

1 UNITED STATES COURT OF APPEALS
2 FOR THE SECOND CIRCUIT

3
4 August Term 2005

5
6 (Submitted: November 21, 2005 Decided: June 13, 2006)

7
8 Docket Nos. 03-7203(L); 03-7253(XAP)

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12 CATSKILL MOUNTAINS CHAPTER OF TROUT UNLIMITED, INC.,
13 THEODORE GORDON FLYFISHERS, INC., CATSKILL-DELAWARE
14 NATURAL WATER ALLIANCE, INC., FEDERATED SPORTSMEN'S
15 CLUBS OF ULSTER COUNTY, INC. and RIVERKEEPER, INC.,

16
17 Plaintiffs-Appellees-Cross-Appellants,

18
19 -- v. --

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21 CITY OF NEW YORK and NEW YORK CITY DEPARTMENT OF
22 ENVIRONMENTAL PROTECTION,

23
24 Defendants-Third-Party-Plaintiffs-
25 Appellants-Cross-Appellees,

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27 JOEL A. MIELE, SR., Commissioner of the Department of
28 Environmental Protection,

29
30 Defendant-Appellant-Cross-Appellee,

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32 -- v. --

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34 STATE OF NEW YORK, NEW YORK STATE DEPARTMENT OF
35 ENVIRONMENTAL CONSERVATION, and ERIN M. CROTTY,
36 Commissioner of the New York State Department of
37 Environmental Conservation,

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39 Third-Party-Defendants-Appellees.

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42 -----x
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44 Before: WALKER, Chief Judge, OAKES and JACOBS, Circuit Judges.

45 Appeal from a decision of the United States District Court
46 for the Northern District of New York (Frederick J. Scullin, Jr.,

1 Chief Judge) holding the City of New York liable for violations of
2 the Clean Water Act, imposing civil penalties, and awarding
3 injunctive relief to Plaintiffs-Appellees-Cross-Appellants.

4 AFFIRMED in part and REMANDED in part.

5 KARL S. COPLAN, Pace Environmental Litigation
6 Clinic, Inc. (Kara E. Murphy, Legal Intern, on the
7 brief), White Plains, New York, for Plaintiffs-
8 Appellees-Cross-Appellants.

9
10 HILARY MELTZER, Assistant Corporation Counsel
11 (Michael A. Cardozo, Corporation Counsel of the
12 City of New York, William S. Plache, on the brief),
13 New York, New York, for Defendants-Third-Party-
14 Plaintiffs-Appellants-Cross-Appellees.

15
16 JAMES M. TIERNEY, Assistant Attorney General (Eliot
17 Spitzer, Attorney General of the State of New York,
18 Michelle Aronowitz, Deputy Solicitor General, Peter
19 H. Lehner, Chief, Environmental Protection Bureau,
20 Gordon J. Johnson, Deputy Bureau Chief, Robert H.
21 Easton, Assistant Solicitor General, on the brief),
22 Albany, New York, for Third-Party-Defendants-
23 Appellees.

24
25 JOHN M. WALKER, JR., Chief Judge:

26 The City of New York ("the City") operates the Shandaken
27 Tunnel ("Shandaken Tunnel" or "the Tunnel") as part of its water-
28 management system that delivers drinking water to New York City
29 and the immediate surrounding area. Water from the Tunnel, which
30 is high in turbidity, discharges into the Esopus Creek ("Esopus
31 Creek" or "the Creek"), a trout stream used for flyfishing and
32 other recreational activities. The Catskill Mountains Chapter of
33 Trout Unlimited, Inc., Theodore Gordon Flyfishers, Inc., Catskill-
34 Delaware Natural Water Alliance, Inc., Federated Sportsmen's Clubs
35 of Ulster County, Inc., and Riverkeeper, Inc. (collectively

1 "Catskills") brought a citizen suit against the City, alleging
2 that the City's use of the Tunnel without a permit violated the
3 Clean Water Act ("CWA" or "Act"), 33 U.S.C. §§ 1251 et seq. In an
4 October 21, 2001, opinion, we held that the CWA permit
5 requirements apply to the Shandaken Tunnel discharges and remanded
6 to the district court. On remand, the district court assessed a
7 \$5,749,000 civil penalty against the City and ordered the City to
8 obtain a permit for the operation of the Tunnel. This appeal
9 followed.

10 BACKGROUND

11 I. Relevant Clean Water Act Provisions

12 The purpose of the CWA is "to restore and maintain the
13 chemical, physical, and biological integrity of the Nation's
14 waters." 33 U.S.C. § 1251(a). As part of the program to achieve
15 this goal, the Act states that "the discharge of any pollutant by
16 any person shall be unlawful," id. § 1311(a), unless it is done in
17 compliance with other provisions of the Act. One of those other
18 provisions, the National Pollutant Discharge Elimination System
19 ("NPDES"), id. § 1342(a), establishes a permit system. Under this
20 provision, the Environmental Protection Agency ("EPA") or state
21 administrators may issue a permit for the discharge of a pollutant
22 at levels below the effluent limitations specified in the permit.
23 Id. The CWA broadly defines "discharge of a pollutant" as "any
24 addition of any pollutant to navigable waters from any point

1 source.” Id. § 1362(12).

