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Best Brief for Intervenor: Seventeenth Annual Pace National Environmental Law Moot Court Competition

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MEASURING BRIEF*

Civ. App. No. 04-137

IN THE UNITED STATES
COURT OF APPEALS FOR THE TWELFTH CIRCUIT

FRIENDS OF THE SOUTH SLOPE CUTTHROAT, INC.,
Appellant

and

STATE OF NEW UNION,
Appellant / Appellee

v.

CAPITOL CITY, NEW UNION,
Appellee.

ON APPEAL FROM THE
UNITED STATES DISTRICT COURT FOR THE
DISTRICT OF NEW UNION

BRIEF FOR APPELLANT / APPELLEE, STATE OF NEW UNION

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JURISDICTIONAL STATEMENT

The case in controversy arises under the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et. seq.* (2004), commonly referred to as the Clean Water Act ("CWA"), which is a federal statute. Congress granted the federal courts statutory authority to hear federal question cases which include questions that arise under federal statutes. 28 U.S.C. § 1331 (2004). This is an appeal of right taken from a final judgment by a federal district court. Therefore, this court has jurisdiction. 28 U.S.C. § 1291 (2004).

STATEMENT OF THE ISSUES

I. Whether Congress intended to allow States, such as New Union, to intervene as a matter of right in CWA enforcement actions.
II. Whether Friends of the South Slope Cutthroat, Inc. gave adequate notice by providing sufficient information to inform Capitol City of its alleged CWA violation.
III. Whether the CWA preempts State authority to allocate water despite the statute's express reservation of that power for States.
IV. Whether the CWA applies to an isolated, nonnavigable, intrastate river used wholly to supply water to Capitol City.

STATEMENT OF THE CASE

On June 1, 2004, Friends of the South Slope Cutthroat, Inc., ("FSSC") gave notice of its intent to sue Capitol City, New Union, pursuant to the CWA's citizen suit provision, 33 U.S.C. §§ 1251, 1365. (R. at 3.) The notice alleged that Capitol City violated section 1311(a) of the CWA because its diversion of water from the Torpid River to the Rapid River added silt, a pollutant, into navigable water without a permit from August 15, 2003 until June 1, 2004. (R. at 3.) After waiting the jurisdictional 60 days, FSSC, on behalf of its members, Nelson Spinner ("Spinner") and Newton Creel ("Creel"), brought this action in the United States District Court for the District of New Union on August 1, 2003. (R. at 3.) Specifically, FSSC contended that Capitol City violated section 1311(a) of the CWA by discharging suspended and settleable solids from the Torpid Aqueduct into the Rapid River from August 15, 2003, until the filing of the suit and continuing thereafter. (R. at 3.)

The State of New Union filed a motion to intervene by right under section 1365(c)(2) of the CWA. (R. at 4.) The district court granted the motion, concluding that the CWA treats States and the United States in the same manner for citizen suit intervention purposes. (R. at 5.) Capitol City then filed a motion for summary judgment on several grounds, which the court granted in its entirety. (R. at 4-5.) First, the court held that FSSC failed to give proper notice of its intent to sue under section 1365(b)(1)(A) of the CWA. (R. at 5-7). Second, the court held that Capitol City's diversion from the Torpid River to the Rapid River does not add pollutants to a navigable water in violation of section 1311(a) of the CWA because the Rapid River does not fall within the Environmental Protection Agency's ("EPA") definition of "navigable waters." (R. at 7-9.) Lastly, the court ruled that the CWA does not govern Capitol City's diversion because New Union's issuance of a permit authorizing Capitol City to divert water is a state water use allocation that, under section 1251(g) of the CWA, precluded what otherwise might be a section 1311(a) violation. (R. at 10.)

STATEMENT OF RELEVANT FACTS

Capitol City is located on the dry south slope of the Front Mountains in the state of New Union. (R. at 3.) Because of its dry location, Capitol City operates a water acquisition program to meet the water supply demands of its large citizenry and businesses. (R. at 3.) Capitol City acquires most of its water from the Torpid River, located on the wet north slope of the Front Mountains, and from the Rapid River, located on the south slope. (R. at 3.) Capitol City has legally appropriated the waters of both the Torpid River and the Rapid River, giving it the exclusive right to use those waters. (R. at 4, 8.)

New Union has an elaborate statutory structure which governs all water allocation and acquisition within its jurisdiction. (R. at 3-4.) New Union requires entities to obtain a permit from the state's Water Engineer before diverting water from one river basin into another. (R. at 4.) In 2002, New Union's Water Engineer issued a diversion permit to Capitol City. (R. at 4.) The permit authorized Capitol City to divert water from the Torpid River into the Rapid River through the newly constructed Torpid Aqueduct. (R. at 4.)

The Torpid River is a mountain stream which flows fast and relatively clear for its first thirty miles. (R. at 4.) Thereafter, the river becomes flat as it meanders slowly through farm and scrub-

land, where it accumulates silt from adjacent land and becomes turbid. (R. at 4.) Capitol City's diversion of water from the Torpid River into the Rapid River occurs at this part of the river. (R. at 4.) The Rapid River's waters flow fast and clear from its headwaters until the point at which the Torpid Aqueduct adds water from the Torpid River. (R. at 4.) The Rapid River has never been used for navigation because of its numerous rapids and waterfalls. (R. at 8.) Although the Rapid River was once a tributary to the navigable Platte River, its waters have not flown into that river for 70 years. (R. at 8.) At present, the Rapid River flows into the Rapid Reservoir, Capitol City's water supply dam built in 1937. (R. at 4, 8.) Moreover, Capitol City uses all of the water in the Rapid Reservoir, ending the Rapid River's flow at the dam. (R. at 4.)

SUMMARY OF ARGUMENT

New Union May Intervene as a Matter of Right

The CWA assigns the ability to intervene in enforcement actions as a matter of right to the EPA Administrator. The CWA's legislative history and broader context show that Congress intended to treat the States as the equivalents of the EPA for enforcement purposes. Courts should construe statutory language to effectuate congressional intent. Therefore, this court should construe the CWA to permit New Union to intervene in this action as a matter of right.

FSSC Provided Sufficient Notice

The CWA's citizen suit provision requires citizens to give notice of their intent to sue 60-days before filing suit. Notice is adequate if it provides sufficient information to advise the alleged violator of its wrongful actions. FSSC satisfied the 60-day jurisdictional requirement. FSSC's notice informed Capitol City of its alleged section 1311(a) violation. FSSC properly identified itself as the person giving notice because FSSC has organizational standing. FSSC's notice correctly identified silt as the specific pollutant, for silt forms the basis of the pollutant FSSC alleged in its complaint. Finally, FSSC's notice accurately averred the dates of violation alleged in its complaint because the CWA does not require notice to identify dates of violation of the same type occurring both during and after the period covered by the notice letter.

The CWA Does Not Preempt State Water Allocation Authority

The CWA explicitly reserves States' authority over internal water allocation because that authority is crucial to the economic survival of arid states, including New Union. New Union exercised that authority in granting a permit for Capitol City's diversion. Accordingly, application of the CWA to the diversion would contravene the express statutory language and legislative intent behind the CWA.

Capitol City Did Not Violate the CWA

The CWA does not apply to the Rapid River because the statute applies only to water that is navigable or a tributary of navigable water. Rapids and waterfalls choke the Rapid River, making it nonnavigable. Furthermore, the Rapid River is not a tributary of navigable water. If this court holds that the Rapid River is navigable, the CWA nonetheless does not apply. To fall under Congress' Commerce Clause power the Rapid River part of interstate commerce. Because it is not, the CWA does not apply.

Furthermore, the inquiry into Congress' Commerce Clause powers poses a constitutional question. Courts have a duty to avoid constitutional questions by reinterpreting statutes consistent with congressional intent. The alternative interpretation of "navigable waters" which treats all geographic bodies of water as one unitary body of water is consistent with congressional intent. Applying this interpretation, Capitol City did not add silt to the waters of the United States because those pollutants were already present in those waters.

ARGUMENT

I. *NEW UNION IS ENTITLED TO INTERVENE AS A MATTER OF RIGHT UNDER 33 U.S.C. § 1365(C)(2) BECAUSE CONGRESS INTENDED TO PROVIDE STATES WITH ENFORCEMENT POWERS EQUAL TO THOSE OF THE EPA.*

The CWA unambiguously assigns the ability to intervene by right in any citizen suit to the EPA Administrator. 33 U.S.C. § 1365(c)(2). However, both the legislative history and the broader context of the CWA indicate that Congress intended to give the States enforcement rights and responsibilities on par with those of the federal government. S. REP. No. 92-414, at 73-74 (1971); 33 U.S.C. §§ 1251(b), 1365(b)(1). Where Congress has

evinced a clear intention to achieve a particular result, courts should not allow statutory language to the contrary to stand in the way. *Ozawa v. United States*, 260 U.S. 178, 194 (1920). Accordingly, this Court should allow New Union to intervene in this action as a matter of right.

A. The Legislative History of the CWA Demonstrates That Congress Intended to Allow States to Intervene as a Matter of Right.

