Developing Water Supplies: Navigating Federal Regulatory Requirements

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A local government or a private company that seeks to develop a new water supply source or system faces a daunting gauntlet of regulatory hurdles. The principal regulatory authorities confronted in public or industrial water supply development include Section 404 of the Clean Water Act and its regulations, the National Environmental Policy Act (NEPA), the Coastal Zone Management Act (CZMA), the Fish and Wildlife Coordination Act, and the Endangered Species Act (ESA). This chapter first describes the various permit programs that a project advocate must navigate and then discusses the related statutes that lend additional content and additional difficulty to the permit programs. These include NEPA, ESA, and various others. The chapter then discusses the nature of judicial review of permit decisions, and it concludes by discussing several of the most prominent environmental issues that typically arise in Section 404 and other regulatory permit proceedings.

Permit Programs

Clean Water Act Section 404

The principal regulatory authority confronted in efforts to develop water supplies from surface water sources is Section 404(a) of the federal Clean Water Act. Section 404 requires a permit from the U.S. Army Corps of Engineers for any "discharge of dredged or fill material into the navigable waters" of the United States. Army Department regulations and substantive criteria applicable to Section 404 and other Corps permit applications are published in the Code of Federal Regulations.

Contrary to a commonsense understanding of the statute, the "navigable waters" regulated under Section 404 include "wetlands." A "discharge" of "fill material" includes virtually any construction in "navigable waters," such as a dam or an intake structure. Section 404 therefore affects a large majority of all water supply projects. It does not apply to groundwater projects except incidentally (for example, to pipeline construction in wetlands or other "navigable waters"), and it can largely be avoided with certain innovative approaches, for example, wastewater reuse.

The permitting process ordinarily begins months, and often years, before a project proponent actually files an application. Extensive pre-application consultation with the Corps and other agencies is customary and expected. Pre-application consultation also includes the NEPA "scoping" process, which is designed to identify the alternatives and environmental issues to be addressed in NEPA documentation. A major project requires extensive evaluation and documentation of alternatives and impacts before the Corps will consider the permit application complete.

In addition, Section 404 and other permitting or licensing processes almost invariably involve a series of public notices and comment periods after the project proponent files an application and again after publication of a draft environmental impact statement (EIS) or environmental assessment (EA). Another notice and comment period may follow publication of a final EIS and, in unusual cases, publication of a final EA. The Corps’ district engineers, who are responsible for most 404 permit decisions, usu-
ally exercise their discretion to order public hearings in controversial cases, and water supply projects frequently are very controversial.

The Corps’ permit program regulations require “a careful weighing of all those factors” that are relevant to a determination “of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest.” The regulations set out a long list of factors that may be relevant, including conservation, economics, aesthetics, general environmental concerns, wetlands, recreation, water supply and conservation, water quality, “and, in general, the needs and welfare of the people.” The regulations also provide that “a permit will be granted unless the district engineer determines that it would be contrary to the public interest.”

Under Section 404(c) of the Clean Water Act, the Environmental Protection Agency (EPA) may prohibit issuance of a Section 404 permit if it determines, after notice and opportunity for public hearings, that the discharge ... will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.” Under Section 404(c), the EPA conducts a de novo review of the Corps’ findings regarding the availability of alternatives. Under current case law, however, the EPA may “veto” a public water supply project even if there are no alternatives.

Clean Water Act Section 401

Section 401(a)(1) of the Clean Water Act requires a state water quality certification (a 401 certification) as a precondition to issuance of a federal license or permit “to conduct any activity ... which may result in any discharge into the navigable waters.” The state in which the discharge will originate must certify that the discharge will comply with other specified sections of the act, which govern water pollution and water quality standards. This requirement applies to Corps permits under Section 404(a) and to other federal licenses or permits involving a “discharge into the navigable waters.”

