

## ARTICLE: THE CLEAN WATER ACT SECTION 404(f) EXCEPTIONS: A CALL TO END THE OPEN DOOR POLICY

Wetland conversion for agricultural and silvicultural use is one of the most significant causes of wetland loss in the United States, yet the process has not been regulated effectively under the principal controlling legislation, the Army Corps of Engineers ("Corps") dredge and fill permitting program set forth at § 404 of the Clean Water Act ("§ 404").<sup>1</sup> This article discusses the manner in which § 404 is intended to control such wetland destruction, with an emphasis upon the "normal farming and silviculture" exemptions of § 404(f). An examination of the legislative history, agency guidance and enforcement records shows that implementation of these exemptions is contrary to both the intent of Congress and judicial interpretation. Consequently, agency policy regarding the exemptions is ripe for challenge.

### LEGISLATIVE HISTORY OF § 404<sup>2</sup>

Federal agencies conduct wetland regulation today through § 404, the origins of which are traceable to various legislation passed in the early nineteenth century that authorized the Corps to improve the navigability of rivers and harbors.<sup>3</sup> At the turn of the century, section 10 of the Rivers and Harbors Act of 1899 ("1899 Act")<sup>4</sup> officially established the first Corps permitting program for dredging, filling and construction in the navigable waters of the United States.

In 1972 Congress passed the comprehensive Federal Water Pollution Control Act Amendments ("1972 Amendments")<sup>5</sup> in order to improve the nation's water quality. Congress' goal was to produce fishable and swimmable waters by 1983 and to eliminate all pollutant discharges by 1985.<sup>6</sup> The 1972 Amendments supplemented and partially replaced the existing permitting program of the 1899 Act with a new dredge and fill permitting program introduced at § 404.<sup>7</sup> In order to reach pollution at its source,<sup>8</sup> the 1972 Amendments broadened the Corps' geographic jurisdiction under §404 to regulate activities in the "waters of the United

States."<sup>9</sup> In addition, they authorized Environmental Protection Agency ("EPA") review and veto power over permits approved by the Corps if the proposed activities posed "unacceptable adverse effect[s]."

The Corps particularly resisted expanding its geographic jurisdiction beyond its historical scope, though the EPA supported increased regulatory coverage. Under its pollutant discharge permitting program organized under § 402, the EPA moved to interpret "waters of the United States" more broadly than under the 1899 Act,<sup>10</sup> in accordance with the intent of Congress to improve water quality. However, the 1973 Corps' § 404 regulations defined "waters of the United States" more narrowly than the EPA, equating the phrase with the Corps' original definition of navigable waters promulgated before the passage of the 1972 Amendments.<sup>11, 12</sup>

Despite the restrictiveness of the latter definition, the Corps regarded it as the broadest interpretation available under the Constitution, and the one in accord with the legislative intent of § 404 of the 1972 Amendments.<sup>13</sup> But the D.C. District Court disagreed in *Natural Resources Defense Council v. Callaway*,<sup>14</sup> ordering the Corps to broaden its definition to comply with the legislative intention to protect water quality to the fullest extent of the commerce clause.<sup>15</sup> In response, the Corps issued regulations in 1975 to expand its jurisdiction beyond waters subject to the ebb and flow of the tide to include all wetlands, mudflats, swamps and similar areas contiguous or adjacent to coastal waters, including periodically inundated saltwater and freshwater wetlands.<sup>16</sup>

Although the Corps conformed its regulations to the terms of the *Callaway* decision, the Corps itself attempted to create opposition to the new definition. It warned in its announcement of the 1975 interim rule that "... this program ... will extend Federal regulation over discharges of dredged or fill material to many areas that have never before been subject to Federal permits," and it "strongly urge[d]" the public to express its concern.<sup>17</sup> The Corps also announced the regulations through a press release claiming that a potential implication of the *Callaway* decision was that farmers would be required to obtain § 404 permits before plowing wet

fields.<sup>18</sup> Public concern over the possibility led to hearings before the House and Senate Public Works Committee,<sup>19</sup> which laid the groundwork for statutory changes in the program when Congress amended the Clean Water Act in 1977.