Even when statutory language is clear and unambiguous, courts should disregard that language if there is "a clearly expressed legislative intention to the contrary." *Consumer Prod. Safety Comm'n v. GTE Sylvania, Inc.*, 447 U.S. 102, 108 (1980); *see also United States v. Am. Trucking Ass'ns*, 310 U.S. 534, 543 (1940). Courts may consult the statute's legislative history to determine congressional intent. *Am. Trucking Ass'ns*, 310 U.S. at 543. The Senate or House committee reports are particularly persuasive evidence of congressional intent. *Simpson v. United States*, 435 U.S. 6, 17 (1978) (Rehnquist, J., dissenting).

The CWA's legislative history shows that Congress intended the States to take a leading role in enforcing the CWA. S. REP. NO. 92-414, at 73-74. For example, the Senate Committee Report accompanying the CWA explained, "[t]he Committee intends the great volume of enforcement actions be brought by the state." *Id.* In fact, the EPA acknowledged in its testimony that the "primary responsibility for enforcement remains with the States." *EPA Testimony at the Hearings on Water Pollution Control Legislation: Hearing Before the Sen. Pub. Works Comm.*, 92d Cong. 1 (1971). Thus, the legislative history demonstrates that Congress intended to treat the States, at the very least, as the federal government's equals for enforcement purposes.

B. The CWA's Broader Context Demonstrates That Congress Intended to Allow States to Intervene as a Matter of Right.

Courts should not attempt to construe statutory provisions in isolation. *Dole v. United Steelworkers of Am.*, 494 U.S. 26, 35 (1990). In *Dole*, the United States Supreme Court ("Court") explained, "[i]n expounding a statute, we are not guided by a single sentence or member of a sentence, but look to the provisions of the whole law, and to its object and policy." *Id.* (internal citation omitted). When statutory language produces a result "plainly at vari-

ance with the policy of the legislation as a whole," courts should look beyond that language and interpret the statute in a manner consistent with congressional intent. *Ozawa*, 260 U.S. at 194. Thus, this court should examine the CWA's citizen suit intervention provision in the statute's broader context to determine congressional intent.

The CWA declares that "[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of the States to prevent, reduce, and eliminate pollution." 33 U.S.C. § 1251(b). In keeping with this intention, the CWA requires citizens bringing enforcement actions to give notice of their intent to sue not just to the EPA Administrator, but also to the State in which the alleged violation occurred. 33 U.S.C. § 1365(b)(1)(A). Furthermore, the CWA prohibits citizens from initiating enforcement actions in cases in which the EPA Administrator or the States have commenced actions of their own. 33 U.S.C. § 1365(b)(1)(B). Thus, the statute's broader context demonstrates that Congress intended to place the States on an equal footing with the federal government in the enforcement of the CWA. Because both the legislative history and the broader context of the CWA show that Congress intended to allow states to intervene in enforcement actions as a matter of right, this court should allow New Union to intervene in this action as a matter of right.

II. *FSSC GAVE PROPER NOTICE OF ITS INTENT TO SUE CAPITOL CITY PURSUANT TO THE CWA'S CITIZEN SUIT PROVISION BECAUSE IT SATISFIED THE STATUTORY AND REGULATORY REQUIREMENTS.*

Congress authorized citizens to bring civil actions in federal district court against any person alleged to be in violation of a CWA effluent standard or limitation. 33 U.S.C. § 1365(a)(1). However, citizens may not bring suit unless and until they have given 60 days' notice of their intent to sue to the alleged violator, the State in which the alleged violation occurs, and the EPA. 33 U.S.C. § 1365(b)(1)(A). The purpose behind this 60-day notice requirement is to give the alleged violator "an opportunity to bring itself into complete compliance with the Act and thus likewise render unnecessary a citizen suit." *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc.*, 484 U.S. 49, 60 (1987).

While the giving of notice is jurisdictional, the contents of notice are not. *Pub. Interest Research Group of N.J., Inc. v. Hercules,*

Inc., 50 F.3d 1239, 1249 (3d Cir. 1995) ("*PIRG*"). Instead, notice is adequate if it specifies sufficient information to advise the alleged violator of its wrongful actions so that it can take corrective measures to avoid suit. *Atl. States Legal Found., Inc. v. Stroh Die Casting Co.*, 116 F.3d 814, 819 (7th Cir. 1997). FSSC's notice included all of the information required by regulation to inform Capitol City that it allegedly violated section 1311(a) of the CWA by discharging silt from the Torpid Aqueduct into the Rapid River without a permit. Therefore, FSSC's notice was adequate. Accordingly, the district court erred in holding that the contents of notice are jurisdictional and that FSSC's notice failed to identify the specific information required by regulation.

A. FSSC Gave Adequate Notice Because It Satisfied the CWA's Jurisdictional 60-Day Notice Provision and Provided Sufficient Information to Inform Capitol City of Its Alleged CWA Violation.

The CWA mandates that citizens provide notice of the alleged statutory violation to the alleged violator, the State in which the alleged violation occurs, and the EPA Administrator, but does not specify the contents of notice. 33 U.S.C. § 1365(b)(1). Congress delegated the task of defining the contents of notice to the EPA. 33 U.S.C. § 1365(b). EPA regulations provide that notice of an alleged CWA effluent standard or limitation violation

> shall include *sufficient information* to permit the recipient to identify the specific standard, limitation, or order alleged to have been violated, the activity alleged to constitute a violation, the person or persons responsible for the alleged violation, the location of the alleged violation, the date or dates of such violation, and the full name, address, and telephone number of the person giving notice.

40 C.F.R. § 135.3 (emphasis added). Accordingly, notice must be sufficiently specific to inform the alleged violator of its wrongful actions so that the violator will know the corrective measures to take in order to avoid suit. *Stroh Die*, 116 F.3d at 819.

The Court in *Hallstrom v. Tillamook County* held that the 60-day wait period of the Resource Conservation and Recovery Act's ("RCRA") citizen suit notice provision is jurisdictional. 493 U.S. 20, 26 (1989). Thus, a district court has no discretion and must dismiss a CWA citizen suit if no notice was given or if the action is commenced prior to 60 days after giving notice. *Nat'l Envtl.*

Found. v. ABC Rail Corp., 926 F.2d 1096, 1097 (11th Cir. 1991) (holding that the CWA's 60-day notice provision is analogous to the RCRA 60-day notice examined in *Hallstrom*). However, *Hallstrom*'s holding is limited to the *statutory* giving and timing of the 60-day notice requirement and did not address whether the *regulatory* substantive requirements of notice are jurisdictional. *PIRG*, 50 F.3d at 1249.

Hallstrom applies only to statutory, not regulatory, citizen suit requirements. *Id.* Admittedly, the CWA states that "[n]otice . . . *shall be given* in such manner as the [EPA] shall prescribe by regulation." 33 U.S.C. § 1365(b) (emphasis added). However, EPA regulations require only that notice provide "sufficient information" to allow the alleged violator to identify the contents required under the regulation. 40 C.F.R. § 135.3. Thus, the regulation requires notice to "be adequate for the recipients . . . to identify the basis for the citizen's complaint" so that the alleged violator can bring itself into compliance. *PIRG*, 50 F.3d at 1249. This interpretation is in accordance with Congress' goal of requiring sufficient notice without placing undue burdens on the person giving notice. Congress urged the EPA to strike a balance, suggesting that the "regulations should not require notice that places impossible or unnecessary burdens on citizens but rather should be confined to requiring information necessary to give clear indication of the citizens' intent." *Id.* at 1246 (quoting SEN. REP. NO. 92-414, at 80).

FSSC satisfied the CWA's 60-day jurisdictional requirement, for FSSC gave notice to Capitol City, New Union and the EPA on June 1, 2004, and filed suit on August 1, 2004. (R. at 11, 3.) FSSC's notice satisfied EPA regulations because it provided the requisite "sufficient information." The notice identified FSSC as the person giving notice and stated that Capitol City's diversion of silt-laden water from the Torpid River through the Torpid Aqueduct to the Rapid River constituted the alleged section 1311(a) violation of discharging silt, a pollutant, from a point source into navigable waters without a permit. (R. at 11-12.) Thus, FSSC's notice gave specific information from which Capitol City could identify the basis for FSSC's prospective complaint. Accordingly, FSSC satisfied the statutory and regulatory requirements for notice.

B. Even If the Content of Notice Is Jurisdictional, FSSC's Notice Is Adequate Because It Included All of the Specific Information Required by EPA Regulations.

EPA regulations require that notice include sufficient information to (1) permit the recipient to identify the specific standard, limitation, or order alleged to have been violated, (2) the activity alleged to constitute the violation, (3) the person or persons responsible for the alleged violation, (4) the location of the alleged violation, (5) the date or dates of such violation, and (6) the full name, address, and telephone number of the person giving notice. 40 C.F.R. § 135.3. FSSC's notice unquestionably satisfied requirements (2), (3), and (4), for the notice explained that Capitol City's diversion of silt-laden water from the Torpid River to the Rapid River through the Torpid Aqueduct constituted the alleged violation. (R. at 11-12.) The district court found that FSSC's notice failed to satisfy requirements (1), (5) and (6) because the notice did not name the proper prospective plaintiffs, the pollutant alleged in the complaint, and the dates of violations occurring after the date of notice. However, the district court's conclusion is erroneous because FSSC's notice included all of the required information in sufficient detail.

