

Understanding Water Rights and Restrictions

I. Common Law Riparian Rights in Surface Waters¹

Many authorities could be quoted for the basic law of riparian rights.² The following statement from *Purcellville v. Potts*, 179 Va. 514, 520-22, 19 S.E.2d 700, 702-03 (1942), will do as well as any other. (Citations are omitted.)

“The well settled general rule on this point is that each riparian proprietor has *ex jure naturae* an equal right to the reasonable use of the water running in a natural course through or by his land for every useful purpose to which it can be applied, whether domestic, agricultural or manufacturing, provided it continues to run, after such use, as it is wont to do, *without material diminution* or alteration and *without pollution*; but he cannot diminish its quantity materially or exhaust it (except perhaps for *domestic* purposes and in the *watering of cattle*) to the prejudice of the lower proprietors, unless he has acquired a right to do so by grant, prescription or license.”

¹ “Common law” is judge-made law, announced in judicial opinions in specific cases. It is different from statutes (enacted by Congress or the General Assembly) and regulations (promulgated by administrative agencies). *See generally* Va. Code § 1-200: “The common law of England, insofar as it is not repugnant to the principles of the Bill of Rights and Constitution of this Commonwealth, shall continue in full force within the same, and be the rule of decision, except as altered by the General Assembly.”

The common law riparian rights doctrine is followed in most of the eastern United States. The arid states of the American West follow a very different system, the prior appropriation doctrine. The essential premise (greatly oversimplified) of the prior appropriation doctrine is that anyone who makes an offstream beneficial use of water from a stream acquires the right to continue making the same use, in the same amounts, which is superior to subsequent users (appropriators) and inferior to prior users from the same stream. Priorities of appropriation come into play in times of shortage, when junior appropriators must curtail or cease their withdrawals, in order of priority, while senior appropriators may continue using to their full extent of their appropriative rights. An excellent initial source for explanation of the prior appropriation doctrine is 2 R. Beck, ed., *Waters and Water Rights* Ch. 11-17 (Repl. Vol. 2001).

² The leading treatise on American water law today is Professor Robert Beck’s multi-volume *Waters and Water Rights*. Volume 1, Chapters 6-9, provides a lengthy and detailed discussion of the riparian doctrine, including modern “Regulated Riparianism” (Ch. 9).

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While a riparian owner is entitled to a reasonable use of the water, he has no right to divert it for use beyond his riparian land, and any such diversion and use is an infringement on the rights of the lower riparian proprietors who are thereby deprived of the flow. Such a diversion is an extraordinary and not a reasonable use....

....

“It has been held with practical unanimity that a municipal corporation, in its construction and operation of a water supply system, by which it impounds the water of a private stream and distributes such water to its inhabitants, receiving compensation therefor, is not in the exercise of the traditional right of a riparian owner to make a reasonable domestic use of the water without accountability to other riparian owners who may be injured by its diversion or diminution. ‘The use of the waters of a stream to supply the inhabitants of a municipality with water for domestic purposes is not a riparian right.’ ... ‘The weight of authority * * * holds a municipal corporation civilly liable for diverting the waters of a private watercourse for the purposes of a public water supply, either with or without legislative authority.’ ... ‘A municipal corporation will be liable for diverting the waters of a stream or watercourse and depriving lower riparian owners of the use thereof.’”

“[T]he rights of a riparian owner” are enumerated stated in *Thurston v. Portsmouth*, 205 Va. 909, 911-12, 140 S.E.2d 678, 680 (1965), quoting *Taylor v. Commonwealth*, 102 Va. 759, 773, 47 S.E. 875 (1904):

“First. The right to be and remain a riparian proprietor and to enjoy the natural advantages thereby conferred upon the land by its adjacency to the water.

“Second. The right of access to the water, including a right of way to and from the navigable part.

“Third. The right to build a pier or wharf out to navigable water, subject to any regulations of the State.

“Fourth. The right to accretions or alluvium.

“Fifth. The right to make a reasonable use of the water as it flows past or laves the land.”

Each of the listed rights (and in recent years particularly the third, the right of wharfage) has been the topic of much litigation. This paper focuses on the fifth listed right, the right of reasonable use.³

The *Thurston-Taylor* formulation does not refer to the riparian owners' right "to have the natural flow of the water of the spring to their lands, undiminished in volume except as affected by reasonable and necessary use by the upper owner in the exercise of his riparian rights," *Hite v. Town of Luray*, 175 Va. 218, 225, 8 S.E.2d 369, 372 (1940); but that right obviously is closely related to the right of reasonable use. See also, e.g., *Panther Coal Co. v. Looney*, 185 Va. 758, 764-65, 40 S.E.2d 298, 301-02 (1946):

In *Trevett v. Prison Ass'n*, [98 Va. 332, 36 S.E. 373 (1900)] is this: "In 1 Wood on Nuisances, (3rd Ed.), section 427, it is said: 'The right of a riparian owner to have the water of a stream come to him in its natural purity is as well recognized as the right to have it flow to his land in its usual flow and volume. But in reference to this, as with the air, it is not every interference with the water that imparts impurities thereto, that is actionable, but only such as impart to the water such impurities as substantially impair its value for the ordinary purposes of life, and render it measurably unfit for domestic purposes; * * *.'

* * *

"It was said by the court in *Merrifield v. Worcester*, 110 Mass. 216, 219, 14 Am. Rep. 592: 'Cultivating and fertilizing the lands bordering on the stream, and in which are its sources, their occupation by farmhouses and other erections, will unavoidably cause impurities to be carried into the stream. As the lands are subdivided, and their occupation and use become multifarious, these causes will be rendered more operative, and their effects more perceptible. The water may thus be rendered unfit for many uses for which it had before been suitable; but so far as that condition results only from reasonable use of the stream in accordance with the common right, the lower riparian proprietor has no remedy.'

In *MacNamara v. Taft*, 196 Mass. 597, 83 N.E. 310, 312, 13 L.R.A. (N.S.) 1044, this is said: "It is only when the owner in the stream below is materially affected in his right to use the water,

³ The reasonable use right is a correlative right. In times of shortage (drought), all users may be required to curtail uses so that no one is cut off entirely. That is a very different system from the western prior appropriation doctrine discussed in footnote 1, above.

by reason of its impurity as it enters his premises, that he has a remedy against the upper proprietor by whose use the quality of the water is impaired. For a slight impairment of quality, necessarily resulting from a reasonable use of the stream or of the land abutting on it, there is no liability. But the rules and principles so fully stated in *Parker v. American Woolen Co.*, [195 Mass. 591, 81 N.E. 468], forbid the unnecessary discharge of polluting substances into a stream in quantities that appreciably affect the purity of the waters when they reach the premises of a riparian proprietor below, and render them materially less fit for domestic or other uses to which they might be put there than when they came to the land of the owner who is charged with polluting them.”

There are state-to-state variations in the common law riparian rights doctrine, of course. One of the major differences among the states is between the “natural flow” and “reasonable use” rules of riparian rights. See, e.g., *Harrell v. Conway*, 224 Ark. 100, 102-03, 271 S.W.2d 924, 926 (1954):

the riparian theory may be subdivided into the doctrine of natural flow and the doctrine of reasonable use, the two being inconsistent with each other. According to the natural flow theory, each riparian owner is entitled to have the watercourse maintained in its natural state, not sensibly diminished in quantity or impaired in quality. Under this theory a riparian owner may withdraw water for domestic uses but not for such artificial uses as the irrigation of crops or the operation of a factory.

Under the reasonable use theory each landowner is entitled to make any reasonable use of the water, provided that such use does not unreasonably interfere with the beneficial use of the stream by others. Under this theory a riparian owner may use the water for irrigation or for any other purpose, the reasonableness of the use being the only measure of riparian rights.

A more elaborate explanation of the distinction and its historical and sociological bases is provided in *Harris v. Brooks*, 225 Ark. 436, 441-43, 283 S.W.2d 129, 132-33 (1955). Virginia has long adhered to the more moderate “reasonable use” rule, as indicated by the *Purcellville* decision quoted above.

Is the riparian rights doctrine relevant in today’s legal environment?

The probable answer is that while the law of riparian rights has not yet passed entirely into the shadows, its relevance has been greatly diminished by a vast array of modern statutes that vest enormous regulatory power in state and federal agencies. An owner who wants to challenge a permitted water withdrawal as a violation of his riparian rights may do so, to be sure; but as a practical matter,

such attacks generally are likely to be little more than a nuisance and at most a source of delay. The “action” today is at the regulatory agencies (and in judicial review of their decisions, but to a somewhat lesser extent due to highly deferential standards of review); and of course riparian rights are sufficient – but far from necessary – to confer standing to challenge a regulatory authorization. *See, e.g., Mattaponi Indian Tribe v. Commonwealth*, 261 Va. 366, 541 S.E.2d 920 (2001).

Regulatory permits do not insulate water users from challenges based on riparian rights; but the simple fact is that cumulative regulatory requirements almost invariably are more stringent than the limitations of the reasonable use doctrine of riparian law. Much as federal and state regulation of water pollution have effectively displaced the common law of nuisance, federal and state law directly and indirectly regulating water withdrawals are at least in the process of supplanting the common law of riparian rights in flowing waters. A major reason for this prediction is that statutory programs address instream as well as offstream uses; they protect environmental amenities as well as developmental interests, whereas the riparian doctrine – particularly under the more modern “reasonable use” approach – focuses much more heavily on offstream, developmental uses. A regulatory permit may or may not be accepted as evidence of reasonableness in a riparian rights adjudication, but I am not aware of any cases testing that proposition. Of course that may simply reflect the increasing desuetude of the riparian doctrine, as the strategic decisions of lawyers in water use controversies bear out the accuracy of my prediction that application of the riparian doctrine to water allocation disputes today is effectively in the process of dying – or perhaps even already dead.

The one area where a riparian rights claim might still frustrate a water withdrawal project that could pass regulatory muster is in the context of withdrawals for use on non-riparian land (land that is not in a single parcel adjacent to the waterway and in the same watershed), including “interbasin transfers” for municipal water supplies. “Reasonable use” of surface water is limited to use on riparian property and in the watershed of the stream, and diversion of water to non-riparian property is *per se* unreasonable under the common law. *See Purcellville v. Potts*, 179 Va. at 521, 19 S.E.2d at 703:

While a riparian owner is entitled to a reasonable use of the water, he has no right to divert it for use beyond his riparian land, and any such diversion and use is an infringement on the rights of the lower riparian proprietors who are thereby deprived of the flow. Such a diversion is an extraordinary and not a reasonable use.

Injunctive relief is presumptively available for a violation of riparian rights (*see id.* at 522, 19 S.E.2d at 703), but Virginia case law is not entirely clear on the question whether a plaintiff owner must show actual damage to obtain an injunction. According to *Purcellville* (the most recent Virginia case on the issue), “a diversion of a natural watercourse, *though without actual damage to a lower riparian owner*, is an infringement of a legal right and imports damage, and that

infringement a court of equity will prevent.” *Id.* at 524, 19 S.E.2d at 704 (emphasis added.) The quoted language may fairly be described as *dictum*,⁴ however, inasmuch as the evidence in that case demonstrated that the Town’s diversions were “very injurious to the property of the plaintiffs.” *Id.* at 520, 19 S.E.2d at 702.