The 1977 Clean Water Act Amendments ("1977 Amendments")<sup>20</sup> preserved the broad jurisdiction of the 1972 amendments, including a textual commitment to wetland coverage,<sup>21</sup> but they also limited the reach of the legislation in response to criticisms of the regulatory program.<sup>22</sup> Congress exempted activities with "minor impacts," such as normal farming and silviculture and certain federal activities,<sup>23</sup> from permitting requirements in order "to dispel the widespread fears that the program is regulating activities that were not intended to be regulated."<sup>24</sup>

The 1977 Amendments statutorily exempted discharges of dredged or fill material from normal farming and silvicultural activities "such as plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber and forest products . . .,"<sup>25</sup> subject to the limitation in § 404(f)(2) that the discharge not be "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 reduced." In simple terms, this exemption applies only to activities that qualify as "normal farming or silviculture," that do not constitute a new use of the area, and that do not adversely affect the area's hydrology.

The legislative history establishes that Congress created these exemptions in response to concerns that enlarging the Corps' territorial jurisdiction for the § 404 program would result in obstructing or prohibiting routine activities by requiring time-consuming application for unnecessary permits.<sup>26</sup> Nevertheless, they were not intended to uniformly exempt all silvicultural or farming activities. Specifically, the § 404(f) exclusions were adopted "to prevent over-regulation of activities that have little or no effect on the aquatic environment."<sup>27</sup> Senator Muskie, sponsor of the 1977 Amendments, stated that only "narrowly defined activities that cause little or no adverse effects either individually or cumulatively" are to be

exempted from the § 404 program.<sup>28</sup> He established that the exemptions were to be issued in a manner consistent with the legislative goal of protecting the integrity of the waters of the United States:

while it is understood that some of these activities may necessarily result in some incidental filling and minor harm to aquatic resources, the exemptions do not apply to discharges that convert extensive areas of water into dry land or impede circulation or reduce the reach or size of the water body.<sup>29</sup>

## REGULATORY STRUCTURE

Corps regulations implementing the § 404(f)(1)(A) exemption for normal farming and silvicultural activities describe in detail the circumstances under which an activity may be exempted. The Corps' rules indicate that, consistent with the legislative intent, the exemption for farming and silviculture is a narrow one. An activity such as plowing or minor drainage must be part of an "established (i.e. ongoing) operation" in order to escape regulation.<sup>30</sup> The regulations require true continuity, providing that an established and ongoing operation does not include activities which "bring an area into" use for farming or silviculture. However, the regulations do allow some flexibility for necessary interruptions in use, such as "activities on areas lying fallow as part of a conventional rotational cycle."<sup>31</sup> An "established" use is defined not only by changes in activity, but also by effects on hydrology. An activity is no longer established and ongoing once it has been "converted to another use or has lain idle so long that modifications to the hydrological regime are necessary to resume operations."<sup>32</sup>

The exception is narrowed decisively by the two-pronged "recapture" regulations implementing § 404(f)(2), which state that discharges incidental to exempted activities will still require permits if the discharge "is part of an activity whose purpose is to convert an area of the waters of the United States into a use to which it was not previously subject and the flow or circulation of waters of the United States may be impaired or the reach of such waters reduced."<sup>33</sup> First, an activity is considered a change in use, and therefore disqualified, if it would re-

sult in a conversion of the land from its wetland character. The EPA guidelines on exempted § 404 activities provide that "conversion of section 404 wetland to a non-wetland is a change in use."<sup>34</sup> More specifically, Corps regulations prohibit discharges associated with changes in the manner of use as well as those that convert wet areas to dry: "a permit will be required for ... the conversion of a wetland from silvicultural to agricultural use when there is a discharge ... in conjunction with ... works or structures used to effect such conversion."<sup>35</sup>

Second, a prohibited use is one which either impairs flow or circulation in the wetland or reduces the reach of the waters of the United States.<sup>36</sup> This portion of the recapture provision prohibits hydrologic changes to a wetland associated with changes in use. Corps regulations prohibit exemptions for activities with gradual hydrological impacts that do not immediately convert an area to an upland, as well as those with more severe drying effects. Such changes in use are recaptured because "[a] discharge which elevates the bottom of waters of the United States without converting it to dry land does not thereby reduce the reach of, but may alter the flow or circulation of, waters of the United States."<sup>37</sup> Regulations reinforcing this disapproval of hydrological changes state that "where the proposed discharge will result in significant discernible alterations to flow or circulation, the presumption is that flow or circulation may be impaired."<sup>38</sup>

