Understanding Water Rights and Restrictions

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I. Common Law Riparian Rights in Surface Waters

Many authorities could be quoted for the basic law of riparian rights. The following statement from *Purcellville v. Potts*, 179 Va. 514, 520-22, 19

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2 “Common law” is judge-made law, announced in judicial opinions in specific cases. It is different from statutes (enacted by Congress or, in Virginia, by 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, called prior appropriation. The essential premise of the prior appropriation doctrine (greatly oversimplified) 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 a more detailed explanation of the prior appropriation doctrine is 2 R. Beck, ed., *Waters and Water Rights* Ch. 11-17 (Repl. Vol. 2001).

3 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).
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* [i.e., by natural law] 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.”

…. 

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….”

“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, which is discussed below in section V.B) has been the topic of much litigation. This section focuses on the fifth listed right, the right of reasonable use.4

The Thurston-Taylor formulation does not refer to the riparian owners’ right “to have the natural flow of the water … 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 (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

4 The reasonable use right is a “correlative” right. Miller v. Black Rock Springs Imp. Co., 99 Va. 747, 750, 759, 40 S.E. 27, 28, 31 (1901). 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.
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.”

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):

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 to that question 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 power in state and federal regulatory agencies. An owner who wants to challenge a permitted water withdrawal as a violation of his riparian rights may do to, 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 both water pollution and 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

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5 Compare *North Carolina v. Tennessee Valley Authority*, 615 F.3d 291 (4th Cir. 2010) (holding that an electricity generating plant that is in compliance with its Clean Air Act permits cannot be held liable for the common tort of nuisance).
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 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), such as an “interbasin transfer” 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, 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:

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

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 ....

.... 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. [Emphases added.]

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 versus 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 108 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 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 which 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 which rises in Colorado but 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 Master7 “for specific factual findings relevant to determining a just and equitable division.”

7 The Supreme Court has exclusive original jurisdiction of suits between States, but it is not equipped to conduct trials. A Special Master is essentially a trial judge who hears evidence and makes recommendations to the Court.
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 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.8 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.8 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.8

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8 A pending case, brought by the State of Florida against the State of Georgia, seeks an equitable apportionment of the waters of the Apalachicola-Chattahoochee-Flint River system, which encompasses parts of Georgia, Alabama, and Florida.

(footnote continued)
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 343.9

II. Common Law Rights in Groundwater

Because Virginia has no statute addressing conflicting rights to groundwater use, the common law applies.10 The scope of the common law

> Florida v. Georgia, No. 142, Original. Copies of papers filed with or issued by the Court’s Special Master in that case are available at http://www.pierceatwood.com/floridavgeorgia142original (visited June 29, 2015).

9 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 a municipal government may acquire riparian rights necessary to allow interbasin transfers for public supply in a single state by using the power of eminent domain, but no State has the power to authorize municipal condemnation of property rights created by the laws of another State.

10 Virginia has 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 (nearly all of Virginia east
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”\(^\text{11}\) or other words to like effect\(^\text{12}\); but in its most recent 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. \textit{Clinchfield Coal Corp. v. Compton}, 148 Va. 437, 454, 139 S.E. 308, 313 (1927).

The \textit{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 \textit{any use he pleases} of underlying percolating waters, and may even cut them off \textit{maliciously} without liability to his neighbor.

\textit{Id.} at 451-52, 139 S.E. at 313 (emphases added). 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 itself, but it does forbid maliciously cutting it off, its


\(^{11}\) \textit{Couch v. Clinchfield Coal Corp.}, 148 Va. 455, 460, 139 S.E. 314, 315 (1927).

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, 139 S.E. at 313.

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)\(^\text{13}\):

The English Rule is clearly the “English common law” rule, but it was developed in the 19th century in a land which, if anything,  

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\(^{13}\) 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. (The author has not found any cases later than *Costello.*)
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 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 groundwater withdrawals that harmed nearby landowners (e.g., by causing land subsidence or reducing the yield of a spring or a well).

Application of the reasonable use rule could impact municipal or community water systems, by “prevent[ing] 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.” Clinchfield, 148 Va. at 453, 139 S.E. at 313. As stated in that case, however, that would only occur in a suit brought by the owner of adjacent or neighboring lands who is able to prove that the competing wells caused “some interference with 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. In that event, a municipal government presumably could acquire the neighboring landowner’s property rights in his underground water by condemnation, just as the local government was able to condemn the downstream owner’s riparian rights in Purcellville v. Potts. The impact obviously would be much greater to a non-governmental community water supply system.
III. 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. 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. Criteria for issuance of permits include

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.

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14 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 25-600-10, *et seq.* The Act addresses quantity and not quality of groundwater, but the SWCB regulates groundwater quality under the State Water Control Law.

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


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 (the 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, essentially the entire portion of the State east of I-95 (excluding only those portions of the cities of Richmond, Fredericksburg, and Emporia) has been included in a designated water management area. 16

Under the 1992 Act, no one may withdraw water from a regulated aquifer within a designated groundwater 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 minor or 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).

16 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, Essex, Gloucester, James City, King George, King and Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northumberland, Richmond, Westmoreland, and York, and the areas east of Interstate 95 in Caroline, Chesterfield, Fairfax, Hanover, Henrico, Prince William, Spotsylvania, and Stafford Counties have since been added, and the combined area is known as the Eastern Virginia Groundwater Management Area (comprising the entire area from I-95 to the Chesapeake Bay). 9 VAC 25-600-20. Accomack and Northampton Counties are our designated as the Eastern Shore Ground Water Management Area. Id.
The 1973 Act exempted publicly-owned water supplies from regulation. In 1986, public water supply wells were subjected to the Act but grandfathered under certificates of groundwater right that allowed operation at their design capacity. 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 groundwater regulations or permits, omission or misrepresentation of material facts, endangerment of human health or the environment, or a 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 may 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 $25,000 per day of violation plus jail terms of up to twelve months can

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17 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.
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).

In response to increasing concerns about groundwater management and proposed reductions to permitted withdrawals, the General Assembly in 2015 enacted legislation barring the Department of Environmental Quality (DEQ) from imposing withdrawal volume reductions in groundwater permits before January 1, 2016, and created a Eastern Virginia Groundwater Advisory Committee, to be appointed by the Director of the DEQ, to “assist” the State Water Commission and the DEQ in “developing, revising, and implementing a management strategy for ground water in the Eastern Virginia Groundwater Management Area.” 2015 Va. Acts, cc. 262 & 613, codified at Va. Code § 62.1-256.1. The Advisory Committee’s duties are elaborated more fully in subsection B of that Act:

The Committee shall examine (i) options for developing long-term alternative water sources, including water reclamation and reuse, ground water recharge, desalination, and surface water options, including creation of storage reservoirs; (ii) the interaction between the Department of Environmental Quality’s ground water management programs and local and regional water supply plans within the Eastern Virginia Groundwater Management Area for purposes of determining water demand and possible solutions for meeting that demand; (iii) potential funding options both for study and for implementation of management options; (iv) alternative management structures, such as a water resource trading program, formation of a long-term ground water management committee, and formation of a commission; (v) additional data needed to more fully assess aquifer health and sustainable ground water management strategies; (vi) potential future ground water permitting criteria; and (vii) other policies and procedures that the Director of the Department of
Environmental Quality determines may enhance the effectiveness of ground water management in the Eastern Virginia Groundwater Management Area. The Committee shall develop specific statutory, budgetary, and regulatory recommendations, as necessary, to implement its recommendations.

A second enactment of the 2015 General Assembly requires the Joint Legislative Audit and Review Commission (JLARC) to review and report to the General Assembly on Virginia’s water management programs, with an emphasis on groundwater management. House Joint Resolution 623 (2015).

IV. State Water Resource Planning

Va. Code § 62.1-44.38(A), enacted in 1989, directs the SWCB to “prepare plans and programs for the management of the water resources of this Commonwealth in such a manner as to encourage, promote and secure the maximum beneficial use and control thereof.” In 2005, the Board promulgated a regulation intended “to establish a comprehensive water supply planning process for the development of local, regional, and state water supply plans,” 9 VAC 25-780-20, and requiring all local governments in the State to develop programs for local or regional water plans, 9 VAC 25-780-40, -50. See generally 9 VAC 25-780-10 to -190. The regulation includes a detailed list of the required components of each such plan, including inventories of existing water sources and uses, water demand projections, drought response and contingency plans, and statements of need and alternatives.

The DEQ published its draft State Water Resources Plan (SWRP) in April 2015, describing it as “a compilation and synthesis of the 48 local and regional water supply plans developed by local governments to assess their future water supply needs,” SWRP, Preface (page ii), and invited public comments, with a deadline of May 8, 2015. Some of the key findings of the draft SWRP are as follows:

- The State is likely to experience a statewide net increase of 32% (450 mgd) in water demands.
- A large majority (77%) of the increased demands will be met from surface water sources and the remainder from groundwater.
- Future droughts are likely to be more severe and longer-lasting, creating a high probability that new management and/or infrastructure will be required to maintain “safe yields” at current levels.
• Future management options, including establishment of Surface Water Management Areas and Groundwater Management Areas, may be needed for “target stream reaches” in the Chowan-Albemarle, James, Potomac-Shenandoah, Rappahannock, Roanoke, and York River basins.

• There will be a need for development of new water storage reservoirs, a task that “can be difficult, potentially involving numerous competing interests, all of which can be the subject of much debate.” (And that is at best an understatement.)

Criticisms of the draft Plan have emphasized that the DEQ appears to have accepted uncritically all of the demand projections included in local and regional plans; that simply combining the demand projections included in the local and regional plans to estimate state-wide water needs is misleading and tends to overestimate total demands; that the draft Plan does not include cost-benefit analyses (comparing, for example, the costs and benefits of water withdrawal restrictions and water supply alternatives); that it does not prioritize the various needs and challenges that it identifies or propose preferred means of solving those challenges with the greatest implications; and that it fails to recognize that existing conservation measures have hardened demands and made further gains from conservation more difficult to achieve. Commenters also have complained that the draft Plan does not discuss the potential use of stormwater as a water supply source or the possibility of developing a water trading program for groundwater management in the Eastern Virginia Groundwater Management Area.

