Chapter 8B
THE INTERSECTION OF WATER LAW
AND TAKINGS DOCTRINE

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Synopsis

§ 8B.01 Introduction
§ 8B.02 A Thumbnail Sketch of Modern Takings Doctrine
    [1] The Property Issue
§ 8B.03 Varieties of Inverse Condemnation Claims Involving Water
    [1] Flooding
    [2] Limits on Access to Water
    [3] Prevention of Water Pollution
    [4] Alteration of Water Quality
    [5] Erosion
    [6] Limits on Filling
    [7] Changes to Water Allocation Systems
§ 8B.04 The Threshold Property Issue in Water Takings Cases
    [1] The Distinctive Physical and Social Characteristics of Water
        [a] Navigation Servitude
        [b] Public Trust Doctrine
§ 8B.05 Applying the Takings Tests in the Water Context
    [2] Regulatory Takings Analysis
§ 8B.06 Looking to the Future—The Effects of Climate Change on Takings Litigation

§ 8B.01 Introduction* **

This chapter addresses how the Takings Clause of the U.S. Constitution applies to the regulation and management of water resources in the United States. It is designed to provide an introduction for attorneys who are relatively new to the topic. It is also intended to help experienced practitioners identify cutting-edge issues in takings litigation involving water. An overarching goal of the chapter is to explain how recent case law developments fit (or do not fit) into the larger doctrinal framework governing this subject area.

The chapter is organized as follows. Section 8B.02 provides a thumbnail sketch of modern inverse condemnation doctrine. (Governments can, of course, acquire property interests in water directly using the eminent domain power, but that application of the Takings Clause is outside the scope of this chapter.) Section 8B.03 provides a general description of the different circumstances in which takings issues have arisen from the regulation and management of water. Section 8B.04 examines how the special, qualified nature of property rights in water affects the analysis of takings claims involving water. Section 8B.05 describes how the tests for identifying “takings” have been and should be applied in the water context. Section 8B.06 looks to the future, focusing on how predicted climate change may affect takings litigation involving water.¹


** The topic of the intersection of water rights and takings doctrine has been divided into two chapters, 8A and 8B, to provide differing perspectives. The author of this chapter, 8B, is a professor of law and environmental and natural resource law scholar, who has represented state and local governments, environmental organizations, and planning groups in a variety of legal matters at all levels of the federal and state court systems. He represented the amicus curiae supporting the United States in the Casitas and Klamath cases discussed in Chapters 8A and 8B. The authors of Chapter 8A are private practitioners in Washington, D.C., whose practice concentrates on environmental litigation involving water rights, takings, and contract issues in the U.S. Court of Federal Claims. They represented the plaintiff water districts in the Tulare, Casitas, and Klamath cases discussed in Chapters 8A and 8B.

§ 8B.02 A Thumbnail Sketch of Modern Takings Doctrine

The Takings Clause of the Fifth Amendment to the U.S. Constitution states: “nor shall private property be taken for public use, without just compensation.” Similar provisions are included or have been read into the state constitutions.

Courts generally decide inverse condemnation cases using a two-part analysis: (1) does the claimant possess “property,” and (2) has the property been “taken.” There is the additional requirement for a valid claim for financial compensation under the Takings Clause that the government action serve a “public use,” that is, a lawful public purpose, but that issue seldom looms large in inverse condemnation cases.

[1] The Property Issue

The Takings Clause itself imposes outer limits on what kinds of interests can qualify as “property” within the meaning of the Constitution. But whether an asserted interest actually rises to the level of being property within the meaning of the Takings Clause, and the nature and scope of the asserted property interest, are determined by resort to an “independent source such as state law.” In addition, so-called “background principles” of nuisance or property law may affirmatively preclude the assertion of a property entitlement to engage in a particular use of property.