Regulations further restrict the availability of the exemption for activities requiring drainage. If an activity qualifies as a protected activity and avoids recapture under § 404(f)(2), only "minor drainage" associated with such activities is exempt.<sup>39</sup> Minor drainage is drainage that either removes moisture from upland croplands or controls or regulates the water for wetland crops (for example, cranberries or rice) in waters which are in established use for wetland crops.<sup>40</sup> Therefore, even drainage associated with introducing a use such as wetland crop cultivation into a wetland is not exempted as minor drainage. Alternating wet and dry land crop rotations (for example, rotations of rice and soybeans) may qualify as an established use for wetland crops, but only "where such rotation results in the cyclical or intermittent temporary dewatering of such areas."<sup>41</sup>

Minor drainage excludes drainage associated with "the immediate or *gradual conversion* of wetland to a non-wetland (e.g., wetland species to upland species not typically adapted to life in saturated soil conditions)," or even more significantly, "conversion from one wetland use to another (for example, silviculture to farming)."<sup>42</sup> Moreover, any structure which "drains or significantly modifies a ... wetland or aquatic area constituting waters of the United States" is not performing minor drainage allowed under the "normal silviculture" exemption.<sup>43</sup>

Despite the clear regulatory mandate that only minor discharges and temporary dewatering associated with previously established normal farming and silviculture be exempt from permitting, the Corps has not enforced permit requirements for conversions of wetlands for farming and forestry. Activities that should be recaptured for permitting under § 404(f)(2) are not regulated by the Corps.<sup>44</sup> In addition, following the issuance of a new multi-agency wetland delineation manual in 1989, the Corps retreated further from such regulation by declaring that the meaning of "wetland" under the Clean Water Act does not support regulation of "prior converted cropland" (wetlands drained and cropped before December 23, 1985 that no longer exhibit "important wetland values").<sup>45</sup> As of March, 1991, both the Corps and the EPA were revising the delineation manual in order to further narrow the regulatory reach of § 404.<sup>46</sup>

## JUDICIAL TREATMENT

The federal courts have, by contrast, vigorously enforced the § 404 recapture provision. In citizen suits against individuals, the Corps and other enforcement agencies, courts have narrowly construed the exemptions in accordance with the legislative intent, holding that certain activities conducted on wetlands are not protected by the § 404(f) exemptions. In *Avoyelles Sportsmen's League, Inc. v. Marsh*,<sup>47</sup> the Fifth Circuit denied the exemption to the defendants, who had attempted to clear and develop their wetland property, holding that landclearing equipment constituted point sources requiring a § 404 permit, and that § 404(f) provides only a "narrow exemption for agricultural and silvicultural activities that have little or no adverse effect on the na-

tion's waters."<sup>48</sup> As a result of this decision, in an encouraging about-face, the Corps altered previous policy in a 1990 Corps guidance letter, providing that "land clearing activities using mechanized equipment ... constitute point source discharges and are subject to § 404 jurisdiction when they take place in wetlands."<sup>49</sup>

Courts consistently have strictly construed the § 404(f) exemptions in agricultural conversion cases. In 1985, in *U.S. v. Huebner*, the Seventh Circuit held that expanding cultivation of a wetland crop to adjacent wetlands did not qualify for the § 404(f) exemption, because it required draining the surrounding area and brought the wetland into a new "use."<sup>50</sup> The following year, in *U.S. v. Akers*, the Ninth Circuit denied a normal farming exemption to a defendant who converted his wetlands to upland crop production, even though the wetlands had been farmed since 1897.<sup>51</sup> The court there rejected the defendant's argument that it was a change within a farming use, holding that the "substantiality of the impact on the wetland," not the historical use, is controlling and determines whether the activity is recaptured under § 404(f)(2).<sup>52</sup>

Although most cases have addressed the scope of the normal farming exemption, a few recent decisions have begun to construe narrowly the normal silviculture exception. Thus far these cases have involved actions between the government and landowners seeking the exemption. In *U.S. v. Larkins*, the defendant had cleared a wetland for cultivation by digging drainage ditches, cutting timber and filling low spots.<sup>53</sup> The Sixth Circuit rejected his argument that the tree clearing activity qualified for the silviculture exception, both because it was recaptured and because it was not normal silviculture: "the silviculture exception ... applies to the normal harvesting of timber, not to ... clearing timber 'to permanently change the area from wetlands into non-wetland agricultural tract for row crop cultivation.'"<sup>54</sup>