V. Determining land boundaries at the water line

Landowners’ and public rights to title and use of lands lying between the high and low water marks of tidal waterways historically was a fruitful source of litigation, but the adjacent upland owners’ ownership of such partially-submerged lands appears now to be well settled by an 1819 Act of the General Assembly and a 1932 decision of the Supreme Court of Virginia. The principles governing adjacent riparian landowners’ rights in submerged lands shoreward of the “line of navigability” also are well settled by a series of decisions, but application of these principles to specific cases continues to occupy the attention of lawyers, judges and marine surveyors.
A. Rights in lands between the high and low water marks

The Supreme Court of Virginia has found, apparently after extensive historical and scholarly research, that under English common law (see n.2, supra) “[t]he land lying between low and high water was primarily vested in the Crown as a part of its jus privatum to the same extent as the highlands adjacent thereto”; and “the king had the right and authority to grant parcels of this strip of land to private persons for private use to the exclusion of the public,” but “the presumption was that he had not done so.” Miller v. Commonwealth, 159 Va. 924, 929, 166 S.E. 557, 558 (1932). The Court concluded, based on this presumption and other analyses elaborated in detail in

18 The term *jus privatum* “signif[ies] private ownership or the right and title of a private owner.” G.L. Webster Co. v. Steelman, 172 Va. 342, 357, 1 S.E.2d 305, 311 (1939). “[T]he use and enjoyment by the people of the tidal waters and their bottoms for the purpose of taking fish and shellfish therefrom … is an incident of the *jus privatum* of the State, not of the *jus publicum*.” Commonwealth v. City of Newport News, 158 Va. 521, 549, 164 S.E. 689, 698 (1932). The same is true of “[t]he right of the public to bathe in and use the waters of [Hampton] Roads and its estuaries for other pleasure purposes.” Id. at 531, 164 S.E. at 691. The term *jus publicum* refers to the State’s sovereign right of “jurisdiction and dominion for governmental purposes over all the lands and waters within its territorial limits, including tidal waters and their bottoms,” id. at 546, 164 S.E. at 696, and probably includes the right of navigation. Id. at 548, 550-51, 164 S.E. at 697, 698. The *jus privatum* of the State can be alienated by private grants, but “[t]he *jus publicum* and all rights of the people, which are by their nature inherent or inseparable incidents thereof, are incidents of the sovereignty of the State…. [T]he Constitution impliedly denies to the legislature the power to relinquish, surrender or destroy, or substantially impair the *jus publicum*, or the rights of the people which are so grounded therein as to be inherent and inseparable incidents thereof, except to the extent that the State or Federal Constitution may plainly authorize it to do so.” Id. at 546-47, 164 S.E. at 696-97.

The Supreme Court of Virginia has held, consistent with the description of the *jus privatum* provided in the earlier cases cited above, that the King had the power, under English common law, to make private grants of lands lying under navigable waters; and there are at least a handful of such grants in various parts of Virginia. See Commonwealth v. Morgan, 225 Va. 517, 303 S.E.2d 899 (1983), involving rights to submerged lands under a branch of Carter’s Creek, in Lancaster County; and Kraft v. Burr, 252 Va. 273, 476 S.E.2d 715 (1996), upholding claims to exclusive fishing rights in the navigable Jackson River, in Alleghany County, under letters of patent from two English monarchs.
the Miller decision, that “where [a] grant called for the sea, or a tidal bay, river or creek, as the boundary of the land granted, the boundary was, as a matter of law, construed to be high-water mark, unless the grant expressly or impliedly showed an intention to make the low-water mark instead of the high-water mark the boundary called for.” Id. at 929-30, 166 S.E. at 558. This did not mean that the upland owner did not have riparian rights in the adjacent waters, however, as discussed in part I of this paper:

Where land which reached to a tidal water, either at high-water or low-water mark, was granted, unless the grant expressly or impliedly provided to the contrary, the grantee became entitled to certain riparian rights (as for instance, the right to have access to the navigable parts of the tidal water), as appurtenant to the riparian lands owned by him. But this is very different from the land between low and high-water marks passing as an appurtenance to the uplands adjacent thereto.

Id. at 930, 166 S.E. at 558-59.

That rule was altered, however, by a statute enacted in 1819 and presently codified in part at Va. Code § 28.2-1202(A). See Miller, 159 Va. at 949-51, 166 S.E. at 566. That statute now provides:

Subject to the provisions of § 28.2-1200, the limits or bounds of the tracts of land lying on the bays, rivers, creeks, and shores within the jurisdiction of the Commonwealth, and the rights and privileges of the owners of such lands, shall extend to the mean low-water mark but no farther, except where a creek or river, or some part thereof, is comprised within the limits of a lawful survey.

Section 28.2-1200, which is cited in § 28.2-1202, also was part of the 1819 law (but appears to have originated somewhat earlier, as discussed below). Section 28.2-1200 provides, in part:

All the beds of the bays, rivers, creeks and the shores of the sea within the jurisdiction of the Commonwealth, not conveyed by special grant or compact according to law, shall remain the property of the Commonwealth and may be used as a common by all the people of the Commonwealth for the purpose of
fishing, fowling, hunting, and taking and catching oysters and other shellfish.

The Miller Court described the effect of the 1819 legislation as follows:

Wherever the land granted was bounded by a tidal water so as, under the common law, to pass title to high-water mark, this act extended the limits of the grant to ordinary low-water mark; granted to the grantee, or his successor in title, the fee simple title to the strip of land along his tidal water frontage which lay between high and low-water marks, and, with the exception below mentioned, vested the grantee, or his successor in title, with the exclusive right to use and enjoy that strip of land and the waters which cover it at high tide, subject only to the right of the public to use the waters covering it at high tide for purposes of navigation ….

The exception above mentioned is this: Where the extension of any such grant to low-water mark would include therein any land lying between low and high-water marks which was at that time “used as a common,” the public should continue to have and enjoy the right of fishing, fowling and hunting thereon.

[The] act of February 16, 1819, was, in effect, a grant by the Commonwealth to every person owning land bounded by a tidal water under a grant theretofore issued; and such grantees could not thereafter be deprived by any subsequent legislation of any of the rights thereby granted.

159 Va. at 951, 166 S.E. at 566.

The Supreme Court of Virginia has held, however, that the effect of the 1819 statute, extending all grants of riparian lands to the low-water mark, applies only to lands which were originally granted (by the King or the Commonwealth) before 1780, at least with respect to areas historically used as “commons.” Bradford v. Nature Conservancy, 224 Va. 181, 197 & n.7, 294 S.E.2d 866, 874 & n.7 (1982). The Court reached that conclusion by application of the statute which is now codified at Va. Code § 28.2-1000, quoted above, which it traced to an Act passed in 1780.

The Court also has held that §§ 28.2-1200 and 28.2-1202 do not apply to lakes. Smith Mountain Lake Yacht Club, Inc. v. Ramaker, 261 Va. 240, 542
S.E.2d 392 (2001). (It also appears from Smith Mountain that the rule of Groner v. Foster, discussed below, may not apply to lakes, but that is not entirely clear from the decision.)

B. Riparian rights in lands and waters below the low water mark

Riparian rights include the right of access to the water, including a right of way to and from the navigable part, and the right to build a pier or “wharf out” to navigable water (subject to State regulation), as stated above in part I. The basic principle is a simple one, but its application to specific cases has caused numerous problems and led to a long series of judicial decisions. The fundamental source of the problems is that the lands bordering navigable waters rarely follow a straight line. The rights of adjoining riparian landowners therefore cannot be established

by a fixed rule of extending out to the line of navigability of the waterway the divisional lines between the owners of the uplands in the same direction that these lines reach the shore…. Such a rule would apply only when the shoreline is straight, the line of navigability equal in length and parallel with it, and the divisional lines approach the shore at right angles. If the line of the shore or the line of navigability curves, or the divisional lines approach the shore at different angles, their projection in the same direction out to the line of navigability would necessarily, and unjustly, cause them to encroach on the riparian rights of the several coterminous owners of the waterfront, and deprive one or more of them of all access to, and benefit of, the navigable part of the watercourse.


The Supreme Court’s solution, adopted in Groner v. Foster, 94 Va. 650, 27 S.E. 493 (1897), and consistently followed since that time, is to “give to each proprietor of the shore, and as directly in his front as practicable, a parcel of the land under the water of a width at its outer end upon the line of navigability proportioned to that which it has at the inner or shore end.” Id. at 652, 27 S.E. at 494. The means of achieving such a proportional division of rights in submerged lands is described in Groner as follows:

A just rule of division is to measure the length of the shore and ascertain the portion thereof to which each riparian
proprietor is entitled; next measure the length of the line of navigability, and give to each proprietor the same proportion of it that he is entitled to of the shore line; and then draw straight lines from the points of division so marked for each proprietor on the line of navigability to the extremities of his lines on the shore. Each proprietor will be entitled to the portion of the line of navigability thus apportioned to him, and also to the portion of the flats, or land under the water, within the lines so drawn from the extremities of his portion of the said line to the extremities of his part of the shore. The general rule of division, therefore, is, as the whole shore line is to the whole line of navigability so is each one’s share of the shore line to each one’s share of the line of navigability. The lines so drawn will be parallel, or diverge, or converge, as the navigable water line happens to be equal and parallel with, or is longer, or shorter, than the shore line.

_id. at 652-53, 27 S.E. at 494.

According to _Groner_, the riparian owner’s “right to the water frontage belonging by nature to his land…. includes … the right to the soil under the water between his land and the navigable line of the water course, whereon he may erect wharves, piers, or bulkheads for his own use, or the use of the public, subject to such rules and regulations as the Legislature may see proper to impose for the protection of the public.” _Id._ In _Grinels v. Daniel_, 110 Va. 874, 877, 67 S.E. 534, 535-36 (1910), however, the Court said “that the title to the land between low water mark and the line of navigability is in the Commonwealth,” and the adjacent riparian owner has only “a qualified right” in such areas.

The rule stated in _Grinels_ represents the law of Virginia today. The Commonwealth holds the title to “[a]ll the beds of the bays, rivers, creeks and the shores of the sea within the jurisdiction of the Commonwealth, not conveyed by special grant or compact according to law,” as stated in Va. Code § 28.2-1200; and the Virginia Marine Resources Commission (VMRC) has the regulatory authority to “[i]ssue permits for all reasonable uses of state-owned bottomlands not authorized under subsection A of § 28.2-1203, including but not limited to, dredging, the taking and use of material, and the placement of wharves, bulkheads, and fill by owners of riparian land in the waters opposite their lands, provided such wharves, bulkheads, and fill do not extend beyond any lawfully established bulkhead lines.” Va. Code § 28.2-1204(1). Section
28.2-1203(A), cited in § 28.2-1204(1), generally prohibits unpermitted encroachments on and removal of materials from the beds of the bays, ocean, rivers, streams, or creeks which are the property of the Commonwealth – but with numerous exceptions, including (among others), “act[s]” that are “necessary” for the following:

1. Erection of dams, the construction of which has been authorized by proper authority;

... 

4. Construction of piers, docks, marine terminals, and port facilities owned or leased by or to the Commonwealth or any of its political subdivisions;

5. Except as provided in subsection D of § 28.2-1205 [which requires permits for certain private piers used for noncommercial purposes measuring 100 or more feet in length from the mean low-water mark], placement of private piers for noncommercial purposes by owners of the riparian lands in the waters opposite those lands, provided that (i) the piers do not extend beyond the navigation line or private pier lines established by the [Marine Resources] Commission or the United States Army Corps of Engineers, (ii) the piers do not exceed six feet in width and finger piers do not exceed five feet in width, (iii) any L or T head platforms and appurtenant floating docking platforms do not exceed, in the aggregate, 400 square feet ... and (v) the piers are determined not to be a navigational hazard by the Commission....