2 Although the CWA establishes this federal permitting scheme,
3 the Act also recognizes that states retain the primary role in
4 planning the development and use of land and water resources, id.
5 § 1251(b), allocating quantities of water within their
6 jurisdictions, id. § 1251(g), and regulating water pollution, as
7 long as those state regulations are not less stringent than the
8 requirements set by the CWA, id. § 1370.

9 **II. The Shandaken Tunnel and the Esopus Creek**

10 As part of the water system that supplies New York City with
11 its drinking water, the City maintains the Schoharie Reservoir in
12 the Catskill Mountains. To deliver this water eventually to New
13 York City, water from the Schoharie Reservoir is diverted through
14 the eighteen-mile Shandaken Tunnel and discharged into the Esopus
15 Creek. The Creek’s water, in turn, flows into the Ashokan
16 Reservoir, through the Catskill Aqueduct, to a series of
17 reservoirs and tunnels along the east side of the Hudson River,
18 and eventually to New York City. Absent the man-made diversion
19 through the Tunnel, water from the Schoharie Reservoir would never
20 reach the Esopus Creek. Catskill Mountains Ch. of Trout Unltd. v.
21 City of New York, 273 F.3d 481, 484 (2d Cir. 2001) (“Catskills
22 I”).

23 Because water in the Schoharie Reservoir contains suspended
24 solids from both natural and man-made causes, discharges from the

1 Tunnel into the Creek are more turbid¹ than the waters of the
2 Esopus. This turbidity impairs use of the Esopus for fly fishing
3 and other recreational activities. Pursuant to state regulations,
4 the City has been studying ways to reduce the turbidity in the
5 water discharged from the Tunnel but so far has failed to find a
6 way to do so. Until this lawsuit, neither the EPA nor the New
7 York State Department of Environmental Conservation ("NYDEC"), the
8 agency that enforces the CWA in New York State, had ever regulated
9 the turbidity in the Tunnel under the CWA's permitting scheme.

10 **III. Procedural History**

11 In March 2000, Catskills, recreational users of the Esopus
12 Creek, brought this citizen suit under the CWA alleging that the
13 City's discharge of turbid water from the Tunnel violated 33
14 U.S.C. § 1311(a), which, as we said, prohibits "the discharge of
15 any pollutant" without a discharge permit. The district court
16 dismissed the claim on the pleadings, holding that the discharge
17 from the Tunnel did not constitute an "addition" of a pollutant to
18 the Creek under 33 U.S.C. § 1362(12).

19 In October 2001, we reversed after concluding that the
20 discharge of water containing pollutants from one distinct water
21 body into another is an "addition of [a] pollutant" under the CWA.
22 Catskills I, 273 F.3d at 491-93. As a result, we determined that

1 ¹ The parties do not contest that turbidity qualifies as a
2 pollutant under the CWA.

1 the discharge from the Tunnel into the Creek requires a permit.

2 On remand from Catskills I, the district court granted
3 summary judgment to the plaintiffs and went on to determine the
4 civil penalties to be assessed against the City. The district
5 court concluded that no penalties should be imposed for the City's
6 actions prior to June 22, 2002, eight months after Catskills I put
7 the City on notice that it needed a permit for the Shandaken
8 discharges. Finding a delay of more than eight months
9 unreasonable, however, the district court imposed the maximum
10 penalty for the period from June 22, 2002, to December 31, 2002,
11 when the City filed its permit application; the penalty totaled
12 \$5,749,000. This appeal followed.

13 **DISCUSSION**

14 In this appeal, the City asks us to reconsider our holding in
15 Catskills I that the discharge of turbid water from the Shandaken
16 Tunnel into the Esopus Creek requires a permit. The City also
17 argues that the penalty of \$5,749,000 is too high. In a cross-
18 appeal, Catskills argues that amount is too low.

19 We are free to reconsider our holding in Catskills I if there
20 are cogent, compelling reasons for doing do, such as a change in
21 controlling law or newly discovered facts. United States v.
22 Tenzer, 213 F.3d 34, 39 (2d Cir. 2000). Determining whether we
23 should reconsider requires briefly revisiting our reasoning in
24 Catskills I.