There are three situations in which inverse condemnation claims are governed by more or less per se, or automatic, rules. These include outright government seizures of possession and control of private property, permanent (or indefinite) physical occupations of private property by

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6 Id. at 1027–31.
7 The reasons these categorical rules may be less than completely categorical are explored in John D. Echeverria, “Making Sense of Penn Central,” 39 Envtl. L. Rptr. News & Analysis 10471 (2009).
government or with government authorization,⁹ and regulation that renders property economically worthless.¹⁰

Outside of these categorical situations, courts resolve takings claims by analyzing the facts and circumstances of each case, generally focusing on the economic impact of the government action, the degree of interference with investment-backed expectations, and the character of the government action.¹¹ In all events, regulation of the use of property results in a taking only in “extreme circumstances.”¹²

A critical issue in takings law is the definition of the relevant property for the purpose of measuring the economic burden on the claimant. Under the so-called parcel as a whole rule, the burden of a regulatory restriction or other government action must be evaluated in relation to “the parcel as a whole.”¹³ If the rule were otherwise, takings claimants could convert virtually every regulation into a compensable taking by asserting a taking of the specific interest or portion of the property affected by a restriction.¹⁴ Importantly, while the parcel rule applies in regulatory takings cases governed by Penn Central and Lucas, it does not apply in direct appropriation or physical-takings cases.¹⁵ The theory underlying this distinction is that appropriations and physical invasions are particularly intrusive and therefore should be treated as takings regardless of their economic impact, making application of the parcel rule to measure economic impact superfluous in these two types of cases.

Finally, in Nollan v. California Coastal Commission,¹⁶ and Dolan v. City of Tigard,¹⁷ the U.S. Supreme Court ruled that a government requirement that would amount to a taking if imposed outside of the permitting

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¹⁰See Lucas, 505 U.S. 1003.


¹²United States v. Riverside Bayview Homes, 474 U.S. 121, 126 (1985). See also Lingle v. Chevron U.S.A., Inc., 544 U.S. 528, 539 (2005) (the goal of regulatory takings analysis is to identify measures that are “functionally equivalent to the classic taking in which government directly appropriates private property or ousts the owner from his domain”).

¹³Penn Central, 438 U.S. at 130–31.


process cannot be imposed as a condition of a permit without triggering takings liability, unless there is an “essential nexus” between the purpose served by the “exaction” and the objective of the regulatory program and a “rough proportionality” between the burden imposed by the exaction and the harm the regulatory program seeks to address. Recently, in Koontz v. St. Johns River Water Management District, the Supreme Court ruled that the Nollan/Dolan standards apply to conditions imposing monetary obligations as well as in the situation where the government has denied a permit because the landowner refused to accept a government demand for an exaction that would have triggered Nollan/Dolan review.

§ 8B.03 Varieties of Inverse Condemnation Claims Involving Water

At the risk of oversimplification, virtually all takings cases involving water fit into about half a dozen different categories.

[1] Flooding

Takings claims have frequently arisen from flooding caused by dams and other similar infrastructure projects. The U.S. Supreme Court’s first inverse condemnation case involved flooding. Permanent invasions of private property caused by government (whether through flooding or other means) are said to result in per se takings. In Arkansas Game & Fish Commission v. United States, the Supreme Court ruled that repetitive yet temporary inundations of private property may, but will not necessarily, result in takings as well. This decision has given a boost to pending claims that the government took private property by opening spillways along the Mississippi River during flooding in 2011 and inundating the land behind the spillways. Another case that may be affected by Arkansas Game & Fish involves claims by St. Bernard Parish and private property owners in southeastern Louisiana that the construction of the 76-mile Mississippi River-Gulf Outlet (MRGO) caused a taking because the outlet

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18 133 S. Ct. 2586 (2013).
19 See Pumpelly v. Green Bay Co., 80 U.S. 166 (1871).
21 133 S. Ct. 511 (2012).
degraded protective coastal wetlands and channeled floodwaters towards New Orleans during Hurricane Katrina.\(^{23}\)

[2] **Limits on Access to Water**

The obverse of takings claims involving too much water are takings claims in which government action allegedly created a situation where there was too little water. Regulatory restrictions on surface water diversions, often driven by environmental concerns, have given rise to a series of recent takings cases filed in federal and state court.\(^{24}\) Unlike the flooding cases, which have often been successful, claims based on restrictions on diversions have generally failed, with the notable exception of the *Tulare Lake* case, discussed below.

Restrictions on groundwater withdrawals have also given rise to takings claims. In the overwhelming majority of cases the courts have rejected the claims.\(^{25}\) Indeed in only one (relatively recent) case has a court concluded that a restriction on groundwater use resulted in a taking and just compensation should be paid.\(^{26}\) As of the date of this writing, a petition to review that decision was pending before the Texas Supreme Court.