1. FSSC's notice properly identified FSSC as the person giving notice.

Under EPA regulations, adequate notice must include the "full name, address, and telephone number of the person giving notice." 40 C.F.R. § 135.3. FSSC's letter providing notice to Capitol City and the EPA of its intent to sue included the full name of FSSC, "Friends of the South Slope Cutthroat, Inc." (R. at 11.) The letter also provided the address and telephone number at which FSSC could be reached. (R. at 12.) Nonetheless, the district court concluded that FSSC's notice was inadequate because it failed to identify the real parties in interest, Spinner and Creel, as the parties giving notice. (R. at 6.) The district court found that Spinner and Creel were the real plaintiffs because FSSC, as an environmental organization, had no standing to sue on its own but only on behalf of its members who may have standing. (R. at 6.)

However, the district court misapplied the real party in interest standard and erroneously concluded that FSSC does not have standing. The real party in interest standard applies only to civil actions brought in federal court, not to statutorily mandated no-

tice provisions. Moreover, FSSC's notice satisfied the real party in interest standard because FSSC has organizational standing. Accordingly, FSSC gave proper notice of its identity.

a. *Rule 17's real party in interest standard does not apply to notice.*

Rule 17 of the Federal Rules of Civil Procedure states that "[e]very action shall be prosecuted in the name of the real party in interest." FED. R. CIV. P. 17(a). A real party in interest is one who possesses the right to enforce and has a significant interest in the claim upon which the plaintiff is suing. *Va. Elec. & Power Co. v. Westinghouse Elec. Corp.*, 485 F.2d 78, 83 (4th Cir. 1973). The substantive law upon which the claim is based determines whether a plaintiff may enforce the asserted right and thus whether the plaintiff is the real party in interest. *Id.* The purpose behind Rule 17 is to allow persons having an equitable or beneficial interest to bring suit to protect that interest without having to rely on someone else to do so. *Id.*

The doctrine of standing derives from Article III, section 2, of the Constitution. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992). Article III provides that "[t]he judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, [and] the Laws of the United States." U.S. CONST. art. III, § 2. Thus, Article III limits federal judicial power to the resolution of "cases" and "controversies" authorized by the Constitution or federal statutes. *Valley Forge Christian Coll. v. Ams. United for Separation of Church & State, Inc.*, 454 U.S. 464, 471 (1982). The Court developed the doctrine of standing to determine whether a plaintiff has presented a case or controversy justiciable in federal court. *Id.* at 471-72. Standing requires a plaintiff to show that it has suffered an injury in fact that is traceable to the defendant's alleged actions and that the injury is redressable in court. *Id.* at 472.

Rule 17 and the doctrine of standing thus serve different interests. Rule 17 ensures that only a plaintiff with a personal stake in the outcome may sue in federal court and that res judicata principles are served. Standing ensures that only bona fide cases or controversies are brought before a federal court, thus protecting the Constitution's limit on the scope of federal jurisdiction. Moreover, a person may be a real party in interest but fail one of the standing requirements. However, once a party is found to

have standing, Rule 17's real party in interest test is satisfied. *See Apter v. Richardson*, 510 F.2d 351, 353 (7th Cir. 1975).

Neither the CWA nor EPA regulations require that the person giving notice be the real party in interest. In fact, the CWA mandates only that the *would-be*, not actual, plaintiff give notice. *Friends of the Earth v. Laidlaw Envtl. Servs., Inc.*, 528 U.S. 167, 174-75 (2000) (citing 33 U.S.C. § 1365(b)(1)(A)). Moreover, the Federal Rules of Civil Procedure govern only after an action is brought in federal court. *Prazak v. Local 1 Int'l Union of Bricklayers & Allied Crafts*, 233 F.3d 1149, 1152-54 (9th Cir. 2000). In *Prazak*, the court held that state procedural rules govern suits in state court unless and until the civil action is removed and brought in federal court. *Id.* at 1153-54 (citing *Herb v. Pitcaim*, 324 U.S. 117, 120 (1945)). Thus, the Federal Rules of Civil Procedure do not apply to procedural rules that govern activities outside the realm of a civil action brought in federal court.

By its own terms, Rule 17 applies to the prosecution of civil actions. FED. R. CIV. P. 17(a). Rule 17 thus does not govern procedures that must take place before a civil action is brought in federal court. The CWA's notice provision is a statutory procedural mandate that must occur *before* a *civil action* can be brought. Further, the purpose of notice is to render civil action unnecessary. *Gwaltney*, 484 U.S. at 60. For example, notice may result in the alleged violator coming into compliance before the 60-day wait period expires or in the government commencing its own suit, either of which would bar the citizen from filing suit. *Id.* at 60-61. Thus, if a civil action is not brought Rule 17 may never be invoked.

Therefore, the district court's real party in interest analysis is applicable only to FSSC as a plaintiff bringing suit in federal court pursuant to the Federal Rules of Civil Procedure, not to FSSC as the person giving notice pursuant to the CWA. Accordingly, the district court misapplied its real party in interest concern. Because FSSC's letter identified FSSC as the person giving notice, FSSC's notice was adequate.

b. *FSSC is the real party in interest because FSSC has organizational standing.*

Should this Court hold that Rule 17 applies to notice, FSSC must possess the right to enforce and have a significant interest in its claim that Capitol City violated section 1311(a) of the CWA by discharging pollutants into navigable waters without a permit. FSSC filed suit pursuant to the CWA's citizen suit provision. (R.

at 1.) This provision applies only to a citizen "who can claim some sort of injury." *Middlesex County Sewerage Auth. v. Nat'l Sea Clammers Ass'n*, 453 U.S. 1, 16 (1981). The CWA defines a citizen who can claim some sort of injury as a "person or persons having an interest which is or may be adversely affected." *Id.* (quoting 33 U.S.C. § 1365(g)). Through this definition, Congress intended "to allow [citizen] suits by all persons possessing standing" under the Court's holding in *Sierra Club v. Morton*, 405 U.S. 727 (1972). *Id.* (citing S. CONF. REP. NO. 92-1236, at 146 (1972)). Accordingly, FSSC's right to enforce section 1311(a) through the CWA's citizen suit provision, and thus its satisfaction of Rule 17, depends upon whether FSSC possesses standing.

The district court did not address whether FSSC or its members, Spinner and Creel, had standing to sue because the court dismissed the suit on other grounds. (R. at 4.) Nevertheless, federal appellate courts are obliged to determine standing even if the issue is not raised on appeal. *Juidice v. Vail*, 430 U.S. 327, 331-32 (1977). Therefore, a standing analysis is warranted.

Standing requires three elements. First, a plaintiff must show that "it has suffered an 'injury in fact' that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical." *Laidlaw*, 528 U.S. at 180 (citing *Lujan*, 504 U.S. at 560-61). Second, the plaintiff must show that the "injury is fairly traceable to the challenged action of the defendant." *Laidlaw*, 528 U.S. at 180. Finally, the plaintiff must show that "it is likely . . . that the injury will be redressed by a favorable decision." *Id.* at 181. Moreover, at the pleading stage, as here, "general factual allegations of injury resulting from the defendant's conduct may suffice, for on a motion to dismiss we 'presum[e] that general allegations embrace those specific facts that are necessary to support the claim.'" *Lujan*, 504 U.S. at 561 (quoting *Lujan v. Nat'l Wildlife Fed'n*, 497 U.S. 871, 889 (1990)).[1] Standing, however, is not limited to persons. An association, like FSSC, "has standing to sue on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim

1. Although the doctrine of standing also embraces prudential considerations, such as whether the interest sought to be protected by the plaintiff is within the zone of interests protected by the statute, those prudential considerations do not apply to citizen suit provisions, including the CWA's, that expressly negate such considerations by permitting "any person" with a defined interest to bring suit. *Bennett v. Spear*, 520 U.S. 154, 163-64 (1997).

asserted nor the relief requested requires the participation of individual members in the lawsuit." *Laidlaw*, 528 U.S. at 181 (citing *Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 333, 343 (1977)). Accordingly, for FSSC has "organizational standing," Spinner and Creel must have standing to sue in their own right.

Spinner and Creel alleged injury in fact in their affidavits. "[P]laintiffs adequately allege injury in fact when they aver that they use the affected area and are persons 'for whom the aesthetic and recreational values of the area will be lessened' by the challenged activity." *Laidlaw*, 528 U.S. at 183 (citing *Morton*, 405 U.S. at 735). Spinner and Creel aver that they are avid fly fishermen who fish on Rapid River because it is close to home and contains the South Slope Cutthroat Trout ("Cutthroat"), a fish native to the waters of New Union. (R. at 13-14.) The men claim that since August 2003 they have been unable to fish in Rapid River downstream from the Torpid Aqueduct because the Cutthroat have disappeared. (R. at 13-14.) Although Spinner and Creel can and do fish for Cutthroat upstream and in other river basins, the Court in *Laidlaw* held that sworn statements averring that recreational activities are no longer engaged in near a river where pollutants are discharged or in a particular downstream area because of the discharge are sufficient facts to support injury in fact. 528 U.S. at 183-85. Accordingly, Spinner and Creel satisfy the injury in fact requirement because their averred inability to fish below the Torpid Aqueduct is a concrete, particularized and actual injury.

