



Reports

5-1-1999

Tulloch Ditching

Carl Hershner

Virginia Institute of Marine Science

Virginia Institute of Marine Science, Wetlands Program

Follow this and additional works at: <https://scholarworks.wm.edu/reports>

 Part of the [Natural Resources and Conservation Commons](#)

Recommended Citation

Hershner, C., & Virginia Institute of Marine Science, Wetlands Program. (1999) Tulloch Ditching. Wetlands Program Technical Report no. 99-4. Virginia Institute of Marine Science, College of William and Mary. <http://dx.doi.org/doi:10.21220/m2-0bmq-d080>

This Report is brought to you for free and open access by W&M ScholarWorks. It has been accepted for inclusion in Reports by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.



Wetlands
Program



Technical Report

May 1999

No. 99-4

Tulloch Ditching

By Carl H. Hershner

The term “Tulloch ditching” is being used to describe the practice of digging drainage ditches in wetlands with careful removal of the excavated materials from the wetland. The objective is to drain the area, so that it will no longer be subject to wetlands regulations, creating the potential for alternative uses. The practice became prevalent in Virginia when the United States Court of Appeals for the District of Columbia upheld a ruling by the U. S. District Court which prevented the Corps of Engineers from using the “Tulloch Rule” to prevent the practice.

posed to drain and then develop 700 acres of wetlands in North Carolina. The Corp’s field office staff had determined the project would result in only very small and incidental releases of dredged material, and therefore would not require a permit under the 1986 regulations. The Wildlife Federation and other environmental groups filed suit to require a permit for the project. As part of the settlement of the case, the Corps agreed to propose stricter permitting requirements. The result was the “Tulloch Rule.”

Background

The Corps is authorized under Section 404 of the Clean Water Act to issue permits “for the discharge of dredged or fill material into the navigable waters at specified disposal sites” (33 U.S.C. § 1344). In 1986 the Corps issued a regulation which defined the term “discharge of dredged material” to mean “any addition,” but expressly excluded very small or incidental inputs resulting from the dredging operation—what has become known as “fallback.” In 1993, the Corps issued a new rule which eliminated the exemption for fallback. The new rule resulted from settlement of a lawsuit, *North Carolina Wildlife Federation v. Tulloch*. The suit concerned the actions of a developer who pro-



Steve Martin

Example of tulloch ditching in southeastern Virginia.

As written in 1993, the Tulloch Rule effectively required a permit for all discharges, unless the Corps could be convinced by the project proponent that the discharges would have no adverse impacts on waters of the United States. The standard for this assessment was set very high by the Corps at the time the regulation was promulgated. The result was that no ditching in wetlands went unregulated until June 1998 when the Court of Appeals issued its ruling.

The Tulloch Rule was challenged in the District Court for the District of Columbia, which covers both North Carolina and Virginia (plus Maryland, West Virginia, South Carolina, and the District of Columbia). The American Mining Congress sued the Corps claiming that regulation of fallback exceeded the scope of authority granted by the Clean Water Act. In 1997, the District Court agreed in a ruling which prohibited the Corps from enforcing the regulation anywhere in the United States.

When the case was brought to the Court of Appeals, the principal question was whether regulation of fallback under the Tulloch Rule was within the scope of the Corps' authority. Several specific legal points were involved in the final court reasoning. Quoting from the court's opinion filed by Judge Williams:

The agencies argue that the terms of the Act in fact demonstrate that fallback may be classified as a discharge. The Act defines a discharge as the addition of any pollutant to navigable waters, 33 U.S.C. § 1362(12), and defines "pollutant" to include "dredged spoil," as well as "rock," "sand," and "cellar dirt." Id. § 1362 (6).

With this argument the Corps and its sister agencies hoped to convince the Appeals Court that the Tulloch Rule did not exceed the Corps' statutory jurisdiction under s 404 of the Clean Water Act.