Other (and older) cases are to the contrary. In *Virginia Hot Springs Co. v. Hoover*, 143 Va. 460, 467, 130 S.E. 408, 410 (1925) (quoting *Stratton v. Mt. Hermon Boys’ School*, 216 Mass. 83, 103 N.E. 87 (1913)), the Court said this:

A proprietor may make any reasonable use of the water of the stream in connection with his riparian estate and for lawful purposes within the watershed, provided he leaves the current diminished by no more than is reasonable, having regard for the like right to enjoy the common property of other riparian owners. If he diverts the water to a point outside the watershed or upon a disconnected estate, *the only question is whether there is actual injury to the lower estate* for any present or future reasonable use. *The diversion alone, without evidence of such damage, does not warrant a recovery even of nominal damages.* [Emphases added.]

Town of Gordonsville v. Zinn, 129 Va. 542, 560, 562, 106 S.E. 508, 514, 515 (1921), is to the same effect:

[I]n an action for damages or suit for injunction by a lower against an upper riparian landowner for wrongful diversion of water by the latter, either upon the upper riparian land or therefrom to non-riparian land, the plaintiff, in order to prevail must show some substantial actual damage occasioned by the diminution of the quantity of the water which the plaintiff has the right to use, or (in cases of suits for injunction), threatened damage

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.... Relief by injunction being sought by the town, that right of use of the water, to the extent that it exists, should be protected from all substantial injury, whether actual or threatened, by the wrongful continuous diversion of water by the upper riparian owner. Beyond this the court will not go to the relief of the plaintiff, whatever may be the lack of abstract right in the upper riparian owner to divert the water. [Emphasis added.]

⁴ *Dictum* (plural *dicta*) is legalese for a statement in a judicial opinion that is not necessary to the decision and therefore may not be considered precedent in a later case, when the question is actually presented for decision.

And even if the *Purcellville* approach prevails, a municipal government or other user who has the power of eminent domain may condemn the riparian rights – which are, after all, only a form of property – of the complaining parties. See *Purcellville*, 179 Va. at 525, 19 S.E.2d at 704 (affirming an injunction against the Town’s withdrawal but postponing its effectiveness to give the Town an opportunity to institute condemnation proceedings).

The federal common law doctrine of equitable apportionment

The U.S. Supreme Court has exclusive original jurisdiction of suits between States. U.S. Constitution, Art. III, § 2; 28 U.S.C. § 1251(a). In a series of State v. State cases raising competing claims to the use of interstate waterways, beginning in 1902, the Court has held as a matter of federal common law that rivers are a common resource that must be shared among the States through or along which they flow: there must be an “equitable apportionment of benefits between the two states resulting from the flow of the river.” *Kansas v. Colorado*, 206 U.S. 46, 118 (1907). Reflecting the “sovereign” status of the States in our federal system, the Court has declined to restrict withdrawals by users in an upstream State “unless the threatened invasion of rights is of serious magnitude and established by clear and convincing evidence.” *Connecticut v. Massachusetts*, 282 U.S. 660, 669 (1931).

Equitable apportionment has been more important in the Western United States than in the East. The U.S. Supreme Court first asserted its authority to apportion interstate waters under federal common law in *Kansas v. Colorado*, 185 U.S. 125 (1902); and in the 106 years since then, disputes among western States that adhere to the prior appropriation doctrine as a matter of state property law have dominated its (limited) docket of equitable apportionment cases, and a few suits between riparian and appropriation States have accounted for most of the remainder.

Reflecting that history, the Supreme Court soon developed the principle (as expressed in *Colorado v. New Mexico* (I), 459 U.S. 176, 184 (1982)) that “[t]he laws of the contending States concerning intrastate water disputes are an important consideration governing equitable apportionment. When ... both States recognize the doctrine of prior appropriation, priority becomes the ‘guiding principle’ in an allocation between competing States.” The underlying reasoning probably was articulated most eloquently in the case that clearly established the principle, *Wyoming v. Colorado*, 259 U.S. 419, 470 (1922):

We conclude that Colorado’s objections to the doctrine of appropriation as a basis of decision are not well taken, and that it furnishes the only basis which is consonant with the principles of right and equity applicable to such a controversy as this is. The cardinal rule of the doctrine is that priority of appropriation gives superiority of right. Each of these states applies and enforces this

rule in her own territory, and it is the one to which intending appropriators naturally would turn for guidance. The principle on which it proceeds is not less applicable to interstate streams and controversies than to others. Both states pronounce the rule just and reasonable as applied to the natural conditions in that region, and to prevent any departure from it the people of both incorporated it into their Constitutions. It originated in the customs and usages of the people before either state came into existence, and the courts of both hold that their constitutional provisions are to be taken as recognizing the prior usage rather than as creating a new rule. These considerations persuade us that its application to such a controversy as is here presented cannot be other than eminently just and equitable to all concerned.

More recent equitable apportionment decisions, however, have focused more on “the protection of existing economies” and placed the burden of proof on a State that sought an apportionment that would threaten existing uses in another State. In *Colorado v. New Mexico* (I), the Court considered Colorado’s claim to a share of a small interstate River whose waters already were “fully appropriated by users in New Mexico,” 459 U.S. at 177; and it said this:

We recognize that the equities supporting the protection of existing economies will usually be compelling. The harm that may result from disrupting established uses is typically certain and immediate, whereas the potential benefits from a proposed diversion may be speculative and remote. Under some circumstances, however, the countervailing equities supporting a diversion for future use in one State may justify the detriment to existing users in another State. This may be the case, for example, where the State seeking a diversion demonstrates by clear and convincing evidence that the benefits of the diversion substantially outweigh the harm that might result....

Id. at 187. That decision concluded with a remand to the Court’s Special Master⁵ “for specific factual findings relevant to determining a just and equitable apportionment of the water of the Vermejo River between Colorado and New Mexico.” *Id.* at 190. After the remand, the Court held in *Colorado v. New Mexico* (II), 467 U.S. 310 (1984), that Colorado had not met its burden of proving, by “clear and convincing evidence,” either that reasonable conservation measures in New Mexico could compensate for some or all of its proposed

⁵ Despite its exclusive original jurisdiction of suits between States, the Supreme Court is not equipped to conduct trials of such suits by itself. A Special Master is essentially a trial judge who hears evidence and makes recommendations to the Court.

diversion or that any injury to New Mexico would be outweighed by the benefits to Colorado from the diversion. It concluded by rejecting “the notion that the mere fact that the Vermejo River originates in Colorado automatically entitles Colorado to a share of the river’s waters,” *id.* at 323 – despite the fact that “approximately three-fourths of the water in the Vermejo River system is produced in Colorado,” *id.* It reasoned:

Both Colorado and New Mexico recognize the doctrine of prior appropriation ... and appropriative, as opposed to riparian, rights depend on actual use, not land ownership.... It follows, therefore, that the equitable apportionment of appropriated rights should turn on the benefits, harms, and efficiencies of competing uses, and that the source of the Vermejo River’s waters should be essentially irrelevant to the adjudication of these sovereigns’ competing claims.

Id. It remains to be seen whether the same conclusion – that the source of the waters in an interstate river is “essentially irrelevant” – would also apply to the competing claims of eastern States that adhere to the riparian doctrine and not the law of prior appropriation.

When the equitable apportionment doctrine crossed the Mississippi and made its way into Eastern water law, in 1931, the reasoning of the 1922 *Wyoming v. Colorado* decision (quoted above) appeared to provide a compelling argument in favor of downstream States that sought to block interbasin water transfers for upstream municipal supplies, because such transfers are *per se* unreasonable under the Eastern riparian rights doctrine. The Supreme Court rejected that argument, however, in *Connecticut v. Massachusetts*, 282 U.S. 660 (1931), and *New Jersey v. New York*, 283 U.S. 336 (1931) – the first and so far the only times that the Court has applied the law of equitable apportionment to interstate rivers in the East. In *Connecticut v. Massachusetts*, the Court denied Connecticut, the downstream State, an injunction forbidding interbasin transfers from the Connecticut River Basin to the Boston metropolitan area. In *New Jersey v. New York*, it likewise rejected New Jersey’s argument for application of the riparian rights doctrine to bar Delaware River Basin withdrawals for New York City’s municipal supplies. Justice Holmes’ Opinion for the Court in that case brushed aside New Jersey’s argument for strict application of the two States’ shared common law riparian doctrine as a matter of federal common law:

A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it. New York has the physical power to cut off all the water within its jurisdiction. But clearly the exercise of such a power to the destruction of the interest of lower States could not be tolerated. And on the other hand equally little could New Jersey be permitted to require New York to give up its power altogether in order that the river might come down to it undiminished.

283 U.S. at 342-43. He concluded by observing that “[t]he removal of water to a different watershed obviously must be allowed at times unless States are to be deprived of the most beneficial use on formal grounds.” *Id.* at 343.⁶

II. Regulation of Surface Water Withdrawals and Wetlands in Virginia

Regulation of surface water withdrawals occurs both at the federal level, through the Army Corps of Engineers, and at the State level, through the State Water Control Board. Federal regulatory authorities are discussed in Part V, below.

Until 1989 there was no Virginia statute that gave the SWCB express authority to regulate surface water withdrawals or wetlands. (Over the previous ten years, however, the SWCB had begun including water withdrawal limitations in Clean Water Act § 401 (33 U.S.C. § 1341) certifications for municipal water supply projects.) In 1989 the General Assembly enacted two new statutes establishing permitting processes to protect instream beneficial uses.⁷ Under the Virginia Water Protection Permit Act (which has been amended several times and was rewritten and recodified in 2007), the SWCB regulates excavation, filling, dumping, permanent flooding and impounding wetlands, and other activities that significantly alter or degrade existing wetland acreage or functions. Va. Code §§ 62.1-44.15:20 through -44.15:23. The Surface Water Management Areas Act authorizes the SWCB to designate areas where all existing and new water uses must be regulated as stream flow rates decline. Va. Code §§ 62.1-242 through -253.

A. Virginia Water Protection Permit

Issuance of a Virginia Water Protection Permit (VWPP or VWP Permit) constitutes the state water quality certification required by § 401 of the federal Clean Water Act. Va. Code § 62.1-44.15:20(D). *See* 33 U.S.C. § 1341 (Clean

⁶ The Court probably recognized that a decision to apply strictly the riparian rights doctrine would have far more conclusive consequences in an interstate context than within a single State. That is because the power of eminent domain may be exercised to acquire riparian rights necessary to allow interbasin transfers for public supply in a single state, but no State has the power to authorize municipal condemnation of property rights in another State.

⁷ 1989 Va. Acts cc. 720, 721. “Beneficial use” means “both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. Offstream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural, electric power generation, commercial and industrial uses.” Va. Code § 62.1-10(b).