In an unpublished 1989 Fourth Circuit opinion, the court denied a defendant's attempt to assert that he qualified for a § 404(f) exemption after sporadically developing his wetland property over a ten-year period.<sup>55</sup> The defendant began draining and road-building activities in 1977, stopped for ten

years, and then resumed the actions in 1988 in order to develop the property for a "hunting club" and "complete residential development."<sup>56</sup> The court held he was not protected under § 404's "[n]arrow exemptions," because the activities were "not a normal part of ongoing and continuous agricultural or forestry operations, but rather ... preparations for putting the property to new uses."<sup>57</sup>

The most significant case concerning the normal silviculture exemption is *Bayou Marcus Livestock and Agricultural Co. v. EPA*,<sup>58</sup> in which the district court narrowly construed the normal silviculture exemption to require § 404 permits where there was dredging and filling activity associated with establishing a pine tree farm in a wetland. The court held the activities were not "normal silviculture" under § 404(f)(1)(A) and, in any case, would have been recaptured under § 404(f)(2).<sup>59</sup> First, the tree farming activity did not merit protection as normal silviculture, because it was not established and ongoing. The court held that the exemption only applied to the activity already being performed at the time the 1975 regulations were implemented; in this case the activity was selective harvesting of natural growth, not tree farming.<sup>60</sup> The court stated that the Clean Water Act "exempts operations in place when [regulations] went into effect, but imposes a permit requirement for new or additional activity affecting the waters of the United States."<sup>61</sup> Second, because start-up activity required modification of the hydrology, it was recaptured for regulation by § 404(f)(2).<sup>62</sup>

### "NORMAL SILVICULTURE": THE DEMISE OF FORESTED WETLANDS

Despite these judicial decisions, the Corps has continued to allow extensive areas of wetlands to be converted into pine tree farms, especially in the southeast where paper companies own large tracts of wetland areas, including hardwood swamps.<sup>63</sup> In North Carolina, for example, approximately 51% of the original coastal wetlands have been destroyed; 53% of the destruction since 1950 is attributable to conversion of wetlands to intensively managed pine tree farms.<sup>64</sup> Such silvicultural conversions of hardwood forested wetlands reduce the ecological productivity of wetlands by

adversely affecting hydrology, water quality, and life support systems.<sup>65</sup> EPA's Region IV, as permitted by a Memorandum of Agreement on Jurisdiction between the Corps and EPA,<sup>66</sup> has acknowledged the importance of these losses by designating itself, rather than the Corps, as the final § 404(f) exemption authority.<sup>67</sup>

Increased EPA enforcement activities promise better permit decisions. In the southeast, however, EPA Region IV policy on wetland silviculture is inconsistent. For example, EPA Region IV supports the creation of a general permit in Georgia for converted pine plantations because of their "dysfunction ... in terms of hydrology, wildlife, habitat, vegetative diversity, [and] nutrient transformation and transport."<sup>68</sup> Under such a program, it would still require individual § 404 permits for activities in natural wet pine communities, because eliminating such scrutiny "could have far reaching adverse impacts."<sup>69</sup> Region IV has issued draft guidance on § 404(f), stating that the conversion of a forested wetland to planted pine plantation "is a normal silvicultural activity" and may constitute an ongoing and established activity "as long as it remains a wetland after the work."<sup>70</sup> This provision ignores both the recapture provision regulations regarding changes in use and the purpose of § 404, which is to protect the functional value and biological integrity of wetlands.<sup>71</sup> Thus, Region IV acknowledges that converting wetlands to pine plantations causes severe ecological damage, but it continues to allow conversions to such plantations to remain exempt under § 404(f).

In eastern North Carolina, large paper concerns have established pine plantations in the last remaining forested wetlands in the state.<sup>72</sup> Typically, these companies purchased large wetland areas at depressed prices decades ago, and systematically have developed new portions of the property, invoking the protection of § 404(f) for "ongoing" silvicultural operations. For example, in 1968, Weyerhaeuser Corporation bought an 11,000 acre tract in the last 5% of the naturally forested area of the East Dismal Swamp.<sup>73</sup> The company began converting the remaining natural hardwood forested wetland into intensively managed pine tree farms, to the extent that 75% of the forested wetlands have already been converted.<sup>74</sup>