See generally, e.g., Evelyn v. Commonwealth, 46 Va. App. 618, 621 S.E.2d 130 (2005), upholding a VMRC ruling that required a riparian landowner to remove a roof and second-story deck structure from his pier on the Pamunkey River, on the ground that § 28.2-1203(A)(5) (which is quoted in substantial part just above) “did not authorize appellant’s construction, without a permit, of the portion of the mooring that was not ‘essential’ to accessing navigable waters.... Allowing unfettered noncommercial building atop piers that do not intrude into navigable waters is contrary to the plain meaning of the statute and the common law and would produce an absurd result.” Id. at 633, 621 S.E.2d at 138. Compare Boone v. Harrison, 52 Va. App. 53, 660 S.E.2d 704 (2008), holding that a Circuit Court erred by invalidating an after-the-fact permit for an upper deck bar on the roof of a restaurant on a pier and by ordering the
restaurateur to dismantle the structure. (The landowner in *Evelyn*, unlike *Boone*, relied only on § 28.2-1203(A)(5) and did not challenge the VMRC’s denial of an after-the-fact permit.)

Va. Code § 28.2-1205 states the basic criteria to be used by the VMRC in deciding whether to issue a permit:

A. When determining whether to grant or deny any permit for the use of state-owned bottomlands, the Commission shall be guided in its deliberations by the provisions of Article XI, Section I of the Constitution of Virginia. In addition to other factors, the Commission shall also consider the public and private benefits of the proposed project and shall exercise its authority under this section consistent with the public trust doctrine as defined by the common law of the Commonwealth adopted pursuant to § 1-200 in order to protect and safeguard the public right to the use and enjoyment of the subaqueous lands of the Commonwealth held in trust by it for the benefit of the people as conferred by the public trust doctrine and the Constitution of Virginia. The Commission shall also consider the project’s effect on the following:

1. Other reasonable and permissible uses of state waters and state-owned bottomlands;
2. Marine and fisheries resources of the Commonwealth;
3. Tidal wetlands, except when this has or will be determined under the provisions of Chapter 13 of this title;
4. Adjacent or nearby properties;
5. Water quality; and

Article XI, Section I of the Constitution of Virginia (“Natural resources and historical sites of the Commonwealth”), which is cited in § 28.2-1205(A), states:

To the end that the people have clean air, pure water, and the use and enjoyment for recreation of adequate public lands, waters, and other natural resources, it shall be the policy of the Commonwealth to conserve, develop, and utilize its natural
resources, its public lands, and its historical sites and buildings. Further, it shall be the Commonwealth’s policy to protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people of the Commonwealth.

(That provision is not “self-executing.” Robb v. Shockoe Slip Foundation, 228 Va. 678, 324 S.E.2d 674 (1985).)

Va. Code § 1-200, likewise cited in § 28.2-1205(A), is quoted in above in n.1. The notion that the common law of the Commonwealth incorporates “the public trust doctrine” appears to be purely the invention of the drafter of that portion of § 28.2-1205. See Commonwealth v. City of Newport News, 158 Va. at 536-40, 164 S.E. at 693-94:

in cases holding that a legislative grant of land under tidal waters or of authority to use tidal waters or their bottoms is invalid in so far as the grant is inconsistent with the use of the waters involved for purposes of navigation, the decisions often have been rested upon the statement that the State holds its tidal waters and their bottoms in trust for the use thereof by the people for purpose of navigation. So also some courts have gone so far as to say, and a few hold, that tidal waters and their bottoms are held by the State in trust not only for the use thereof by the people for navigation, but also for taking fish and shellfish therefrom….

It is questionable whether the interposition of the conception of a trust in these cases serves any useful purpose or tends to clarity of thinking or correctness of decision. The statement that the State or the State legislature holds its tidal waters and their bottoms upon a trust establishes nothing that remained to be established before the statement was made.

Whatever will prove the existence of the trust requisite to support a decision will establish (without the interposition of the conception of a trust) the limitation upon the power of the State or the legislature which the decision declares to exist. It would be preferable, more logical, and render the
decision less open to misapplication as a precedent, to rest the
decision directly upon the primary premise, instead of first
deducing a trust therefrom, and then deducing from the trust the
limitation upon the power of the legislature which the decision
holds to exist.

The courts nevertheless have endeavored to import some content to that
legislatively enacted common law “trust” doctrine. See Palmer v. VMRC, 48
Va. App. 78, 88, 628 S.E.2d 84, 89-90 (2006), quoting the VMRC’s
Subaqueous Guidelines, 21 V.R.R. 1708 (Feb. 21, 2005), and holding that
under the public trust doctrine “[t]he state holds the land lying beneath public
waters as trustee for the benefit of all citizens. As trustee, the state is
responsible for proper management of the resource to ensure the preservation
and protection of all appropriate current and potential future uses, including
potentially conflicting uses, by the public.” The Palmer court also quoted
from a law review article “noting that the public trust doctrine provides that
‘tidelands and certain other lands and waters are held by the state in trust for its
citizens, to be used only for the benefit of the public.’”

The VMRC’s authority is purely regulatory, not judicial. A VMRC
permit for the construction of piers, wharves, boat slips, etc., does not
determine the riparian rights of the permittee or adjacent riparian landowners.
permit determines only the rights of an applicant vis-a-vis the Commonwealth
and the public”; it “does not amount to an adjudication of conflicting private
property claims.” Id. at 570-71, 391 S.E.2d at 68.

VI. 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
federal permit for most new surface water withdrawal and construction
projects. Many of the other federal regulatory authorities discussed in this
paper apply only 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 320-332, 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).

**Waters of the United States.** Through a remarkable process of statutory, judicial, and regulatory alchemy, the term “navigable waters,” in § 404, has come to include “areas that are inundated or saturated by surface or groundwater 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(c)(4) (new citation; see below); see 33 C.F.R. §§ 328.1, 328.3(a)(2), (6); 40 C.F.R. §§ 230.3(s)(2), (3), (7), 230.3(t); see also, e.g., *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). (The genesis of that process is Congress’ definition of “navigable waters,” as used in the Clean Water Act, as “mean[ing] the waters of the United States, including the territorial seas.” 33 U.S.C. § 1362(7). With that definition, the scope of federal regulatory authority, previously confined to navigable waters within the traditional meaning of that term, was given almost unlimited room for expansion.)

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” within its jurisdiction (33 C.F.R. § 328.3(a)(3)) and an interpretation of that regulation as including 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.*, which appeared to have approved a 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, 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 Clean Water Act (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 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 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*, 552 U.S. 948 (2007).¹⁹ Neither the U.S. Court of Appeals for the Fourth Circuit (which includes Virginia) nor any U.S. District Court in Virginia has weighed in on the question.²⁰

In an effort to put an end to this widespread confusion, the Corps and the EPA recently issued a lengthy and controversial new definition of “waters of the United States” under the CWA (also known as “jurisdictional waters,” meaning that they are subject to the Corps’ § 404 jurisdiction). The new regulation, with its lengthy preamble, is available at [http://www2.epa.gov/cleanwaterrule/prepublication-version-final-clean-water-rule](http://www2.epa.gov/cleanwaterrule/prepublication-version-final-clean-water-rule) (visited June 19, 2015).²¹ The new regulation:

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¹⁹ 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).

²⁰ In *Precon Development Corp. v. United States Army Corps of Engineers*, 633 F.3d 278 (4th Cir. 2011), the parties “agree[d] that Justice Kennedy’s ‘significant nexus’ test governs,” and the court “therefore [did] not address the issue of whether the plurality’s ‘continuous surface connection’ test provides an alternate ground upon which CWA jurisdiction can be established.” *Id.* at 288.

²¹ The new rule was published in the Federal Register on June 29, 2015, just as this paper was being completed. Numerous parties immediately filed suits challenging the rule, including at least three cases filed by a total of 17 different States.
• Defines “waters of the United States” as including:
  o “All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide,” and the territorial seas – i.e., traditionally navigable waters; interstate waters, including interstate wetlands; and impoundments of such waters or any of their tributaries. 33 C.F.R. § 328.3(a)(1) - (4). (No change from the previous regulation.)
  o “All tributaries” of any traditionally navigable waters, interstate waters, or any of their tributaries. 33 C.F.R. § 328.3(a)(5) (emphasis added). (No changes, except that (1) the previous regulation included tributaries of impoundments of waters otherwise defined as waters of the United States, which now is omitted, and (2) “tributary” now is defined. See below.)
  o All waters adjacent to a water identified in § 328.3(a)(1) - (5) (described above), including “wetlands, ponds, lakes, oxbows, impoundments, and similar waters.” 33 C.F.R. § 328.3(a)(6). (No changes, except to the definition of “adjacent.” See below.)
  o All waters located within the 100-year floodplain of traditionally navigable or interstate waters. 33 C.F.R. § 328.3(a)(8). (New.)
  o All waters located within 4,000 feet of the high tide line or the ordinary high water mark of traditionally navigable waters, interstate waters, or an impoundment or tributary of such waters, “where they are determined on a case-specific basis to have a significant nexus” to traditionally navigable or interstate waters. Id. (New.)
  o “For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain … or within 4,000 feet of the high tide line or ordinary high water mark” of traditionally navigable or interstate waters. Id. (emphases added). (New.)

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22 The “territorial seas” are “the waters, 3 nautical miles wide, adjacent to the coast of the United States and seaward of the territorial sea baseline.” 33 C.F.R. § 2.22. See 33 C.F.R. § 328.4(a). The “territorial sea baseline” is “[n]ormally … the mean low water line along the coast of the United States.” 33 C.F.R. § 2.20.
Certain other waters “where they are determined, on a case-specific basis, to have a significant nexus to” traditionally navigable or interstate waters. 33 C.F.R. § 328.3(a)(7). Waters within this subsection include, among others, Carolina bays and Delmarva bays (which are “ponded, depressional wetlands that occur along the Atlantic coastal plain”) and pocosins (“evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain”). (New.)

- Excludes “[w]aste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act”; prior converted croplands; ditches (to the extent discussed below); irrigated areas that would revert to dry land if irrigation ceased; lakes and ponds constructed in dry land, such as farm and stock watering ponds, irrigation ponds, settling basins, rice fields, and cooling ponds; and “[p]uddles.” (Waste treatment systems and prior converted croplands were excluded by the previous regulation. The other exclusions are new.)

- Defines the term “tributary” very broadly, as meaning “a water that contributes flow, either directly or through another water (including an impoundment …),” to a traditionally navigable or interstate water “that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.” (It appears that the “bed and banks” clause, last quoted, refers to the tributary and not to the downstream water to which it “contributes flow.”) “A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (b) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break.” 33 C.F.R. § 328.3(c)(3) (emphases added). (New.)