Water Act § 401). Permits must “contain requirements for compensating impacts on wetlands... sufficient to achieve no net loss of existing wetland acreage and functions” and may contain conditions on water withdrawals. Va. Code §§ 62.1-44.15:21(B), 62.1-44.15:22(A). The Board is required to develop general permits “as it deems appropriate,” and it is specifically directed to develop general permits for activities causing less than one-half acre of wetland impacts, linear transportation projects, and certain activities regulated by other agencies. Va. Code § 62.1-44.15:21(D). The Board’s regulations provide various exclusions from the permitting requirement, including most normal farming activities, construction and maintenance of farm ponds and farm and forest roads, and maintenance of existing and serviceable dikes, levees, dams, breakwaters and other similar structures. 9 VAC 25-210-60. Waivers are available for activities impacting isolated wetlands of “minimal ecological value.” Va. Code § 62.1-44.15:21(D); 9 VAC 25-210-220.⁸

New regulations issued in 2007 create an optional “preapplication review panel” process and require preapplication public notices for new or expanded surface water supply projects requiring VWP permits. If requested by any person, a potential applicant must hold at least one public information meeting with at least 14 days public notice. 9 VAC 25-210-75.

An applicant for a permit for a “major” surface water withdrawal (more than 90 million gallons per month), a public surface water supply project, or any project that would alter instream flows must provide a narrative description of “the water supply issues that form the basis of the proposed project purpose” and demonstrate that the project meets an established local water supply need. All VWPP applicants must demonstrate that they have avoided and/or minimized impacts to the aquatic environment, that they have evaluated practicable alternatives to the proposed activity, and that the proposed activity is the least environmentally damaging practicable alternative in terms of impacts to water quality and fish and wildlife resources. 9 VAC 25-210-115. The regulation prescribes a detailed alternatives analysis.

An application must be submitted at least 180 days prior to the date planned for commencement of the permitted activity. The permit application form is the familiar Joint Permit Application for the federal § 404 permit, State § 401 certification and Virginia Marine Resources Commission permit under Va. Code

⁸ See 9 VAC 25-210-10 (defining “isolated wetlands of minimal ecological value” as non-forested wetlands less than one-tenth of an acre in size that have no surface water connection to other state waters, are not located in a FEMA-designated 100-year floodplain, are not identified by the Virginia Natural Heritage Program as a rare or state significant natural community and do not contain any federally- or state-listed threatened or endangered species).

§ 28.2-1205. 9 VAC 25-210-80. *See* <http://www.nao.usace.army.mil/executive/executive%20offices/regulatory%20office/pn/jpaforms.htm> (visited June 10, 2008).⁹ Thirteen categories of information (listed over approximately three pages of the Virginia Administrative Code) must be provided to make any application complete, plus another eight categories if the application involves a surface water withdrawal or Federal Energy Regulatory Commission (FERC) license. *See* 9 VAC 25-210-80(B).

The Board must issue a permit if determines that the proposed activity is consistent with the provisions of the Clean Water Act and the State Water Control Law and will protect instream beneficial uses, but “only if the Board finds that the effect of the impact, together with other existing or proposed impacts to wetlands, will not cause or contribute to a significant impairment of state waters or fish and wildlife resources.” Va. Code §§ 62.1-44.15:20(B), 62.1-44.15:21(A). “Domestic and other existing beneficial uses shall be considered the highest priority uses.” Va. Code § 62.1-44.15:22(A).¹⁰ Permits must “address avoidance and minimization of wetland impacts to the maximum extent practicable” and contain requirements for compensating wetland impacts sufficient to achieve no net loss of existing wetland acreage and functions. Va. Code §§ 62.1-44.15:21(A), (B). *See* 9 VAC 25-210-116 (detailed regulation requiring compensation for both wetland and stream impacts).

The SWCB staff will prepare a draft permit if it tentatively decides to issue a permit. 9 VAC 25-210-120. Permits include a number of standard conditions, including monitoring and recordkeeping. *Id.*; 9 VAC 25-210-90. Permits also may contain various special conditions, including instream flow conditions, water quality standards, toxic pollutant controls, and best management practices. 9 VAC 25-210-110.

⁹ A less detailed application is prescribed for a new or expanded minor surface water withdrawal (less than 90 million gallons per month). 9 VAC 25-210-80(C), 25-210-10.

¹⁰ *See also* Va. Code §§ 62.1-10(b), 62.1-263, *supra* (public water supply use for human consumption is considered the highest priority; and when proposed ground water uses are in conflict or available supplies of ground water are insufficient for all who desire to use them, preference shall be given to uses for human consumption over all others); Va. Code § 62.1-44.36 (in formulating the Commonwealth’s water resources policy, the Board shall, among other things, take into consideration the principle that adequate and safe supplies should be preserved and protected for human consumption, while conserving maximum supplies for other beneficial uses; and “[w]hen proposed uses of water are in mutually exclusive conflict or when available supplies of water are insufficient for all who desire to use them, preference shall be given to human consumption purposes over all other uses”).

Before issuing any VWP Permit, the SWCB must consult with and give “full consideration” to the written recommendations of a number of other state agencies. Consultation must include the need for balancing instream uses with offstream uses. The agencies have 45 days to comment on a proposed permit prior to its issuance. Va. Code § 62.1-44.15:20(C).

In 2007, following several very controversial Board decisions on permit matters, the General Assembly passed a statute that would consolidate the State Air Pollution Control Board, the State Water Control Board, and the Waste Management Board into one eleven-member citizen board to be called the Virginia Board of Environmental Quality. This new board would have authority to adopt regulations, including general permit regulations, but all other responsibilities of the existing boards, including the authority to issue and enforce permits, would be transferred to the Department of Environmental Quality. However, this bill required the 2008 Session of the General Assembly to pass the legislation again before it would become effective.

The 2008 Session declined to reenact the 2007 bill and, instead, passed a separate measure to reallocate decision-making functions between the boards and DEQ. Permit decisions will usually be made by the DEQ Director, but an individual board can exercise its authority in certain cases to make such decisions. *See* Va. Code § 62.1-44.15.02 in 2008 Va. Acts, c. 557, effective July 1, 2008. The circumstances in which a board can take over such decision-making are not at all clear, so interested parties must await further administrative or judicial interpretations of or legislative changes to the statute.

When a board makes a decision that varies from the DEQ’s staff recommendation, the board is required to consult “with legal counsel” and provide, contemporaneously with the decision, “a clear and concise statement explaining the reason for the variation and how [its] decision is in compliance with applicable laws and regulations.” Va. Code § 62.1-44.15.02(P) in 2008 Va. Acts, c. 557, effective July 1, 2008. The requirements to consult with legal counsel (which should be read to refer to the Virginia Attorney General) and to document compliance with applicable law apparently result from concerns that, in some cases, boards have made decisions without sufficient regard for the scope of their authority and what their statutes and regulations require.

The public involvement provisions in the permit process include a public notice and opportunity for public hearing. 9 VAC 25-210-140 to -170. Applicants must submit comments on the draft permit or risk waiver of an opportunity to present comments to the SWCB prior to action on the application. The Executive Director has authority either to issue or deny the permit or to present the matter to the Board for decision at its next quarterly meeting. *See* 9 VAC 25-210-250. If the permit is denied, the applicant has the right to a formal hearing on request and to judicial review whether or not a formal hearing is held. 9 VAC 25-230-100, *et seq.* (Procedural Rule No. 1); Va. Code § 62.1-44.29.

The maximum term of a VWP Permit is fifteen years. 9 VAC 25-210-185(A). When permits are reissued, compliance with then-current requirements will be mandated. In the meantime, permits can be “reopened” if regulatory standards change or there are material and substantial changes in the circumstances on which the permit was issued. 9 VAC 25-210-110(G).

The SWCB charges a fee for processing permit applications based on the nature of the project and its impacts, with a sliding scale of fees which currently ranges from \$2,400 to \$60,000. 9 VAC 25-20-110. Permits are transferable with 30 days prior notice to the SWCB and an agreement between the parties with respect to their respective obligations. VAC 25-210-180(E). Permits can be modified or revoked and reissued, with the permittee’s consent, or terminated for cause. 9 VAC 25-210-180(A)-(D), (G).

Violations are subject to all of the civil and criminal enforcement tools available under the State Water Control Law, including injunctions, civil penalties and criminal sanctions. Va. Code §§ 62.1-44.23, 62.1-44.32.

B. Surface Water Withdrawal Permit

The second major 1989 statute – the Surface Water Management Areas Act – authorizes the SWCB to regulate most water withdrawals in designated areas where the demand for surface water exceeds threshold limits. Va. Code §§ 62.1-242, *et seq.* After an area has been designated as a Surface Water Management Area, any person who withdraws more than 300,000 gallons of water per month, during a period when the Board has determined by regulation that “the level of flow is such that permit conditions in a surface water management area are in force,” must have a permit (unless the withdrawal is exempted under Va. Code § 62.1-243). Va. Code §§ 62.1-248, -249. The maximum permit term is ten years. 9 VAC 25-220-100(4). The SWCB has promulgated an elaborate set of regulations for enforcement of the Surface Water Management Areas Act. 9 VAC 25-220-10, *et seq.* By statute, the Board’s regulations are required to “prioritize among types of users. Domestic and existing uses shall be given the highest priority in the issuance of permits for other beneficial uses. Included among existing uses shall be any projected use which has been relied upon in the development of an industrial project and for which a permit has been obtained by January 1, 1989, pursuant to § 404 of the Clean Water Act.” Va. Code § 62.1-248(D); *see* 9 VAC 25-220-10.

It appears, however, that this Act is merely a paper tiger. As of this writing (June 2008), the Act has been in force for almost 19 years and the regulations for

more than 16 years, but no Surface Water Management Area has yet been designated and no such designations are under active consideration.¹¹

The Board may designate a surface water management area where:

1. A stream has substantial instream values as indicated by evidence of fishery, recreation, habitat, cultural or aesthetic properties; and
2. Historical records or current conditions indicate that a low flow condition could occur which would threaten important instream uses; and
3. Current or potential offstream uses contribute to or are likely to exacerbate natural low flow conditions to the detriment of instream values; and
4. the Board finds that the public welfare, health and safety require that regulatory efforts be initiated.

Va. Code § 62.1-246. Surface water management area designation proceedings include public hearings and consultations with numerous state agencies. Va. Code §§ 62.1-246(B), 62.1-250.

In acting on permit applications, the SWCB is required to balance offstream and instream uses, and where needed, to impose conditions designed to protect instream uses from unacceptable adverse effects. Permits must include a minimum instream flow (“MIF”) term for the protection of instream beneficial uses. When stream flows drop below the MIF, withdrawals must be stopped or reduced in accordance with the requirements of the permit. Permits can include conditions on the amount of water withdrawal such as maximum amounts of withdrawals, times of the day or year during which withdrawals may occur, and requirements for voluntary and mandatory water conservation measures. Va. Code § 62.1-248(A).

The SWCB must consider the following in deciding whether to issue, modify or deny a permit application:

1. The number, object, extent and necessity of withdrawals on a stream;
2. The nature and size of the stream;

¹¹ The SWCB last announced that it was considering a Surface Water Management Area designation in April 7, 2003 (for the James River and its tributaries from the Route 522 bridge in Powhatan County to the I-95 bridge in Richmond).

3. The relationship of the activity to the uses;
4. The relationship of the necessity of the use and the extent of any detriment caused;
5. The effects on beneficial uses; and
6. Any other relevant factors.

Va. Code § 62.1-248(B).