The Court was not persuaded. Judge Williams, writing for the Court concluded that the plaintiffs' counter argument, and the previous ruling by the lower court were correct. His opinion states:

We agree with the plaintiffs, and with the district court, that the straightforward statutory term "addition" cannot reasonably be said to encompass the situation in which material is removed from the waters of the United States and a small portion of it happens to fall back.Although the Act includes "dredged spoil" in its list of pollutants, 33 U.S.C. § 1362(6), Congress could not have contemplated that the attempted removal of 100 tons of that substance could constitute an addition simply because only 99 tons of it were actually taken away.

In a concurring opinion, Judge Silberman added some further explanation to the court's interpretation of "addition." He wrote:

We hold that the Corps's interpretation of the phrase "addition of any pollutant to navigable waters" to cover incidental fallback is "unreasonable,"As our opinion's discussion of prior cases

Wetlands Program
School of Marine Science
Virginia Institute of Marine Science
College of William and Mary
Gloucester Point, Virginia 23062
(804) 684-7380



Dr. Carl Hershner, Program Director
Dr. Kirk Havens, Editor
Published by: VIMS Publication Center

This technical report was funded, in part, by the Virginia Coastal Resources Management Program of the Dept. of Environmental Quality through Grant #NA87O20253-01 of the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resources Management, under the Coastal Zone Management Act of 1972, as amended.



The views expressed herein are those of the authors and do not necessarily reflect the views of NOAA or any of its subagencies or DEQ.

Commonwealth's Declared Policy: "to preserve the wetlands and to prevent their despoliation and destruction..."

Printed on recycled paper.



indicates, the word addition carries both a temporal and geographic ambiguity. If the material that would otherwise fall back were moved some distance away and then dropped, it very well might constitute an “addition.” Or if it were held for some time and then dropped back in the same spot, it might also constitute an “addition.” But the structure of the relevant statutes indicates that it is unreasonable to call incidental fallback an addition.

The Court of Appeals’ opinion included language which appears to indicate two options for federal agencies in lieu of the invalidated Tulloch Rule. The first is development of a more specific regulation. The court wrote:

But we do not hold that the Corps may not legally regulate some forms of redeposit under its s 404 permitting authority. We hold only that by asserting jurisdiction over “any redeposit,” including incidental fallback, the Tulloch Rule outruns the Corps’s statutory authority. Since the Act sets out no bright line between incidental fallback on the one hand and regulable redeposits on the other, a reasoned attempt by the agencies to draw such a line would merit considerable deference.

The second option is to ask Congress to amend the Clean Water Act to bring the type of activity addressed by the Tulloch Rule clearly within the permitting purview of the Corps. The Court’s opinion concludes:

In a press release accompanying the adoption of the Tulloch Rule, the White House announced: “Congress should amend the Clean Water Act to make it consistent with the agencies’ rulemaking.”While remarkable in its candor, the announcement contained a kernel of truth. If the agencies and NWF believe that the Clean Water Act inadequately protects wetlands and other natural resources by insisting upon the presence of an “addition” to trigger permit requirements, the appropriate body to turn to is Congress. Without such an amendment, the Act simply will not accommodate the Tulloch Rule.

Location	Underway or Completed Acres (Parcels)	Planned or Likely Acres (Parcels)
Chesapeake	1836 (10)	4375 (21)
Suffolk	264 (3)	80 (1)
Virginia Beach	0 (0)	1160 (?)
Newport News	5 (1)	25 (?)
Poquoson	0 (0)	50 (?)
Prince William	0 (0)	5 (?)
Essex	0 (0)	20 (?)
TOTALS	2105 (14)	5717 (22+)

Table 1. Wetland Loses Due to Tulloch Ditching as of 05/11/99

Source: Army Corps of Engineers Norfolk District

Recent Developments

As soon as the Court of Appeals issued its opinion affirming invalidation of the Tulloch Rule, ditching of wetlands in the coastal plains of North Carolina and Virginia began. Thousands of acres of nontidal wetlands which were only saturated or flooded seasonally were targeted for conversion to other uses. In North Carolina as many as 10,000 acres have reportedly been drained in coastal areas since the ruling. In Virginia over 2,000 acres have been impacted, with more ditching planned.