1 **I. Catskills I**

2 In concluding that the transfer of turbid water from the
3 Shandaken Tunnel to the Esopus Creek qualified as the “discharge
4 of [a] pollutant,” 33 U.S.C. § 1311(a), requiring an NPDES permit,
5 Catskills I first noted the CWA’s broad definition of the
6 “discharge of a pollutant” as “any addition of any pollutant to
7 navigable waters from any point source.” Id. § 1362(12). Because
8 the Shandaken Tunnel “plainly qualifies as a point source,”
9 Catskills I, 273 F.3d at 493, our holding rested, in principal
10 part, on the meaning of “addition,” which the CWA leaves
11 undefined. We decided that “addition” means the introduction into
12 navigable water from the “outside world,”² with the outside world
13 being defined as “any place outside the particular water body to
14 which pollutants are introduced.” Id. at 491.

15 In reaching this result, we distinguished the “dams cases,”
16 on which the City relied. In National Wildlife Federation v.
17 Gorsuch,³ 693 F.2d 156 (D.C. Cir. 1982), and National Wildlife

1 ² This phrase comes from the definition of the word
2 “addition” urged by the EPA on the court in National Wildlife
3 Federation v. Gorsuch, 693 F.2d 156, 175 (D.C. Cir. 1982). In
4 Gorsuch, the EPA argued that an “addition of a pollutant” takes
5 place only if the point source introduces a pollutant into the
6 water from the outside world. Id.

1 ³ Gorsuch involved water released from a dam that, due to
2 its impoundment, had a low dissolved oxygen rate, variable water
3 temperature, high concentrations of dissolved minerals and
4 nutrients, increased sediment levels, and was supersaturated with
5 air-attributes that can be harmful to downstream waters and the
6 wildlife inhabiting them. Id. at 161-64.

1 Federation v. Consumers Power Co.,⁴ 862 F.2d 580 (6th Cir. 1988),
2 two sister circuits held that water taken from a water source and
3 then released back into that same source was not an "addition" to
4 navigable waters under the CWA, despite the fact that the water so
5 released contained "pollutants." 693 F.2d at 183; 862 F.2d at
6 587. This case differed from the dams cases, we believed, because
7 the Tunnel discharges water into the Creek from a source that is a
8 different, distinct body of water. Catskills I, 273 F.2d at 491-
9 92. In Catskills I, we analogized the dams cases to a soup ladle
10 scooping soup out of a pot and returning it to that pot, a type of
11 water transfer known as an intrabasin transfer. The Tunnel's
12 discharge, in contrast, was like scooping soup from one pot and
13 depositing it in another pot, thereby adding soup to the second
14 pot, an interbasin transfer. Interbasin transfers, we held in
15 Catskills I, constitute "additions," rendering the City's reliance
16 on the dams cases misplaced. Id. at 492.

17 We also rejected the City's "unitary water" theory of
18 navigable waters, which posits that all of the navigable waters of
19 the United States constitute a single water body, such that the
20 transfer of water from any body of water that is part of the
21 navigable waters to any other could never be an "addition." We

1 ⁴ Consumers Power involved water pumped from Lake Michigan
2 through the turbines of a hydroelectric power plant and then
3 released back into the lake—a process that harmed fish and other
4 aquatic life and then released their remains as "pollutants" back
5 into the lake. 862 F.2d at 583.

1 pointed out that this theory would lead to the absurd result that
2 the transfer of water from a heavily polluted, even toxic, water
3 body to one that was pristine via a point source would not
4 constitute an "addition" of pollutants and would not be subject to
5 the CWA's NPDES permit requirement. Id. at 493. Catskills I
6 rejected the "unitary water" theory as inconsistent with the
7 ordinary meaning of the word "addition." Id.

8 Finally, we rejected the contention that the provisions of
9 the CWA reserving power to the states could overcome the express
10 permit requirement for water transfers that result in the addition
11 of pollutants. We pointed out that "like many complex statutes
12 . . . the CWA balances a welter of consistent and inconsistent
13 goals" but that "none of the statute's broad purposes sways us
14 from what we find to be the plain meaning of its text." Id. at
15 494.

16 **II. Intervening Legal Developments**

17 Following Catskills I, there have been two relevant legal
18 developments. The Supreme Court decided South Florida Water
19 Management District v. Miccosukee Tribe of Indians, 541 U.S. 95
20 (2004), and the EPA issued an agency interpretation addressing the
21 applicability of the CWA's NPDES permit requirement to water
22 transfers such as the one at issue in this case.

23 Miccosukee was a citizen suit contending that an NPDES permit
24 is necessary for the South Florida Water Management District to

1 operate a pump that conveys water from a polluted canal to an
2 undeveloped wetland. The pump serves both to prevent the basin
3 surrounding the canal from flooding and to preserve the wetland
4 area. Id. at 100-01. Consistent with the dams cases, Miccosukee
5 held that if the canal and the wetlands are not meaningfully
6 distinct water bodies—an unresolved factual question—no NPDES
7 permit is required. Id. at 112; cf. S.D. Warren Co. v. Me. Bd. of
8 Envtl. Prot., 126 S. Ct. 1843, 1850 (2006) (“[I]f two identified
9 volumes of water are ‘simply two parts of the same water body,
10 pumping water from one into the other cannot constitute an
11 “addition” of pollutants.’” (quoting Miccosukee, 541 U.S. at
12 109)).