- The ditches “excluded under paragraph (b)” are (i) ditches with ephemeral or intermittent flow that are not a relocated tributary, excavated in a tributary, or (ii) (in the case of ditches with intermittent flow) drain wetlands, and (iii) ditches that do not flow, either directly or
through another water, into traditionally navigable or interstate waters. 33 C.F.R. § 328.3(b)(3). (New.)

- Defines “adjacent” as “bordering, contiguous, or neighboring” traditionally navigable waters, interstate waters, or any of their impoundments or tributaries, “including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like…. Adjacency is not limited to waters located laterally to [such waters]. Adjacent waters also include all waters that connect segments of [such waters] or are located at the head of [such a water] and are bordering, contiguous, or neighboring such water.” 33 C.F.R. § 328.3(b)(1). (Expanded from the previous definition.)

- Defines “significant nexus” as “mean[ing] that a water, including wetlands, either alone or in combination with other similarly situated waters in the region, significantly affects the chemical, physical, or biological integrity of” traditionally navigable or interstate waters. “The term ‘in the region’ means the watershed that drains to the nearest [traditionally navigable or interstate water]. For an effect to be significant, it must be more than speculative or insubstantial. Waters are similarly situated when they function alike and are sufficiently close to function together in affecting downstream waters. For purposes of determining whether or not a water has a significant nexus, the water’s effect on downstream [traditionally navigable or interstate waters] shall be assessed” by evaluating a series of “aquatic functions” listed below. “A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the region, contributes significantly to the chemical, physical, or biological integrity of the nearest [traditionally navigable or interstate waters.]” 33 C.F.R. § 328.3(b)(5) (emphasis added). (New.)

- The aquatic functions included in the significant nexus evaluation include
  - Sediment trapping;
  - Nutrient recycling;
  - Pollutant trapping, transformation, filtering, and transport;
  - Retention and attenuation of flood waters;
  - Runoff storage;
o Contribution of flow;
  o Export of organic matter;
  o Export of food resources; and
  o Provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in a traditionally navigable or interstate water.

The agencies’ rule announcement asserts that “[t]he scope of jurisdiction in this rule is narrower than that under the existing regulation…. in part because the rule puts important qualifiers on some existing categories such as tributaries. In addition, the rule provides greater clarity regarding which waters are subject to CWA jurisdiction, reducing the instances in which permitting authorities … would need to make jurisdictional determinations on a case-specific basis.” Page 3. Skeptical Republicans in Congress have floated various proposals designed to block the new regulation, however, and litigation challenges are widely expected – perhaps from both the right and the left.

Industry groups have complained that the “tributary” definition is too broad and the exclusion of ditches with ephemeral or intermittent flows too narrow, representing unwarranted overreaches of federal regulatory authority. According to the National Association of Home Builders, for example, the new rule “could place millions of additional acres of private land under federal jurisdiction” and “is so extreme that the federal government will actually regulate certain roadside ditches, isolated ponds and channels that may only flow after a heavy rainfall.” [http://www.nahb.org/en/research/nahb-priorities/wetlands/waters-of-the-united-states-the-final-rule.aspx](http://www.nahb.org/en/research/nahb-priorities/wetlands/waters-of-the-united-states-the-final-rule.aspx) (visited June 22, 2015).

The Waterkeeper Alliance, on the other hand, has complained (according to an emailed environmental news report) that the “tributary” definition does not reach far enough because it is limited to waterways with a bed and banks and an ordinary high water mark, thereby excluding various ephemeral streams (particularly in the arid western states). It also has objected to the exclusion of ditches with ephemeral or intermittent flows. According to the Alliance, those provisions are simply a license to discharge pollution into tributaries of larger streams. It also has complained that the “[w]aste treatment systems” exclusion “allows polluters to dam up streams to form waste lagoons that would not be subject to the full protections of the Clean Water Act” and
“allows polluters to escape treatment requirements by impounding waters of the United States and claiming the impoundment is a waste treatment system, or by discharging wastes into wetlands.”

http://waterkeeper.org/2015/05/27/us-epa-and-army-corps-issue-weak-clean-water-rule/ (visited June 22, 2015). Most environmental advocacy groups, however, appear to be holding their noses and supporting the new rule as representing an improvement over guidance previously issued by the second Bush Administration.

The § 404 permit process. A “discharge” of “fill material,” subject to regulation under § 404(a), includes any construction, such as a building, a highway, a dam, or an intake structure, in jurisdictional waters. See 33 C.F.R. § 323.2(f). Discharges of fill material include, for example, building foundations and pipelines – as well as traditional fill materials, which are designed to raise ground elevation and convert a wetland or open water to an upland. Section 404 permits therefore are required for a large majority of all linear construction and water supply projects and for any construction project that takes place to any extent in a wetland area. Section 404 and other federal regulatory statutes do not apply to groundwater withdrawal projects, however (except incidentally, such as for construction of pipelines crossing wetlands or streams).

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

Some discharge activities which have been determined to cause minimal individual and cumulative adverse environmental impacts are authorized by published nationwide or regional permits. Current nationwide permits (the “2012 NWPs”), which expire on March 18, 2017, are published in the Federal Register at 77 Fed. Reg. 10184 (Feb. 21, 2012). There are 52 nationwide permits, each of them is subject to 31 general conditions, and the Corps may add special conditions in particular cases. Approximately half of the 52 nationwide permits require pre-construction notifications (defined as “request[s] … for confirmation that a particular activity is authorized by nationwide permit”) to the Corps. The Norfolk District has issued 10 regional permits or, which are available at http://www.nao.usace.army.mil/Missions/Regulatory/RBregional.aspx (visited June 29, 2015). The Corps always has the option of requiring an individual
permit for an activity that is within the scope of a nationwide or regional permit, if it “finds that the proposed activity would have more than minimal individual or cumulative net adverse effects on the environment or otherwise may be contrary to the public interest.” 33 C.F.R. § 330.1(d).

Nationwide and regional permits aside, 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 environmental impact statement (EIS) or environmental assessment (EA). Another notice and comment period may be allowed following publication of a final EIS and in unusual (i.e., controversial) 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. Major highway, pipeline, and water withdrawal projects often are highly controversial, and an active and engaged “environmental” community can usually generate sufficient public interest to create a controversy involving any activity that its leaders view with a jaundiced eye.

A major current issue is whether a landowner may proceed immediately to federal court to challenge a “jurisdictional determination,” which is a finding by the Corps or EPA that a given tract of land contains a stated and specified area of “waters of the United States” (usually wetlands). The Corps and EPA take the position that a jurisdictional determination is not a final agency action and therefore cannot be challenged directly. Where that position prevails, the only options available to a landowner who disagrees with a jurisdictional determination are (1) to abandon the proposed project; (2) to apply for a Section 404 permit and challenge the final decision (either a permit denial or a grant with conditions) on the ground that the agencies lacked jurisdiction in the first place; or (3) to ignore the jurisdictional determination and proceed with the proposed activity, risking an enforcement action, civil penalties of as much as $25,000 per day, possible criminal prosecution, and a federal court order either to restore the land to its original condition or to apply for an after-the-fact permit.

One U.S. Court of Appeals held recently that a jurisdictional determination is subject to immediate judicial review. Hawkes Co., Inc., v. U.S. Army Corps of Engineers, 782 F.3d 994 (8th Cir. 2015). At least one other appellate court has reached the opposite conclusion. Belle Co., LLC v. U.S. Army Corps of Engineers, 761 F.3d 383 (5th Cir. 2014), cert. denied, No.
14-493, 83 U.S.L.W. 3291 (March 23, 2015). As the citation indicates, the U.S. Supreme Court declined to review the decision in the Belle case. The conflict of opinions among the federal circuits created by the subsequent Hawkes decision, however, gives rise to a situation in which the Supreme Court is more likely to accept a case which presents the issue for its decision (perhaps Hawkes, perhaps some later decision).23

Issuance of a permit often will be relatively quick and painless, where wetland impacts are minimal. In other cases, however, the question whether immediate judicial review is available has enormous financial and practical consequences. The Hawkes case provides an example. In that case, involving a proposed peat mine, a Corps representative told the project proponent that “a permit would take years and the process would be very costly”; the agency sent “a letter advising that nine additional information items costing more than $100,000 would be needed, including hydrological and functional resource assessments and an evaluation of upstream potential impacts”; and it advised “that an environmental impact statement would likely be required, delaying the issuance of any permit for several years.” 782 F.3d at 998 (emphasis in original). The court also noted, quoting the Supreme Court’s decision in Rapanos, 547 U.S. at 721, “that the average applicant for an individual Corps permit ‘spends 788 days and $271,596 in completing the process.’” Hawkes, 782 F.3d at 1001 (emphasis added).

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.

23 Belle has asked the Supreme Court to reconsider its denial of review, arguing that the Hawkes decision has created a conflict among the lower federal appellate courts which only the Supreme Court can resolve and that the Government is unlikely to seek review in Hawkes due to the risk that the Court might announce a nationwide precedent rejecting its position. The Government has replied that it is seeking rehearing from the Eighth Circuit in Belle and therefore that the conflict may be resolved without the Supreme Court’s intervention.
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)”).

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24 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 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.

*(footnote continued)*
In *PUD No. 1*, the U.S. Supreme Court extended the 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. 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).

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 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

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).
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 Section 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.” (That is not the same definition that applies under § 404, as discussed above.)

**Other federal regulatory approvals** may be required, depending on the circumstances. Natural gas pipelines, for example, require certificates of public convenience and necessity from Federal Energy Regulatory Commission (FERC) under § 7(c) of the Natural Gas Act, 15 U.S.C. § 717f(c). See 16 C.F.R. Part 153. Construction of bridges or causeways over navigable waters require Coast Guard permits under a series of federal acts now codified at 33 U.S.C. §§ 401, 491, and 525. See 33 C.F.R. Parts 114-116. Projects that involve water withdrawals from existing FERC-licensed hydropower projects 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

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 project that began operation in 1973. The Water Authority included hydropower generation facilities only to meet a portion of its own need for electrical supply to the project, not to bring the project within FERC’s jurisdiction.

**The National Environmental Policy Act (NEPA)** is the biggest (or at least the most expensive) “overlay” to the § 404 and other federal permit or license processes. 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)\(^ {25} \) 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*

\(^ {25} \) 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.
The process of preparing an EIS is far slower and more expensive than preparation of an EA and FONSI, so federal agencies (as well as permit applicants) 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 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 an agency 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, agencies in many cases make an initial decision whether to prepare an EIS or only an EA and FONSI, and proceed 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 minimal 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 only a procedural statute. If an agency follows the necessary procedures and considers environmental factors, NEPA does not require the most “environmentally sound” outcome. 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).

The Coastal Zone Management Act (CZMA) 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, but a State veto can be set aside by the U.S. Secretary of Commerce.