[3] **Prevention of Water Pollution**

Another set of water takings cases have involved government regulations designed to prevent water pollution. The courts have consistently rejected this type of takings claim. Thus, for example, in *City of Houston v. Trail Enterprises*,\(^{27}\) the court ruled that a city ordinance prohibiting oil drilling within 1,000 feet of a lake that served as a public water supply did not effect a taking. Other courts have reached the same conclusion on similar facts.\(^{28}\) So-called “perc,” or percolation, tests, which are designed to prevent septic pollution from residential development, often impose drastic restrictions


\(^{27}\) 377 S.W.3d 873 (Tex. App.—Houston [1st Dist.] 2012, pet. denied).

\(^{28}\) See, e.g., Appolo Fuels, Inc. v. United States, 381 F.3d 1338, 1350–51 (Fed. Cir. 2004) (designation of area as “unsuitable for mining” under the Surface Mining Control and Reclamation Act not a taking, in part because designation was designed to prevent water pollution); Machipongo Land & Coal Co. v. Commonwealth, 799 A.2d 751 (Pa. 2002) (prohibition of mining to prevent acid mine drainage not a taking).
on the opportunity to develop private land. This type of pollution-control regulation has not generated successful takings cases.

[4] Alteration of Water Quality

The obverse of the water pollution control cases are cases in which government allegedly took private property by causing water pollution. In *Mildenberger v. United States*,\(^{29}\) for example, the U.S. Court of Appeals for the Federal Circuit affirmed dismissal of a claim based on the theory that the U.S. Army Corps of Engineers’ (Corps) manipulation of water levels in Lake Okeechobee and the release of polluted water through the St. Lucie River and St. Lucie Canal resulted in a taking. There have been a few other cases in the same vein, all arriving at the same result.\(^ {30}\)

This category also may be understood to include cases in which government officials took action to alter water quality, not necessarily to degrade its quality, but in a fashion that nonetheless allegedly imposed harms on property owners. These include, for example, the takings cases brought by holders of oyster leases in Louisiana who alleged that modifications in salinity levels due to the operations of diversion projects constructed as part of the coastal restoration effort resulted in the destruction of the economic value of their leases. Federal and state courts rejected these claims on various grounds.\(^ {31}\)

[5] Erosion

There have been numerous takings cases arising from the erosion of private lands caused by levees and breakwaters or other similar government construction projects. Given the gradual nature of the erosion process, cases in this category have frequently raised questions about whether the claim is ripe or, alternatively, whether it is time-barred. In *United States v. Dickinson*,\(^ {32}\) the U.S. Supreme Court adopted the basic rule that an erosion takings claim does not accrue until the situation has “stabilized.”\(^ {33}\) Government efforts to remedy an erosion problem have been held to toll the applicable statute of limitations.\(^ {34}\) A pending case in this category is

\(^{29}\)643 F.3d 938 (Fed. Cir. 2011).


\(^{31}\)See Avenal v. United States, 100 F.3d 933, 936 (Fed. Cir. 1996); Avenal v. State, 886 So. 2d 1085 (La. 2004).

\(^{32}\)331 U.S. 745 (1947).

\(^{33}\)Id. at 749.

\(^{34}\)See Banks v. United States, 314 F.3d 1304 (Fed. Cir. 2003).
§ 8B.03[6] Limits on Filling

The obverse of an erosion-takings case is a case based on the theory that a government restriction on filling tidelands or other submerged lands results in a taking. This category includes, for example, the significant volume of hotly contested cases involving prohibitions on filling of wetlands.36

§ 8B.04 The Threshold Property Issue in Water Takings Cases

As discussed, the existence, the nature, and the scope of the alleged “property” interest are threshold issues in every takings case. But the property issue looms especially large in takings cases arising from government regulation and management of water.

[1] The Distinctive Physical and Social Characteristics of Water

The particular importance of the property issue in water takings is attributable to the distinctive physical characteristics of water as well as its special social functions. First, water, in contrast with land, is highly variable in quantity, on a daily, seasonal, and year-to-year basis. One notable consequence of this variability is that, under the prior appropriation system, for example, relatively junior appropriators may have no legal entitlement to water during low-water periods. A property right that comes and goes with the weather, so to speak, is different from most property rights.

36See, e.g., Walcek v. United States, 303 F.3d 1349 (Fed. Cir. 2002).
38560 U.S. 702 (2010).
Second, the utility of water resources often depends upon and is magnified by shared use of the resource by many citizens. An obvious example is the use of navigable waters as unobstructed channels of commerce.