Spinner and Creel's injury is fairly traceable to Capitol City's alleged violation of section 1311(a) by discharging silt into Rapid River without a permit. Spinner and Creel stated that their inability to see or catch Cutthroat occurred when Capitol City began diverting water from the Torpid River into the Rapid River in mid-August. (R. at 13, 14.) Spinner claimed that he had "never seen the trout thrive in waters that were not clear and was not surprised when they stopped living below the Aqueduct discharge." (R. at 13.) Creel's affidavit pointed to a letter from the New Union Fish and Game Department's Director ("Director") which admitted that the Cutthroat likely will not survive below the Torpid Aqueduct in the silt-laden water. (R. at 15.) In fact, suspended and settleable solids such as silt can decrease the passage of light through water and result in water heating more rapidly, which can adversely affect aquatic life adapted to lower temperatures. *Monitoring and Assessing Water Quality*, EPA, at http://

www.epa.gov/ volunteer/stream/vms58.html (Sept. 9, 2003) (APPENDIX D). On a motion to dismiss, we must presume that Spinner and Creel's allegations support the inference that their inability to fish is fairly traceable to Capitol City's discharge of silt into Rapid River. *Lujan*, 504 U.S. at 561.

Finally, a favorable decision will redress Spinner and Creel's injury. FSSC seeks an injunction against further discharges of silt into Rapid River except in accordance with a duly issued permit. (R. at 11.) If granted, an injunction likely will allow the waters below Rapid River to regain clarity and become habitable for the Cutthroat to survive. (R. at 11.) Moreover, even if the discharge continues but is subject to permit requirements, those limitations may be strict enough to allow for habitable water. Therefore, an injunction against Capitol City's discharge of silt into the Rapid River will redress Spinner and Creel's injury.

Accordingly, Spinner and Creel have standing to sue in their own right. Further, the interests at stake here are germane to FSSC's purpose, for FSSC is a non-profit organization committed to the Cutthroat in New Union. (R. at 11.) Hence, the Cutthroat's survival is the centerpiece of FSSC's existence. Additionally, nothing in the record indicates that FSSC's claim or their requested injunction relief requires the participation of individual members such as Spinner and Creel in the actual lawsuit. Thus, FSSC has organizational standing to sue on behalf of its members under the CWA's citizen suit provision.

Once a party is found to have standing, Rule 17's real party in interest test is satisfied. *See Apter*, 510 F.2d at 353. Here, FSSC possesses the right to enforce effluent standards or limitations of section 1311(a) through the CWA's citizen suit provision because it has organizational standing. Hence, FSSC has the right to enforce and a significant interest in the claim upon which it is suing, satisfying the real party in interest standard. Accordingly, FSSC properly identified itself as the would-be plaintiff giving notice of its intent to sue.

2. FSSC's notice identified the specific pollutant which forms the basis of its complaint.

Adequate notice must provide sufficient information to identify the "specific standard, [or] limitation . . . alleged to have been violated." 40 C.F.R. § 135.3. The standards and limitations upon which citizens can bring suit include "an unlawful act under subsection (a) of section 1311." 33 U.S.C. § 1365(f). An unlawful act

under section 1311(a) includes the discharge of a pollutant from a point source into navigable waters without a permit or applicable exception. *Stroh Die*, 116 F.3d at 818. Additionally, adequate notice must include the "activity alleged to constitute" the violation by identifying with reasonable specificity the pollutant alleged to have been unlawfully discharged. *Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of N.Y.*, 273 F.3d 481, 488 (2d Cir. 2001).

FSSC's notice alleged that Capitol City violated section 1311(a) by discharging silt, a pollutant, from the Torpid Aqueduct, a point source, into the Rapid River, navigable water, without a permit. (R. at 11.) Silt is a pollutant. *Driscoll v. Adams*, 181 F.3d 1285, 1291 (11th Cir. 1999) (citing 40 C.F.R. § 122.2). Hence, FSSC properly identified with sufficient specificity the standard or limitation Capitol City allegedly violated, as well as the activity and pollutant alleged to constitute the violation. However, FSSC's actual complaint alleged additions of suspended and settleable solids, not silt. (R. at 6.) The district court thus concluded that FSSC's notice was inadequate because it did not specify the actual pollutant—suspended and settleable solids—upon which it would sue. (R. at 6.) However, FSSC's notice properly identified the specific pollutant that it would sue upon because silt is a component of suspended and settleable solids. Moreover, FSSC's suit can be limited to the specific pollutant alleged in its notice instead of the more general category of pollutants alleged in its complaint.

The Second Circuit in *Catskill* held that notice "must include the pollutant alleged to be the basis of a violation subsequently alleged in the complaint" because such specificity better allows both enforcement agencies and violators to take prompt corrective measures. 273 F.3d at 487-88. However, the court also held that notice is adequate if the pollutant alleged in the complaint by definition depends upon the pollutant alleged in the notice. *Id.* at 489. Thus, the court held that notice of a CWA violation based on discharges of suspended solids was sufficient to provide notice of an eventual claim based on discharges of turbidity because water cannot be turbid without suspended solids. *Id.* at 488-89. Accordingly, the exact name of the pollutant alleged in the complaint need not mirror that of the pollutant alleged in the notice if a sufficient relationship exists between the two pollutants. *Id.*

By definition, "suspended solids" includes silt. *Monitoring and Assessing Water Quality*, EPA, at http://www.epa.gov/volunteer/stream/vms58.html (Sept. 9, 2003) (APPENDIX D). Sus-

pended and settleable solids are subsets of "total solids," a general name used to refer to solids measured in water quality management. *Id.* Therefore, suspended solids, settleable solids and silt are pollutants with a definitional relationship. Moreover, FSSC's complaint alleged the more general pollutant, suspended solids, whereas its notice alleged the specific pollutant, silt. (R. at 6, 11.) Hence, this is not a case in which FSSC gave notice of a general pollutant and then filed suit based upon a specific pollutant. The notice's specific identification of silt-laden water discharged from the Torpid Aqueduct surpassed the "reasonable specificity" standard and allowed Capitol City to understand the alleged violation and to rectify the problem. Further, although suspended solids by definition can include other particulate matter, FSSC likely will be limited in its suit to the specific pollutant, silt, which it properly alleged in the notice. *Catksill*, 273 F.3d at 488-89. Therefore, FSSC adequately provided notice of the specific pollutant alleged to constitute Capitol City's section 1311(a) violation.

3. The CWA does not require FSSC to allege each day of violation in its notice.

Adequate notice also must provide "the date or dates" of the alleged effluent standard or limitation violation. 40 C.F.R. § 135.3. FSSC's notice alleged section 1311(a) violations each and every day from August 15, 2003, until June 1, 2004, the date of the notice. (R. at 11.) FSSC's complaint alleged violations up to and after August 15, 2004, the date the complaint was filed. (R. at 6.) The district court dismissed the complaint for all violations alleged to have occurred after June 1, 2004, because the notice alleged no violations after this date. (R. at 6-7.)

However, the CWA does not require a citizen to give notice of each violation of a specific discharge limitation. *PIRG*, 50 F.3d at 1247-48. Although a "literal reading" of the 60-day notice provision requires a citizen to identify the alleged effluent standard or limitation violation, the statute is silent as to whether a citizen must allege each day of such violation. *Id.*[2] Thus, notice which identifies the specific violation is sufficient to "identify violations of the same type . . . occurring both during and after the period covered by the notice letter." *Id.* at 1250. Accordingly, the Third Circuit in *PIRG* reinstated post-notice, pre-complaint violations of

2. This is in contrast to the CWA's civil and criminal penalty provisions, which provide that civil penalties and criminal fines should be assessed on a per day of violation standard. 33 U.S.C. §§ 1319(c), 1319(d).

the same type alleged in the notice that the district court had dismissed. *Id.*

The Court's decision in *Gwaltney* supports this conclusion.[3] There, the Court held that federal courts do not have jurisdiction over CWA citizen suits for wholly past violations. *Gwaltney*, 484 U.S. at 64. The Court explained that Congress' use of the phrase "to be in violation" in section 1365(a) of the CWA requires a plaintiff bringing a citizen suit to "make a good-faith allegation [in the complaint] of continuous or intermittent violation" in order to invoke the federal court's jurisdiction. *Id.* Thus, the CWA "make[s] plain that the interest of the citizen-plaintiff is primarily forward-looking." *Id.* at 59.