The CZMA was enacted in 1972 and has been amended several times. It is supported by Congressional findings, stated in § 302 of the CZMA, 16 U.S.C. § 1451, that, among other things,26

(a) There is a national interest in the effective management, beneficial use, protection, and development of the coastal zone.

26 The findings and policies stated in §§ 302 and 303 are quoted at some length because they are important criteria in “appeals” of State consistency objections to the U.S. Secretary of Commerce, as discussed below.
(c) The increasing and competing demands upon the lands and waters of our coastal zone occasioned by population growth and economic development, including requirements for industry, commerce, residential development, recreation, extraction of mineral resources and fossil fuels, transportation and navigation, waste disposal, and harvesting of fish, shellfish, and other living marine resources, have resulted in the loss of living marine resources, wildlife, nutrient-rich areas, permanent and adverse changes to ecological systems, decreasing open space for public use, and shoreline erosion.

(d) The habitat areas of the coastal zone, and the fish, shellfish, other living marine resources, and wildlife therein, are ecologically fragile and consequently extremely vulnerable to destruction by man’s alterations.

(e) Important ecological, cultural, historic, and esthetic values in the coastal zone which are essential to the well-being of all citizens are being irretrievably damaged or lost.

(f) New and expanding demands for food, energy, minerals, defense needs, recreation, waste disposal, transportation, and industrial activities in the Great Lakes, territorial sea, exclusive economic zone, and Outer Continental Shelf are placing stress on these areas and are creating the need for resolution of serious conflicts among important and competing uses and values in coastal and ocean waters;

(g) Special natural and scenic characteristics are being damaged by ill-planned development that threatens these values.

(h) In light of competing demands and the urgent need to protect and to give high priority to natural systems in the coastal zone, present state and local institutional arrangements for planning and regulating land and water uses in such areas are inadequate.

(i) The key to more effective protection and use of the land and water resources of the coastal zone is to encourage the states to exercise their full authority over the lands and waters in the coastal zone by assisting the states, in cooperation with Federal
and local governments and other vitally affected interests, in developing land and water use programs for the coastal zone, including unified policies, criteria, standards, methods, and processes for dealing with land and water use decisions of more than local significance.

....

(k) Land uses in the coastal zone, and the uses of adjacent lands which drain into the coastal zone, may significantly affect the quality of coastal waters and habitats, and efforts to control coastal water pollution from land use activities must be improved.

Section 303 of the Act, 16 U.S.C. § 1452, includes the following declarations of national policy, among others:

(1) to preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation’s coastal zone for this and succeeding generations;

(2) to encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone, giving full consideration to ecological, cultural, historic, and esthetic values as well as the needs for compatible economic development, which programs should at least provide for -

(A) the protection of natural resources, including wetlands, flood plains, estuaries, beaches, dunes, barrier islands, coral reefs, and fish and wildlife and their habitat, within the coastal zone,

(B) the management of coastal development to minimize the loss of life and property caused by improper development in flood-prone, storm surge, geological hazard, and erosion-prone areas and in areas likely to be affected by or vulnerable to sea level rise, land subsidence, and saltwater intrusion, and by the destruction of natural protective features such as beaches, dunes, wetlands, and barrier islands,
(C) the management of coastal development to improve, safeguard, and restore the quality of coastal waters, and to protect natural resources and existing uses of those waters,

(D) priority consideration being given to coastal-dependent uses and orderly processes for siting major facilities related to national defense, energy, fisheries development, recreation, ports and transportation, and the location, to the maximum extent practicable, of new commercial and industrial developments in or adjacent to areas where such development already exists,

(E) public access to the coasts for recreation purposes, [and]

(F) assistance in the redevelopment of deteriorating urban waterfronts and ports, and sensitive preservation and restoration of historic, cultural, and esthetic coastal features ….

The Act creates financial incentives for States to develop coastal management plans and submit them to the U.S. Department of Commerce for approval. See 16 U.S.C. § 1455. Virginia has had an approved coastal program since 1986. Its official program document has not been revised in nearly thirty years and is badly out of date (see OCRM and Virginia Council on the Environment, Final Environmental Impact Statement and the Virginia Coastal Resources Management Program (July 1985) (cited below as VCP FEIS) (linked to http://www.gpo.gov/fdsys/search/searchresults.action?st=Virginia+Coastal or available by email from the author (N.B.: large file – 21.9 MB), and it appears

27 The National Oceanic and Atmospheric Administration (NOAA) is the branch of the Department of Commerce responsible for administration of the CZMA. Within NOAA, CZMA responsibility is further delegated, through the National Ocean Service (NOS), to the Office of Ocean and Coastal Resource Management (OCRM).
that the DEQ regards it as having been effectively superseded by various subsequent guidance documents.²⁸

Section 304(1) of the Act, 16 U.S.C. § 1453(1), defines “coastal zone,” in part, as

the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches. The zone extends … seaward to the outer limit of State title and ownership under the Submerged Lands Act (43 U.S.C. 1301 et seq.) …. The zone extends inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters, and to control those geographical areas which are likely to be affected by or vulnerable to sea level rise….

The Virginia Coastal Zone definition is set out below.

“Federal consistency.” Section 307(c)(3)(A) of the 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. As discussed below, 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.

Section 307(c)(3)(A) provides:

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

²⁸ The VCP FEIS refers to the Virginia Council on the Environment, but the Council on the Environment no longer exists and Virginia’s Coastal Program is now administered by the DEQ.
the enforceable policies of the state’s approved program and that such activity will be conducted in a manner consistent with the program. At the same time, the applicant shall furnish to the state or its designated agency a copy of the certification, with all necessary information and data. . . .

NOAA’s regulations further describe land and water uses and natural resource of the coastal zone:

Land and water uses, or coastal uses ... include, but are not limited to, public access, recreation, fishing, historic or cultural preservation, development, hazards management, marinas and floodplain management, scenic and aesthetic enjoyment, and resource creation or restoration projects. Natural resources include biological or physical resources that are found within a State’s coastal zone on a regular or cyclical basis. Biological and physical resources include, but are not limited to air, tidal and nontidal wetlands, ocean waters, estuaries, rivers, streams, lakes, aquifers, submerged aquatic vegetation, land, plants, trees, minerals, fish, shellfish, invertebrates, amphibians, birds, mammals, reptiles, and coastal resources of national significance. Coastal uses and resources also includes uses and resources appropriately described in a management program.

15 C.F.R. § 930.11(b).

What then is the meaning of “affecting any land or water use or natural resource of the coastal zone”? Is there a threshold of significance, or does any effect, no matter how minuscule, require a consistency certification? According to § 930.11(g) of the NOAA regulations,

The term “effect on any coastal use or resource” means any reasonably foreseeable effect on any coastal use or resource resulting from a Federal agency activity or federal license or permit activity . . . . Effects are not just environmental effects, but include effects on coastal uses. Effects include both direct effects which result from the activity and occur at the same time and place as the activity, and indirect (cumulative and secondary) effects which result from the activity and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects are effects resulting from the
incremental impact of the federal action when added to other past, present, and reasonably foreseeable actions, regardless of what person(s) undertake(s) such actions. [Emphasis added.]

The Federal Register notice that formally issued most of the current CZMA regulations added “that the test for triggering consistency is not whether the effect is significant or substantial, but whether it is reasonably foreseeable.” 65 Fed. Reg. 77124, 77130 (Dec. 8, 2000).

A State has six months to respond to an applicant’s consistency certification, by either “concurring” or “objecting.” Section 307(c)(3)(A) of the Act provides that “[i]f the state or its designated agency fails to furnish the required notification within six months after receipt of its copy of the applicant’s certification, the state’s concurrence with the certification shall be conclusively presumed.” If the State objects to the certification, the federal agency is disabled from approving the application unless the State’s objection is set aside on “appeal” to the U.S. Secretary of Commerce.

The word “appeal” may be misleading. The Secretary does not review a State’s consistency objection, to determine whether the State has accurately determined that the application is inconsistent with its Coastal Plan. The CZMA only authorizes the Secretary to override an objection on the ground that the activity is “consistent with the objectives of this chapter or is otherwise necessary in the interest of national security” (16 U.S.C. § 1456(c)(3)(A)), despite the State’s finding that the activity is inconsistent with its Coastal Plan. Any challenge to the State’s finding of inconsistency therefore must be taken to the State courts. Cf., e.g., Roosevelt Campobello International Park Comm’n v. U.S. EPA, 684 F.2d 1041, 1056 (1st Cir. 1982) (challenges to States’ decisions under § 401 of the Clean Water Act may only be brought in State courts).

Secretaries of Commerce have issued lengthy, detailed opinions in numerous CZMA appeals. Those decisions are available from the U.S. Department of Commerce’s CZMA web site, at http://coast.noaa.gov/czm/consistency/appeals/fcappealdecisions/ (visited April 7, 2015).

The terms “consistent with the objectives of this chapter” and “necessary in the interest of national security” (the requirements for a Secretarial override) are defined in NOAA’s regulations at 15 C.F.R. §§ 930.121 and 930.122. Briefly, a federally licensed or permitted activity is “consistent with the objectives or purposes of the Act” if (a) it “furthers the national interest as
articulated in § 302 or § 303 of the Act, in a significant or substantial manner,” (b) the national interest furthered by the activity “outweighs the activity’s adverse coastal effects, when those effects are considered separately or cumulatively,” and (c) “[t]here is no reasonable alternative available which would permit the activity to be conducted in a manner consistent with the enforceable policies of the management program.” § 930.121. The “national interest[s] … articulated in § 302 [and] § 303 of the Act” are listed above.

Application of some of those “national interest” factors is illustrated by a prominent Secretarial override of a North Carolina state consistency objection, in a case affecting eastern Virginia. In that case, the Secretary of Commerce found that the Lake Gaston pipeline project, which provides water from the Roanoke River to Virginia Beach and other localities in tidewater Virginia, “will foster development of the coastal zone and coastal zone resources, and thus furthers more than one of the objectives or purposes of the CZMA.” Decision and Findings in the Consistency Appeal of the Virginia Electric and Power Company from an Objection by the North Carolina Department of Environment, Health and Natural Resources (May 19, 1994) (cited below as Gaston Pipeline Consistency Decision), at viii (emphasis added). See also id. at ix:

The proposed project will contribute significantly to the national interest because it will allow the beneficial use of water resources of the coastal zone. Providing potable water for human consumption to a major metropolitan area constitutes a very high priority use among all beneficial uses of water. The record shows that the project will contribute significantly to the national interest because of the extent to which it will further and support economic development in the coastal zone, and the extent to which it will alleviate southeastern Virginia’s projected water deficit. [Emphases added.]

A federally licensed or permitted activity “is ‘necessary in the interest of national security’ if a national defense or other national security interest would be significantly impaired were the activity not permitted to go forward as proposed.” 15 C.F.R. § 930.122. As a practical matter, Secretaries of Commerce are not likely to override State consistency objections on national security grounds unless the Department of Defense or the Department of Homeland Security weighs in strongly in favor of the license or permit application. See, e.g., Gaston Pipeline Consistency Decision at 53-54:
Past decisions have established that “the regulatory criteria for an override based on Ground II establishes a difficult test.”