Maryland did not experience wetland losses due to "Tulloch ditching" following the court ruling. This is because the state has its own nontidal wetlands management program which regulates ditching and other wetland impacts. Maryland wetlands were thus unaffected by changes to the federal program.

Since the court ruling, North Carolina has determined that wetlands ditching and draining still falls under its authority to manage water quality within the state.

Wetlands are defined as waters of the state, therefore the state's authority applies when the hydrology or biology of the wetland is altered or when the draining violates downstream water quality standards such as turbidity, salinity and dissolved oxygen. The North Carolina Division of Water Quality developed and began implementing a wetlands draining policy on March 1, 1999. The policy does not represent any new regulation.

Virginia is currently reviewing its programs and authority to determine how best to respond to the wetland impacts caused by "Tulloch ditching." The Corps' Norfolk District office has been tracking wetland losses due to Tulloch ditching, and reports both impacted and planned acreages, based on projects reported by localities, consultants, and the property owners. Table 1 lists projects known to the Corps staff in mid-May 1999. At that time there were 7,820 acres of wetlands in Virginia's coastal zone which had been or were likely to be impacted by ditching.

On May 10, 1999, the Corps and EPA issued a revision to the Tulloch Rule. (Federal Register 64(89): 25119-25123)

On August 25, 1993, the Corps issued the Tulloch Rule which defines the term "discharge of dredged material" as:

Any addition of dredged material into, including any re-deposit within, the waters of the United States. The term includes, but is not limited to the following:any addition, including any re-deposit, 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.

On May 10, 1999, the Corps issued a revised rule which:

....deletes the use of the word "any" as a modifier of the term "redeposit," and expressly excludes "incidental fallback" from the definition of "discharge of dredged material."

definition of "discharge of dredged material" so that it conforms with the district court ruling, which was upheld by the Court of Appeals. The rule now does not exert jurisdiction over "any" re-deposit of dredged material, and it specifically excludes "incidental fallback" from the definition. The Corps and EPA now maintain that determination of "...when a particular re-deposit is subject to CWA jurisdiction will require a case-by-case evaluation, based on the particular facts of each

case." The expressed purpose of the rule revision is simply to comply with the injunction against application of the Tulloch Rule issued by the district court. The Corps and EPA announced their intention to expeditiously undertake rulemaking which will make "...a reasoned attempt to more clearly delineate the scope of CWA jurisdiction over redeposits of dredged material in waters of the U.S." This will be the effort to develop the bright line between regulable and incidental redeposits which the Court of Appeals indicated would resolve some of the controversy.

The Corps and EPA also put anyone planning to undertake a project to drain wetlands on notice with the following statement in the announcement of the revised rule.

Entities that are engaging, or intend to engage, in activities in waters of the U.S. that may result in a “discharge of dredged material” as that term is defined in today’s final rule are hereby given notice that the agencies intend to regulate those activities that we find, based on the particular circumstances, would result in an addition of pollutants to the waters of the U.S.

Wetlands at Risk

The wetland resources which are most likely to be impacted by Tulloch ditching are nontidal wetlands which are temporarily flooded or saturated. These areas generally have significant amounts of water present for only part of the year, often appearing dry for the balance of the time. As such, they are tempting targets for effective drainage which can remove the excess water. These are the types of wetlands which were often ditched and drained in the past for agricultural lands. The pressure now comes from development interests.

In order to assess how many wetlands fall into the categories of temporarily flooded or saturated, the most recent versions of the National Wetlands Inventory (NWI) maps were reviewed. Beginning in the mid-1980’s, NWI began mapping all of the wetlands in Virginia using aerial photography and geographic information systems (GIS). The resulting maps are available both in hardcopy and digital versions. Although not all of Virginia has been completed (there are still maps in development for areas around Richmond and Washington, DC), a summary of what is currently available provides a sense of Virginia’s wetland resources. The information in Table 2 was developed by collating acreages based on the NWI classification of water regimes in mapped wetlands. Table 2 reports wetland acreages for large areas of Virginia which are shown in Figure 1. From these figures it is clear that most of the temporarily flooded and saturated wetlands (those with the A or B wetland regime modifier) are found in the coastal zone of Virginia, particularly in southeastern Virginia.