The Third Circuit held that "[b]ecause a citizen must delay filing suit for at least 60 days after notice has been sent, it is foreseeable that a complaint will include allegations of more recent violations in an effort to establish [the] 'continuous or intermittent violations'" required by *Gwaltney*. *PIRG*, 50 F.3d at 1251. A rule that dismisses violations of the same type occurring after the alleged dates of violation in the notice is incompatible with the Supreme Court's holding in *Gwaltney* for two reasons. First, forcing citizens to allege violations which may take place in the future in their notice arguably violates *Gwaltney*'s standard that citizens make "good faith" allegations as to the *present nature* of the violation, for citizens cannot allege violations which have not yet occurred. *Stroh Die*, 116 F.3d at 820-21. Second, if the district court dismisses the current violations alleged in the complaint because they were not alleged in the notice, the district court must dismiss the entire complaint because it does not contain allegations of "continuous or intermittent violations" as required under *Gwaltney*. This conclusion thus leads to a harsh and untenable result, for it forces citizens to either guess at prospective violation dates or risk having valid claims dismissed because of technical pre-complaint procedural errors. Moreover, this result contravenes Congress' intent that notice provide sufficient information to the alleged violator without overburdening prospective citizen-plaintiffs. SEN. REP. NO. 92-414, at 80.

3. The 60-day notice at issue here and the complaint at issue in *Gwaltney* involve two separate jurisdictional requirements for bringing a citizen suit. *See PIRG*, 50 F.3d at 1251. However, the decision in *Gwaltney* that "[c]ontinuing or intermittent violations of the same type are necessary to create jurisdiction of the citizen . . . are perforce related to the noticed violations" and thus provides a helpful framework for this analysis. *Id.*

Thus, the CWA's notice provision requires citizens to allege only the dates of violation of which citizens are aware. As long as the post-notice, pre-complaint violations alleged in the complaint are of the same type and nature as those alleged in the notice letter, notice is sufficient. *PIRG*, 50 F.3d at 1250-51. Here, FSSC's complaint alleged section 1311(a) violations of the same type and nature as those alleged in FSSC's notice. Hence, the fact that FSSC's complaint alleged violations occurring after the dates of violations alleged in FSSC's notice is negligible. Accordingly, FSSC's notice identified the person giving notice, the specific pollutant which constitutes the alleged violation, and the dates of that violation. Therefore, FSSC's notice was adequate.

III. *THE CWA DOES NOT APPLY TO NEW UNION'S WATER ALLOCATION PROGRAM BECAUSE CONGRESS DID NOT INTEND TO PREEMPT STATE AUTHORITY OVER INTERNAL WATER ALLOCATION.*

New Union intervened in this action to preserve its authority over water allocation. New Union's issuance of a permit for Capitol City's diversion obviated application of the CWA to the diversion. The CWA states unequivocally that "the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by this chapter." 33 U.S.C. §1251(g). Congress added this provision in order to prevent courts from construing the CWA as a federal preemption of state authority to allocate quantities of water within their jurisdictions. 123 Cong. Rec. S39211 (daily ed. Dec. 15, 1977) (statement of Sen. Wallop), LEXIS 95 Cong. Senate Debates 1977, at *39211 (APPENDIX C). Because the CWA's statutory language and legislative history indicate that Congress did not intend to preempt these decisions, and because States should retain authority over water allocation, the district court properly granted summary judgment.

A. The CWA's Legislative History Demonstrates That Congress Did Not Intend to Preempt State Authority Over Water Allocation.

The CWA does not preempt New Union's regulatory authority to allocate its water quantities because Congress did not intend for the CWA to preempt state water allocation authority. *Gade v. Nat'l Solid Waste Mgmt. Ass'n*, 505 U.S. 88, 96 (1992) (O'Connor, J., concurring) (citing *Allis-Chalmers Corp. v. Lueck*, 471 U.S. 202,

208 (1985)). Federal preemption of state law may occur when Congress crafts statutory language which expressly preempts state law or when congressional intent to preempt can be inferred from statutory language. *Hillsborough County v. Automated Med. Labs., Inc.*, 471 U.S. 707, 713 (1985). In either case, congressional intent to preempt is an essential ingredient in any judicial finding of preemption. *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 541 (2001).

The Court has applied these principles of preemption to the CWA. *Solid Waste Agency of N. Cook County v. United States Army Corps of Eng'rs*, 531 U.S. 159, 172-74 (2001) ("*SWANCC*"). In *SWANCC*, the Court held that States have "traditional and primary power" over water use within their borders. *Id.* at 174. Accordingly, the Court refused to extend the CWA to interfere with a state decision regarding water use absent "a clear indication that Congress intended that result." *Id.* at 172. The Court then held the statutory recognition of "the primary responsibilities and rights of States . . . to plan the development and use . . . of land and water resources" contained in section 1251(b) sufficient to prohibit federal interference with the state regulatory process. *Id.* at 174.[4]

The CWA's language and legislative history show that Congress did not intend to preempt New Union's authority to allocate water. First, Congress explicitly reserved States' power over internal water allocation declaring "that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this chapter." 33 U.S.C. § 1251(g). Thus, Congress unambiguously stated its intent

4. Although the Court addressed an issue similar to the one under consideration here in *PUD No. 1 of Jefferson County v. Wash. Dep't of Ecology*, 511 U.S. 700 (1994), that case is distinguishable for several reasons. First, *Jefferson County* involved navigable interstate waters while this case involves nonnavigable intrastate waters. Thus, the federal interest involved in *Jefferson County* was substantially greater than the federal interest involved here. Second, the Court in *Jefferson County* stated in dicta that "the authority of each state to allocate water quantity" does not "limit the scope of water pollution controls that may be imposed on users who have obtained . . . a water allocation." However, because *Jefferson County* involved state-imposed conditions upon navigable interstate waters, this dictum should not be construed to allow the imposition of federal conditions upon isolated nonnavigable intrastate waters when the State opposes such conditions. As explained below, such a construction is contrary to the legislative intent behind the CWA as well as sound public policy. Finally, the holding in *Jefferson County* is limited to the proposition that the CWA "allows States to impose conditions based upon several enumerated sections of the Clean Water Act and 'any other appropriate requirement of State law.'" This holding is not relevant to the facts involved here.

to leave state authority to regulate internal water allocations untouched by the CWA. *Id.* Moreover, Congress directed federal agencies to cooperate with the States outside of the CWA framework to find solutions to pollution problems caused by state water management. *Id.*

Second, the legislative history supports the conclusion that Congress designed this provision to prevent federal interference with state water diversion projects. The original CWA of 1972 contained several provisions designed to preserve states' rights. 33 U.S.C. §§ 1251(b), 1370. Congress added the provision quoted above during the 1977 amendment process in response to a policy paper by the Water Resource Council which concluded that reducing water diversions resulting from state management policies might be necessary to solve water quality problems. 42 Fed. Reg. 36,788, 36,793 (July 15, 1977). The author of the amendment, Senator Malcolm Wallop, explained that it was necessary to "reassure the State [sic] that it is the policy of Congress that the Clean Water Act will not be used for the purpose of interfering with State water rights systems." 123 Cong. Rec. S39211 (daily ed. Dec. 15, 1977) (statement of Sen. Wallop), LEXIS 95 Cong. Senate Debates 1977, at *39211 (APPENDIX C). This legislative history demonstrates that Congress did not intend courts to construe the CWA as a preemption of state authority over water allocation.

B. The CWA Does Not Apply to State Water Diversion Projects Because Application Would Threaten the Economic Vitality of Arid States.

CWA application to state water allocation projects would stifle diversion projects which are essential to the economic survival of arid states, such as New Union. *Jicarilla Apache Tribe v. United States*, 657 F.2d 1126, 1133 (10th Cir. 1981). Due to prevailing conditions of systemic scarcity, many arid states have adopted "maximum utilization" strategies which allow the timely diversion of water resources to the areas of greatest need. *Fellhauer v. People*, 167 Colo. 320, 336 (1968). In many cases, these diversions must utilize natural watercourses to transfer water in an economically viable manner. *See e.g. Jacarilla Apache Tribe*, 657 F.2d at 1132; *City of L.A. v. City of Glendale*, 23 Cal.2d 68, 76-77 (1943). Furthermore, arid states authorize immediate diversions during water shortages because time is crucial during these emergencies. COLO. REV. STAT. § 37-92-308(7) (2002) (Colorado); NEV. REV. STAT. § 416.030 (2004) (Nevada); N.M. STAT. ANN. § 72-5-24.1

(2004) (New Mexico). Unfortunately, the minimum time between submission of an application and issuance of a permit under the CWA is 180 days. 40 C.F.R. § 122.21(c). As a result, CWA application to state water diversion projects threatens the economic vitality of arid states, such as New Union.[5] (R. at 15-16.) As the Director of New Union's Fish and Game Department explained without the diversion would "remove such a great percent [sic] of [Capitol City's] water supply [that it] would be an intolerable economic burden and a danger to its public health." (R. at 15.) Therefore, this Court should hold that New Union's granting of a permit for Capitol City's diversion obviates application of the CWA to the diversion.