Neither the Corps nor the EPA has required § 404 permits for these activities, which include clearcutting forested timber, installing water control canals in order to drain the area, and leveling and then reshaping the land into linear beds in which young pine trees are planted.<sup>75</sup> The Corps has directed the EPA to make its § 404(f) determination, but EPA Region IV has not yet acted.<sup>76</sup> The State of North Carolina also has indicated it intends to allow the practice of conversion to continue. It recently issued a document entitled "Best Management Practices for Forestry in the Wetlands of North Carolina," which explicitly approves conversions of wetlands to silvicultural use, describing recommended practices for silviculture in wetlands under the EPA-approved state program.<sup>77</sup>

Regulatory policy should mandate consistently that changes in use barred by § 404(f)(2) include hydrologic changes and conversions from one wetland use to another. Silvicultural conversions constitute new uses involving more than minor drainage. Drainage canals that divert and channelize water flow through the area, and bedding mounds that elevate large portions of the wetland bottom, disturb the flow, circulation and reach of these wetlands. Permits should be required for such activities. In addition, changes in the intensity of use, especially conversions from biologically diverse areas to monotypic farms, are intended to be recaptured by § 404(f)(2) in order to preserve protected wetland values. Just as the *Huebner* court regarded the introduction of a wetland crop into a wetland as a change in use, conversions of forested wetlands to tree farms should also be treated as changes in use prohibited by § 404(f)(2).<sup>78</sup>

In December 1990, the Southern Environmental Law Center, North Carolina Environmental Defense Fund, and North Carolina Coastal Federation filed notice of intent to sue EPA, the Corps and Weyerhaeuser for failure to comply with their respective duties under the § 404 permitting program after negotiations among the parties collapsed in late 1990.<sup>79</sup> Assuming courts adhere to their strict stance on § 404 exceptions, this lawsuit, which challenges Corps and EPA policies on silvicultural conversions of wetlands in North Carolina's East Dismal Swamp, ultimately may alter national

wetland regulations and policy to significantly decrease abuse of the § 404 exceptions by silvicultural and other industries.

At the same time, however, substantial policy shifts on the status of the § 404(f) exemptions and the fate of silvicultural conversions are likely to occur in the legislative arena. The reauthorization of the Clean Water Act during the current Congress will provide a forum for changes to the § 404 program. This promises to be one of the most vigorously debated issues of the session. A series of wetland hearings has already been scheduled during the spring of 1991 in the House, where two bills aiming to "reform" § 404 have been introduced.<sup>80</sup> These developments emphasize that wetland regulation under § 404 has been unsatisfactory to industry and environmentalists alike, indicating that the time has come to institute a consistent regulatory policy for wetland uses.

—Margaret Spring

1. US General Accounting Office, *Wetlands: The Corps of Engineers' Administration of the Section 404 Program* 198 (1988) ("Wetlands").
2. For a detailed history of Section 404, see Michael C. Blumm and D. Bernard. Zaleha, *Federal Wetlands Protection Under the Clean Water Act: Regulatory Ambivalence, Intergovernmental Tension, and a Call for Reform*, 60 U Colo L Rev 695, 699-713 (1989).
3. Id at 700-701.
4. Rivers and Harbors Appropriation Act of March 3, 1899, ch 425, 30 Stat 1121, current version codified at 33 USC §§ 401, 403 (1988).
5. Pub L No 92-500, 86 Stat 816 (1972), codified at 33 USC §§ 1251-1376 (1988).
6. 33 USC § 1251(a)(1) and (2) (1988).
7. 33 USC § 1344 (1988).
8. Senate Committee on Public Works Report on the Federal Water Pollution Control Act Amendments of 1971, S Rep No 414, 92d Cong, 1st Sess 77 (1971).
9. 33 USC § 1362(7) (1988).
10. 33 USC § 1251(a)(1) and (2) (1988). See definition of "navigable waters" in US EPA General Counsel Opinion (February 6, 1973).
11. 37 Fed Reg 18289 (September 16, 1972), published at 33 CFR 209.260 (1973).
12. 33 CFR 209.120(d)(1) (1975) (limiting Corps jurisdiction to waters "which are subject to the ebb and flow of the tide, and/or... presently, or have been in the past, or may be in the future susceptible for use for purposes of interstate or foreign commerce").
13. 39 Fed Reg 12115 (1974).
14. 392 F Supp 685, 686 (D DC 1975) (invalidating the definition of "navigable waters" at 33 CFR §§ 209.210(d)(1), 209.260 (1974)).
15. Id at 686. ("Congress ... asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution. Accordingly, as used in the Water Act, the term is not limited to the traditional tests of navigability.") Id.
16. 40 Fed Reg 31, 320 (July 25, 1975), published at 33 CFR 209.120(d)(2)(b),(h) (1976).
17. 40 Fed Reg 31,320 (July 25, 1975).
18. US Army Corps of Engineers, *Federal Authority for Disposal of Dredged or Fill Material Expands* (May 6, 1975) (press release, warning that expanded jurisdiction would require permits from "the rancher who wants to enlarge his stock pond, or the farmer who wants to deepen an irrigation ditch or plow a field, or the mountaineer who wants to protect his land against stream erosion."); see reprint in Section 404 of the Federal Water Pollution Control Act Amendments of 1972, Hearings Before the Senate Comm. on Public Works, 94th Cong, 2d Sess 517 (1976).
19. See generally Development of New Regulations by the Corps of Engineers Implementing Section 404 of the Federal Water Pollution Control Act Concerning Permits for Disposal of Dredge or Fill Material, Hearings before the Committee on Public Works and Transportation, 94th Cong 1st Sess (July 15, 16 and 22, 1975).
20. Clean Water Act of 1977, Pub L No 95-217, 91 Stat 1566, codified at 33 USC § 1251-1376 (1988).
21. 33 USC 1344(g).
22. See generally Blumm & Zaleha, *Federal Wetlands Protection* at 707-08 (cited in note 2).