Third, uses of water are often highly interdependent. Many, perhaps most, water users depend on “return flows” from upstream water uses in order to meet their water needs. Groundwater pumping by one landowner can cause water to migrate underground, to the possible detriment of neighbors’ ability to access water from their lands.

Fourth, the scarcity and high value of water have produced certain distinctive public-interest limitations on property rights in water. The use it or lose it principle of traditional western water law is the classic illustration: if a holder of an appropriative right stops using the water, the holder will be deemed after some period of time to have given up that water right, freeing the water for appropriation by someone else. This legal rule is based on the principle that if an owner is not making productive use of his property society should have the right to make an uncompensated transfer of the property to someone who will make productive use of the resource. In the real estate context, by contrast, the law obviously does not divest an owner of title to a residential or commercial building simply because the owner is not making productive use of the property. The principle that the holder of a water right can claim no entitlement to make “wasteful” use of water is another example of a special, public-interest limitation on property rights in water.

Modern environmental concerns have given rise to new demands for regulation and management of water to serve the public interest. But as the preceding discussion hopefully demonstrates, the notion that private property rights in water should be qualified because of the special character and great public importance of water resources is hardly new.


An elaborate body of highly varied state law creates and defines private interests in water. Traditionally at common law, surface waters in the East were governed by riparian doctrine while surface waters in the West were governed by the system of prior appropriation.\(^\text{39}\) Five different legal systems are said to govern groundwater: the rule of capture, correlative rights, the reasonable use doctrine, prior appropriation, and the \textit{Restatement (Second) of Torts’} doctrine of reasonable use.\(^\text{40}\) Today, extensive statutory law overlays the common law rules governing both surface waters and


\(^{40}\) Id.
groundwater in most states.\textsuperscript{41} The character and outcome of takings cases involving water often are affected to a significant degree by the nature of the underlying water interest at stake.

In some water-takings cases there will be a question whether a takings claimant can even identify a protected property interest in water at all. For example, in \textit{Mildenberger v. United States},\textsuperscript{42} the court rejected a claim that riparian landowners suffered a taking of their rights to view wildlife, to boat, fish, or swim in the waters adjacent to their properties, and to have the waters adjacent to their properties free from pollution, on the ground that these asserted “rights” were not among the recognized property rights of riparian property owners under Florida law. By contrast, in \textit{Edwards Aquifer Authority v. Day},\textsuperscript{43} the court rejected the government’s argument that groundwater pumping restrictions could not result in a taking of the water beneath the plaintiff’s land because, under the Texas rule of capture, property owners have no right to bar neighbors from using pumps to drain the water from beneath their land.

Even when there is a recognized property right in water, it may have a special, narrow scope. In most or all of the western states, the public owns the water itself (that is, the molecules making up the water), and private parties can only acquire “usufructuary” interests in water.\textsuperscript{44} For some purposes, the distinction between ownership of the physical water and a right to use the water will be of little consequence; for example, all farmers require from a water right is the ability to divert the water and “use” it to irrigate their fields. If they are barred from watering their crops they suffer the same burden as a result of the interference with their usufructuary interest that they would suffer if they owned the water itself. In other contexts, however, the takings analysis may well be affected by the character of the property interest in water, as discussed below.

The case of \textit{Arkansas Game & Fish Commission v. United States},\textsuperscript{45} illustrates how the nature and scope of a property right in water may be relevant to the resolution of a takings claim. All of the lower federal courts addressing the takings claim ignored the potential relevance of the state-law definition of the underlying riparian rights. However, in an amicus

\textsuperscript{41}Id.

\textsuperscript{42}643 F.3d 938 (Fed. Cir. 2011).

\textsuperscript{43}369 S.W.3d 814, 839 (Tex. 2012).

\textsuperscript{44}See Robert W. Adler, Robin K. Craig \& Noah D. Hall, \textit{Modern Water Law: Private Property, Public Rights, and Environmental Protections} 121 (2013) (“beneficial use is ‘the basis, the measure, and the limit’ of an appropriative water right” (quoting 43 U.S.C. § 372)).