IV. *CAPITOL CITY DID NOT VIOLATE THE CWA BECAUSE THE RAPID RIVER IS NOT NAVIGABLE WATER AND CAPITOL CITY DID NOT ADD A POLLUTANT.*

The CWA prohibits the addition of pollutants into navigable water without a permit. 33 U.S.C. §§ 1311(a), 1342. Without navigable water or without the addition of a pollutant, the CWA does not apply. The district court correctly held that the Rapid River is not navigable water. (R. at 9.) Regardless, Capitol City did not add a pollutant into navigable water because the pollutant silt was already present in the waters of the United States. (R. at 9.) Therefore, this court should affirm the district court and hold that Capitol City did not violate section 1311(a).

A. The CWA Does Not Apply to Rapid River Because It Is Not Navigable Water and It Is Outside of Congress' Commerce Clause Powers.

Congress' authority to regulate navigable waters derives from its Commerce Clause powers. *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 133 (1985). Therefore, any understanding of the navigable waters governed by the CWA exists within the limits of the Commerce Clause. The CWA defines navigable water as "the waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7). EPA regulations further define waters of the

5. However, the unitary theory of water, introduced in Argument Section IV.B would provide an interpretation of the CWA that would allow states to divert water for re-allocation without a federal permit. *See S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 124 S.Ct. 1537, 1544-45 (2004).

United States as those waters which may be used in interstate commerce or are tributaries of waters which may be used in interstate commerce. 40 C.F.R. § 122.2. Because the Commerce Clause limits Congress' power to regulate navigable waters, the scope of the CWA may not be greater than Congress' traditional powers to regulate navigable waters.

Congress' traditional powers to regulate navigable waters are limited to waters "which are accessible from a State other than those in which they lie." *Kaiser Aetna v. United States*, 444 U.S. 164, 173 (1979); H. CONF. REP. No. 95-830, at 97 (1977). In *Kaiser*, the Court explained that the limits of Congress' Commerce Clause powers over navigable waters are those waters which may be used in their present condition to transport interstate or foreign commerce. 444 U.S. at 173. Congress' power to regulate navigable waters is limited to waters which are navigable in fact when "used or susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water." *The Daniel Ball*, 77 U.S. 557 (1870). Therefore, the CWA may only regulate waters which are or are related to waters which may be used in interstate or foreign commerce.

1. EPA's definition of navigable waters encompassing solely intrastate waters is invalid because Congress did not grant the EPA authority to regulate those waters.

EPA regulations that purport to include the Rapid River within the jurisdiction of the CWA without requiring a surface connection to navigable waters are outside the scope of powers Congress granted to the EPA. *SWANCC*, 531 U.S. at 171. In *SWANCC*, the Court held that Congress did not grant agencies jurisdiction to regulate "nonnavigable, isolated, intrastate waters." *Id.* The Court invalidated a United States Army Corps regulation that defined waters of the United States to include intrastate waters which may have been used as a habitat for migratory birds. *Id.* at 164, 171. EPA regulations define the waters of the United States to include solely intrastate waters that may be used in interstate commerce either for fishing or recreational purposes. 40 C.F.R. § 122.2. Though the Court in *SWANCC* only invalidated the one regulation, the logical extension of the holding is that similar regulations, such as the one here that purports to cover solely intrastate waters, are invalid. *See United States v.*

Rueth Dev. Co., 335 F.3d 598, 603 (7th Cir. 2003) (explaining that the logical extension of *SWANCC* is that portions of 40 C.F.R. § 122.2 defining waters of the United States to include intrastate waters are invalid); *United States v. Wilson*, 133 F.3d 251, 257 (4th Cir. 1997) (holding 33 C.F.R. § 328.3(a)(3), containing the same relevant text as 40 C.F.R. § 122.2, invalid because it exceeded the regulatory jurisdiction of the United States Army Corps). Therefore, the portions of EPA regulations that attempt to include nonnavigable intrastate waters are invalid because the Court held in *SWANCC* that the term navigable water is not without meaning in the CWA. 531 U.S. at 172. Waters must bear some connection with navigable water, which the Rapid River does not.

2. The Rapid River does not fall within the CWA's jurisdiction of navigable waters because it is neither navigable in fact nor a tributary of navigable waters.

While the portions of EPA regulations that regulate intrastate waters are invalid, the EPA still properly regulates interstate waters and waters that are tributaries of interstate waters. A tributary of navigable water is one which bears a surface connection to navigable water. *Quivira Mining Co. v. United States EPA*, 765 F.2d 126, 129 (10th Cir. 1985). Therefore, to fall within the CWA, the water must either be navigable in its own right or at least bear a surface connection to navigable water. *SWANCC*, 531 U.S. at 172; *Wilson*, 133 F.3d at 257; *Carabell v. United States Army Corps of Eng'rs*, 257 F. Supp. 2d 917 (E.D. Mich. 2003); 40 C.F.R. § 122.2. The Rapid River does not fall within these definitions because the Rapid River is neither navigable nor a tributary.

The Rapid River is not navigable water because waterfalls and rapids along the river prevent navigation. (R. at 8.) Additionally, the Rapid River is not navigable in fact because it is located wholly within New Union and may not be used as a highway of interstate commerce. (R. at 3-4.)

The Rapid River is not a tributary of navigable water. Although the Platte River is navigable water, the Rapid River is not a tributary of it. (R. at 8.) Furthermore, the Rapid River has not been a tributary of the Platte River for seventy years, nor will it be in the future. (R. at 8.) Because the Rapid River no longer flows to the Platte River, even intermittently, the Rapid River is not its tributary. *See Kaiser Aetna*, 444 U.S. at 165 (explaining that the

navigability of a body of water may change and thus the CWA's jurisdiction also may change). Furthermore, although the Rapid River is a tributary of Rapid Reservoir, the reservoir is not navigable. (R. at 4.). It is not navigable because it is enclosed by a dam on one side and a nonnavigable river on the other. (R. at 4.); *Weaver v. Hollywood*, 255 F.3d 379, 384 (7th Cir. 2001) (stating that "a dam and a bridge which prevent a riverboat casino from traveling over 300 yards are presumably not susceptible to commercial shipping" and thus the water was not navigable in fact). All water in Rapid Reservoir is used as drinking water for Capital City and thus Rapid Reservoir itself is not a tributary of navigable water. (R. at 4.); *Headwaters v. Talent Irrigation Dist.*, 243 F.3d 526, 534 (9th Cir. 2000) (determining that the CWA regulates tributaries only when they eventually flow into a navigable water). Also, the Rapid Reservoir is located wholly within New Union and so may not be used as a highway for commerce. (R. at 3-4.) Therefore, the Rapid Reservoir is not navigable water. Because the Rapid River is not a tributary of navigable water, the Rapid River is not subject to CWA regulation.

3. Even if the Rapid River is navigable water, it is outside the scope of Congress' Commerce Clause power.

Congress enacted the CWA pursuant to its Commerce Clause powers. *Riverside*, 474 U.S. at 133. The Commerce Clause permits Congress to regulate "[c]ommerce . . . among the several States." U.S. CONST. art. I, § 8, cl. 3. Congress may regulate an activity only if it falls into one of three distinct categories. *United States v. Morrison*, 529 U.S. 598, 608 (2000). First, Congress may regulate the "use of the channels of interstate commerce." *Id.* at 609. Second, Congress may regulate the instrumentalities of interstate commerce or the persons or things in interstate commerce. *Id.* Lastly, Congress may regulate activities substantially related to interstate commerce. *Id.*

Here, the Rapid River is not a channel of interstate commerce, for it is located solely within New Union. (R. at 4.) Nor is the Rapid River an instrumentality or thing involved in interstate commerce for it is used solely by the citizens of Capitol City. (R. at 4.) Therefore, Congress may regulate Capitol City's activities only if those activities are substantially related to interstate commerce. The Rapid River is outside the scope of Congress' powers because the Rapid River bears no substantial relationship to interstate commerce. To determine whether a substantial relationship ex-

ists, this court must balance four factors: (1) whether the statute regulates "economic activity"; (2) whether the statute contains an "express jurisdictional element" that limits the application of the statute to interstate commerce; (3) whether Congress made express legislative findings that the activity bears a substantial relation to interstate commerce; (4) whether the activity's relationship to interstate commerce is too attenuated. *Morrison*, 529 U.S. at 610 (citing *United States v. Lopez*, 514 U.S. 549, 551 (1995)).

First, whether the regulated activity is economic is the central element to determining the extent of Congress' Commerce Clause powers. *Morrison*, 529 U.S. at 610. The Court noted that "'any conduct in this interdependent world of ours has an ultimate commercial origin or consequence, but we have not yet said that the commerce power may reach so far.'" *Morrison*, 529 U.S. at 611 (quoting *Lopez*, 514 U.S. at 559-60). Therefore, regulation of a non-economic activity must have an "evident commercial nexus." *Id.* Capitol City's diversion of water is not an economic activity and does it have an evident commercial nexus because the diversion is not diverting water for profit but rather to assist in the general welfare of its citizens. The fact that activity is noneconomic, tips the balance in favor of determining that Congress does not have authority to regulate the diversion.