Section 401(a)(2) provides that if the Administrator of the EPA determines that a discharge “may affect ... the quality of the waters of any other State,” the Administrator shall so notify the other state, the licensing or permitting agency, and the applicant. If within 60 days the other state determines “that such discharge will affect the quality of its waters so as to violate any water quality requirement in such State” and notifies the EPA and the licensing or permitting agency in writing that it objects to issuance of the license or permit and requests a public hearing on such objection, the licensing or permitting agency must hold such a hearing. The agency must then “condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.”

Various state regulatory programs have grown up independently and around Section 401. The Virginia General Assembly, for example, recently adopted a law requiring a State Water Protection Permit for surface water withdrawals and provided that issuance of the state permit shall constitute the certification required under § 401 of the Clean Water Act. The state permit comes with its own set of agency regulations and enforcement powers not attached to a conventional 401 certification.

The Coastal Zone Management Act Coastal states with federally approved Coastal Management Plans have authority to review federal license or permit applications for consistency with those plans. As discussed below, a state “consistency objection” functions as a veto of the federal license or permit application, subject to an appeal to the U.S. Secretary of Commerce.

The act provides that

[after final approval ... of a state’s management program, any applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state’s approved program. ...]

The meaning and interpretation of virtually every phrase in this passage, and its syntax, are controversial. For example, what is “a required Federal license or permit”? What are “enforceable policies”? What is the meaning of “affecting any land or water use or natural resource of the coastal zone”—is there a threshold of significance, or does any effect, no matter how minuscule, require a consistency certification? If the “affecting” test is met, does the act require an applicant to certify that its “activity” com-
plies with the enforceable policies of other states' management plans?

If a state objects to a consistency certification under the CZMA, the federal agency is disabled from approving the application unless the state's objection is set aside by the Secretary of Commerce:

At the earliest practicable time, the state ... shall notify the Federal agency concerned that the state concurs with or objects to the applicant's certification. ... No license or permit shall be granted by the Federal agency until the state ... has concurred with the applicant's certification or until, by the state's failure to act [within six months after receipt of the certification], the concurrence is conclusively presumed, unless the Secretary, on his own initiative or upon appeal by the applicant, finds ... that the activity is consistent with the objectives of this chapter or is otherwise necessary in the interest of national security.19

The secretary does not review a state's consistency objection on the merits to determine whether the state has reasonably or accurately determined that the application is inconsistent with its coastal plan. The CZMA does not provide for an remedy for inaccurate or arbitrary objection; it only authorizes the secretary to override an objection on the grounds that the activity is consistent with the objectives of the act or otherwise necessary in the interest of national security, despite the state's finding that the activity is inconsistent with its coastal plan. Therefore, if there is a remedy for an arbitrary objection to a consistency certification, it must be found in state law.

Rivers and Harbors Act of 1899

Section 10
Section 1020 of the Rivers and Harbors Act of 1899 requires a Corps of Engineers permit for construction of any "obstruction" of the navigable capacity of waters of the United States. Section 10 permitting is routinely handled in the same proceeding as Section 404 permitting and does not impose any significant additional restrictions on water supply development.

Section 9
Section 921 of the Rivers and Harbors Act of 1899 requires a permit from the Corps of Engineers and approval from Congress (in the case of interstate waters) or the state legislature (for "rivers and other waterways the navigable portions of which lie wholly within the limits of a single State") to construct "any ... dam, or dike over or in any ... navigable river, or other navigable water of the United States." Corps regulations define the critical terms of Section 9:

The term navigable waters of the United States means those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce.22

Note that this is a different definition from the one applicable under Section 404 of the Clean Water Act, discussed above:

A dike or dam is any impoundment structure that completely spans a navigable water of the United States and that may obstruct interstate waterborne commerce.23

Related Regulatory Statutes

Federal Power Act
Water supply withdrawals from a hydropower project that is licensed by the Federal Energy Regulatory Commission (FERC) or its predecessor, the Federal Power Commission, under the Federal Power Act (FPA)24 normally require FERC approval.25 Depending on the terms of the existing license, a formal license amendment may or may not be required. In some circumstances, developers of a water supply project may choose to include hydropower generation facilities, bringing the project under FERC jurisdiction. For example, the city of Fort Smith, Arkansas, apparently included hydropower generation facilities in its water supply project to obtain the federal power of eminent domain granted FERC licensees by the FPA26 to reach areas in another state, upstream of its dam, that would be flooded by its reservoir.27 Until recently, a reservoir project applicant also might choose to include hydropower facilities and subject the project to FERC's licensing jurisdiction to avoid state regulation of minimum reservoir releases.28 The Supreme Court now had held, however, that states may regulate minimum releases from FERC-licensed projects under authority of Section 401 of the Clean Water Act.29