The regulations also establish a water use classification system to be used in issuing permits. Class I uses are all domestic and public water supply uses and all existing uses as of July 1, 1989. These uses have the highest priority. Class II and Class III uses are new uses, not existing on July 1, 1989. Class II includes both instream uses (*e.g.*, protection of fish and wildlife habitat, maintenance of waste assimilation) and offstream uses (*e.g.*, agriculture, electric power generation, and industrial uses). Class III uses, which have the lowest priority, include recreation, navigation, and cultural and aesthetic values. The Board may impose restrictions on one or more classes as necessary to maximize the benefits without imposing unreasonable burdens on any individual or group. 9 VAC 25-220-120.

Effect on Riparian Rights.

One interesting section of the Surface Water Management Areas Act, titled “Riparian Rights,” provides:

Nothing in this chapter shall be construed as altering, or authorizing any alteration of, any existing riparian rights except as set forth in permits issued pursuant to this chapter. The conditions in such permits shall be in force only in those times when low stream flows, or the potential therefor, result in a declaration as provided for in subsection A of § 62.1-249.

Va. Code § 62.1-253. It has been said that under that statute a riparian owner retains full use of his riparian rights except when he actually needs them. While literally true, that statement is applicable only within those areas designated for water management. Everywhere else in Virginia, riparian rights are alive and well. Because of their inherent uncertainty, however, riparian rights have never been a favorite of businessmen, who demand certainty on matters as critical as water supply. A businessman may prefer having a permit to the right to sue over riparian rights in a stream that has many competing uses.

III. Common Law Rights in Groundwater

Because Virginia has no statute addressing conflicting rights to groundwater use, the common law applies.¹² The scope of the common law riparian right to use groundwater in Virginia, however, is highly uncertain. Every Virginia Supreme Court case which has addressed groundwater use and damage issues has held “that a landowner, under whose land there is oil, gas, or water, cannot complain of a neighbor who in pumping on his own property drains the oil, gas, or water from his lands”¹³ or other words to like effect¹⁴; but in its latest pronouncement on the subject (in 1927), the Court held that in a future case it would “feel free to consider ... *de novo*” whether to apply the so-called “English” or “American” (“reasonable use”) rule. *Clinchfield Coal Corp. v. Compton*, 148 Va. 437, 454, 139 S.E. 308, 313 (1927).

The *Clinchfield* Court described the competing rules as follows. First, the English rule:

The common law regarded the fee simple owner of the land as the owner of everything above and below the surface from the sky to the center of the earth ... and this doctrine is adhered to in England. [Citations.] Under this doctrine, the owner of the land may make any use he pleases of underlying percolating waters, and may even cut them off maliciously without liability to his neighbor.

Id. at 451-52, 139 S.E. at 313. The Court then described the American rule, at significantly greater length:

It is said that the earlier American cases followed this doctrine and some of them still do, but that the trend of modern opinion is in favor of the “reasonable use” rule which has come to be called the American rule.... The “reasonable use” rule does not forbid the use of the percolating water for all purposes properly connected with the use, enjoyment and development of the land

¹² Virginia does have two major statutes which relate to groundwater. The Ground Water Management Act of 1992, Va. Code §§ 62.1-254, *et seq.*, regulates groundwater withdrawals in designated ground water management areas (all of Virginia east of Interstate 95 and south of the Mattaponi River, including the Eastern Shore). See Part IV, below. The State Water Control Law, Va. Code §§ 62.1-44.2, *et seq.*, authorizes the Water Control Board to establish standards of groundwater quality. Neither of those statutes deals with disputes between property owners over rights to use groundwater.

¹³ *Couch v. Clinchfield Coal Corp.*, 148 Va. 455, 460, 139 S.E. 314, 315 (1927).

¹⁴ See *Heninger v. McGinnis*, 131 Va. 70, 108 S.E. 671 (1921); *Miller v. Black Rock Springs Imp. Co.*, 99 Va. 747, 754-61, 40 S.E. 27, 30-32 (1901).

itself, but it does forbid maliciously cutting it off, its unnecessary waste, or withdrawal for sale or distribution for uses not connected with the beneficial enjoyment or ownership of the land from which it is taken.... The basis of the “American rule” is well expressed by Chancellor Pitney in *Meeker v. East Orange*, 77 N.J.L. 623, 74 A. 379, 25 L.R.A.(N.S.) 465, 134 Am. St. Rep. 798, as follows: “This does not prevent the proper user by any landowner of the percolating waters subjacent to his soil in agriculture, manufacturing, irrigation, or otherwise; nor does it prevent any reasonable development of his land by mining or the like, although the underground water of neighboring proprietors may thus be interfered with or diverted; but it does prevent the withdrawal of underground waters for distribution or sale for uses not connected with any beneficial ownership or enjoyment of the land whence they are taken, if it thereby result that the owner of adjacent or neighboring land is interfered with in his right to the reasonable user of subsurface water upon his land, or if his wells, springs, or streams are thereby materially diminished in flow, or his land is rendered so arid as to be less valuable for agriculture, pasturage, or other legitimate uses.”

Id. at 452-53, 139 S.E. at 313. The defendant coal company “was making a legitimate use of its land for mining purposes,” according to the Court, “even under the ‘reasonable use’ rule”; and therefore it was “not called upon to decide between the different theories, but if the question shall again come before this court we shall feel free to consider it *de novo*.” *Id.* at 454.

That is the Supreme Court’s last word on the subject. The Circuit Courts in recent cases appear to be tilting heavily toward the reasonable use rule. *See Costello v. Frederick County Sanitation Authority*, 49 Va. Cir. 41, 48, 51, 52 (Frederick Co. Cir. Ct. 1999)¹⁵:

The English Rule is clearly the “English common law” rule, but it was developed in the 19th century in a land which, if anything, has too much water as opposed to too little. The fact that the English Rule has been rejected by most American states and by the drafters of the Restatement of Torts, Second, is circumstantial evidence that the absolutist English rule in all of its Draconian splendor may not be a suitable rule for application in Virginia.... This Court is persuaded that the fact that the English Common Law was evolving

¹⁵ The *Costello* court also cited an unpublished decision that “adopt[ed] the American Rule and reject[ed] the English Rule,” *Andrews v. Board of Supervisors of New Kent County* (New Kent Co. Cir. Ct., 1994). *Costello*, 49 Va. Cir. at 52.

over time to meet the industrial, political, and climatic conditions of the United Kingdom and that the current English Common Law Rule was not enunciated until 1848 indicate that this may well not be a rule of common law that is suitable for application in Virginia in the twenty-first century.... I do not decide this matter at this time, but I will require a substantial showing that the English Rule is consistent with the peculiar needs and requirements of Virginia as it approaches the twenty-first century.

The bottom line on this issue must be that the question is open, but it cannot be predicted with any confidence that the Supreme Court would not adopt the “reasonable use” or “American” rule in a case involving conflicting groundwater withdrawals or groundwater withdrawals that otherwise harmed nearby landowners (*e.g.*, by causing land subsidence).

IV. Regulation of Groundwater Withdrawals

Under the Ground Water Management Act of 1992 (which replaced the Groundwater Act of 1973), the State Water Control Board (SWCB) is responsible for regulating the *quantity* of groundwater withdrawn in regions of the state declared to be groundwater management areas.¹⁶ The Ground Water Management Act (Act) is based on a finding that “the continued, unrestricted usage of ground water is contributing and will contribute to pollution and shortage of ground water, thereby jeopardizing the public welfare, safety and health.” Va. Code § 62.1-254. It required not only new groundwater users but also existing users, which had been grandfathered under the 1973 Act, to obtain groundwater withdrawal permits. Applications for new permits must include a Board-approved water conservation and management plan. Va. Code § 62.1-262.¹⁷ Criteria for issuance of permits include

¹⁶ The Ground Water Management Act is codified at Va. Code §§ 62.1-254 through -270. The SWCB’s regulations implementing the Ground Water Management Act are at 9 VAC 25-610-10, *et seq.* The Act addresses quantity and not quality of groundwater, but the SWCB regulates groundwater quality under the State Water Control Law.

¹⁷ “A water conservation and management plan shall include: (i) use of water-saving plumbing and processes including, where appropriate, use of water-saving fixtures in new and renovated plumbing as provided under the Uniform Statewide Building Code; (ii) a water-loss reduction program; (iii) a water-use education program; and (iv) mandatory reductions during water-shortage emergencies including, where appropriate, ordinances prohibiting waste of water generally and providing for mandatory water-use restrictions, with penalties, during water-shortage emergencies.

(footnote continued on next page)

the nature of the proposed beneficial use, the proposed use of alternate or innovative approaches such as aquifer storage and recovery systems and surface and ground water conjunctive uses, climatic cycles, unique requirements for nuclear power stations, economic cycles, population projections, the status of land use and other necessary approvals, and the adoption and implementation of the applicant's water conservation and management plan. In no case shall a permit be issued for more ground water than can be applied to the proposed beneficial use.

When proposed uses of ground water are in conflict or when available supplies of ground water are insufficient for all who desire to use them, preference shall be given to uses for human consumption, over all others.

Va. Code § 62.1-263. Since 1973, groundwater regulation has been based on the premise that state management is required only where groundwater resources were being overtaxed. At that time it was reported widely that groundwater levels in that part of the Lower Cretaceous Aquifer lying south of the James River and east of the Fall Line (I-95 corridor) were dropping. Soon after the 1973 Act was passed, that area was designated as the State's first groundwater management area. Since that first designation, every county and city south of the York River and its tributaries and east of I-95 has been included in a designated ground water management area.¹⁸

Under the 1992 Act, no one may withdraw water from the regulated aquifer within a designated ground water management area without either a permit or a statutory exemption. The principal exemption is for uses less than 300,000 gallons per month. There are nine other narrow exemptions for relatively minor or

(footnote continued)

The Board shall approve all water conservation plans in compliance with subdivisions (i) through (iv) of this section.” Va. Code § 62.1-262.

¹⁸ The original Southeastern Virginia Ground Water Management Area included the cities of Chesapeake, Franklin, Hopewell, Norfolk, Portsmouth, Suffolk and Virginia Beach and the counties of Isle of Wight, Prince George, Southampton, Surry, and Sussex. The cities of Hampton, Newport News, Poquoson and Williamsburg, the counties of Charles City, James City, King William, New Kent and York, and the area east of Interstate 95 in Chesterfield, Henrico and Hanover Counties have since been added, and the combined area is known as the Eastern Virginia Ground Water Management Area. 9 VAC 25-600-20. The Eastern Shore counties of Accomack and Northampton have been designated a “Critical Ground Water Area,” 9 VAC 25-620-10, which is generally referred to as the Eastern Shore Ground Water Management Area.

temporary uses. Va. Code § 62.1-259. The Board also has the power to issue special exceptions in “unusual situations where requiring the user to obtain a ground water withdrawal permit would be contrary to the intended purpose of the Act.” Va. Code § 62.1-267(A).

The 1973 Act exempted publicly-owned water supplies from regulation. In 1986 public water supply wells were made subject to the Act but grandfathered under certificates of groundwater right that allowed operation at their design capacity.¹⁹ The 1992 Act eliminated grandfathered rights for existing publicly-owned wells and provided for permitting both existing and approved but unbuilt wells, based on historical usage rates. Va. Code § 62.1-260. Special provision was made for permitting publicly-owned drought relief wells which had been grandfathered under the prior act. Va. Code § 62.1-265. Permits for other classes of existing and approved, but not built, wells are based on demonstrated usage during specified time periods. *See* Va. Code § 62.1-260. The Board may allow greater usage rights based on the same criteria that apply to permits for new uses. Va. Code §§ 62.1-260(G), 62.1-263.