23. 91 Stat at 1600, 1601 & 1605, codified at 33 USC 1344(f),(r).
24. S Rep No 95-370, 95th Cong 1st Sess in 1977 USCCAN 4400.
25. 33 USC § 1344(f)(1)(A) (1988).
26. 3 Senate Committee on Environment and Public Works, A Legislative History of the Clean Water Act of 1977: A Continuation of the Legislative History of the Federal Water Pollution Control Act, 95th Cong, 2d Sess at 494 (remarks of Senator Randolph, Chairman, December 15, 1977) ("1977 Legislative History").
27. Id, note 166 at 485 (remarks of Senator Stafford, ranking member of the Senate Committee on Environment and Public Works, Senate debate December 15, 1977) (emphasis added).
28. Id at 474.
29. Id.
30. 33 CFR 323.4(a)(1)(ii) (1990).
31. Id.
32. Id.
33. 33 CFR 323.4(c) (1990).
34. 53 Fed Reg 20,765, 20,773, published at 40 CFR 232.3(b) (1989). "We have made the note more explicit to clarify that a conversion of wetlands to non-wetlands is (and has been) considered a 'change in use.'" Id.
35. 33 CFR 323.4(c) (1990).
36. Id.
37. Id.
38. Id.
39. 33 CFR 323.4(a)(1) (1990).
40. 33 CFR 323.4(a)(1)(iii)(C)(1)(i-iii) (1990).
41. Id (emphasis added).
42. Id (emphasis added).
43. Id.
44. See US General Accounting Office, *Wetlands* at 19 (cited in note 1). "Although ... the definition of what constitutes normal farming, silviculture, and ranching activities can be interpreted in different ways and Section 404(f)(2) precludes the exemption of many wetlands conversions, there is little doubt that such activities have resulted in large and unregulated wetlands losses." Id.
45. US Army Corps of Engineers, Regulatory Guidance Letter 90-7 (September 26, 1990).
46. Interagency Memorandum, Major Accomplishments by Federal Interagency Committee for Wetland Delineation During Week of February 18, 1991 (proposing to weaken reliance on saturated soil criterion in favor of wetland vegetation criterion).
47. 715 F2d 897 (5th Cir 1983).
48. Id at 926 (holding cutting down vegetation, leveling the land and digging a ditch to increase drainage were not de minimis adverse effects allowed under the Act).
49. US Army Corps of Engineers, Regulatory Guidance Letter No. 90-5 (July 18, 1990).
50. 752 F2d 1235, 1243 (7th Cir 1985), cert denied 474 US 817 (1985) (affirming holding of court below that "the conversion of the adjacent wetlands into cranberry beds was a 'use' of wetlands to which they had not been previously subject.")
51. 785 F2d 814, 819 (9th Cir 1986), cert denied 479 U.S. 828 (1986).
52. Id at 822-3 (holding non-exempt because activity's "likely drying effect" was change in use recaptured by § 404(f)(2)).
53. 852 F2d 189,190 (6th Cir 1988).
54. Id at 192-3 (quoting the 5th Circuit opinion in *Avoyelles*).
55. *US v Johnson*, 891 F2d 287 (Table), 30 ERC 1550 (4th Cir 1989).
56. 30 ERC at 1551 n 2 (noting the defendant had conducted "very limited farming or forestry operations").
57. Id at 1551.