13 On August 5, 2005, the EPA issued an agency interpretation
14 regarding whether the movement of pollutants by a water transfer
15 from one navigable water to a separate one is the “addition” of a
16 pollutant subjecting the activity to the NPDES permitting
17 requirement. According to the EPA, several provisions of the CWA
18 indicate Congress’s intent that such transfers be regulated by the
19 states, not by the federal NPDES program. The EPA interpretation
20 argues that, rather than primarily focusing on the meaning of the
21 word “addition,” as we did in Catskills I, a “holistic” view of
22 the statute that takes this intent into account is appropriate.

23 The City concedes that this EPA interpretation is not
24 entitled to Chevron deference. See Chevron U.S.A., Inc. v.
25 Natural Res. Def., 467 U.S. 837 (1984). Instead, the deference

1 described in Skidmore v. Swift & Co., 323 U.S. 134 (1944), and
2 United States v. Mead Corp., 533 U.S. 218 (2001), is applicable.
3 We thus defer to the agency interpretation according to its
4 “power to persuade.” Mead, 529 U.S. at 235 (quoting Skidmore,
5 323 U.S. at 140).

6 **III. Reconsideration of Catskills I**

7 We turn to the City’s request that we reconsider our holding
8 in Catskills I. Rather than offering “compelling and cogent”
9 reasons for reconsideration, however, the City basically serves us
10 warmed-up arguments that we rejected in Catskills I, with the
11 additional contention that either the Supreme Court’s Miccosukee
12 decision, the EPA interpretation, or both compel a result
13 different from the one we reached earlier. We disagree.

14 The City first argues that new evidence developed below and
15 the Supreme Court’s decision in Miccosukee invalidate the
16 distinction between intrabasin and interbasin water transfers.
17 The “new evidence” the City points to simply shows that the
18 release of water from a dam into downstream water is no less
19 likely to add pollutants as would a transfer of water from a
20 distinct water body. Having considered the dams cases in
21 Catskills I, we were aware of the presence of pollutants in
22 intrabasin transfers. Gorsuch includes an extensive discussion of
23 the nature of water quality changes wrought by dammed water. 693
24 F.2d at 161-64. And in Consumers Power, the water at issue

1 contained fish that were pulverized as they passed through the
2 turbines of a hydroelectric power plant and then were reintroduced
3 into Lake Michigan as biological waste. 862 F.2d at 582.
4 Nonetheless, Catskills I concluded that, despite the presence of
5 pollutants in both interbasin and intrabasin transfers, interbasin
6 transfers are properly distinguished because they “add” pollutants
7 to the navigable waters. See Catskills I, 273 F.3d at 492. This
8 has not changed.

9 Nor does the Supreme Court’s decision in Miccosukee render
10 inter- and intra-basin transfers indistinguishable. Miccosukee
11 cited with approval our “soup ladle” analogy and the distinction
12 between inter- and intra-basin transfers. 541 U.S. at 109-10.
13 The Court remanded the case to the district court to determine
14 whether the water bodies in question were “two pots of soup, not
15 one.” Id.; cf. S.D. Warren Co., 126 S. Ct. at 1850 n.6. This
16 remand would be unnecessary if there were no legally significant
17 distinction between inter- and intra-basin transfers.

18 The City also reasserts the unitary-water theory of navigable
19 waters. Our rejection of this theory in Catskills I, however, is
20 supported by Miccosukee, not undermined by it. In that case, the
21 Supreme Court pointed out that several provisions of the CWA seem
22 to distinguish among water bodies that are part of the navigable
23 waters of the United States, implying that, at least in the
24 context of the CWA, the unitary-water theory has no place. 541
25 U.S. at 105-09. Miccosukee also noted that the EPA has never

1 endorsed the theory in any administrative documents. Id. at 107.
2 Indeed, the Supreme Court pointed out that “the agency once
3 reached the opposite conclusion.” Id. Thus, Miccosukee did no
4 more than note the existence of the theory and raise possible
5 arguments against it. This does not constitute a change of
6 controlling law warranting reconsideration of this court’s
7 previous decision on the issue.

8 Finally, the City points to the “holistic” argument,
9 reflected in the EPA’s 2005 agency interpretation,⁵ to assert that
10 the proper allocation of rights and responsibilities between the
11 states and the federal government for water regulation
12 necessitates a reconsideration of our holding in Catskills I.
13 This proposition is supported by amicus curiae briefs filed by
14 western states who fear that the Catskills I rule will upend state
15 regulation of water rights.