All permits have ten year terms. Va. Code § 62.1-266(C). The SWCB charges a fee for processing permit applications, currently \$1,200 for a permit based on historic withdrawals and \$6,000 (the maximum authorized by the General Assembly) for other groundwater withdrawals. 9 VAC 25-20-110(E). *See* Va. Code § 62.1-44.15:6(B3).

Permits may be amended or revoked for a number of reasons, including violations of ground water regulations or permits, omission or misrepresentation of material facts, endangerment of human health or the environment, and material change in the basis on which the permit was issued that requires reduction or elimination of the withdrawal. Va. Code § 62.1-266(E). No permit application is complete without a notification from the governing body of the jurisdiction where the well would be located that the use complies with local zoning ordinances. Va. Code § 62.1-266(F).

The Act creates a series of enforcement powers, including civil and criminal sanctions. Those powers are essentially identical to those in the State Water Control Law and the federal Clean Water Act, which regulate water pollution. A court may impose civil penalties up to \$25,000 per day. Va. Code § 62.1-270(A). The SWCB has authority to settle cases by receipt of civil charges in lieu of civil penalties. Va. Code § 62.1-268(D). Criminal penalties ranging from \$2,500 to

¹⁹ 1986 Va. Acts, c. 402; Va. Code § 62.1-44.93(d), repealed by 1992 Va. Acts, c. 812 (the Ground Water Management Act). These grandfather provisions were addressed principally to drought relief wells that had been built since 1980 in the Southeastern Virginia Ground Water Management Area.

\$25,000 per day of violation plus jail terms of up to twelve months can be imposed for willfully or negligently violating the Act, regulations or permits. If violations or false statements are “knowing,” the offense is a felony and penalties range from \$5,000 to \$50,000 per day and up to three years in prison. Corporate defendants can be fined \$10,000 or more per day of violation. Knowing endangerment of others can be punished by fines of up to \$250,000 and two to fifteen years in prison, and in the case of corporate defendants by a fine up to the greater of \$1 million or three times the amount of the economic benefit of the offense. Va. Code § 62.1-270(B-C). There is a three year statute of limitations from discovery for prosecution of these criminal offenses. *Id.*, subsection (D).

V. An Overview of the Federal Regulatory Environment

Section 404(a) of the Clean Water Act, 33 U.S.C. § 1344(a), 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. That is the key permit for most new surface water withdrawal projects. Many of the other federal regulatory authorities discussed in this outline only apply to local water supply projects as “overlays” on the Corps permit process.

Army Department regulations applicable to § 404 (and other Corps permit programs) are published in 33 C.F.R. Parts 320-331, and in 33 C.F.R. Part 230 (NEPA regulations). Additional substantive criteria applicable to § 404 Permit applications are found in the U.S. Environmental Protection Agency’s (EPA’s) “Section 404(b)(1) Guidelines,” published at 40 C.F.R. Part 230. *See* 33 C.F.R. § 323.6(a).

Through a remarkable process of statutory, judicial and regulatory alchemy, the term “navigable waters” has come to include “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” – *i.e.*, “wetlands.” 33 C.F.R. § 328.3(b); *see* 33 C.F.R. §§ 328.1, 328.3(a)(3); 40 C.F.R. § 230.3(s)(3); *see also, e.g., United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).

Recent U.S. Supreme Court case law, however, has left the *reach* of federal regulatory authority over wetlands very much in doubt. *See Rapanos v. United States*, 547 U.S. 715 (2006); *Solid Waste Agency v. United States Army Corps of Engineers*, 531 U.S. 159 (2001) (SWANCC).

In SWANCC the issue was whether the Corps has jurisdiction over isolated wetlands (those lacking a surface connection to other waters). The wetlands at issue in that case were borrow pits left by an abandoned sand and gravel mining operation. The specific issue addressed by the Court was the validity of a Corps regulation that included waters “the use, degradation or destruction of which could affect interstate or foreign commerce” (33 C.F.R. § 328.3(a)(3)) within its jurisdiction and an interpretation of that regulation as extending its jurisdiction to intrastate waters that

provide habitat for migratory birds (the “Migratory Bird Rule”). The U.S. Supreme Court held (in a 5-4 decision written by the late Chief Justice William Rehnquist) that the Migratory Bird Rule exceeded the Corps’ statutory authority under § 404. The SWANCC decision read the earlier decision in *United States v. Riverside Bayview Homes, Inc.*, 474 U. S. 121 (1985), which appeared to have approved an broad interpretation of the Corps’ jurisdiction, as limited to wetlands adjacent to traditional “navigable” waters (those which are subject to the ebb and flow of the tide or are (or have been in the past or may be in the future) susceptible for use for purposes of interstate or foreign commerce).

In *Rapanos* the Court divided three ways on the question whether the Corps’ § 404 jurisdiction reaches wetlands “which lie near ditches or man-made drains that eventually empty into traditional navigable waters.” None of the three opinions was supported by a majority of the Court, leaving the question open to considerable doubt and the lower courts in a state of confusion and disarray. The more “conservative” branch of the court (Justice Scalia, joined by Chief Justice Roberts and Justices Thomas and Alito) took the position that § 404 reaches “only relatively permanent, standing or flowing bodies of water ... found in ‘streams,’ ‘oceans,’ ‘rivers,’ ‘lakes,’ and ‘bodies’ of water ‘forming geographical features,’” terms which “connote continuously present, fixed bodies of water, as opposed to ordinarily dry channels through which water occasionally or intermittently flows.” Those justices would hold that a wetland must have a “continuous surface connection” to such a water body to be covered by § 404. 547 U.S. at 732-33, 742.

The Court’s “liberal” block, Justices Stevens, Souter, Ginsburg and Breyer, stated in a dissenting opinion²⁰ that they would have deferred to the Corps’ administrative interpretation of the statute and held that wetlands need not be directly adjacent to navigable waters to be protected under § 404. According to those Justices, wetlands adjacent to tributaries of navigable waters are “waters of the United States” within the meaning of the statute. Those Justices also noted that they would uphold CWA jurisdiction “in all other cases in which either the plurality’s or Justice Kennedy’s test is satisfied” and argued that although Justice Kennedy’s standard likely would be controlling in most cases, “in the unlikely event that the plurality’s test is met but Justice Kennedy’s is not, courts should also uphold the Corps’ jurisdiction.” 547 U.S. at 810 & n.14.

Finally, Justice Kennedy, who is often considered a “swing vote” on the Court, chose not to “swing” in either direction on the Corps jurisdiction question. Justice Kennedy instead took something of a middle ground, arguing that a water or wetland is within the scope the Corps’ jurisdiction if it “possess[es] a ‘significant nexus’ to waters

²⁰ Justices Stevens’ opinion is technically a dissent only because Justice Kennedy and the four “conservative” Justices agreed that the lower courts’ judgments should be vacated and the cases remanded for further proceedings.

that are or were navigable in fact or that could reasonably be so made.” According to Justice Kennedy, “wetlands possess the requisite nexus, and thus come within the statutory phrase ‘navigable waters,’ if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’” 547 U.S. at 759, 780.

The lower federal courts have divided on the meaning and effect of the 4-1-4 *Rapanos* decision. Some courts have held that Justice Kennedy’s concurrence is the controlling opinion, on the ground that it expresses “the narrowest ground to which a majority of the Justices would assent if forced to choose in almost all cases.” *Northern California River Watch v. City of Healdsburg*, 496 F.3d 993, 999-1000 (9th Cir. 2007), *cert. denied*, 128 S. Ct. 1225 (2008). Others, citing Justice Stevens’ comment that the dissenting Justices would uphold CWA jurisdiction “in all other cases in which either the plurality’s or Justice Kennedy’s test is satisfied,” have held that the Corps has jurisdiction if either of those tests is met. *E.g.*, *United States v. Johnson*, 467 F.3d 56, 64-66 (1st Cir. 2006), *cert. denied*, 128 S. Ct. 375 (2007).²¹ Neither the U.S. Court of Appeals for the Fourth Circuit (which includes Virginia) nor any U.S. District Court in Virginia has yet weighed in on the question.

The Corps and the Environmental Protection Agency have jointly issued a guidance document, which has technically expired (*see* 72 Fed. Reg. 31824 (June 8, 2007)) but presumably remains in effect until superseded by regulations or other guidance. *See* U.S. Environmental Protection Agency and U.S. Army Corps of Engineers, “Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States & Carabell v. United States*,” <http://www.epa.gov/owow/wetlands/pdf/RapanosGuidance6507.pdf> (visited June 16, 2008). According to that guidance document:

- The agencies will assert jurisdiction over the following waters:
- Traditional navigable waters
 - Wetlands adjacent to traditional navigable waters

²¹ The *Johnson* court pointed out that accepting Justice Kennedy’s test alone as the controlling standard could lead to anomalous results in some unusual cases: “If Justice Kennedy finds federal jurisdiction over a particular site using the ‘significant nexus’ test the four dissenters would also find jurisdiction. However, if Justice Kennedy does not find federal jurisdiction, there could be instances where both the plurality and the dissent disagree with his conclusion. In other words, there could be a case in which Justice Kennedy ‘would vote against federal authority only to be outvoted 8-to-1 (the four dissenting Justices plus the members of the *Rapanos* plurality) because there was a slight surface hydrological connection.’” 467 F.3d at 62, quoting *United States v. Gerke Excavating, Inc.*, 464 F.3d 723, 725 (7th Cir. 2006), *cert. denied*, 128 S. Ct. 45 (2007).

- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months)
- Wetlands that directly abut such tributaries

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters
- Significant nexus includes consideration of hydrologic and ecologic factors

A “discharge” of “fill material,” subject to regulation under § 404(a), includes any construction in “navigable waters,” such as a dam or an intake structure. *See* 33 C.F.R. § 323.2(f). Section 404 permits therefore are required for a large majority of all water supply projects. Section 404 and other federal regulatory statutes do not apply to groundwater projects, however (except incidentally, such as for construction of pipelines crossing wetlands or streams).

The permitting process ordinarily begins months (and often years) before an application is filed. Extensive pre-application consultation with the Corps and other agencies (including the “scoping” process, which is designed to identify the alternatives and environmental issues to be addressed in NEPA documentation) is customary and expected.

Section 404 and other permitting or licensing processes almost invariably involve a series of public notices and comment periods, typically following the filing of

an application and again following the publication of a draft EIS or EA. (The terminology is explained in the NEPA discussion, below.) Another notice and comment period may be allowed following publication of a final EIS, and in unusual cases following publication of a final EA. Public hearings may be ordered in the discretion of the Corps' District Engineers, who are responsible for most 404 Permit decisions. Public hearings usually are ordered in controversial cases, and major water withdrawal projects often are highly controversial.

Section 404(c) of the Clean Water Act, 33 U.S.C. § 1344(c), gives the EPA the power to prohibit issuance of a § 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.” *See, e.g., James City County, Virginia v. U.S. EPA*, 12 F.3d 1330 (4th Cir. 1993), *cert. denied*, 513 U.S. 823 (1994). Regulations applicable to the exercise of EPA's § 404(c) “veto” authority are published at 40 C.F.R. Part 231.