FERC authorization was required for a different reason in Fairfax County Water Authority,30 which involved an after-the-fact issuance of an FERC license for a municipal water
supply-hydropower project that began operation in 1973. The Water Authority included hydropower generation facilities to meet a portion of its own need for electrical supply to the project, not to bring the project within FERC’s jurisdiction. Several years later, however, FERC required the authority to obtain a license to continue operating the project.

Migratory Bird Treaty Act
The federal Migratory Bird Treaty Act (MBTA) makes it "unlawful at any time, by any means or in any manner, to . . . take . . . any migratory bird, . . . or . . . nest, or egg of any such bird . . . " except under regulations made by the Secretary of the Interior. The U.S. Fish and Wildlife Service (USFWS) has argued in some cases that destruction of migratory bird nests or habitat is a "taking" within the meaning of the MBTA and requires a permit, but the courts so far have rejected that contention. In water supply development projects, land clearing or construction required for new impoundments or pipelines could result in takings issues.

National Environmental Policy Act
Section 102 of NEPA is the principal federal statute that affects the substantive and procedural course of federal agency actions under the above statutes. NEPA requires federal agencies to include environmental considerations in agency decision making. To implement this mandate, NEPA requires publication of environmental impact analyses for all "major Federal actions." Such analyses may be provided either in an EIS or in an EA with a Finding of No Significant Impact (FONSI).

An EIS is required for all "major Federal actions significantly affecting the quality of the human environment." An EIS requires far more time and expense than an EA and FONSI, so applicants often prefer to avoid the EIS process. Disputed cases normally turn on the question of whether the action will have "significant" environmental effects, because the courts usually hold that federal regulatory permits are "major" federal actions.

Federal agencies routinely require applicants to conduct the necessary environmental investigations and to submit environmental reports with permit applications; but the agencies remain responsible for compliance with NEPA, including the contents of the EIS or EA and FONSI. There is no possible substitute for employment of qualified environmental professionals for this work. In controversial cases, experienced counsel who are familiar with federal permit requirements and judicial review should participate in project development from the outset to minimize the risk of costly missteps or oversights.

NEPA regulations promulgated by the President’s Council on Environmental Quality (CEQ) provide that agencies should prepare EAs to assist in deciding whether to prepare an EIS and to aid in NEPA compliance if an EIS is not required. As a practical matter, in most cases the agency makes an initial decision whether to prepare an EIS or only an EA and FONSI and then proceeds accordingly, subject to being persuaded otherwise in the notice and comment proceedings. Whether an agency elects to prepare an EIS or an EA and FONSI, it normally circulates a draft document for review and comments from the public and from other federal and state agencies. Circulation of draft and final EISs is required by the CEQ’s NEPA regulations; circulation of draft EAs and FONSIs is optional.

Each federal agency has its own NEPA regulations, and all are bound by the CEQ’s NEPA regulations. President Clinton has asked Congress for legislation that would abolish the CEQ. If that occurs, the existing regulations will likely remain in effect until and unless they are amended by a successor agency or department.

Where possible, applicants should make use of "lead agency" agreements among agencies by filing simultaneous applications. By invoking this method of obtaining a single, coordinated review by multiple agencies of multiple permit applications, risks of delay, inconsistent permit conditions, and other inconsistent decisions can be minimized (though not eliminated).

NEPA is a procedural statute—it does not command substantive outcomes. If an agency follows the necessary procedures and considers environmental factors, NEPA does not require the most "environmentally sound" outcome if other factors support a different action.