....

The Navy is the primary military service located in the Virginia Beach area. The Navy stated that the Department of Defense has a vital interest in efforts of the City to establish a water system that supplies installations and supports activities in the Hampton Roads area with a safe, adequate and dependable municipal water supply for three reasons: (1) operational readiness; (2) quality of life; and (3) support of local economy supplying military needs. In addition, the Navy stated that during the drought of 1980-81, when a 25 percent curtailment on water use was imposed, operations and readiness were impaired. Also, the Navy stated that readiness would be significantly impaired if uninterrupted usage of a safe, adequate and dependable water supply could not be assured.

However, the Navy did not specifically state or find that a national security or defense interest would be “significantly impaired” if the Lake Gaston pipeline project did not go forward as proposed. General statements about the military’s need for an adequate municipal water supply, and the likely adverse effects if such a supply is not available, do not meet the criteria for Ground II, which requires a finding specific to the particular project at issue in the appeal. The arguments presented in the various public comments were not of sufficient weight to overcome the failure of naval officials to link significant impairment of a national defense interest to the project’s not going forward as proposed. [Footnotes omitted.]

Section 307 does not expressly authorize a State to add conditions to its concurrence with a consistency certification, but that authority is provided by regulation. See 15 C.F.R. § 930.4 (Conditional concurrences). The applicant must amend its federal application to incorporate the State conditions, and the federal licensing agency must approve the application as amended with those
conditions.29 The Federal Register notice which promulgated that regulation nevertheless provides pretty strong signals that some NOAA personnel, at least, are not thrilled with the concept. See 65 Fed. Reg. 77123, 77127-28 (Dec. 8, 2000): “Conditions of concurrence should not replace State objections and the identification of alternatives for activities that the State agency finds are inconsistent with its management program…. [C]onditional concurrences could seriously weaken the State authority granted by the CZMA consistency requirement …. ” See also 65 Fed. Reg. 20270, 20272 (April 14, 2000) (proposed rule). Virginia has exercised that authority, however, on several occasions. The City of Newport News’ proposed King William Reservoir project (Corps of Engineers Clean Water Act § 404 discharge permit application) and Dominion Virginia Power’s proposed North Anna II nuclear generating plant (Nuclear Regulatory Commission early site permit application) are prominent examples.

Whether the CZMA authorizes a State to review a project located in another State for consistency with its Coastal Plan, and to veto a federal permit for such a project if it finds an inconsistency with its plan, has been a controversial issue in several cases.30 It appears now to have been settled, in

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29 65 Fed. Reg. 77124 (Dec. 8, 2000), explains that those requirements are included because a State cannot, through the CZMA, enforce its conditions after it has concurred; because the CZMA does not require a Federal agency to adopt a State’s conditions of concurrence; and because federal agencies are not required to enforce state conditions. If an applicant modifies its federal permit application pursuant to state conditions and the federal agency approves the amended application, however, “the Federal agency would be more likely to enforce the State’s conditions (since the State conditions would be part of the federal permit).” Id. at 77128. (The CZMA does not give States any enforcement powers – the only power it gives them is the power to “veto” federal permits for inconsistency with enforceable policies of State coastal programs – but it also does not in any way affect States’ enforcement powers under their own laws. See 15 C.F.R. § 930.5 (State enforcement action): “The regulations in this part are not intended in any way to alter or limit other legal remedies, including judicial review or State enforcement, otherwise available.”)

30 See generally City of Virginia Beach v. Brown, 858 F. Supp. 585 (E.D. Va. 1994) (dismissing as moot Virginia Beach’s challenge to the State of North Carolina’s jurisdiction to review the Lake Gaston water supply project – which is located entirely in Virginia but withdraws water from a river that flows into North Carolina – for consistency with the North Carolina state coastal plan, after the Secretary of Commerce sustained Virginia Beach’s appeal from North Carolina’s

WHAT HAPPENS IF AN APPLICANT PROVIDES THE STATE AGENCY A COPY OF ITS CERTIFICATION BUT WITHOUT “ALL NEEDED INFORMATION AND DATA”? SEE 15 C.F.R. § 930.63(c):

A STATE AGENCY OBJECTION MAY BE BASED UPON A DETERMINATION THAT THE APPLICANT HAS FAILED, FOLLOWING A WRITTEN STATE AGENCY REQUEST, TO SUPPLY THE INFORMATION REQUIRED PURSUANT TO § 930.58 OR OTHER INFORMATION NECESSARY FOR THE STATE AGENCY TO DETERMINE CONSISTENCY. IF THE STATE AGENCY OBJECTS ON THE GROUNDS OF INSUFFICIENT INFORMATION, THE OBJECTION SHALL DESCRIBE THE NATURE OF THE INFORMATION REQUESTED AND THE NECESSITY OF HAVING SUCH INFORMATION TO DETERMINE THE CONSISTENCY OF THE ACTIVITY WITH THE MANAGEMENT PROGRAM. [EMPHASES ADDED.]

THE REGULATIONS ALSO PROVIDE AN OPTION SHORT OF A FORMAL OBJECTION, HOWEVER:

STATE AGENCIES AND APPLICANTS … MAY MUTUALLY AGREE IN WRITING TO STAY THE SIX-MONTH CONSISTENCY REVIEW PERIOD. SUCH AN AGREEMENT SHALL … STATE A SPECIFIC DATE ON WHEN THE STAY WILL END. THE STATE AGENCY SHALL PROVIDE A COPY OF THE WRITTEN AGREEMENT TO THE FEDERAL AGENCY AND THE FEDERAL AGENCY SHALL NOT PRESUME STATE AGENCY CONCURRENCE WITH AN APPLICANT’S CONSISTENCY CERTIFICATION WHEN SUCH A WRITTEN AGREEMENT TO STAY THE SIX-MONTH CONSISTENCY REVIEW PERIOD IS IN EFFECT.

15 C.F.R. § 930.60(b).

Several other provisions of the federal CZMA are discussed below, in conjunction with related provisions of the Virginia Coastal Plan.

The Virginia Coastal Zone Management Program (VCP) was established in 1986, by an Executive Order of Governor Baliles which has been renewed by each successive Governor since that time.

A map of the Virginia Coastal Zone is attached. (http://www.deq.virginia.gov/Portals/0/DEQ/CoastalZoneManagement/virginia_czm_boundary_map.jpg) Virginia’s Coastal Zone includes 29 counties, 17 cities, 42 incorporated towns, 5,000 miles of shoreline, and extends seaward to the three mile Territorial Sea boundary. It includes Virginia’s Atlantic Ocean coastline and all of Virginia’s Atlantic coast watershed; parts of the Chesapeake Bay and Albemarle-Pamlico Sound watersheds; and the Potomac, Rappahannock, York and James Rivers and their tributaries, up to as much as 100 miles inland. Any federally licensed or permitted activity, whether it occurs “in or outside of the coastal zone,” must be accompanied by a consistency certification if it will “affec[t] any land or water use or natural resource of” Virginia’s Coastal Zone. CZMA § 307(c)(3)(A), 16 U.S.C. § 1456(c)(3)(A) (emphases added).

A CZMA consistency certification must state “that the proposed activity complies with the enforceable policies of the state’s approved program and that such activity will be conducted in a manner consistent with the program,” CZMA § 307(c)(3)(A). State objections may only be based on “enforceable policies” of the State program. 15 C.F.R. § 930.11(h).31 The “enforceable policies” provision is a key limitation on the reach of the certification requirement and the veto power of the State. That term is defined in the CZMA as follows:

The term “enforceable policy” means State policies which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or

31 See also 15 C.F.R. § 930.58(a)(3): “Applicants shall demonstrate that the activity will be consistent with the enforceable policies of the management program. Applicants shall demonstrate adequate consideration of policies which are in the nature of recommendations. Applicants need not make findings with respect to coastal effects for which the management program does not contain enforceable or recommended policies.” (Emphases added.)
administrative decisions, by which a State *exerts control* over private and public land and water uses and natural resources in the coastal zone.

16 U.S.C. § 1453(6a) (emphases added). The NOAA regulations add that such policies “must be sufficiently comprehensive and specific to regulate land and water uses, control development, and resolve conflicts among competing uses in order to assure wise use of the coastal zone.” 15 C.F.R. § 923.40(a).

Those provisions thus indicate clearly that the CZMA does not add anything substantively to the powers that States already have under their own laws, except to attach the additional consequence of a federal permit veto to an applicant’s failure to satisfy the requirements of such laws. The VCP thus “proposes no new state programs, organizations, regulations, or laws. It is based on an approach termed ‘networking’ which is a framework and process for linking *existing* Commonwealth programs, agencies, and laws into a system that will meet Federal requirements for an effective Commonwealth Coastal Resources Management Program.” *VCP FEIS*, Part I: Overview (emphasis added).

Applicants for federal licenses or permits subject to CZM review therefore are required only to certify compliance with “enforceable policies” that already are legally binding under state law. The DEQ’s policy and practice is that for a proposed project to be consistent with the VCP, the applicant must obtain and comply with all applicable permits and approvals. The DEQ’s CZM Program Staff has primary responsibility for administration of the consistency review requirements of the CZMA and the VCP, but in those respects it acts largely in a clearinghouse capacity. In other words, it compiles and coordinates the responses of other agencies who are responsible for implementation of the enforceable policies of the coastal program – including other components of the DEQ itself – to federal license and permit applicants’ consistency certifications. Notwithstanding this apparent directness and simplicity, however, obtaining the DEQ’s concurrence in a consistency certification can be a difficult and time-consuming journey through the bureaucratic maze, at least in controversial cases.