EPA has not often invoked its § 404(c) authority. In the *James City County* case, however, it announced a truly remarkable interpretation of that statute. Section 404(c) is expressly designed (in part) to prevent “unacceptable adverse effect[s] on municipal water supplies.” In *James City County* EPA held that the statute granted it authority to veto a § 404 permit for a public water supply project sought by an applicant which (on the record) had *no other available source* of water to meet its demonstrated future needs. Even more remarkably, the U.S. Court of Appeals for the Fourth Circuit sustained that interpretation, and the U.S. Supreme Court denied a petition for review.

Section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1), requires a State water quality certification (a 401 Certification) as a precondition to issuance of a Corps permit under § 404(a). 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.

A 401 Certification also is required for other federal licenses or permits “to conduct any activity . . . which may result in any discharge into the navigable waters.” *Id. See, e.g., Public Utility District No. 1 v. Washington Department of Ecology*, 511 U.S. 700 (1994) (*PUD No. 1*) (FERC hydroelectric license). *Cf. Virginia Electric and Power Co.*, 72 F.E.R.C. ¶ 61,075 at 61,393-94 (1995) (“assuming, *arguendo*” (*i.e.*, for the sake of argument) that an amendment of Virginia Power's hydroelectric license, to accommodate the construction and operation of the City of Virginia Beach's Lake Gaston pipeline project, “is subject to the provisions of section 401(a)(1)”).²²

²² On petitions for review, the U.S. Court of Appeals for the District of Columbia Circuit refused to accept FERC's “*arguendo*” assumption and remanded the matter to

In *PUD No. 1*, the U.S. Supreme Court extended States' § 401 regulatory/veto powers to maintenance of the *quantity* of water in a stream, on the ground that stream flow reductions could violate a State's water quality standards by rendering the stream less useful for fish habitat, a "designated use" of that stream under the State's water quality standards. Previous decisions had confined § 401 to regulation of discharges of pollutants or – at most – maintenance of traditional water *quality* parameters, *i.e.*, the "chemical, physical, and biological integrity" of the water (33 U.S.C. §§ 1251(a), 1314(a)(2)), as measured by the numerical criteria in the States' water quality standards promulgated under § 303 of the CWA, 33 U.S.C. § 1313. *See, e.g., Power Authority of the State of New York v. Williams*, 60 N.Y. 315, 457 N.E.2d 726, 469 N.Y.S.2d 620 (1983). *See also Commonwealth of Pennsylvania v. City of Harrisburg*, 133 Pa. Cmwlth. 577, 578 A.2d 563 (1990). *PUD No. 1* thus added another arrow to the quivers of opponents of water withdrawal projects; there are exceptions to this rule, but water generally cannot be withdrawn from either a reservoir or a free-flowing stream for municipal use without diminishing to some degree the quantity of water flowing in the stream.

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" (*i.e.*, States downstream of proposed projects), he shall so notify the downstream State, the licensing or permitting agency, and the applicant. (In practice, of course, downstream

(footnote continued)

FERC with instructions to determine "whether § 401(a)(1) applies to this license amendment to require a certification from North Carolina." *State of North Carolina v. FERC*, Nos. 95-1494, 95-1500 (D.C. Cir. Sept. 11, 1996) (unpublished order). On remand, FERC held that North Carolina's certification was not required, reasoning in part that the "'activities' that necessitate[d]" its license amendment were the construction of Virginia Beach's water supply facilities and withdrawals of water, and not the ongoing operation of its licensee's hydroelectric project; and that the water supply project would not cause any discharges through the hydroelectric dams.

The Court of Appeals affirmed that decision. Ironically, this time the Court began its analysis much as FERC had done before the remand, by "assum[ing] *arguendo*" that "the flow of water through the Power Project dam turbines is a 'discharge'" within the meaning of the CWA (an assumption that was later confirmed by the U.S. Supreme Court, in *S.D. Warren Co. v. Maine Board of Environmental Protection*, 547 U.S. 370 (2006)). It held, however, that "neither the withdrawal of water from the Lake nor the reduction in the volume of water passing through the dam turbines 'results in a discharge' for purposes of Section 401(a)(1)." The Court explained that "the word 'discharge' contemplates the addition, not the withdrawal, of a substance or substances. . . . A decrease in the volume of water passing through the dam turbines cannot be considered a 'discharge' as that term is defined in the CWA." *State of North Carolina v. FERC*, 112 F.3d 1175, 1187-88 (D.C. Cir. 1997), *cert. denied*, 522 U.S. 1108 (1998).

States do not wait passively but lobby EPA to make such determinations.) The downstream State then has 60 days to notify EPA and the licensing or permitting agency that it has determined that the “discharge will affect the quality of its waters so as to violate any water quality requirement in such State,” and that it objects to issuance of the license or permit and requests a public hearing on such objection. The licensing or permitting agency then must hold such a hearing and must “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.” 33 U.S.C. § 1341(a)(2). *Cf. Arkansas v. Oklahoma*, 503 U.S. 91 (1992) (upholding an EPA requirement that an upstream pollution discharge comply with a downstream State’s water quality standards).

Section 9 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 401, 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 (33 C.F.R. § 321.2) define the key terms of § 9: 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,” but it does not include a weir. (Weirs and other “obstruction[s] ... to the navigable capacity of any of the waters of the United States” are regulated under § 404(a) of the Clean Water Act and under § 10 of the 1899 Rivers and Harbors Act, 33 U.S.C. § 403, and its implementing regulations at 33 C.F.R. Part 322.) 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.” (This is *not* the same definition, however, that applies under § 404, discussed above.)

Other federal regulatory approvals may be required, depending on the circumstances. Projects that involve water withdrawals from a hydropower project licensed by the Federal Energy Regulatory Commission will require FERC’s approval. Depending on the terms of the existing license, a formal license amendment may or may not be required. *See generally Virginia Electric and Power Co.*, 68 F.E.R.C. ¶ 61,227 at 62,075 n.1 (1994) (FERC’s authorization of a proposed public water supply project required amendment of a hydroelectric project license because “the application entails a substantial new use of project waters”); *State of North Carolina v. Federal Energy Regulatory Commission*, 112 F.3d 1175 (D.C. Cir. 1997), *cert. denied*, 522 U.S. 1108 (1998).

In some circumstances, developers of a water supply project may *choose* to include hydropower generation facilities, thus bringing the project under the Federal

Power Act and requiring a FERC license. For example, the reservoir project applicant in *City of Fort Smith, Arkansas*, 44 F.E.R.C. ¶ 61,160 (1988), *affirmed*, *National Wildlife Federation v. FERC*, 912 F.2d 1471 (D.C. Cir. 1990), appears to have included hydropower generation facilities in its water supply project to obtain the federal power of eminent domain granted FERC licensees by the Federal Power Act (FPA), 16 U.S.C. § 814, to reach areas in another State, upstream of its dam, that would be flooded by its reservoir. *Compare Fairfax County Water Authority*, 54 F.E.R.C. ¶ 62,142 (1991), involving an after-the-fact issuance of a 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.

Section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA), 16 U.S.C. § 1456(c)(3)(A), gives coastal States with federally-approved Coastal Zone Management Plans (including Virginia) the authority to review federal license or permit applications for consistency with those Plans. A State "consistency objection" functions as a veto of a federal license or permit application, subject to review by the U.S. Secretary of Commerce. The CZMA and Virginia's Coastal Zone Management Program are discussed at length in a separate chapter of this program handout.

The National Environmental Policy Act (NEPA) is the biggest (or at least the most expensive) "overlay" to the § 404 permit process. NEPA has enormous direct and indirect influence over the substantive and procedural course of federal agency actions under the statutes discussed above, and many others as well.

The principal requirement of NEPA is stated in § 102(2)(C) of that Act, 42 U.S.C. § 4332, which requires a "detailed statement" of the environmental impacts of all "proposals" for "major Federal actions significantly affecting the quality of the human environment." The "detailed statement" is commonly known as an environmental impact statement (EIS). NEPA regulations promulgated by the President's Council on Environmental Quality (the CEQ)²³ go one step further and mandate a less detailed statement – an environmental assessment (EA) and finding of no significant impact (FONSI) – for proposed actions with less than significant environmental effects. 40 C.F.R. §§ 1501.3, 1501.4(b)-(e), 1508.9, 1508.13. *See, e.g., Roanoke River Basin Association v. Hudson*, 940 F.2d 58 (4th Cir. 1991), *cert. denied*, 502 U.S. 1092 (1992).

An EIS is far slower and more expensive than an EA and FONSI, so permit applicants and federal agencies may prefer to avoid preparing a full EIS. Disputed cases in this area usually turn on the question whether the action will have "significant" environmental effects, because the courts generally hold that federal regulatory permits

²³ Each federal agency has its own NEPA regulations, and all are bound by the CEQ's NEPA regulations, which are published at 40 C.F.R. Parts 1500-1508.

are “major” federal actions. *See, e.g., River Road Alliance, Inc. v. Corps of Engineers*, 764 F.2d 445, 450 (7th Cir. 1985), *cert. denied*, 475 U.S. 1055 (1986); *North Carolina v. Hudson* (I), 665 F. Supp. 428, 438 & n.10 (E.D.N.C. 1987). *But see Macht v. Skinner*, 916 F.2d 13 (D.C. Cir. 1990); *Winnebago Tribe of Nebraska v. Ray*, 621 F.2d 269, 272-73 (8th Cir.), *cert. denied*, 449 U.S. 836 (1980); and *Save the Bay, Inc. v. U.S. Corps of Engineers*, 610 F.2d 322 (5th Cir.), *cert. denied*, 449 U.S. 900 (1980).

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. The requirement to prepare an EIS (or at least an EA) often means lengthy and expensive investigations and seemingly interminable consultations

There is no possible substitute for employment of qualified environmental professionals for this work. In potentially controversial cases, experienced counsel who are familiar with federal permit requirements and judicial review also should participate in project development from the outset, to minimize the risk of costly missteps or oversights.

The CEQ’s NEPA regulations provide that agencies should prepare an EA to assist in making the decision whether to prepare an EIS and to aid in compliance with NEPA if an EIS is not required. *See* 40 C.F.R. §§ 1501.4(b)-(e), 1508.9. 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 proceeds accordingly, subject to being persuaded otherwise in notice and comment proceedings.

Whether an agency elects to prepare an EIS or an EA and FONSI, it may circulate a draft document for review and comments from the public and other federal and state agencies. Circulation of Draft EISs is required by the CEQ’s NEPA regulations. Circulation of draft EAs and FONSI is optional but not unusual, particularly in cases that have generated even a minimum of controversy.

When multiple federal agency permit or license decisions are required for a single project, applicants should make use of “lead agency” agreements among agencies by filing simultaneous applications, wherever possible, to avoid duplicative and time-consuming consecutive reviews. *See generally* 40 C.F.R. § 1501.5.

NEPA is a procedural statute; it does not command substantive outcomes. If the 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. *E.g., Strycker’s Bay Neighborhood Council v. Karlen*, 444 U.S. 223 (1980). “If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs.... Other statutes may

impose substantive environmental obligations on federal agencies, but NEPA merely prohibits uninformed – rather than unwise – agency action.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350-51 (1989).