The Endangered Species Act
Section 7 of the ESA requires all federal agencies, in consultation with either the Department of the Interior (through the USFWS) or the Department of Commerce (through the National Marine Fisheries Service, or NMFS), to "insure that any action authorized . . . by such agencies . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of a designated "critical habitat"
of such a species. All agencies thus have a substantive obligation not to jeopardize the continued existence of listed species or their critical habitats, either by agency activities or by regulatory permits.

If the continued existence of an endangered or threatened species or its critical habitat is threatened by a development activity, then the ESA presents one of the most serious threats to its viability. The agency (or its designee, such as the applicant) must prepare a "biological assessment" whenever either USFWS or NMFS determines that a listed species "may be present" in the "area of a proposed action." However, regulations promulgated jointly by USFWS and NMFS restrict this requirement to "major construction activities," defined as any "major Federal action significantly affecting the quality of the human environment as referred to in [NEPA]." In essence, to activities that require an EIS. If USFWS or NMFS finds that another agency's action "may affect listed species or critical habitat," it may require the agency to enter into formal consultation under the ESA. The consultation process includes a review of available scientific and commercial data and concludes with issuance of a "biological opinion" by USFWS or NMFS. The biological opinion states the service's conclusion on whether the proposed action would "jeopardize" the listed species. The consultation process cannot exceed 150 days without the applicant's consent.

A "jeopardy" opinion from USFWS or NMFS is not binding on another federal agency. The ESA authorizes citizens' suits to enjoin alleged violations, however, so an agency's decision to reject USFWS or NMFS opinions or recommendations is by no means a "safe harbor"; indeed, it is simply another invitation to litigation.

Project developers also are directly regulated by the ESA because it forbids any person to "take" any listed endangered species of fish or wildlife. To take under the act is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

The ESA regulations take the definition one step further, reading "harm" to include any act "which actually kills or injures wildlife," including "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns...."

These broad prohibitions do not extend to endangered or threatened plants. The ESA does not prohibit "taking" endangered plants; as relevant here, it forbids any person to remove, cut, dig up, damage, or destroy any such species "in knowing violation of any law or regulation of any State."

Other Consultation Requirements
Section 2 of the Fish and Wildlife Coordination Act (FWCA) speaks directly, by its title, to "impounding, diverting, or controlling of waters." When any "body of water" is proposed to be "controlled or modified for any purpose whatsoever, including navigation and drainage," the proposing or permitting federal agency must consult with the USFWS and the state wildlife resources agency, with a view to the conservation, development, and improvement of wildlife resources. The FWCA requires other federal agencies to give "full consideration" to the views of the Interior Department (i.e., USFWS) and any state agency. The statute does not, however, require permitting agencies to adopt those views.

In cases subject to FERC jurisdiction, the FPA requires special deference to the recommendations of state and federal fish and wildlife agencies. Whether this statute applies to FERC approvals for water withdrawals from FERC-licensed hydropower projects is undecided. When the FPA requires consultation, FERC may refuse to follow a fish and wildlife agency's recommendation only if it determines "that adoption of such recommendation is inconsistent with the purposes of [the FPA] or with other applicable provisions of law" and that FERC's own license conditions will protect, mitigate, and enhance fish and wildlife and their habitat.

The National Historic Preservation Act (NHPA) requires federal agencies to "take into account the effect" of federal licenses "on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register" of Historic Places. Typically, this requires an applicant to provide at least a "Phase I" archaeological survey in connection with a Section 404 or other permit application.

In sum, there are a vast array of federal and state regulatory agencies with a variety of authorities for review of water supply projects, and numerous opportunities for public involvement and comment (and resulting delays, seen from the perspective of the permit applicant). Water is a highly emotional issue for those who live or work in the vicinity of the source; and in most controversial cases, litigation can be expected at the conclusion of the permit process. Often, lead times of a decade or more and extensive...
quantities of stamina are necessary. Opponents of meritorious water supply and other development projects have perfected "the concept of 'winning through slowly losing'—using litigation to so delay and inflate the cost of a project as to make it not worth the effort."63