58. *Bayou Marcus Livestock & Agric. Co. v EPA*, No 88-30275 (N D Fla, November 3, 1989).
59. *Id* at 8.
60. *Id*. Tree harvesting occurred between 1971-1974. The defendant argued that continuous activity had taken place because the later activities began within the 12-15 year growth cycle of the trees growing after the harvest. The court stated that the cycle was irrelevant to the issue of tree farming.
61. *Id* at 8, citing *Avoyelles*. The July 1975 regulation phased-in activities under the exemption as long as they were completed within six months or by January 1976. 33 CFR 209.120(e)(2)(iii) (1976).
62. *Id* at 7.
63. See William Want, *Court Ruling Limits § 404 Silviculture Exemption*, National Wetlands Newsletter 10 (May-June 1990).
64. G.E. Cashin, *Wetland Development in the North Carolina Coastal Plain: Presettlement to 1980's*. (unpublished masters project, Duke University School of Forestry and Environmental Management). 42% of the losses were due to agricultural conversions; urban development accounted for only 2%. *Id*.
65. Letter from L.K. Mike Gantt, Supervisor, Raleigh NC office, US Dept of the Interior Fish & Wildlife Service, to D. Carter, Southern Environmental Law Center (March 2, 1990) (copy on file with author).
66. Memorandum of Agreement Between the Dept of the Army and the EPA Concerning the Determination of the Geographic Jurisdiction of the Section 404 Program and the Application of the Exemptions Under Section 404(f) of the Clean Water Act 2 (January 19, 1989). The agreement establishes that EPA may designate "special 404(f) matters" in which it will make the final determination of eligibility, rather than the Corps.
67. Letter from Greer C. Tidwell, Regional Administrator, EPA Region IV, to Col Paul W. Woodbury, District Engineer, US Army Corps of Engineers, Wilmington NC (June 5, 1989).
68. Letter from W. Ray Cunningham, Director, Water Management Division, EPA Region IV, to Col Ralph Locurcio, District Engineer, US Army Corps of Engineers, Savannah GA (December 19, 1990).
69. *Id*.
70. US EPA, *Region IV Guidance on Agriculture and Silviculture Exemptions* (draft document, undated, issued 1989-90) at 2. The exemption is not available if it results in impairment of flow or circulation or reduction of reach of waters; this occurs where changes in hydrology, soil or plant community result in the area no longer being considered a wetland. *Id*.
71. 1977 Legislative History at 4400 (cited in note 26).
72. See L.S. Earley, *Wetlands & Pine Plantations*, Wildlife in North Carolina 11-17 (November 1990) ("Wetlands & Pine Plantations").
73. Documentation provided by Weyerhaeuser Corporation to Mike Smith, Regulatory Branch, US Army Corps of Engineers, Wilmington, NC (February 1990).
74. *Id* (noting 7,182 acres planted by 1990).
75. See Earley, *Wetlands & Pine Plantations* at 13 (cited in note 72) (describing Weyerhaeuser's conversion operation as requiring sequenced roadbuilding; removal of original vegetation; drainage via "thousands of miles of ditches and canals;" site preparation by scraping, raking, chopping, harrowing and sometimes burning the land; and finally, creation of raised beds in which to plant seedlings).
76. February 1, 1990, letter from Lt Col Thomas C. Suermann, District Engineer, US Army Corps of Engineers, Wilmington NC, to Greer C. Tidwell, Administrator, EPA Region IV (February 1, 1990).
77. NC Dept Envir, Health & Natural Resources, *Best Management Practices for Forestry in the Wetlands of North Carolina* (1990).
78. 752 F2d 1235, 1245 (7th Cir 1985) (acknowledging expert testimony that an expansion of cranberries, a wetland crop, into adjacent wetlands, although compatible with wetland use, would not provide the same hydrologic functions as undisturbed wetlands; and denying the exemption because drainage was required to establish the crop beds).
79. Following the filing of a notice to sue in January 1990, the parties agreed to enter into negotiations for a consent decree, during which Weyerhaeuser ceased conversion activities.
80. HR 404 and HR 5968.