Section 7 of the Endangered Species Act (ESA), 16 U.S.C. § 1536, requires each federal agency, in consultation with either the Department of the Interior (the U.S. Fish and Wildlife Service (USFWS)) or the Department of Commerce (the National Marine Fisheries Service (NMFS)) (depending on which of the Services has jurisdiction of the species at issue), to “insure that any action authorized ... by such agency ... 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. § 1536(a)(2). That prohibition creates a potential environmental “fatal flaw” applicable to even the most necessary public projects. *See TVA v. Hill*, 437 U.S. 153 (1978) (the “snail darter case”). The Supreme Court held in *Hill* that § 7 “admits of no exceptions” and that “Congress intended endangered species to be afforded the highest of priorities” and “to halt and reverse the trend toward species extinction, whatever the cost,” *id.* at 173, 174, 184; and it affirmed an injunction against impoundment of a reservoir project that already had been virtually completed at a cost of more than \$100 million. (Section 7 was amended in 1978 to create an administrative exemption procedure, available only in limited circumstances. *See* 16 U.S.C. § 1536(h).)

Section 9(a)(1) of the ESA, 16 U.S.C. § 1538(a)(1), makes it unlawful for “any person subject to the jurisdiction of the United States” to “take” any endangered species within the United States or the territorial sea of the United States or on the high seas. Section 3(19) of the ESA, 16 U.S.C. § 1532(19), defines “take” as including “harm.” An Interior Department regulation in turn defines “harm” as “an 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, including breeding, feeding, or sheltering.” 50 C.F.R. § 17.3. The U.S. Supreme Court upheld that regulation as a permissible interpretation of the Act in *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687 (1995).

Under the Interior Department regulation upheld in *Sweet Home*, the prohibitions of § 9 go much further than the prohibitions of § 7. Section 7 acts only on federal agencies, and it is limited to threats to the continued existence of an entire species and destruction or damage to designated “critical habitat”; but § 9(a)(1) reaches any act by any person that “actually kills or injures” any individual member of a protected species, including acts that affect such individuals indirectly through “habitat modification or degradation.” Violations of § 9 also subject the violator to civil and even criminal penalties (for “knowin[g]” violations), under 16 U.S.C. § 1540(a) and (b).

Despite the extensive reach of § 9 and the severe consequences of violations, the ESA more frequently affects federally permitted projects through the § 7 consultation process.

USFWS and NMFS (alternatively or collectively, the “Service(s)” or the “consulting agencies”) have promulgated detailed regulations implementing the consultation requirements of § 7. *See* 50 C.F.R. Part 402. Endangered and threatened species are listed in 50 C.F.R. §§ 17.11, 17.12, 223.102, and 224.101. Critical habitats are listed in 50 C.F.R. §§ 17.95 and 17.96 and 50 C.F.R. Part 226.

The ESA regulations require formal consultation between federal permitting agencies and either USFWS or NMFS with respect to “any action [that] *may affect* listed species or critical habitat.” 50 C.F.R. § 402.14(a) (emphasis added). In cases that involve “major construction activities” in areas where listed species or critical habitat “may be present,” either the federal action agency or an applicant for a federal permit or license must prepare a “biological assessment” prior to the initiation of formal consultation. *See* 50 C.F.R. §§ 402.12, 402.14(c). (The term “major construction activities” is defined by reference to NEPA and means activities that require preparation of an EIS. *See* 50 C.F.R. § 402.02 and NEPA discussion above. That definition tends to the circular, however, as “[t]he degree to which the action may adversely affect an endangered or threatened species” or its critical habitat is a major factor employed in determining whether a proposed action will “significantly” affect the quality of the human environment and therefore requires an EIS. 40 C.F.R. § 1508.27(9).)

A biological assessment is designed to evaluate the potential effects of a proposed action and to determine whether any species that are listed or proposed for listing as endangered or threatened are “likely to be adversely affected by the action.” 50 C.F.R. § 402.12(a). The contents of a biological assessment “are at the discretion of the Federal [permitting] agency.” *Id.*, subsection (f). That regulation lists several items that “may be considered for inclusion,” however, including the results of an on-site inspection and/or a literature review, the views of recognized experts on the species, an analysis of the effects of the proposed action (including “cumulative” effects), and an analysis of alternatives to the proposed action. *Id.*

After completion of the biological assessment, and in all cases involving proposals that may affect a listed species, the permitting agency should initiate formal consultation under 50 C.F.R. § 402.14. Formal consultation is not required, however, if the results of the biological assessment (for “major construction activities”) or informal consultation indicate, and the Service agrees, “that the proposed action is not likely to adversely affect any listed species or critical habitat.” *Id.*, subsection (b).

Formal consultation has a 90-day time limit. That limit can be extended by mutual agreement of the permitting and consulting agencies, but an applicant can veto any extension that exceeds 60 days. *Id.*, subsection (e).

Within 45 days after the end of formal consultation, the Service must provide its “biological opinion” to the permitting agency and the applicant. The biological opinion is a critical step in the consultation process, because it must provide “[t]he Service’s opinion on whether the action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat.” *Id.*, subsection (h). A “jeopardy opinion” also must describe “reasonable and prudent alternatives, if any.” *Id.*

“Formal consultation is terminated with the issuance of the biological opinion,” *id.*, subsection (l), and further action is the responsibility of the permitting agency. “Following the issuance of a biological opinion, the Federal agency shall determine whether and in what manner to proceed with the action in light of its section 7 obligations and the Service’s biological opinion.” 50 C.F.R. § 402.15.

A jeopardy opinion is not binding on another federal agency, which may reject the Service’s views and conclude that its action is not likely to jeopardize the continued existence of a listed species or damage any critical habitat. Courts do review such agency decisions closely, under the “arbitrary [or] capricious” standard of review, however, to effectuate the requirements of the ESA. *See Roosevelt Campobello International Park Comm’n v. U.S. EPA*, 684 F.2d 1041, 1049-55 (1st Cir. 1982) (upholding permitting agency’s authority to determine, contrary to NMFS biological opinion, that it had taken all necessary action to ensure that its action would not jeopardize the continued existence of a listed species, but vacating and remanding for failure to “ ‘use the best scientific . . . data available,’ ” as required by § 7); *Sierra Club v. Froehlke*, 534 F.2d 1289, 1303-05 (8th Cir. 1976) (holding that “[c]onsultation under Section 7 does not require acquiescence” and affirming Corps’ decision that a reservoir project would not jeopardize the continued existence of a listed species); *National Wildlife Federation v. Coleman*, 529 F.2d 359, 371-75 (5th Cir.), *cert. denied*, 429 U.S. 979 (1976) (holding that “Section 7 does not give the Department of the Interior a veto over the actions of other federal agencies” but that the Department of Transportation had “failed to take the necessary steps ‘to insure’ ” that a highway would not jeopardize a listed species or modify its habitat). *Cf. Sierra Club v. Marsh*, 816 F.2d 1376, 1386 (9th Cir. 1987) (reviewing Corps of Engineers’ refusal of USFWS’ request to “reinitiate the consultation process” for arbitrariness).

Federal permitting agencies have always been reluctant to reject USFWS or NMFS jeopardy opinions, because a project’s opponents may cite that action to a federal court as evidence of agency arbitrariness. The existence of several reported decisions involving action agencies’ rejections of jeopardy opinions (see above) may indicate that other agencies are willing to exercise their own fact-finding abilities and expertise to leaven some of the excesses that occasionally are exhibited by the USFWS and NMFS. The U.S. Supreme Court’s decision in *Bennett v. Spear*, 520 U.S. 154 (1997), however, may have led them to re-evaluate the wisdom of doing so.

Bennett involved a Federal Bureau of Reclamation irrigation project. In 1992, the Bureau notified the USFWS that continued operation of the project might

jeopardize two listed species of endangered fish. The USFWS investigated and issued a Biological Opinion which concluding that continued operation of the project would likely jeopardize the fish. It also recommended alternative means of operation, including maintenance of minimum water levels in the reservoirs, which would avoid such “jeopardy.” The Bureau agreed to adopt the recommended operational procedures. Several users of irrigation water from the project then filed suit challenging the Biological Opinion because its recommendations would reduce the amount of water available to them, but they did not challenge the Bureau’s decision to adopt that recommendation.

The Government argued that the petitioners lacked standing because any injury they suffered was not fairly traceable to the Biological Opinion, “because the ‘action agency’ (the Bureau) retains ultimate responsibility for determining whether and how a proposed action shall go forward.” The Court acknowledged its rule that standing will not rest on an injury which is “ ‘th[e] result [of] the *independent* action of some third party not before the Court’ ” (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992); emphasis added in *Bennett*), but it explained that the rule “does not exclude injury produced by determinative or coercive effect upon the action of someone else.” 520 U.S. at 169. It found that the Bureau was only “technically free” to disregard the Biological Opinion, because the law imposed a “substantial risk” on the Bureau and its employees if it disregarded a Biological Opinion and caused the endangered species to be harmed, including the possibility of substantial civil and criminal penalties and imprisonment. Because the Biological Opinion was “virtually determinative” of the Bureau’s decision to change its method of operation, the Court held that the petitioners had standing to challenge the Opinion. 520 U.S. at 169-70. The Court’s apparent desire in that case to allow the plaintiffs to challenge the source of their misfortune may work a substantial – and, arguably, undesirable – shift in agency powers under the ESA.

The ESA may be enforced by citizen suits “to enjoin any person, including the United States and any other governmental instrumentality or agency (to the extent permitted by the eleventh amendment to the Constitution)” from violating its requirements or prohibitions. 16 U.S.C. § 1540(g). *See, e.g., TVA v. Hill*, discussed above. *See also Bennett v. Spear*, also discussed above, which reversed a Ninth Circuit ruling that “only plaintiffs who allege an interest in the preservation of endangered species fall within the zone of interests protected by the ESA” (*Bennett v. Plenert*, 63 F. 3d 915, 919 (9th Cir. 1995)), and held that § 1540(g) applies to plaintiffs who “are seeking to prevent application of environmental restrictions rather than to implement them. . . . [T]he ‘any person’ formulation applies to all the causes of action authorized by § 1540(g) – not only to actions against private violators of environmental restrictions, and not only to actions against the Secretary asserting underenforcement under § 1533, but also to actions against the Secretary asserting overenforcement under § 1533.”

Section 2 of the Fish and Wildlife Coordination Act (FWCA), 16 U.S.C. § 662, speaks directly, by its title, to “Impounding, diverting, or controlling of waters.”

When any “body of water” is proposed to be “impounded, diverted, the channel deepened, or ... otherwise controlled or modified for any purpose whatever, 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. *Id.*, subsection (a).

Subsection (b) of the same statute requires other Federal agencies to give “full consideration” to the views of the Interior Department (i.e., USFWS) and state fish and wildlife resource agencies. Subsection (b) has been construed as limited, at least in part, to federal construction projects (*Sierra Club v. Sigler*, 532 F. Supp. 1222, 1242-43 (S.D. Tex. 1982), *reversed in part on other grounds*, 695 F.2d 957 (5th Cir. 1983)), but the Corps’ regulations similarly require “full consideration to the views of [USFWS, NMFS and the state fish and wildlife agency for the state in which work is to be performed] on fish and wildlife matters in deciding on the issuance, denial, or conditioning of individual or general permits.” 33 C.F.R. § 320.4(c).