Litigation and Judicial Review

Courts normally conduct judicial review of federal permit actions on the agency's administrative record under the Administrative Procedure Act (APA).64 However, some courts appear almost routinely to admit evidence outside administrative records in NEPA actions, and others will do so if the project proponent demonstrates special circumstances, such as a need to explain highly technical evidence in the record or to demonstrate that the agency failed to address or investigate a relevant issue.65

In this author's opinion, an exception for the explanation of highly technical evidence makes eminent good sense because judges are often ill-equipped by training or experience to understand technical issues that are daily meat and potatoes for federal regulatory agencies. However, the latter exception, failure to address or investigate a relevant issue, is far more questionable. In theory, there may be cases in which an issue is so obvious and so important that a federal agency acts arbitrarily in failing to address it, even in the absence of any comment suggesting that it is an issue in the case. In fact, it will be a rare case indeed when a relevant, much less an important, issue escapes regulatory attention. Numerous federal and state regulatory agencies are involved in review of federal permit applications, under Section 404 and otherwise, from the scoping process, the very purpose of which is to identify issues for discussion in environmental documentation, through completion of a final EIS or EA and FONSI. Most of the pivotal agencies are dedicated solely to protecting natural resources, and they are not shy about asserting a need to address every conceivable resource issue in a permit application. Representatives of the public, necessarily including the parties who assert that the permitting agency has overlooked an important issue, also have abundant opportunities to participate in review of permit applications by submitting comments on the application itself and on draft and even final EISs and EAs.

Courts have held, however, that failure to raise an issue during the comment process should not preclude an environmental plaintiff from raising the same issue in subsequent litigation.66 This is the opposite of the normal rule in litigation, that issues not raised before a trial court or administrative agency will not be heard on appeal. The courts reason, however, that the plaintiff's default should not prejudice the public interests that it presumably represents.67 The potential for "sandbagging" appears obvious. Equally relevant, issues raised for the first time in litigation frequently have no merit whatsoever, or they would have been asserted in a timely fashion by resource agencies or other commentators. This view has impressive support in Vermont Yankee Nuclear Power Corp. v. NRDC.68

Administrative proceedings should not be a game or a forum to engage in unjustified obstructionism by making cryptic and obscure reference to matters that "ought to be" considered and then, after failing to do more to bring the matter to the agency's attention, seeking to have that agency determination vacated on the ground that the agency failed to consider matters "forcefully presented." . . .

And a single alleged oversight on a peripheral issue, urged by parties who never fully cooperated or indeed raised the issue below, must not be made the basis for overturning a decision properly made after an otherwise exhaustive proceeding.69

On review, the APA provides that an agency's decision to proceed without an EIS and/or to issue a license or permit, and its conditions, will be sustained unless it is shown to be arbitrary or capricious.70

Typical Environmental Issues and Conditions

Selection of the Best Practicable Alternative

The EPA's Section 404(b)(1) guidelines provide that "no discharge . . . shall be permitted if there is a practicable alternative . . . which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."71 Opponents of water supply projects invariably argue to the Corps, the EPA, other federal and state agencies, and in proceedings for judicial review of a permit decision that the applicant and the permitting agency have arbitrarily refused to select the best available alternative. It is not difficult for a creative mind to think of alternative water sources, located in
“somebody else’s backyard,” that are at least arguably superior in some respects to the selected project. The developer’s only remedy is to engage from the outset in a thorough, objective selection process, including potential opponents to the extent that they are willing to participate, and then prepare to defend the choice of alternatives through lengthy and expensive administrative and judicial reviews. Bitter experience has taught numerous water supply and other project applicants that even the most rigorous and objective evaluation of alternatives is at best a valid defense to a permit challenge. It is no guarantee against lengthy and expensive litigation for defending the particular choice.72

Wetlands Alteration or Destruction
Wetlands serve a variety of important biological functions, and preservation of wetlands is a high priority of the Section 404 permit system, as it should be.73