\textsuperscript{45}133 S. Ct. 511 (2012).
brief filed in the U.S. Supreme Court, Professor Robert Abrams and others pointed out that the plaintiff had no vested entitlement to unaltered river flows in view of the legal rights of other riparian owners, such as the Corps, to modify the river flow to serve their own reasonable needs.\textsuperscript{46} Justice Ruth Bader Ginsburg, writing for the Court, acknowledged the potential relevance of this issue to the proper disposition of the takings claim.\textsuperscript{47} But she ruled that the issue had been waived, underscoring the fact that litigators need to pay attention to the threshold property issue in order to properly represent their clients in water takings cases.

Finally, it is noteworthy that some select states have so qualified private interests in water that it is debatable whether they qualify as property at all. Two remarkable but little noticed provisions of the California Water Code provide:

Every permittee [or licensee], if he accepts a permit [or license], does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit [or license] . . . in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State . . . of the rights and property of any permittee [or licensee], or the possessor of any rights granted, issued, or acquired under the provisions of [the law governing the appropriation of water].\textsuperscript{48}

Comparable statutes are found in Arizona\textsuperscript{49} and Oregon.\textsuperscript{50} On their face, these provisions preserve public authority to reclaim water rights previously granted to private parties upon payment of the water right’s original cost, which will certainly be far below the current market value of these interests. Despite the lack of attention these provisions have received, they seem to mean exactly what they say.\textsuperscript{51}

\section{Background Principle Limitations on Water Rights}

Assuming a claimant can point to a protected property interest in water, so-called “background principles” of state or federal law may affirmatively preclude a claim of entitlement to exercise the property right. Two examples illustrate the potential importance of background principles in the water context.

\textsuperscript{46}Motion for Leave to File Amicus Curiae Brief, \textit{Arkansas Game \\& Fish}, 133 S. Ct. 511 (No. 11-597), 2012 WL 3875238.

\textsuperscript{47}133 S. Ct. at 522 & n.1.

\textsuperscript{48}Cal. Water Code § 1392. \textit{See also id.} § 1629.


\textsuperscript{50}Or. Rev. Stat. § 537.390.

[a] Navigation Servitude

The most venerable background principle for takings purposes is the navigation servitude, which precludes government liability under the Takings Clause for government actions designed to protect or promote navigation. The navigation servitude derives from the Commerce Clause of the U.S. Constitution and, by virtue of the Supremacy Clause, overrides conflicting state property law. The navigation servitude grows out of the special public importance of maintaining unobstructed use of navigable waterways, discussed above.

While all riparian lands bordering a navigable waterway are subject to the navigation servitude, the servitude applies only to government actions that are related to promoting navigation. There has been a good deal of litigation focused on whether government activities in or affecting navigable waters are within the scope of the federal navigational servitude.

[b] Public Trust Doctrine

The public trust doctrine is also frequently invoked as a background principles defense in takings litigation. Under this common law doctrine, the state owns and has a duty to manage tidal and navigable waters, together with the lands beneath them, in trust for the public.

While the doctrine was originally understood to focus on navigation, commerce, and fishing, various state courts over time “have developed the doctrine alongside the public’s changing uses of water to incorporate additional public purposes, including traveling, bathing, recreating, hunting, protecting the ecosystem, preserving scenic beauty, and maintaining access to the waters.”

The public trust doctrine defeats takings claims because it imposes an overarching limitation on private property interests in public trust resources. Thus, for example, courts have held that the doctrine precludes

52 See Scranton v. Wheeler, 179 U.S. 141, 163 (1900) (rights of “riparian owner in the submerged lands . . . bordering on a public navigable water” are held subject to the federal navigation servitude).

53 Palm Beach Isles Assocs. v. United States, 208 F.3d 1374, 1384 (Fed. Cir. 2000).

54 Compare Palm Beach Isles, 208 F.3d 1374 (environmental protection objectives not within the scope of the navigation servitude), with Mildenberger v. United States, 91 Fed. Cl. 217 (2010) (release of polluted water from Lake Okeechobee in order to protect the structural integrity of levees surrounding the lake was within the scope of the navigation servitude), aff’d on other grounds, 643 F.3d 938 (Fed. Cir. 2011).


takings claims based on regulatory prohibitions on filling tidelands, on limitations on mining activity that threatens to pollute public trust waters, and on mandates that land developers allow public access to areas subject to the public trust.