“[F]ull consideration,” however, does not mean slavish adherence, and fish and wildlife agencies do not have the power to compel the Corps to deny a permit. *See, e.g., Sierra Club v. Callaway*, 499 F.2d 982, 993 (5th Cir. 1974) (rebuking district court for holding, under NEPA, that the Corps normally must “ ‘defer’ ” to project evaluations provided by commenting agencies with special expertise and holding that such agencies are not “vested with authority to veto the evaluation of the Corps”); *North Carolina v. Hudson* (II), 731 F. Supp. 1261, 1269 (E.D.N.C. 1990), *aff’d*, *Roanoke River Basin Association v. Hudson*, 940 F.2d 58 (4th Cir. 1991), *cert. denied*, 502 U.S. 1092 (1992). *Compare North Carolina v. Hudson* (I), 665 F. Supp. 428, 438 & n.10 (E.D.N.C. 1987) (vacating Corps’ initial decision because it “did not adequately respond” to comments of USFWS and NMFS).

The “Environmental Justice” doctrine provides another weapon that can be used to fight a project. President Clinton’s Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7,629 (Feb. 16, 1994), orders each Federal agency, “[t]o the greatest extent practicable and permitted by law, ... [to] make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low income populations.” Although designed primarily to address the cumulative effects of intensive, usually industrial activities in disadvantaged urban areas, environmental justice also has power to bring federal regulators to the aid of minority groups who claim disproportionate harms from rural activities, such as new water withdrawal projects.

Section 10(j) of the Federal Power Act, 16 U.S.C. § 803(j), requires FERC to give special deference to recommendations of state and federal fish and wildlife agencies. (Section 10(j) was enacted in response to complaints of various environmental advocacy groups and perceptions of some Members of Congress that FERC was insufficiently attentive to environmental needs.) FERC has held, however,

that amendment of an existing hydroelectric license to accommodate a new water withdrawal “is not a ‘licensing action’ subject to those parts of the FPA, such as § 10(j), that apply at licensing,” at least as long as the changes do not “authoriz[e] a significant new project work, such as a new turbine/generator, an increase in the height of the project dam, or the like.” *Virginia Electric and Power Co.*, 72 F.E.R.C. ¶ 61,075 at 61,399 & n. 41 (1995).

Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, 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, which is created under § 101 of the Act, 16 U.S.C. § 470a. This generally requires an applicant to provide at least a “Phase I” archaeological survey (typically a literature review and limited field investigations if needed) in connection with a § 404 or other permit application. In cases of “adverse effect” on historic resources, negotiations normally ensue with the federal agency, the State Historic Preservation Officer (SHPO), and other interested parties, with the goal of entering into a Memorandum of Agreement (a § 106 MOA) specifying the appropriate treatment of such resources. Section 106 is an important “checkoff,” but it normally is not a veto. Regulations under § 106 are published at 36 C.F.R. Part 800.

Judicial review of federal permit actions normally is conducted on the agency’s administrative record, under 5 U.S.C. § 706 (the Administrative Process Act). *See, e.g., Buttrey v. United States*, 690 F.2d 1170, 1184 (5th Cir. 1982), *cert. denied*, 461 U.S. 927 (1983). Some courts appear almost routinely to admit evidence outside administrative records in NEPA actions, however; and others will do so if special circumstances are demonstrated (such as a need to explain technical evidence in the record, or to demonstrate that the agency failed to address or investigate a relevant issue). *See, e.g., Asarco, Inc. v. U.S. 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), *cert. denied*, 434 U.S. 1064 (1978). On review, 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.” *See, e.g., Marsh v. Oregon Natural Resources Council*, 490 U.S. 360 (1989).

VI. Typical environmental issues and permit conditions

A. Selection of the least environmentally damaging practicable alternative.

EPA’s § 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.” 40 C.F.R. § 230.10(a).

Opponents of water supply projects invariably argue to the Corps, EPA, and other federal and state agencies, and in proceedings for judicial review of a permit decision, that the applicant and the permitting agency have 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 back yard,” that at least arguably are superior in some respects to the selected project. A project sponsor’s only remedy is to engage in a thorough, objective selection process from the outset, including potential opponents to the extent they are willing to participate, and then to be prepared to defend the choice of alternatives through lengthy (and expensive) administrative and judicial reviews.

In recent years, public water supply project opponents have argued ever more strenuously that growing areas really do not need additional water supplies at all, but merely to conserve and share existing supplies; and that if additional water supplies are needed, they can be obtained from “innovative” approaches such as wastewater reuse or desalination of seawater or brackish groundwater. In this author’s experience, at least, federal agencies generally are sympathetic to such arguments but realistic enough not to embrace their more extreme manifestations. Well in advance of seeking federal permits for a new public water supply project, therefore, sponsors would be well advised to begin incorporating aggressive water conservation measures into their daily operations and long-term plans and to investigate the feasibility of making non-potable uses (such as irrigation, power plant cooling, and other industrial processes) of recycled wastewater. Federal and State resource agencies, seeking to minimize the wetlands and stream flow impacts of new water supply projects, almost invariably demand that project sponsors minimize their customers’ water demands by such measures; and sponsors may be able to develop a degree of trust from the agencies by taking the initiative in those and other areas.

- B. Wetlands destruction or alteration.** We know today that wetlands serve a variety of important biological functions, and preservation of wetlands is a high priority of the § 404 Permit system. *See, e.g.*, 40 C.F.R. § 230.41. Few substantial water supply reservoirs can be built and filled without substantial wetlands impacts, but the extent of the impacts varies with the terrain. Reservoir sites in deep, steep-sided streams or ravines usually yield a substantially greater ratio of storage to wetlands than do sites in broad river valleys. The magnitude of wetlands impacts invariably will be a major factor in selecting a preferred alternative and running the gauntlet of regulatory approvals.
- C. Stream flow – impacts on fisheries, fish spawning, etc.** 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. *See, e.g., North Carolina v. Hudson* (I), 665 F. Supp. 428, 440-43 (E.D.N.C. 1987); and *North Carolina v. Hudson* (II), 731 F. Supp. 1261 (E.D.N.C. 1990), *aff’d*, *Roanoke River Basin Association v. Hudson*, 940 F.2d 58 (4th Cir. 1991), *cert. denied*, 502 U.S. 1092 (1992) (impacts of water withdrawals on reservoir releases provided for striped bass spawning). *See also PUD No. 1*, 511 U.S. 700 (allowing State regulation of minimum stream flows, to protect fish habitat, under § 401 of the Clean Water Act).

- D. Stream flow – impacts on water quality.** Industrial and municipal wastewater treatment plants depend on river flows for assimilation of their discharges. Discharge limits in NPDES (pollution control) permits typically are keyed to the minimum regulated flow, in regulated river systems; or to the 7Q10 (the lowest seven-day average river flow that statistically is expected to occur in any ten years), in unregulated streams. Permits for new dams and 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 regulated minimum flows or in the 7Q10 may lead to violations 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 7Q10's, can be highly controversial. *See, e.g., North Carolina v. Hudson* (I), 665 F. Supp. at 438-40 (up to 1.2% reduction in average flow; no impact on minimum flows).
- E. Minimum instream flow (MIF) conditions,** varying seasonally and especially during fish spawning seasons. This topic generally is discussed above. A recent trend in project permitting is to require that all withdrawals must cease when stream flows fall below a specified threshold, varying from month to month and expressed as percentages of annual average flow. That can be an expensive condition for industrial users, and it could be disastrous for a public water supply. The more stringent the MIF requirements, the greater will be the need for reservoir storage to maintain water supplies during severe droughts – and the greater will be the resulting impacts on wetlands at the reservoir site. The process easily can become a whipsaw, with the project sponsor torn between advocates of wetlands preservation and advocates of stream flow protection; and the two camps are likely to join in arguing that the project should not be built at all.
- F. 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.
- G. Cumulative impacts.** The CEQ's NEPA regulations require permitting agencies, in deciding whether a proposed action would “significantly” impact the environment and therefore requires an EIS, to determine “[w]hether the action is *related to* other actions with individually insignificant but cumulatively significant impacts” and explains that “[s]ignificance cannot be avoided by terming an action temporary or by breaking it down into small component parts.” 40 C.F.R. § 1508.27(b)(7) (emphasis added). That is an “anti-piecemealing” regulation, and it has been interpreted in that fashion in several judicial decisions. *See, e.g., Webb v. Gorsuch*, 699 F.2d 157, 161 (4th Cir. 1983) (“Generally, an administrative agency need consider the impact of other proposed projects when developing an EIS for a pending project only if the projects are so interdependent that it would be unwise or irrational to complete one without the others”). *See generally Kleppe v. Sierra Club*, 427 U.S. 390, 408-14 (1976); *Trout Unlimited v. Morton*, 509 F.2d 1276,

1285 (9th Cir. 1974). Invariably, however, project opponents cite the *definition* of “cumulative impacts,” in 40 C.F.R. § 1508.7 (“the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions”), as imposing a substantive obligation to consider the impacts of other, *unrelated* future actions. That argument appears valid when an agency is determining the *scope* of an EIS (see 40 C.F.R. § 1508.25(c)), but § 1508.27 demonstrates that it is not valid when the issue is *whether to prepare* an EIS.

H. Mitigation

1. Wetlands mitigation – sequencing: avoid, then minimize, then compensate.

Under a Memorandum of Agreement between EPA and the Corps of Engineers (published at 55 Fed. Reg. 9210, March 12, 1990), one of the highest priorities in evaluation of 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).” *Id.*

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.” *Id.*

Finally, “Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required.” *Id.*

2. Compensatory mitigation – wetlands restoration or “creation.”

The EPA-Corps Memorandum of Agreement goes on to provide that “Compensatory 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 Simple purchase or ‘preservation’ of existing wetlands resources may in only exceptional circumstances be accepted as compensatory mitigation.”

3. Provision of reservoir storage to maintain minimum streamflows/optimum flows for fish spawning. See *North Carolina v. Hudson*, 731 F. Supp.

1261, 1265-66 & 1271-72 (E.D.N.C. 1990), *aff'd*, *Roanoke River Basin Association v. Hudson*, 940 F.2d 58, 62-64 (4th Cir. 1991), *cert. denied*, 502 U.S. 1092 (1992).

These issues largely come down to recognition of the fact that there are competing uses of river flows, wetlands, and other resources. This competition generally 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 both instream uses (including human uses, such as hydropower generation, waste assimilation, and recreation, as well as “natural” or biological uses such as fish habitat) and offstream uses (human consumption, manufacturing, agricultural irrigation, etc.).

The goal obviously should be to recognize, reconcile and accommodate all legitimate interests to the maximum extent possible. That goal often is highly difficult to achieve in the “real world,” where advocates of competing interests tend to emphasize their own goals to the exclusion of all others. The reality is that those who want to develop new water withdrawal projects often face an amazing gauntlet of regulatory hurdles. The process includes numerous federal and state regulatory agencies with a vast array of authorities for review of water withdrawal projects and numerous opportunities for public involvement and comment and resulting delays. 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. Long lead times (often up to a decade, or even more) and extensive stamina are necessary. Many opponents of water withdrawal projects are skilled practitioners of “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.” *Pollution Control 20 Years After Earth Day: A Retrospective on Federal Environmental Programs*, 21 *Env't. Rep.*, Current Developments (BNA) 123, 130 (1990). And many project sponsors have learned through bitter experience that 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 asserted issue is illusory.