16 The argument relies on sections 101(g) and 510 of the CWA, 33
17 U.S.C. §§ 1251(g), 1370, both of which expressly reserve the
18 authority of states over the water within their jurisdiction, as
19 well as section 304(f) of the CWA, 33 U.S.C. § 1314(f), which
20 governs non-point-source pollution. Section 101(g) provides that

1 ⁵ As noted above, the EPA’s agency interpretation is
2 entitled to deference only insofar as it has the power to
3 persuade. See Skidmore, 323 U.S. at 140. Because the EPA and
4 the City assert the same contentions on this point, we address
5 the City and the EPA’s position as one. For reasons discussed
6 below, we do not find the argument persuasive and therefore
7 decline to defer to the EPA.

1 "the authority of each State to allocate quantities of water
2 within its jurisdiction shall not be superseded, abrogated or
3 otherwise impaired." Section 510 states that "[e]xcept as
4 expressly provided in this chapter, nothing in this chapter shall
5 . . . be construed as impairing or in any manner affecting any
6 right or jurisdiction of the States with respect to the waters
7 . . . of such States." Because, according to the City, there are
8 no feasible means of reducing the pollution in the Tunnel, a
9 permit requirement would effectively amount to a ban on the
10 transfer of water from the Tunnel to the Creek and thereby
11 interfere with New York's statutory water allocation rights.

12 This argument, too, was raised by the City in Catskills I,
13 albeit less elaborately, and, as with the interbasin/intrabasin
14 distinction and the unitary-waters theory, Miccosukee fails to
15 alter the legal landscape to support the "holistic" theory. The
16 power of the states to allocate quantities of water within their
17 borders is not inconsistent with federal regulation of water
18 quality. Section 510 provides for the preservation of the
19 preexisting rights of states not in conflict with the other
20 requirements of the CWA ("except as expressly proved in this
21 chapter"). Indeed, the Supreme Court has held that "[s]ections
22 101(g) and 510(2) preserve the authority of each State to allocate
23 water quantity as between users; they do not limit the scope of
24 water pollution controls. . . ." PUD No. 1 v. Wash. Dep't of
25 Ecology, 511 U.S. 700, 720 (1994). To be sure, Miccosukee

1 acknowledged the possibility that “construing the NPDES program to
2 cover such transfers would . . . raise the costs of water
3 distribution prohibitively, and violate” section 101(g).

4 Miccosukee, 541 U.S. at 108. But in the next sentence, the Court
5 recognized that, despite their potential cost, such permits
6 nevertheless might be necessary to protect water quality. Id.

7 Nor does Miccosukee support the EPA and the City’s argument
8 that the non-point-source provisions of the CWA indicate
9 congressional intent to leave interbasin water transfers outside
10 the NPDES permitting scheme. Section 304(f) of the CWA directs
11 the EPA to study and make recommendations for the regulation of
12 pollutants spread by non-point sources, such as “changes in the
13 movement, flow, or circulation of any navigable waters or ground
14 waters, including changes caused by the construction of . . . flow
15 diversion facilities.” 33 U.S.C. § 1314(f)(2)(F). From this
16 language, the EPA and the City claim that Congress intended that
17 changes in the circulation of navigable waters caused by the
18 construction of “flow diversion facilities,” such as the Tunnel,
19 be exempt from the permit requirements that apply to point
20 sources. As the Supreme Court pointed out in Miccosukee, however,
21 “1314(f)(2)(F) does not explicitly exempt nonpoint pollution
22 sources from the NPDES program if they also fall within the ‘point
23 source’ definition.” 541 U.S. at 106.

24 In the end, while the City contends that nothing in the text
25 of the CWA supports a permit requirement for interbasin transfers

1 of pollutants, these "holistic" arguments about the allocation of
2 state and federal rights, said to be rooted in the structure of
3 the statute, simply overlook its plain language. NPDES permits
4 are required for "the discharge of any pollutant," 33 U.S.C. §
5 1311(a), which is defined as "any addition of any pollutant to
6 navigable waters from any point source," id. § 1362(12). It is
7 the meaning of the word "addition" upon which the outcome of
8 Catskills I turned and which has not changed, despite the City's
9 attempts to shift attention away from the text of the CWA to its
10 context. In Catskills I, we pointed out that complex statutes
11 often have seemingly inconsistent goals that must be balanced.
12 273 F.3d at 494. The CWA seeks to achieve water allocation goals
13 as well as to restore and maintain the quality of the nation's
14 waters. The City and the EPA would have us tip the balance toward
15 the allocation goals. But in honoring the text, we adhere to the
16 balance that Congress has struck and remains free to change.