The most famous modern public trust case, *National Audubon Society v. Superior Court*, has figured prominently in takings cases arising from restrictions on water diversions. The California Supreme Court discussed in detail the relationship between the appropriative water rights system and the California public trust doctrine. The court ruled that the state’s “continuing supervisory control” over water resources subject to the trust “prevents any party from acquiring a vested right to appropriate water in a manner harmful to the interests protected by the public trust.” The court recognized that the government has the power to grant permission to private parties to divert and use water, “even though this taking does not promote, and may unavoidably harm, the trust uses at the source stream,” but the court stressed that the exercise of this power cannot create an entitlement to harm trust resources.

Because the California public trust doctrine bars anyone from acquiring “a vested right to appropriate water in a manner harmful to the interests protected by the public trust,” it follows that a restriction on water use to protect public trust resources from harm does not result in a taking. The California Court of Appeal recognized and applied this reasoning in *United States v. State Water Resources Control Board*. The case involved a legal challenge to the State Water Resources Control Board’s (SWRCB) adoption of new water quality standards for salinity control and for protection of fish and wildlife in the Sacramento-San Joaquin River Delta. The U.S. Bureau of Reclamation objected to these standards on the ground that they would “result in impairment of its vested appropriative rights.” The court rejected the argument stating that:

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57 See, e.g., Esplanade Props., LLC v. City of Seattle, 307 F.3d 978 (9th Cir. 2002); McQueen v. S.C. Coastal Council, 580 S.E.2d 116 (S.C. 2003).


60 658 P.2d 709 (Cal. 1983).

61 Id. at 727.

62 Id.


64 Id. at 200.
The issue is now clearly controlled by National Audubon . . . In that case the Supreme Court clarified the scope of the "public trust doctrine" and held that the state as trustee of the public trust retains supervisory control over the state's waters such that no party has a vested right to appropriate water in a manner harmful to the interests protected by the public trust.\(^{65}\)

Quoting National Audubon, the court concluded that in exercising its supervisory function over public trust resources the SWRCB was "not confined by past allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs," and "[n]o vested rights bar such reconsideration."\(^{66}\)

Despite the clarity of the California courts' position that the public trust doctrine functions as a background principle barring takings claims, the U.S. Court of Federal Claims has fumbled the public trust issue in two separate takings cases. The silver lining for government defendants is that neither case produced a precedential decision. In the notorious\(^{67}\) case of Tulare Lake Basin Water Storage District v. United States,\(^{68}\) the court upheld takings claims based on restrictions on water deliveries from the Sacramento-San Joaquin River Delta imposed pursuant to the Endangered Species Act (ESA). The court rejected the government's argument that the claim was barred by the public trust doctrine. As a threshold matter, the court "accept[ed] the proposition that [a water user has] no right to use or divert water . . . in a way that violates the public trust . . . ."\(^{69}\) But the court offered two reasons for why, in its view, the public trust doctrine could not serve as a defense to the takings claim in this case. First, it ruled that the original water permit issued by the SWRCB represented an authoritative determination by a branch of state government that "define[d] the scope of plaintiffs' property rights,"\(^{70}\) and that determination was binding on a federal court unless and until it was modified by the SWRCB or a state court. Second, the court believed the question whether the public trust doctrine requires a modification of the water permit involved "a complex balancing

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\(^{65}\)Id. at 201 (citation omitted).

\(^{66}\)Id. (emphasis omitted) (quoting Nat'l Audubon, 658 P.3d at 728).


\(^{68}\)49 Fed. Cl. 313 (2001).

\(^{69}\)Id. at 321.

\(^{70}\)Id. at 322.
of interests,” a task for which a federal court “is not suited and with which it is not charged.”71

This analysis was plainly mistaken.72 First, contrary to the Court of Federal Claims’ reasoning, issuance of a water permit does not immunize a permit holder from the public trust doctrine: as the California Supreme Court explained in National Audubon, the doctrine by its own force “prevents any party from acquiring a vested right to appropriate water in a manner harmful to the interests protected by the public trust.”73 Second, again contrary to the view of the Court of Federal Claims, no balancing of interests is required to determine whether the public trust doctrine precludes a claim of entitlement to the use of water. Rather, for the reasons discussed above, the only pertinent issue in deciding whether the public trust doctrine bars a takings claim is whether the regulated water use is harmful to public trust resources. Under National Audubon, the SWRCB can appropriately engage in a balancing of interests in deciding whether to issue a permit for a project that will unavoidably harm public trust resources. But the scope of the board’s discretionary permitting authority does not determine how the public trust doctrine qualifies private property entitlements in water. Unfortunately, the United States did not pursue an appeal in the Tulare Lake case, meaning that an appellate court did not have the opportunity to correct the errors committed by the Court of Federal Claims.