Second, whether the regulation contains an express jurisdictional element that limits the statute's application to interstate commerce also is relevant. *Morrison*, 529 U.S. at 612 (citing *Lopez*, 514 U.S. at 562). Here, the CWA contains an express jurisdictional element. 33 U.S.C. § 1362(7). The phrase "navigable water" in section 1362 limits the CWA's scope to those waters that are or have a relationship to traditional navigable waters. *SWANCC*, 531 U.S. at 172. As established, the Rapid River is not navigable water and does not possess a relationship with navigable water. (R. at 8.) Therefore, the CWA's jurisdictional limitation prohibits its application to waters such as the Rapid River.

Third, courts should consider express congressional findings concerning the regulated activity's relationship to interstate commerce. *Morrison*, 529 U.S. at 612. Here, Congress did not make findings that state water diversion programs bear a substantial relationship to interstate commerce. Nonetheless, had Congress made findings with respect to state water diversion programs, the "existence of congressional findings is not sufficient, by itself, to

sustain the constitutionality of Commerce Clause legislation." *Morrison*, 529 U.S. at 614.

Lastly, even if a relationship exists with interstate commerce, the Commerce Clause does not permit Congress to regulate that activity if the relationship is too attenuated. *Morrison*, 529 U.S. at 612. In *Morrison*, the Court rejected noneconomic activities that indirectly affected interstate commerce as too attenuated. 529 U.S. at 615. For example, violent crime may have an effect on the national economy but that relationship is too attenuated. *Id.* Capitol City's water diversion program is not an economic activity and has, at best, an indirect effect on interstate commerce. This court may not rely on an indirect causal chain to determine that the CWA applies to the Rapid River. Subsequent to the Court's holdings in *Morrison* and *Lopez* and using the interpretations of navigable waters urged on us by other courts, Congress does not possess Commerce Clause authority to regulate the Rapid River.

As this discussion reflects, this case presents a constitutional question as to whether Congress may regulate nonnavigable intrastate waters. To find navigability on these facts, this court must consider the constitutional question posed here. However, if possible, courts must construe statutes in order to avoid any constitutional question. *Edward J. Debartolo Corp. v. Fla. Gulf Coast Bldg. & Constr. Trades Council*, 485 U.S. 568, 575 (1988) (holding "where an otherwise acceptable construction of a statute would raise serious constitutional problems, the Court will construe the statute to avoid such problems unless such construction is plainly contrary to the intent of Congress"). The argument that follows is an interpretation consistent with congressional intent which avoids this constitutional question. However, if this court rejects the following argument and considers the constitutional question, then, pursuant to *Morrison*, Congress may not regulate the Rapid River.

B. If This Court Determines That Rapid River Is Navigable Water, Then Capitol City Did Not Add a Pollutant to the Rapid River Because the Silt Already Was Part of the Waters of the United States.

Traditionally, courts have understood the CWA to treat each body of navigable water as a separate and distinct source requiring regulation. *See S. Fla.*, 124 S.Ct. at 1544-45. Thus, the CWA does not apply to wholly intrastate bodies of water. *SWANCC*,

531 U.S. at 171. This arguably contravenes Congress' intent that "the term 'navigable waters' be given the broadest possible constitutional interpretation." S. CONF. REP. NO. 92-1236, at 144. The interpretation that gives the broadest possible constitutional interpretation to the term navigable waters would recognize no legal distinction between separate bodies of water. This interpretation acknowledges that all waters are part of the same hydrological system. S. REP. NO. 92-414, at 77. This "unitary theory of water" solves the constitutional problem presented above. If all waters are the same, then the Commerce Clause permits Congress to regulate isolated intrastate waters because those waters are part of the larger hydrological system that includes navigable bodies of water.

The unitary theory of water derives from a basic standard of statutory construction: courts are to interpret statutes based on their plain meaning. *Richards v. United States*, 369 U.S. 1, 11 (1962). Section 1311(a) defines the discharge of a pollutant as "any addition of any pollutant to navigable waters from any point source." 33 U.S.C. § 1311(a). Conspicuously missing from this phrase is the word "any" before "navigable waters." This phrase plainly means that there are many kinds of pollutants, many kinds of additions, and many point sources, but only one navigable water–the waters of the United States. Section 1312(a)'s reference to "water quality in a specific portion of *the* navigable waters" supports this construction. 33 U.S.C. § 1312(a) (emphasis added). The reference not only to a "specific portion" but also to navigable waters as "the" navigable waters demonstrates Congress' understanding that the waters of the United States are one body of water. Furthermore, this definition is consistent with Congress' use of the phrase waters of the United States to define navigable waters.

Because water moves in hydrological cycles, waters located in one location may travel, through evaporation, surface movement, or ground water, to an entirely separate place. *See* S. REP. NO. 92-414, at 77 (noting that "water moves in hydrologic cycles"). Congress, recognizing and understanding this hydrological cycle, intended to regulate all waters of the United States. 33 U.S.C. § 1362(7); S. REP. NO. 95-370, at 75 (1977). The legislative history discussing the phrase navigable waters reflects Congress' understanding that the waters of the United States are so interrelated that regulation of the waters at one location protects the water quality of all the nation's waters. S. REP. NO. 95-370, at 75 (1977)

(explaining that the adverse effects of pollution must be addressed where the pollutants were first discharged). Congress intended to regulate the introduction of pollutants into the waters of the United States and to regulate all waters of the United States. However, Congress cannot regulate all waters under the Commerce Clause so long as this court interprets navigable waters as referring to separate bodies of water. Therefore, to effectuate congressional intent to regulate all waters, this court should hold that the CWA regulates navigable waters as a unitary body of national waters.

Congress understood that it was regulating the *addition* of pollutants into the waters, as opposed to the re-distribution of the nation's waters, as here. The main culprit with respect to water pollution is not the diversion of waters from one water basin to the other, but rather persons dumping pollutants into the navigable waters. S. REP. NO. 95-370 (explaining throughout the legislative history that the purpose of the CWA is to regulate dumping of pollutants, such as municipal and industrial waste, into the nation's waters). Congress' express concern was the disposal and dumping of sludge and toxic materials by industrial dischargers into the navigable waters. *Id.* The legislative history does not mention state water diversion programs and their possible effects on water quality.

Dumping and diversion are two activities that the CWA cannot consistently regulate. Courts can continue to construe the navigable waters as referring to separate and distinct bodies of water, at which point water diversion may be properly regulated in almost all instances, except, of course, when the reach of the Commerce Clause does not permit such regulation. Alternatively, courts could construe the CWA to mean that all waters are the same water, and thus permit the CWA's regulation of each and every single act of dumping into any body of water, no matter its location, size or use. If all waters are the same, then regulation of any body of water necessarily affects interstate commerce. Thus, the Commerce Clause would not limit Congress' ability to regulate the introduction of pollutants into solely intrastate puddles that bear no relation to interstate commerce, which is not presently the case. *See SWANCC*, 539 U.S. at 172.

The Torpid River naturally accumulates silt from adjacent land as it meanders toward the Torpid Aqueduct. (R. at 4.) The pollutant in this case, silt, already was in the nation's waters whether or not the water traveled through the Torpid Aqueduct.

Applying the unitary theory of water, the water diversion at issue here is not an addition of pollutants into the waters of the United States.

Adoption of the unitary theory of water would require a reinterpretation of other aspects of the CWA and accompanying regulations. This court can avoid that result by holding that the Rapid River is not navigable water within the traditional definition of navigable waters. That approach also would allow this court to bypass the constitutional question posed by the facts of this case and this court's obligation to interpret the CWA to avoid that question. Nonetheless, if this court holds that the Rapid River is navigable water, the unitary theory of water interprets the CWA consistent with congressional intent and obviates the constitutional question.

CONCLUSION

The Commerce Clause constitutes an essential bulwark against congressional encroachments on state authority. Federal regulation of state diversions of nonnavigable, isolated, intrastate waters would exceed the scope of congressional power under the Commerce Clause and imperil the economic wellbeing of arid states like New Union. Because FSSC gave sufficient notice and New Union may intervene in this action as a matter of right, this court should evaluate this action on the merits and hold that the CWA does not reach isolated intrastate waters and does not preempt state authority over internal water allocation. Therefore, this court should AFFIRM the district court's holding that New Union may intervene as a matter of right, REVERSE and hold that FSSC's notice was proper, AFFIRM that the CWA does not preempt state water allocation authority, and AFFIRM that the Rapid River is not navigable water and that Capitol City did not add pollutants to the Rapid River.

Respectfully Submitted
UC Hastings College of the Law
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APPENDIX A- Statutory Provisions

28 USCS § 1291: The courts of appeals (other than the United States Court of Appeals for the Federal Circuit) shall have jurisdiction of appeals from all final decisions of the district courts of the United States, the United States District Court for the District of the Canal Zone, the District Court of Guam, and the Dis-

trict Court of the Virgin Islands, except where a direct review may be had in the Supreme Court. The jurisdiction of the United States Court of Appeals for the Federal Circuit shall be limited to the jurisdiction described in sections 1292(c) and (d) and 1295 of this title.

28 USCS § 1331: The district courts shall have original jurisdiction of all civil actions arising under the Constitution, laws, or treaties of the United States.