Stream Flow and Impacts on Water Quality
Industries and municipal wastewater treatment plants depend on river flows for assimilation of their wastewater discharges. In National Pollutant Discharge Elimination System permits, discharge limits are typically keyed to the minimum regulated flow in regulated river systems, or to the 7Q10 (the lowest seven-day average river flows that is statistically expected to occur in any ten years) in unregulated rivers. Permits for new reservoirs invariably require specified instantaneous minimum releases to protect water quality and promote waste assimilation. Minimum release requirements normally are higher in the summertime, because warmer water holds less dissolved oxygen. Substantial reductions in established minimum flows or in the 7Q10 may lead to violation of water quality standards and restrictions on existing discharges or to restrictions on water withdrawals during low flow conditions. Even minor reductions in average flows, which do not reduce regulated minimums or 7Q10s, can be highly controversial.74

Stream Flow and Impacts on Fisheries
Permits for reservoir projects typically impose higher minimum stream flow requirements in the spring, when fish use the water below the reservoir for spawning. This has been a major issue in numerous water projects.75

Minimum Instream Flow Conditions
Minimum instream flow (MIF) requirements vary seasonally, especially during fish spawning seasons. A recent trend in project permitting is to require that all withdrawals cease when stream flows fall below a specified threshold, such as 30 percent of the annual average flow. This can be a very expensive condition for industrial users, and it could be disastrous for a public water supply. While, to date, the author is not aware of any public water supply projects forced to accept such stringent MIF conditions, environmental advocates will likely demand such conditions in future projects.

Compensatory Conservation
An alternative to a stringent MIF regime, which may be more palatable to a public water supply provider, is to require increasing levels of conservation measures based on declining levels of stream flow.

Mitigation
Mitigation has numerous meanings and takes on numerous forms, depending on the resource issues involved. A detailed discussion of the universe of mitigation conditions is far beyond the scope of this chapter. The current regulatory requirements for mitigation of wetlands impacts, however, may be taken as a template for most issues that will arise in this context.

As a preliminary matter, mitigation may be employed to bring a project’s impacts below the NEPA threshold of “significance” and thereby to avoid preparation of an EIS.76 Although this should not be a controversial proposition, it was in some doubt for several years because a 1981 CEQ document that attempted to answer the “Forty Most Asked Questions” about the CEQ’s NEPA regulations stated that “[m]itigation measures may be relied upon to make a finding of no significant impact only if they are imposed by statute or regulation, or submitted by an applicant or agency as part of the original proposal.”77 Fortunately, the courts have refused to adopt this rule.

Wetlands Mitigation
A Memorandum of Agreement (MOA) between the EPA and the Corps of Engineers78 establishes a sequence for wetlands mitigation. In shorthand form, the sequence is: avoid, then minimize, then compensate. Under the MOA, one of the highest priorities in evaluating alternatives is to choose the one that avoids wetlands impacts to the maximum extent practicable: “Compensatory mitigation may not be used as a method to reduce environmental impacts in the evaluation of the least environmentally damaging
practicable alternatives for the purposes of requirements under [40 C.F.R.] Section 230.10(a)."79

After the least damaging alternative is chosen, "appropriate and practicable steps to minimize the adverse impacts will be required through project modifications and permit conditions."80 Finally, "appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required."81

Compensatory mitigation, when it is appropriate under the MOA, typically consists of wetlands restoration or "creation." The EPA-Corps MOA provides that

[c]ompensatory actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands) should be undertaken, when practicable, in areas adjacent or contiguous to the discharge site (on-site compensatory mitigation). If on-site compensatory mitigation is not practicable, off-site compensatory mitigation should be undertaken in the same geographic area if practicable (i.e., in close physical proximity and, to the extent possible, the same watershed).

Mitigation banking may be an acceptable form of compensatory mitigation under specific criteria designed to ensure an environmentally successful bank.

Simple purchase or "preservation" of existing wetlands resources may in only exceptional circumstances be accepted as compensatory mitigation.82

Conclusion

The environmental issues discussed in this chapter, which are often major bones of contention in administrative and judicial proceedings involving water supply project development, largely come down to the recognition that there are competing uses of river flows, wetlands, and other resources. Generally this competition is most acute under drought conditions, when limited availability of instream water supplies typically coincides with peak public water supply demands.