Subsequently, in Casitas Municipal Water District v. United States,74 the Court of Federal Claims (indeed the same judge) revisited the issue of whether the public trust doctrine operates as a defense to a takings claim. This case arose from restrictions on diversions at a water supply project on the Ventura River designed to protect endangered steelhead trout. The court ultimately dismissed the case for lack of a ripe claim, and that ruling was upheld on appeal.75 But in what amounts to extended dictum the court discussed whether the claim was barred by the public trust doctrine. The court abandoned its prior reasoning in Tulare Lake for concluding that the public trust doctrine did not bar the takings claim, but adopted new reasons that are equally flawed. First, the court ruled that the public trust doctrine can only serve as a defense to a takings claim based on state

71Id. at 323–24.


73Nat’l Audubon, 658 P.2d at 727.


government action, not federal government action.\textsuperscript{76} This argument is mistaken because the public trust doctrine qualifies a property interest for the purpose of a takings claim in the same fashion regardless of whether the claim is based on state or federal government action. Second, conducting the balancing analysis it eschewed in \textit{Tulare Lake}, the court concluded that the balance tipped in favor of the claimant.\textsuperscript{77} Setting aside the issue of whether the court conducted a well-reasoned balancing analysis (it did not, in this author’s view), the more basic flaw with the court’s approach was in choosing to apply a balancing analysis to resolve whether the public trust doctrine barred the claim, for the reasons discussed above.

Hopefully the U.S. Court of Federal Claims will get the California public trust doctrine right eventually, but it has not done so yet.

\section*{§ 8B.05 Applying the Takings Tests in the Water Context}

It has been more than 100 years since the U.S. Supreme Court last directly addressed whether a regulation of water use constitutes a taking of a water right. In the case of \textit{Hudson County Water Co. v. McCarter}\textsuperscript{78} the Court rejected the claim that a New Jersey law restricting the export of water from a New Jersey river to the neighboring state of New York resulted in a taking of the plaintiff’s riparian water right. The Court declared:

\begin{quote}

[1]t appears to us that few public interests are more obvious, indisputable, and independent of particular theory than the interest of the public of a state to maintain the rivers that are wholly within it substantially undiminished, except by such drafts upon them as the guardian of the public welfare may permit for the purpose of turning them to a more perfect use.\textsuperscript{79}
\end{quote}

\textit{Hudson County} predates the development of modern takings doctrine and the Court’s analysis is certainly difficult to categorize in terms of modern takings law. But at a minimum \textit{Hudson County} would seem to counsel restraint in applying the Takings Clause in the water context. This suggestion has not always been followed.

[1] \textbf{The Physical Takings Theory}

As discussed, it is well established that permanent physical occupations or invasions of private property should be regarded as per se takings. It is logical to apply that principle in the context of water in the same fashion that it applies in any other context. Thus, when government dams and other infrastructure projects permanently flood private lands with water

\textsuperscript{76} \textit{Casitas}, 102 Fed. Cl. at 457–58.

\textsuperscript{77} \textit{Id.} at 461.

\textsuperscript{78} 209 U.S. 349 (1908).

\textsuperscript{79} \textit{Id.} at 356.
there is generally little dispute that a taking has occurred. Indeed, cases involving government-caused flooding represent the foundation of the modern per se takings rule for permanent physical invasions.

Because claimants asserting a physical taking are not required to establish a serious economic burden on the property as a whole, they naturally seek, in all types of takings cases, to argue that their claims should be analyzed under the physical takings theory rather than as potential regulatory takings. Likewise in the water context specifically, litigants commonly attempt to reframe what in reality are regulatory claims into physical takings claims. Generally speaking, these efforts have failed, with some notable exceptions discussed below.

[2] Regulatory Takings Analysis

Starting from first principles, there is no sound reason for applying anything other than traditional regulatory takings analysis to takings claims arising from regulatory restrictions on the use of water. The Penn Central analysis has been applied to takings claims arising from regulatory restrictions on a wide variety of property interests and there is no apparent reason why the same analysis should not apply to takings claims arising from restrictions on water use. Moreover, the limited nature of the property interest in water makes it especially incongruous to attempt to characterize a regulatory constraint on the use of water as a physical invasion or occupation. As discussed above, a water rights holder typically holds only a usufructuary interest in water, and has no claim to ownership of the water itself. It seems to follow that a regulatory restriction on a water use right has to be analyzed as a potential regulatory taking.