33 USCS § 1251: (b) Congressional recognition, preservation, and protection of primary responsibilities and rights of States. It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this Act *[33 USCS §§ 1251* et seq.]. It is the policy of Congress that the States manage the construction grant program under this Act *[33 USCS §§ 1251* et seq.] and implement the permit programs under sections 402 and 404 of this Act *[33 USCS §§ 1342,* 1344]. It is further the policy of the Congress to support and aid research relating to the prevention, reduction, and elimination of pollution, and to provide Federal technical services and financial aid to State and interstate agencies and municipalities in connection with the prevention, reduction, and elimination of pollution.

(g) Authority of States over water. It is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this Act *[33 USCS §§ 1251* et seq.]. It is the further policy of Congress that nothing in this Act *[33 USCS §§ 1251* et seq.] shall be construed to supersede or abrogate rights to quantities of water which have been established by any State. Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.

33 USCS § 1311: (a) Illegality of pollutant discharges except in compliance with law. Except as in compliance with this section and sections 302, 306, 307, 318, 402, and 404 of this Act *[33 USCS §§ 1312,* 1316, 1317, 1328, 1342, 1344], the discharge of any pollutant by any person shall be unlawful.

33 USCS § 1312: (a) Establishment. Whenever, in the judgment of the Administrator or as identified under section 304 (l) *[33*

USCS § 1314 (l)], discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 301(b)(2) of this Act *[33 USCS § 1311*(b)(2)], would interfere with the attainment or maintenance of that water quality in a specific portion of the navigable waters which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water, effluent limitations (including alternative effluent control strategies) for such point source or sources shall be established which can reasonably be expected to contribute to the attainment or maintenance of such water quality.

33 USCS § 1362: (7) The term "navigable waters" means the waters of the United States, including the territorial seas.

33 USCS § 1365: (a) Authorization; jurisdiction. Except as provided in subsection (b) of this section and section 309(g)(6) *[33 USCS § 1319*(g)(6)], any citizen may commence a civil action on his own behalf—

(1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of (A) an effluent standard or limitation under this Act *[33 USCS §§ 1251* et seq.] or (B) an order issued by the Administrator or a State with respect to such a standard or limitation, or

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this Act *[33 USCS §§ 1251* et seq.] which is not discretionary with the Administrator. The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce such an effluent standard or limitation, or such an order, or to order the Administrator to perform such act or duty, as the case may be, and to apply any appropriate civil penalties under section 309(d) of this Act *[33 USCS § 1319*(d)].

(b) Notice. No action may be commenced—

(1) under subsection (a)(1) of this section—

(A) prior to sixty days after the plaintiff has given notice of the alleged violation (i) to the Administrator, (ii) to the State in which the alleged violation occurs, and

(iii) to any alleged violator of the standard, limitation, or order, or

(B) if the Administrator or State has commenced and is diligently prosecuting a civil or criminal action in a court of the United States, or a State to require compliance with the standard, limitation, or order, but in any such action in a court of the United States any citizen may intervene as a matter of right.

(2) under subsection (a)(2) of this section prior to sixty days after the plaintiff has given notice of such action to the Administrator, except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of sections 306 and 307(a) of this Act *[33 USCS §§ 1316,* 1317(a)]. Notice under this subsection shall be given in such manner as the Administrator shall prescribe by regulation.

(c) Venue; intervention by Administrator; United States interests protected.

(1) Any action respecting a violation by a discharge source of an effluent standard or limitation or an order respecting such standard or limitation may be brought under this section only in the judicial district in which such source is located.

(2) In such action under this section, the Administrator, if not a party, may intervene as a matter of right.

(3) Protection of interests of United States. Whenever any action is brought under this section in a court of the United States, the plaintiff shall serve a copy of the complaint on the Attorney General and the Administrator. No consent judgment shall be entered in an action in which the United States is not a party prior to 45 days following the receipt of a copy of the proposed consent judgment by the Attorney General and the Administrator.

. . .

(f) Effluent standard or limitation. For purposes of this section, the term "effluent standard or limitation under this Act" means (1) effective July 1, 1973, an unlawful act under subsection (a) of section 301 of this Act *[33 USCS § 1311*(a)]; (2) an effluent limitation or other limitation under section 301 or 302 of this Act *[33 USCS § 1311* or 1312]; (3) standard of performance under section 306 of this Act *[33 USCS § 1316];* (4) prohibition, effluent standard or pretreatment standards under

section 307 of this Act *[33 USCS § 1317];* (5) certification under section 401 of this Act *[33 USCS § 1341];* (6) a permit or condition thereof issued under section 402 of this Act *[33 USCS § 1342],* which is in effect under this Act *[33 USCS §§ 1251* et seq.] (including a requirement applicable by reason of section 313 of this Act *[33 USCS § 1323]);* or (7) a regulation under section 405(d) of this Act *[33 USCS § 1315*(d)][,].

. . .

APPENDIX B- Administrative Regulations

40 C.F.R. § 122.21(c): (c) Time to apply. (1) Any person proposing a new discharge, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the Director. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity. Facilities described under § 122.26(b)(14)(x) or (b)(15)(i) shall submit applications at least 90 days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits. Persons proposing a new discharge are encouraged to submit their applications well in advance of the 90 or 180 day requirements to avoid delay. See also paragraph (k) of this section and § 122.26(c)(1)(i)(G) and (c)(1)(ii).

40 C.F.R. § 122.2: Waters of the United States or waters of the U.S. means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate "wetlands;"

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

  (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

  (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

  (3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

40 C.F.R. § 135.3: (a) Violation of standard, limitation or order. Notice regarding an alleged violation of an effluent standard or limitation or of an order with respect thereto, shall include sufficient information to permit the recipient to identify the specific standard, limitation, or order alleged to have been violated, the activity alleged to constitute a violation, the person or persons responsible for the alleged violation, the location of the alleged violation, the date or dates of such violation, and the full name, address, and telephone number of the person giving notice.

(b) Failure to act. Notice regarding an alleged failure of the Administrator to perform any act or duty under the Act which is not discretionary with the Administrator shall identify the provision of the Act which requires such act or creates such duty, shall describe with reasonable specificity the action taken or not taken by the Administrator which is alleged to constitute a failure to perform such act or duty, and shall state the full name, address and telephone number of the person giving the notice.

(c) Identification of counsel. The notice shall state the name, address, and telephone number of the legal counsel, if any, representing the person giving the notice.

APPENDIX C- Legislative Materials

123 Cong. Rec. S39211 (daily ed. Dec. 15, 1977) (statement of Sen. Wallop), LEXIS 95 Cong. Senate Debates 1977, at *39211:

> The conferees accepted an amendment which will reassure the State [sic] that it is the policy of Congress that the Clean Water Act will not be used for the purpose of interfering with State water rights systems.
>
> * * *
>
> The amendment simply states that it is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this act. It also states that it is the further policy of Congress that nothing in this act will be construed for the purpose of superseding or abrogating rights to quantities of water which have been established by a State.

APPENDIX D- Internet Materials

Monitoring and Assessing Water Quality, EPA, at http://www.epa.gov/volunteer/stream/ vms58.html (Sept. 9, 2003):

5.8 TOTAL SOLIDS

What are total solids and why are they important?

Total solids are dissolved solids plus suspended and settleable solids in water. In stream water, dissolved solids consist of calcium, chlorides, nitrate, phosphorus, iron, sulfur, and other ions particles that will pass through a filter with pores of around 2 microns (0.002 cm) in size. Suspended solids include silt and clay particles, plankton, algae, fine organic debris, and other particulate matter. These are particles that will not pass through a 2-micron filter.

The concentration of total dissolved solids affects the water balance in the cells of aquatic organisms. An organism placed in water with a very low level of solids, such as distilled water, will swell up because water will tend to move into its cells, which have a higher concentration of solids. An organism placed in water with a high concentration of solids will shrink somewhat because the water in its cells will tend to move out. This will in turn affect the organism's ability to maintain the proper cell density, making it difficult to keep its position in the water column. It might float up or sink down to a depth to which it is not adapted, and it might not survive.

Higher concentrations of suspended solids can serve as carriers of toxics, which readily cling to suspended particles. This is particularly a concern where pesticides are being used on irrigated crops. Where solids are high, pesticide concentrations may increase well beyond those of the original application as the irrigation water travels down irrigation ditches. Higher levels of solids can also clog irrigation devices and might become so high that irrigated plant roots will lose water rather than gain it.

A high concentration of total solids will make drinking water unpalatable and might have an adverse effect on people who are not used to drinking such water. Levels of total solids that are too high or too low can also reduce the efficiency of wastewater treatment plants, as well as the operation of industrial processes that use raw water.

Total solids also affect water clarity. Higher solids decrease the passage of light through water, thereby slowing photosynthesis by

aquatic plants. Water will heat up more rapidly and hold more heat; this, in turn, might adversely affect aquatic life that has adapted to a lower temperature regime.
Sources of total solids include industrial discharges, sewage, fertilizers, road runoff, and soil erosion.
Total solids are measured in milligrams per liter (mg/L).