From this information, one would conclude that Tulloch ditching is most prevalent (as reported by the Corps Norfolk District) in the area with greatest proportion of susceptible wetlands (as mapped by the NWI). The environmental consequences of large scale conversion of wetlands to developed lands in a coastal plain may not be certain, but concerns include: loss of habitat; increased water quality impacts in adjacent surface waters; and increased runoff and flooding. In addition, many of these wetlands have what are known as “shrink/swell” soils. These are soils whose volume and load bearing capacity changes dramatically with varying soil moisture. Construction of solid building foundations in these soils is particularly challenging.

Web sites for additional information:

Federal Register online via GPO Access

http://www.access.gpo.gov/su_docs/aces/aces140.html

(The revised rule can be found by searching the 1999 Federal Register for Final Rules on 5/10/99 using the search term Tulloch Rule. The Document is titled: Revisions to the Clean Water Act Regulatory Definition of “Discharge of Dredged Material,” final Rule)

Text of Court of Appeals opinion

<http://www.cadc.uscourts.gov/common/opinions/199806/97-5099a.txt>

Virginia Department of Environmental Quality

<http://deq.state.va.us>

U.S. Environmental Protection Agency Wetlands homepage

<http://www.epa.gov/owow/wetlands/>

National Wetlands Inventory homepage

<http://www.nwi.fws.gov/>

Norfolk District U.S. Army Corps of Engineers

<http://155.78.30.111/>

North Carolina’s Wetlands Draining Policy

<http://h2o.enr.state.nc.us/wqhome.html>

Table 2. Wetland acreage in Virginia as classified by the National Wetland Inventory according to water regime.

1:250,000 scale USGS quad	Total Wetland Acres	Nontidal Wetland Acres	Water Regime Modifiers						
			A	B	C	D	E	F	G
Baltimore	9,215	9,215	5,486	7,719	434	3	358	27	0
Bluefield	12,091	12,091	457	32	645	0	217	166	1
Charlottesville	29,274	29,274	9,559	2,395	1,635	0	422	284	1
Chincoteague	1,253,757	314,374	4,141	252,502	11,503	12	3,730	533	0
Cumberland	2,340	2,340	349	11	177	0	26	19	0
Currituck Sound	41,618	6,843	1,057	0	765	0	2,439	0	0
Greensboro	107,838	107,838	38,365	2,028	13,514	221	649	632	3
Jenkins	3,294	3,294	82	0	84	0	71	11	0
Johnson City	5,867	5,867	211	11	418	0	34	374	0
Norfolk	458,983	380,681	101,571	26,374	88,956	186	102,977	8,528	0
Richmond	1,147,232	285,794	46,574	25,349	58,849	0	28,332	33,018	0
Roanoke	126,398	126,398	52,942	575	12,781	0	2,209	1,848	13
Washington	100,963	69,744	10,969	2,574	15,531	0	7,822	3,555	1
Winston-Salem	15,239	15,239	637	54	956	0	195	41	0
TOTALS	3,314,109	1,368,992	268,673	319,623	206,248	422	149,481	49,036	19

NOTE: Total wetland acres includes everything identified as a wetland on a National Wetland Inventory (NWI) map. This can include aquatic beds and flats. Nontidal wetland acres in this table includes everything identified as a wetland on the maps which is not classified as Marine or Estuarine by NWI.

Water Regime Modifiers

- A - Temporarily Flooded. Surface water is present for brief periods during the growing season, but the water table usually lies well below the soil surface for most of the season. Plants that grow both in uplands and wetlands are characteristic of the temporarily flooded regime.
- B - Saturated. The substrate is saturated to the surface for extended periods during the growing season, but surface water is seldom present.
- C - Seasonally Flooded. Surface water is present for extended periods especially early in the growing season, but is absent by the end of the season in most years. When surface water is absent, the water table is often near the land surface.
- D - Seasonal Well Drained
- E - Seasonal Saturated
- F - Semipermanently Flooded. Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land surface.
- G - Intermittently Exposed. Surface water is present throughout the year except in years of extreme drought.