The enforceable policies of the VCP are found in the following regulatory programs:

(1) *Fisheries Management*, administered by the VMRC under Va. Code §§ 28.2-200 through 28.2-713; the Department of Game and Inland Fisheries (DGIF) under Va. Code §§ 29.1-100 through 29.1-570; and the VMRC, DGIF,
and Virginia Department of Agriculture Consumer Services under Va. Code § 3.2-3904 and §§ 3.2-3935 through 3.2-3937 (State Tributyltin (TBT) Regulatory Program);

(2) **Subaqueous Lands Management**, administered by the VMRC under Va. Code §§ 28.2-1200 through 28.2-1213;

(3) **Wetlands Management**, administered in part by the VMRC under Va. Code §§ 28.2-1301 through 28.2-1320 (tidal wetlands), and in part by the DEQ under Va. Code §§ 62.1-44.15:5 (the Virginia Water Protection Permit program) and § 401 of the federal Clean Water Act, 33 U.S.C. § 1341;

(4) **Dunes Management**, administered by the VMRC under the Coastal Primary Sand Dune Protection Act, Va. Code §§ 28.2-1400 through 28.2-1420;

(5) **Non-Point Source Pollution Control**, administered in part by the DEQ under the Erosion and Sediment Control Law, Va. Code §§ 62.1-44.15:51, *et seq.*, and in part jointly by the DEQ and the 84 localities in Tidewater Virginia under Va. Code §§ 62.1-44.15:67 through 62.1-44.15:79 and 9 VAC 25-830-10 *et seq.* (Coastal Lands Management);

(6) **Point Source Pollution Control**, administered by the State Water Control Board and the DEQ under Va. Code § 62.1-44.15 and Section 402 of the federal Clean Water Act, 33 U.S.C. § 1342;

(7) **Shoreline Sanitation Control**, administered by the Department of Health under Va. Code §§ 32.1-164 through 32.1-165;

(8) **Air Pollution Control**, administered by the State Air Pollution Control Board and the DEQ under Va. Code §§ 10-1.1300 through 10.1-1320; and

(9) **Coastal Lands Management**, a state-local cooperative program administered by the DEQ’s Water Division and the 84 localities in Tidewater, Virginia, under the Chesapeake Bay Preservation Act (Va. Code §§ 62.1-44.15:67 through 62.1-44.15:79) and Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 25-830-10, *et seq.*).

The VCP also includes “advisory policies (recommendations),” which were established to serve as a discretionary guide during project planning.” DEQ, “Federal Consistency Information Package,” [http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview/FederalConsistencyReviews.aspx](http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview/FederalConsistencyReviews.aspx) (visited April 7, 2015). Advisory policies are not
enforceable and may not be cited as grounds for a consistency objection, but federal agencies (and therefore federal license or permit applicants) nevertheless “should consider” and address them in consistency certifications. *Id.* The advisory policies of the VCP are discussed below.

The Act states without reservation that federal license and permit applicants must certify the consistency of any “activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone …. 16 U.S.C. § 1456(c)(3)(A). NOAA’s regulations effectively modify that directive, however, by providing different sets of procedures for “listed” and “unlisted” activities. In brief, applicants are always required to submit certifications for “listed” activities (categories of “federal license or permit activities” named in the State Coastal Plan); but State coastal agencies must request OCRM’s authorization to review “unlisted” activities, and they have only 30 days from notice of an application to make such a request. (Unlisted activities include activities “listed” by category but located outside the coastal zone, unless the State coastal management program “generally describe[s] the geographic location of such activities.”) Section 930.53(a) of the NOAA regulations states the requirements for listed activities:

State agencies shall develop a list of federal license or permit activities which affect any coastal use or resource, including reasonably foreseeable effects, and which the State agency wishes to review for consistency with the management program. The list shall be included as part of the management program, and the federal license or permit activities shall be described in terms of the specific licenses or permits involved (e.g., Corps of Engineers 404 permits, Coast Guard bridge permits). In the event the State agency chooses to review federal license or permit activities, with reasonably foreseeable coastal effects, outside of the coastal zone, it must generally describe the geographic location of such activities.

Section 930.54 generally governs unlisted activities:

(a)(1) With the assistance of Federal agencies, State agencies should monitor unlisted federal license or permit activities (e.g., by use of intergovernmental review process established pursuant to E.O. 12372, review of NEPA documents, *Federal Register* notices). *State agencies shall notify Federal agencies, applicants, and the Director of unlisted*
activities affecting any coastal use or resource which require State agency review within 30 days from notice of the license or permit application, that has been submitted to the approving Federal agency, otherwise the State agency waives its right to review the unlisted activity. The waiver does not apply in cases where the State agency does not receive notice of the federal license or permit application.

(2) Federal agencies or applicants should provide written notice of the submission of applications for federal licenses or permits for unlisted activities to the State agency. Notice to the State agency may be constructive if notice is published in an official federal public notification document or through an official State clearinghouse (i.e., the FEDERAL REGISTER, draft or final NEPA EISs that are submitted to the State agency, or a State’s intergovernmental review process). The notice, whether actual or constructive, shall contain sufficient information for the State agency to learn of the activity, determine the activity’s geographic location, and determine whether coastal effects are reasonably foreseeable. [Emphases added.]

The DEQ’s VCP web site lists licenses and permits subject to consistency review at http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview/FederalConsistencyReviews.aspx (visited April 7, 2015). Examples of such “listed activities” include Corps of Engineers permits under § 404 of the Clean Water Act (33 U.S.C. § 1344) and §§ 9 and 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §§ 401, 403); FERC licenses for non-federal hydroelectric projects; Coast Guard permits for construction or modification of bridge structures across navigable waters; Federal Aviation Administration permits and licenses for the construction, operation, or alteration of airports; and Nuclear Regulatory Commission permits and licenses required for the construction and operation of

32 See also VCP FEIS at pages X-9 and X-10. The enumeration of “Listed Federal Permit, License, Approval Activities” provided at the web site differs verbally but not substantively from the list in the VCP FEIS – even to the extent that both continue to list Interstate Commerce Commission approvals of the abandonment of rail lines, despite the fact that the ICC was abolished in 1995 and its functions either cancelled or transferred to the Surface Transportation Board. (See ICC Termination Act of 1995, 109 Stat. 803; 49 U.S.C. § 702.)
nuclear power plants. Applicants for such federal licenses and permits therefore must comply with the consistency certification requirements described above.

The VCP’s advisory policies (see above) apply in “Geographic Areas of Particular Concern,” which include the following:

- Coastal Natural Resource Areas – areas which “are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline” (including wetlands; aquatic spawning, nursery, and feeding grounds; coastal primary sand dunes; barrier islands; significant wildlife habitat areas; public recreation areas; sand and gravel resources; and underwater historic sites). “These areas are worthy of special consideration in any planning or resources management process.”

- Coastal Natural Hazard Areas ("areas vulnerable to continuing and severe erosion and areas susceptible to potential damage from wind, tidal, and storm related events including flooding," i.e., “Highly Erodible Areas” and “Coastal High Hazard Areas, including flood plains”). In those areas, “[n]ew buildings and other structures should be designed and sited to minimize the potential for property damage due to storms or shoreline erosion.”

- Waterfront Development Areas (commercial ports, commercial fishing piers, and community waterfronts), which “are vital to the Commonwealth because of the limited number of areas suitable for waterfront activities.”

For the most part, the advisory policies themselves are pretty nebulous. Some apparent statements of policy are included in the descriptions of Geographic Areas of Particular Concern, as set out above. The policy statements themselves include such broad declarations as “public shoreline areas will be maintained to allow public access to recreational resources”; the recreational values of parks, wildlife management areas, and natural areas “should be protected and maintained”; and “[i]t is the policy of the Commonwealth and the [Virginia Coastal Plan] to enhance the protection of buildings, structures and, and sites of historical, architectural, and archaeological significance from damage or destruction when practicable.”

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 of fish or wildlife 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).

Endangered plants, on the other hand, receive much less protection than animals. Under ESA Section 9(a)(2), 16 U.S.C. § 1538(a)(2), the primary prohibitions are not to “remove and reduce to possession any [endangered plant] species from areas under Federal jurisdiction”; not to “maliciously damage or destroy” any such species on any area under Federal jurisdiction; and not to “remove, cut, dig up, or damage or destroy any such species on any
other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law.”

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 (including issuance of federal licenses and permits), 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 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.

And while the term “areas under Federal jurisdiction” may seem straightforward and easily understood, a federal appeals court recently held that it is ambiguous … and then interpreted it as meaning essentially what any intelligent non-lawyer would understand it to mean – “areas under the control of the federal government, i.e. through ownership, leasehold-estates, or conservation easements,” rejecting an argument that it should include wetlands that are subject to the regulatory jurisdiction of the Corps of Engineers. *Northern California River Watch v. Wilcox*, 633 F.3d 766, 781 (9th Cir. 2011).
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(b)(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 (see § 402.13) indicate, and the Service agrees, “that the proposed action is not likely to adversely affect any listed species or critical habitat.” § 402.14(b).

Formal consultation has a 90-day time limit. That limit can be extended by mutual agreement of the permitting agency and the Service, 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)(3). 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)(1), 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).

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).

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 endangered fish species. 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.” 52 all 0 U.S. at 166.

**Section 2 of the Fish and Wildlife Coordination Act (FWCA).**

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, the Department of the Interior, and the state wildlife resources agency, with a view to the conservation, development and improvement of wildlife resources. 16 U.S.C. § 662(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” does not mean slavish adherence, however, 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 proposed 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, the environmental justice doctrine 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, highway, or pipeline 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, 54 U.S.C. § 306108, 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 54 U.S.C. §§ 302101, et seq. 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 construction 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)

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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 determine whether the agency failed to address or investigate a relevant issue). See, e.g., Ohio Valley Environmental Coalition v. Aracoma Coal Co., 556 F.3d 177, 201 (4th Cir. 2009) (“We acknowledge the importance of extra-record evidence in NEPA cases to inform the court about environmental factors that the agency may not have considered. While review of agency action is typically limited to the administrative record that was available to the agency at the time of its decision …, a NEPA suit is inherently a challenge to the adequacy of the administrative record …. That is why, in the NEPA context, ‘courts generally have been willing to look outside the record when assessing the adequacy of an EIS or a determination that no EIS is necessary.’” But “[s]uch consideration of extra-record evidence in a NEPA case does not … give courts license to simply substitute the judgment of plaintiff’s experts for that of the agency’s experts …”) (citations omitted)). 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).

VII. Surface Water Withdrawals and Wetlands Protections under Virginia law

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.

Until 1989 no Virginia statute 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. \(^{35}\) Under the Virginia Water Protection Permit Act (which has been amended several times), which is a part of the State Water Control Law, 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 62.1-44.15:23.1. 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 62.1-253.

A. Virginia Water Protection Permits

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 Water Act § 401). Permits must “address avoidance and minimization of wetland impacts to the maximum extent practicable” and “contain requirements for compensating impacts on wetlands…. sufficient to achieve no net loss of existing wetland acreage and functions,” and they may contain conditions on water withdrawals. Va. Code §§ 62.1-44.15:21(A), (B). The “no net loss” requirement may be satisfied through wetland creation or restoration, purchase or use of mitigation bank credits, or contributions to the State’s Wetland and Stream Replacement Fund. Va. Code § 62.1-44.15:21(B). See 9 VAC 25-210-116 (detailed regulation requiring compensation for both wetland and stream impacts). 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 and residential gardening activities, construction and maintenance of farm ponds and farm and forest roads, and maintenance of dikes, levees, dams, breakwaters and other similar structures. 9

\(^{35}\) 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).
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 25-210-220.36

The Board’s regulations include 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, 9 VAC 25-210-10), 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.


36 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).

37 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.
(listed over approximately four pages of the Virginia Administrative Code) must be provided to make any application complete, plus another eight categories if the application involves a major surface water withdrawal or a 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).38

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, requirements to maintain compliance with water quality standards, toxic pollutant controls, and best management practices. 9 VAC 25-210-110.