17 The City's final argument for reconsideration is that other
18 provisions of federal and state law are more appropriate means of
19 regulating the water discharged from the Shandaken Tunnel. The
20 City points to the Safe Drinking Water Act, which limits the
21 levels of contaminants that are allowed in public drinking water;
22 section 303(d) of the CWA, which regulates pollution levels
23 resulting from pollution from both point and non-point sources;
24 and various provisions of state law that regulate water quality.
25 While these provisions no doubt contribute to the goals of

1 pollution reduction and regulation, the City does not explain how
2 their existence invalidates a separate, independent requirement
3 imposed by the permitting scheme of the CWA.

4 The City's plea for reconsideration appears to rest upon the
5 assumption that regulating the discharge from the Tunnel would
6 effectively require that the flow be stopped altogether. This
7 claim seems to us exaggerated. We think the flexibility built
8 into the CWA and the NPDES permit scheme, a flexibility that the
9 City has endorsed in a related proceeding,⁶ will allow federal
10 authority over quality regulation and state authority over
11 quantity allocation to coexist without materially impairing
12 either.

13 We conclude this section with a somewhat detailed and
14 technical accounting of the flexibilities that exist. Effluent
15 limitations contained in NPDES permits fall into two categories:
16 technology-based effluent limits⁷ ("TBELs") and water-quality-based
17 effluent limits ("WQBELs").⁸ Where, as here, no applicable

1 ⁶ The City has acknowledged the NPDES system's flexibility
2 in hearings related to its permit application. See In re
3 Application of the New York City Department of Environmental
4 Protection, DEC Application No. 3-5150-00420/00001, 2005 N.Y.
5 Env. Lexis 40, at *24, *26 (June 22, 2005) (Ruling on Issues and
6 Party Status).

1 ⁷ Technology-based limits are based on the effluent levels
2 that can be achieved through the use of various water treatment
3 technologies. See 40 C.F.R. § 125.3.

1 ⁸ Water-quality-based limits are those limits needed to
2 ensure the appropriate water quality of the receiving water body.
3 That water quality is specified by the state in which the water

1 national TBELs have been set, the permit-writer may set TBELs
2 using best professional judgment. See 33 U.S.C. § 1342(a)(1)(B);
3 40 C.F.R. § 125.3. In doing so, NYDEC will consider the available
4 technologies, costs in relation to effluent reduction benefits,
5 engineering aspects of various control techniques, available best
6 management practices, and non-water-quality environmental impacts.
7 See 40 C.F.R. § 125.3(c), (d). This process thus affords the
8 permit-writer "considerable flexibility in establishing permit
9 terms and conditions." EPA, NPDES Permit Writers' Manual 69
10 (1996). Only if the TBELs established by the NYDEC prove
11 insufficient to achieve the water quality standards set by the
12 state for the Esopus Creek⁹ will more stringent WQBELs be adopted.
13 33 U.S.C. § 1312(a); 40 C.F.R. § 122.44(d).

14 If the City is unable to comply with the effluent limitations
15 adopted by the NYDEC, CWA provisions and implementing regulations
16 still provide means of enabling the NYDEC to issue a valid permit
17 to the City. The permit may include a schedule of compliance,
18 allowing the permittee to achieve compliance over time. 33 U.S.C.
19 § 1362(17); 40 C.F.R. § 122.47. Indeed, the current draft permit
20 prepared by the NYDEC in this case includes a compliance schedule

1 body is located.

1 ⁹ With respect to turbidity for water bodies like the Esopus
2 Creek, New York's water quality standards require that there be
3 "[n]o increase that will cause a substantial visible contrast to
4 natural conditions." N.Y. Comp. Codes R. & Regs. tit. 6, §
5 703.2.

1 that requires the City to investigate both technological and
2 structural solutions to the turbidity problem and to implement
3 those solutions according to a specified schedule. See NYS Env.
4 Notice Bulletin, Notice of Completed Application for Shandaken
5 Tunnel Outlet 7-9 (August 4, 2004).

6 Second, the NYDEC may allow a variance to WQBELs if the
7 permittee demonstrates that achieving the effluent limitation
8 contained in the permit is not feasible. 40 C.F.R. § 131.13; N.Y.
9 Comp. Codes R. & Regs. tit. 6, § 702.17(b).¹⁰ A variance is
10 temporary and must include conditions to assure that the permittee
11 makes "reasonable progress . . . toward achieving the [original]
12 effluent limitations." Id. § 702.17(e)(2). It may be renewed
13 subject to the same requirements. Id. § 702.17(g). Because the
14 City is investigating means of reducing the turbidity of the
15 Tunnel's discharge pursuant to state requirements, a temporary
16 variance might well provide the time necessary to implement any
17 reasonable and feasible solutions to the turbidity problem.