Competing uses of river flows include instream uses (which include human uses, e.g., hydropower generation, waste assimilation, fisheries, recreation, etc.) as well as "natural" uses (fish, wildlife, groundwater recharge, riparian habitat, etc.) and off-stream uses (human consumption, manufacturing processes, agricultural irrigation, etc.). The goal should be to recognize and accommodate all legitimate interests to the maximum extent possible. That goal, unfortunately, is often very difficult to achieve in the "real" world, where reason is frequently overwhelmed by emotions.

A number of states have recognized by statute or otherwise that human consumption is the highest and best use of water, to be preferred in cases of irreconcilable conflict.83 In reality, however, those who want to develop a water supply for human consumption face an amazing gauntlet of regulatory hurdles. As many project sponsors have learned through bitter experience, the mere assertion of an environmental issue, however bogus, by a "responsible" spokesman such as a state or federal agency can have the same dilatory effect as recognition of a genuine issue, even where the record is more than sufficient to demonstrate that the issue is at best illusory.

Notes

4. See 33 C.F.R. § 323.2(f).
6. 33 C.F.R. § 320.4.

7. Id.
8. Id. (emphasis added).
13. Id.
14. See, e.g., City of Frederickburg, Va. v. FERC, 876 F.2d 1109 (4th Cir. 1989) (FERC hydropower project license under the Federal Power Act).
22. 33 C.F.R § 321.2.
24. The FERC, under the FEA, invariably has licensing jurisdiction over private hydropower projects. Federal hydropower projects are authorized by Congress and are not subject to the FPA; withdrawals from such facilities therefore do not require FERC's approval.
32. See Seattle Audubon Soc'y v. Evans, 952 F.2d 297 (9th Cir. 1991).
34. NEPA § 102(2)(C), 42 U.S.C. § 4332(2)(C).
36. See 40 C.F.R. §§ 1501.4(b)–(c) and 1508.9.
37. See 40 C.F.R. § 1502.19.
38. CEQ's regulations are published at 40 C.F.R. pts. 1500–1508 (1993).
39. See generally 40 C.F.R. § 1501.5.
42. See, e.g., TVA v. Hill, 437 U.S. 153 (1977) (the "snail darter case").
43. 16 U.S.C. § 1536(b).
46. 50 C.F.R. § 402.14.
51. 50 C.F.R. § 17.3; see also id. (definition of "harass"). A divided panel of the U.S. Court of Appeals for the D.C. Circuit recently held that inclusion of habitat modification in § 17.3 was invalid because it exceeded the authority delegated by Congress. Sweet Home Chapter of Communities for a Great Oregon v. Interior Dep't, 17 F.3d 1463, reheg denied, 30 F.3d, 190 (D.C. Cir. 1994). Contra Paulita v. Hawaii Dept of Land and Natural Resources, 852 F.2d 1106 (9th Cir. 1988).
52. See discussion supra.
53. See discussion supra.
54. See discussion supra.
55. See discussion supra.
56. See discussion supra.
57. See discussion supra.
65. See, e.g., Asarco, Inc. v. EPA, 616 F.2d 1153, 1158–61 (9th Cir. 1980); County of Suffolk v. Secretary of the Interior, 562 F.2d 1368, 1384–85 (2d Cir. 1977) (citing cases), cert. denied, 434 U.S. 1064 (1978).
66. See County of Suffolk, supra, 562 F.2d at 1385.
69. Id. at 553–54, 558.
71. 40 C.F.R. § 230.10(a).
73. See, e.g., 40 C.F.R. § 230.41; James City County, Va. v. U.S. EPA, supra, 12 F.3d 1330 (challenge to an EPA Section 404(c) "veto" based on unacceptable adverse impacts of wetlands destruction).
74. See, e.g., North Carolina v. Hudson, supra, 665 F. Supp. 428, 438–40 (approximately 1 percent reduction in average flow; no impact on compliance with existing minimum flow conditions).
79. Id.
80. Id.
81. Id.
82. Id.