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

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38 See also Va. Code §§ 62.1-10(b), 62.1-263 (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”). (The State Water Resources Policy, adopted by the SWCB in May 1974, is published at 9 VAC 25-390, et seq. In general, the Policy advocates protection of natural water sources and beneficial uses, long-term environmental protection, minimizing pollution and wasteful use of water, and preservation of wetland ecosystems.)
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 controversial Board decisions on permit matters, the General Assembly passed a statute that would have consolidated 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 had 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 have been 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 the 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.

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). The requirements to consult with legal counsel (meaning the 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 draft permits or risk waiver of an opportunity to present comments to the SWCB prior to action on their applications. 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 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. 9 VAC 25-210-180(E). Permits can be modified or revoked, 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. The Surface Water Management Areas Act

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 (Definition of “Beneficial use”).
It appears, however, that this Act is a paper tiger. As of this writing (April 2015), the Act has been in force for almost 26 years and the regulations for nearly 23 years (with a few amendments), but no Surface Water Management Area has yet been designated and no such designations are under active consideration.39

VIII. Typical environmental issues and permit conditions

A. Selection of the least environmentally damaging practicable alternative.

The CEQ’s NEPA regulations state that the analysis of alternatives is “the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. And 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 proposed projects invariably argue to the Corps, EPA, and other federal and state agencies, and in proceedings for judicial review of permit decisions, 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 alternatives, located in “somebody else’s back yard,” that at least arguably are superior in some respects to a 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

39 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).
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 of recycled wastewater (such as irrigation, street cleaning, power plant cooling, and other industrial processes). 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 alteration or destruction.

In earlier times, “wet, swamp or overflowed lands” (Va. Code § 21-292) were regarded as public nuisances and sources of disease and pestilence, and public policy favored “draining and reclaiming” such lands. Id. (still on the books, but highly unlikely to be used in today’s regulatory environment). 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 ravines usually yield a substantially greater ratio of storage to wetlands than do sites in broad river valleys, and potential reservoir sites in the Coastal Plain typically have higher wetland components than those located in the Piedmont region or farther from the coast. The magnitude of wetlands impacts invariably will be a major factor in selecting a preferred alternative and running the gauntlet of regulatory approvals. Wetland impacts also have become environmental “fatal flaws” blocking the development of other major projects, notably in Virginia the proposed four-lane Route 460 Corridor Improvement Project from Suffolk to Petersburg.

C. Stream flow – impacts on fisheries, fish spawning, and other instream beneficial uses.

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,

**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.**

MIF conditions vary 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 (which defines the NEPA term “significantly”) 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. See also 40 C.F.R. § 230.91(c) (Section 404(b)(1) Guidelines).

The 1990 MOA goes on to provide that 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.” And finally, “Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required.”

2. **Compensatory mitigation** – restoration, establishment, enhancement, or preservation.

EPA’s Section 404(b)(1) Guidelines (40 C.F.R. Part 230) “establish standards and criteria for the use of all types of compensatory mitigation, including on-site and off-site permittee-responsible mitigation, mitigation banks, and in-lieu fee mitigation to offset unavoidable impacts to waters of the United States authorized through the issuance of [§ 404] permits by the U.S. Army Corps of Engineers.” 40 C.F.R. § 230.91(a)(1). The Guidelines also point out, somewhat ominously, that the Corps “may determine that a [§ 404] permit for the proposed activity cannot be issued because of the lack of appropriate and practicable compensatory mitigation options.” Id., § 230.91(c).

The Guidelines’ mitigation requirements are long and detailed, and only the highlights are summarized here. The Guidelines provide that “[i]n general, … compensatory mitigation should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services, taking into account such watershed scale features as aquatic habitat diversity, habitat connectivity, relationships to hydrologic sources (including the availability of water rights), trends in land use, ecological benefits, and compatibility with adjacent land uses.” Id.,

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40 The Guidelines, as revised in 2008, supersede “the provisions relating to the amount, type, and location of compensatory mitigation projects, including the use of preservation,” in the 1990 MOA. 40 C.F.R. § 230.91(e)(2).
§ 230.93(b)(1). Within those parameters, the preferred priority of mitigation methods is:

- Acquisition of mitigation bank credits (“[w]hen permitted impacts are located within the service area of an approved mitigation bank, and the bank has the appropriate number and resource type of credits available”).
- Acquisition of “In-lieu fee program credits” (“[w]here permitted impacts are located within the service area of an approved in-lieu fee program, and the sponsor has the appropriate number and resource type of credits available”).
- “Permittee-responsible mitigation under a watershed approach.”
- “Permittee-responsible mitigation through on-site and in-kind mitigation.”
- And finally, “[p]ermittee-responsible mitigation through off-site and/or out-of-kind mitigation.” *Id.*

“In general, in-kind mitigation is preferable to out-of-kind mitigation because it is most likely to compensate for the functions and services lost at the impact site.” But “[i]f the [Corps’] district engineer determines, using the watershed approach … that out-of-kind compensatory mitigation will serve the aquatic resource needs of the watershed, the district engineer may authorize the use of such out-of-kind compensatory mitigation.” *Id.*, § 230.93(e)(1), (2).

[T]he amount of required compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions…. If a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used.

(2) The district engineer must require a mitigation ratio greater than one-to-one where necessary to account for the method of compensatory mitigation (e.g., preservation), the likelihood of success, differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project, temporal losses of aquatic resource functions, the difficulty of restoring or establishing the desired aquatic resource type and functions, and/or the distance between the affected aquatic resource and the compensation site.
Id., § 230.93(f)(1), (2). Preservation is an acceptable mitigation method only when all the following criteria are met:

(i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed;

(ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available;

(iii) Preservation is determined by the district engineer to be appropriate and practicable;

(iv) The resources are under threat of destruction or adverse modifications; and

(v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust).

Id., § 230.93(h)(1). Permit applicants must prepare highly detailed draft and final mitigation plans for the Corps’ and other agencies’ review and the Corps’ approval, and the approved final mitigation plan must be incorporated into the permit by reference. Id., § 230.94(c)(1)(i). (Similar but less demanding requirements apply to general permits. Id., § 230.94(c)(1)(i).)

Approved mitigation plans “must contain performance standards that will be used to assess whether the project is achieving its objectives” and describe monitoring requirements designed to determine whether the performance standards are satisfied. Id., §§ 230.95(a), 230.96(a). The minimum monitoring period is five years, and “[a] longer monitoring period must be required for aquatic resources with slow development rates (e.g., forested wetlands, bogs).” Id., § 230.96(b).


* * * * *
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 (in particular) 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 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 Envt. 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.
Appendix: A brief guide to legal citation forms

Cases: Citations are by the names of the parties and the volume number, the report’s abbreviation, page numbers where the decision appears in published reports, and the year of the decision, with the initial page number followed where appropriate by the page number(s) where a quotation or cited proposition appears in the report. E.g., Purcellville v. Potts, 179 Va. 514, 520-22, 19 S.E.2d 700, 702-03 (1942). That citation indicates that the Purcellville decision is published in Volume 179 of the Virginia Reports at page 514 and in Volume 19 of the Southeastern Reporter, Second series, at page 700, and that the quotation appears at pages 520-22 of the Virginia Report and pages 702-03 of the Southeastern Reporter.

The report abbreviation which appears first in any parallel citation usually identifies the court which made the decision. Thus, Purcellville was decided by the Supreme Court of Virginia (“Va.”), and Evelyn v. Commonwealth, 46 Va. App. 618, 621 S.E.2d 130 (2005), was decided by the Court of Appeals of Virginia. The reporter citation to Costello v. Frederick County Sanitation Authority, 49 Va. Cir. 41 (Frederick Co. Cir. Ct. 1999), indicates that Costello was decided by a Circuit Court, but the parenthetical is necessary to indicate which Circuit Court made the decision. “U.S.” citations (e.g., United States v. Riverside Bayview Homes, Inc., 474 U.S. 121 (1985)) are to decisions of the United States Supreme Court. “S. Ct.” or “L.Ed.2d” citations are to Supreme Court decisions that have not yet been published in the official U.S. Reports. Where the report abbreviation does not identify the court, that identification is provided in parentheses as indicated just below.

“F.,” “F.2d” and “F.3d” citations (e.g., North Carolina v. Tennessee Valley Authority, 615 F.3d 291 (4th Cir. 2010)) are to decisions of United States Courts of Appeals, also known as U.S. Circuit Courts, and the “Cir.” notation designates the Circuit Court which made the decision. Citations to “F. Supp.” or “F. Supp.2d” (e.g., Sierra Club v. Sigler, 532 F. Supp. 1222, 1242-43 (S.D. Tex. 1982)) are to decisions of U.S. District (trial) Courts.

A case citation usually includes citations to subsequent appellate decisions which affirm, reverse, or otherwise dispose of an appeal or appeals from the cited decision. Northern California River Watch v. City of Healdsburg, 496 F.3d 993, 999-1000 (9th Cir. 2007), cert. denied, 128 S. Ct. 1225 (2008), for example, indicates that the Supreme Court denied a petition for review of the Ninth Circuit’s decision (known as a petition for certiorari). The citation 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), indicates that the principal decision (at 731 F. Supp. 1261) is the second in a series, that it was affirmed on appeal (under a different name), and that the Supreme Court denied review. *Compare 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).

An unpublished decision is cited by the parties’ names, docket number, court, and day of decision, thus: *State of North Carolina v. FERC*, Nos. 95-1494, 95-1500 (D.C. Cir. Sept. 11, 1996). A decision which is designated for publication but has not been published at the time of citation is cited similarly, with a placeholder for the reporter citation. *E.g.*, *Valentine v. Sugar Rock, Inc.*, ___ F.3d ___, No. 12-2273 (4th Cir. April 2, 2015).

**Statutes:** Federal statutes are cited to the official U.S. Code (U.S.C.) or sometimes to the “U.S.C.A.” (which refers to a privately-published annotated Code) in a manner similar to that of case citations. “28 U.S.C. § 1251(a),” for example, is to Title 28 of the Code, Section 1251, Subsection a. Virginia statutes are cited by section number, and the numbers which precede the hyphen (or the first hyphen) in the citation indicate the Title of the Code. Thus, the citation “Va. Code § 62.1-254” is to Section 62.1-254 of the Code, and you can readily determine from the citation that the cited section is in Title 62.1.

**Regulations:** Federal regulations are cited to the Code of Federal Regulations (C.F.R.), and the citation format is similar to that of the U.S. Code. *E.g.*, “33 C.F.R. § 323.6(a)” or “33 C.F.R. Part 230.” Virginia regulations are cited to the Virginia Administrative Code (VAC); and again the format is similar, except that the Section ($) symbol generally is not used. *E.g.*, 9 VAC 25-20-110(E).


“*Id.*” is a reference to the next preceding citation.