18 The draft Shandaken Tunnel permit issued by the NYDEC on
19 August 4, 2004, illustrates additional flexibilities. The draft

1 ¹⁰ Under N.Y. Comp. Codes R. & Regs. tit. 6, § 702.17, the
2 City might be eligible for a variance on the basis that its
3 compliance with the existing standard is precluded by "naturally
4 occurring pollutant concentrations," id. § 702.17(b)(1); "human-
5 caused . . . sources of pollution," id. § 702.17(b)(3); "dams,
6 diversions or other types of hydrologic modifications," id. §
7 702.17(b)(4); or the fact that compliance would "result in
8 substantial and widespread economic and social impact," id. §
9 702.17(b)(6).

1 permit varies turbidity level restrictions by season, accepting
2 higher levels at times when the natural turbidity level of the
3 Creek is higher; it also contains exemptions from the effluent
4 limitations when necessary to avoid drought conditions, to remedy
5 emergency threats, to avert threats to public health or safety, or
6 to allow repairs to the Schoharie Reservoir. See NYS Env. Notice
7 Bulletin, Notice of Completed Application for Shandaken Tunnel
8 Outlet 3, 4 n.2 (August 4, 2004).

9 The draft permit shows that the NPDES permit scheme can
10 ensure that the water discharged from the Shandaken Tunnel will
11 continue to meet the City's needs without unnecessarily
12 sacrificing progress toward water quality goals. We find the
13 City's position, that federal regulation of interbasin water
14 transfers will lead to the termination of those transfers in
15 contravention of the rights explicitly reserved to the states, to
16 be alarmist and unwarranted.

17 At bottom, the City's arguments for reconsideration of our
18 holding in Catskills I are simply embellishments of those made in
19 that case. Neither these arguments nor any intervening
20 developments lead us to conclude that our earlier holding was
21 reached in error or should otherwise be modified. We note that
22 every other court faced with this issue has reached the same
23 conclusion. See N. Plains Res. Council v. Fidelity Exploration &

1 Dev. Co.,¹¹ 325 F.3d 1155 (9th Cir. 2003); Miccosukee Tribe of
2 Indians v. S. Fla. Water Mgmt. Dist.,¹² 280 F.3d 1364 (11th Cir.
3 2002); Dubois v. U.S. Dep't of Agric.,¹³ 102 F.3d 1273 (1st Cir.
4 1996). While we recognize the incremental administrative burden
5 our interpretation entails, we have little doubt that it
6 nevertheless permits the City to deliver drinking water to its
7 citizens while furthering the CWA's goal to "restore and maintain
8 the chemical, physical, and biological integrity of the Nation's
9 waters." 33 U.S.C. § 1251(a).

10 **III. Civil Penalty**

11 Both sides attack the \$5,749,000 civil penalty imposed on the
12 City by the district court. District courts have broad discretion
13 in calculating civil penalties under the CWA. See Tull v. United
14 States, 481 U.S. 412, 427 (1987) (noting that "highly
15 discretionary calculations that take into account multiple factors

1 ¹¹ Northern Plains held that the discharges of groundwater
2 derived from the extraction of coal bed methane into a river
3 requires an NPDES permit. The court reasoned that the alteration
4 of the chemical integrity of the river resulting from those
5 discharges constituted an addition of a pollutant because such
6 groundwater would not have flowed into the river but for the
7 company's methane extraction processes. 325 F.3d at 1163.

1 ¹² Before the Supreme Court granted certiorari in
2 Miccosukee, the Eleventh Circuit held that the transfer of water
3 that was high in phosphorus from a canal to a wetlands area
4 required an NPDES permit. 280 F.3d at 1366, 1368-69.

1 ¹³ Dubois held that, when a ski area pumped water from a
2 polluted river and discharged it into a pristine pond into which
3 it otherwise would not have flowed as part of a snow-making
4 process, an NPDES permit was required for the discharge. 102
5 F.3d at 1296-99.

1 are necessary in order to set civil penalties under the Clean
2 Water Act"); United States v. Smithfield Foods, Inc., 191 F.3d
3 516, 526 (4th Cir. 1999); Hawaii's Thousand Friends v. Honolulu,
4 821 F. Supp. 1368, 1395 (D. Haw. 1993). A district court's
5 findings of fact in support of a CWA penalty are reviewed for
6 clear error, e.g., Smithfield Foods, Inc., 191 F.3d at 526; Sierra
7 Club, Lone Star Ch. v. Cedar Point Oil Co., 73 F.3d 546, 573 (5th
8 Cir. 1996); Pub. Interest Research Group of N.J., Inc. v. Powell
9 Duffryn Terminals, Inc., 913 F.2d 64, 79 (3d Cir. 1990), and the
10 district court's determination of the penalty based on those facts
11 is reviewed for abuse of discretion, e.g., Smithfield Foods, 191
12 F.3d at 526; Sierra Club, 73 F.3d at 573. In calculating civil
13 penalties under the CWA, the court may begin either with the
14 violator's estimated economic benefit from noncompliance (known as
15 the "bottom-up" method) or with the statutory maximum allowable
16 penalty (known as the "top-down" method). E.g., Smithfield Foods,
17 191 F.3d at 528 & n.7; United States v. Mun. Auth. of Union Twp.,
18 150 F.3d 259, 265 (3d Cir. 1998). This starting figure then may
19 be adjusted after considering the six factors enumerated in
20 section 309(d) of the CWA: (1) the seriousness of the violations;
21 (2) the economic benefit resulting from the violation; (3) any
22 history of violations; (4) good-faith efforts to comply with
23 applicable requirements; (5) the economic impact of the penalty on
24 the violator; and (6) other matters as justice may require. 33
25 U.S.C. § 1319(d). E.g., Sierra Club, 73 F.3d at 528, n.7. The