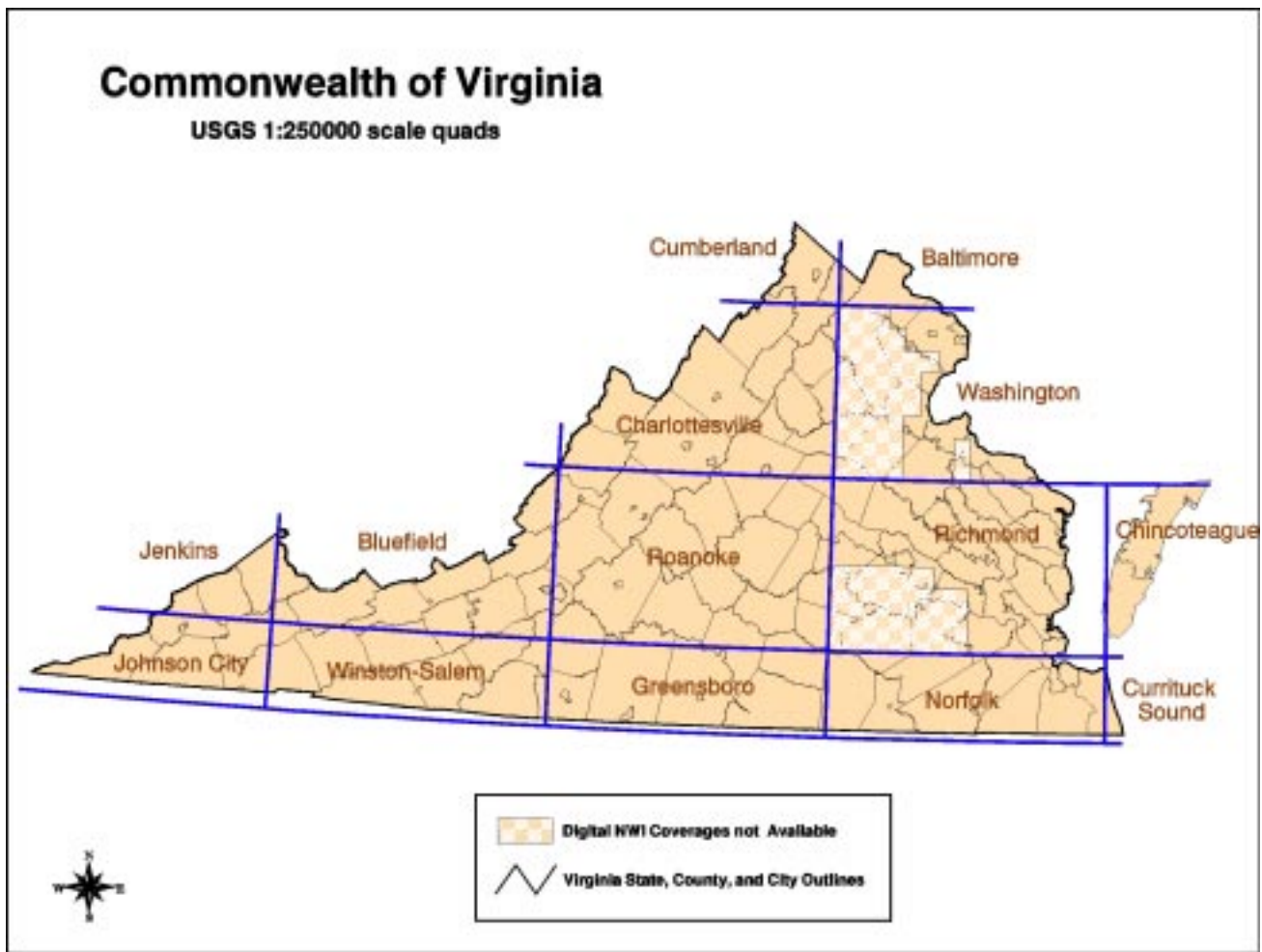


Figure 1. Location of 1:250,000 Scale USGS Quads.

