provisions of clause (vi) shall apply only to impacts within subdivisions of the listed cataloging units where overlapping watersheds exist, as determined by the Department of Environmental Quality, provided the Department has made such a determination by that date. *The Department of Environmental Quality is authorized to serve as a signatory to agreements governing the operation of wetlands mitigation banks. The Commonwealth, its officials, agencies, and employees shall not be liable for any action taken under any agreement developed pursuant to such authority. State agencies are authorized to purchase credits from wetland mitigation banks.*

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C. F. Prior to the issuance of a Virginia Water Protection Permit, the Board shall consult with, and give full consideration to the written recommendations of, the following agencies: the Department of Game and Inland Fisheries, the Department of Conservation and Recreation, the Virginia Marine Resources Commission, the Department of Health, the Department of Agriculture and Consumer Services and any other interested and affected agencies. Such consultation shall include the need for balancing instream uses with offstream uses. Agencies may submit written comments on proposed permits within forty-five days after notification by the Board. The Board shall assume that if written comments are not submitted by an agency within this time period, the agency has no comments on the proposed permit.

D. G. No Virginia Water Protection Permit shall be required for any water withdrawal in existence on July 1, 1989; however, a permit shall be required if a new § 401 certification is required to increase a withdrawal.

H. No Virginia Water Protection Permit shall be required for any water withdrawal not in existence on July 1, 1989, if the person proposing to make the withdrawal has received a § 401 certification before January 1, 1989, with respect to installation of any necessary withdrawal structures to make such withdrawal; however, a permit shall be required before any such withdrawal is increased beyond the amount authorized by the certification.

I. On and after July 1, 2000, and prior to the adoption of regulations promulgated pursuant to subsection D, absent the issuance of a permit by the U.S. Army Corps of Engineers pursuant to § 404 of the Clean Water Act, no person shall excavate in a wetland without compensating for the impact to the wetland to the satisfaction of the Board in a manner sufficient to achieve no net loss of existing wetland acreage and functions.

§ 62.1-44.29. Judicial review.

Any owner aggrieved by, or any person who has participated, in person or by submittal of written comments, in the public comment process related to, a final decision of the Board under §§ 62.1-44.15 (5), 62.1-44.15 (8a), (8b), and (8c), *62.1-44.15:5,* 62.1-44.16, 62.1-44.17, 62.1-44.19 or § 62.1-44.25, whether such decision is affirmative or negative, is entitled to judicial review thereof in accordance with the provisions of the Administrative Process Act (§ 9-6.14:1 et seq.) if such person meets the standard for obtaining judicial review of a case or controversy pursuant to Article III of the United States Constitution. A person shall be deemed to meet such standard if (i) such person has suffered an actual or imminent injury which is an invasion of a legally protected interest and which is concrete and particularized; (ii) such injury is fairly traceable to the decision of the Board and not the result of the independent action of some third party not before the court; and (iii) such injury will likely be redressed by a favorable decision by the court.

2. The State Water Control Board shall promulgate regulations governing excavation activities in wetlands to be effective within 280 days of enactment of this act and shall adopt proposed regulations to implement all other provisions of this act by January 1, 2001, to become effective on October 1, 2001.

3. That the State Water Control Board shall promptly, but no later than July 1, 2002, seek from the U.S. Army Corps of Engineers the issuance to Virginia of a § 404 Clean Water Act State

Programmatic General Permit. The Board shall report to the House Committee on Chesapeake and Its Tributaries and the Senate Committee on Agriculture, Conservation and Natural Resources at least every six months on its progress in obtaining the State Programmatic General Permit.

4. That nothing in this act shall be construed to restrict the State Water Control Board's authority to issue Virginia Water Protection Permits for activities requiring certification under § 401 of the Clean Water Act.

VITA

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