1 court below opted to use the "top-down" method. Although neither
2 party objected to this general approach, both sides take issue
3 with the details of its implementation.

4 The district court began with the maximum statutory penalty
5 and reduced that number due to factors mitigating in the City's
6 favor. First, the district court found that the seriousness
7 factor mitigated in favor of the City. Second, because the City's
8 belief that it did not need a permit to operate the Tunnel was
9 reasonable until the October 2001 decision of this court, the
10 district court determined that the City should not be penalized
11 for its history of violations. Third, the district court credited
12 the City's ongoing efforts to reduce the turbidity of the water in
13 the Tunnel pursuant to non-CWA regulation and its eventual
14 application for a NPDES permit as indicating a good-faith effort
15 to comply with applicable requirements. Finally, the district
16 court considered the City's reasonable belief that a CWA permit
17 was not necessary to be a mitigating factor.

18 Catskills faults the district court for its determination
19 that the seriousness factor mitigated in favor of the City. This
20 determination was based on three considerations: the pollution at
21 issue resulted from natural conditions that caused turbidity and
22 not toxic pollutants; there was no evidence that downstream fish
23 were adversely affected by the discharge; and finally, the
24 discharge, while turbid, actually improved the habitat for trout
25 by raising low water levels. Because these findings have

1 evidentiary support, we will not disturb them or the district
2 court's conclusion that, taken together, they were a mitigating
3 factor.

4 Both parties take issue with the district court's June 22,
5 2002, starting date for penalties, after which the court imposed
6 the maximum penalty. Catskills argues that the starting date
7 should have been October 21, 2001, the date of Catskills I, while
8 the City contends that December 2002 would have been reasonable
9 and that, in any event, the mitigating factors should have reduced
10 the penalty imposed after the starting date. The district court
11 did impose the maximum daily penalty, but for only about nine per
12 cent of the period for which the district court could have
13 penalized the City.¹⁴ The district court's choice of starting date
14 accounted both for a reasonable time for the City to come into
15 compliance with the CWA and for the mitigating factors; it will be
16 sustained.

17 Both parties also attack the penalty figure based on the
18 "economic benefit resulting from the violations" factor. The City
19 argues that it is receiving no economic benefit from operating the
20 Tunnel without a permit, so this factor should be treated as a
21 mitigating factor. Catskills, on the other hand, argues that the

1 ¹⁴ Catskills filed its complaint on March 31, 2000. Because
2 the CWA has a five-year statute of limitations, 28 U.S.C. § 2462,
3 that is tolled sixty days before the filing of a complaint,
4 Sierra Club v. Chevron U.S.A., Inc., 834 F.2d 1517, 1524 (9th
5 Cir. 1987), January 30, 1995, is the date on which the City
6 became liable for penalties.

1 City reaped a benefit by not having to build a filtration plant to
2 screen the turbidity from the Tunnel's water, which Catskills says
3 would cost \$27 million. Even assuming the feasibility of such a
4 plant, as to which the district court was skeptical, the district
5 court found that construction of the plant would not have begun
6 until 1995 at the earliest. Therefore, only costs that would have
7 been incurred after that date, a figure considerably below \$27
8 million, would be appropriately considered. In addition, there is
9 a substantial question as to whether the City should be faulted
10 for not building a plant during a period (prior to Catskills I) in
11 which it did not believe it was in violation of the CWA.

12 Considering the evidence on both sides of this issue, the district
13 court did not abuse its discretion in determining that the issue
14 of cost savings to the City from not building a plant should be
15 deemed neither a mitigating factor nor a cause for increased
16 penalties.

17 Finally, Catskills challenges the City's good faith belief
18 that it did not need a permit to operate the Tunnel. The district
19 court's determination that the City had such a good faith belief,
20 based on credibility assessments, is deserving of deference and
21 nothing in the record leads us to question it. Neither the EPA
22 nor the NYDEC had ever indicated the necessity of a permit. The
23 district court's decision not to penalize the City for a
24 reasonable, albeit incorrect, interpretation of a statute is not
25 an abuse of discretion.