In accordance with this reasoning, most courts have declined to analyze takings claims involving water as potential physical takings. This is not to suggest that there are not some complexities in applying regulatory takings analysis to water regulations, including the question of how to apply the relevant parcel rule in this context. One issue is whether a property interest in water should be considered as a unit together with the land that is served by the water interest. Some cases appear to proceed on the assumption that the water interest may be considered independently from the land. But when a water right is used to support a particular use of a specific piece

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80 See, e.g., Yee v. City of Escondido, 503 U.S. 519 (1992) (rejecting argument that mobile home rent control should be regarded as a physical taking).

81 See, e.g., Edwards Aquifer Auth. v. Day, 369 S.W.3d 814 (Tex. 2012) (rejecting argument that regulatory restriction on groundwater pumping should be treated as a physical taking); Allegretti & Co. v. Cnty. of Imperial, 42 Cal. Rptr. 3d 122, 132 (Ct. App. 2006) (same).

82 See Tulare Lake, 49 Fed. Cl. at 319.
of land, and especially when a water interest is legally appurtenant to a particular parcel of land, there is a strong case for including the land in the analysis. In *Edwards Aquifer Authority v. Bragg*, the Edwards Aquifer Authority is seeking review in the Texas Supreme Court in part on the ground that the lower court failed to assess the economic impact of the restriction on groundwater pumping on the value of claimant’s agriculture lands on which the water is used.

Second, there are complexities even if one focuses on the water right alone. Given the physical variability of water flows and the different priorities under an appropriative water system, a water right does not confer a guarantee to a fixed quantity of water year in and year out. In some years, when precipitation is abundant, a water rights holder will be able to use the full amount of her appropriation. But in other, drier years, the holder may have to accept a reduced amount of water or even do without completely. If new regulatory constraints are imposed, for example to maintain minimum stream flows to protect a fishery, the effect may be to increase the risk of reduced water availability in any given year. Depending on the weather, the new restrictions could produce a shortfall in water deliveries immediately or the appearance of a shortfall could be delayed for many years. The most straightforward way to assess the economic impact of a regulatory limit on water use is probably to compare the value of the water right without regulation (when shortages would be dictated by natural variability) with the value of the water interest subject to regulation (when shortages would be dictated by a combination of natural variability and “regulatory shortages”). This approach appears to faithfully apply the with-and-without measure of economic impact in a water takings case, assuming for the sake of argument that the takings analysis can appropriately focus on the water interest alone.

In the *Tulare Lake* case the Court of Federal Claims (mistakenly in this author’s view) declined to apply a traditional regulatory takings analysis to a regulatory limit on water use imposed pursuant to the ESA. Instead, the court ruled that the plaintiffs established a per se physical taking. The court offered several arguments to support this conclusion, none of which has any merit, as discussed at greater length elsewhere. The court said the regulation was a physical taking because it rendered the property valueless. This reasoning is plainly mistaken because a regulation that has

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83 421 S.W.3d 118 (Tex. App.—San Antonio 2013, pet. filed).


such a drastic negative economic impact may trigger the *Lucas* regulatory takings rule, but it does not support the conclusion that there has been a physical taking. In addition, the assertion that the regulation rendered the property valueless rested on an implicit assumption that the parcel rule did not apply in the first place, a premise that would have been correct only if the traditional regulatory takings test did not apply; in others words, the court’s analysis simply begged the question at issue. Finally, in the claims court’s view, the conclusion that the physical takings test applied drew support from several older U.S. Supreme Court decisions, but in fact those cases involved direct appropriations, rather than physical occupations, and therefore were distinguishable.\(^{86}\)

In the subsequent case of *Casitas Municipal Water District v. United States*,\(^{87}\) the Court of Federal Claims reversed itself. Relying principally on the U.S. Supreme Court’s intervening decision in *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*,\(^{88}\) which clarified the distinction between regulatory takings claims and physical takings claims, the court reached the (in this author’s view) correct conclusion that takings claims based on regulation of water use should be evaluated as potential regulatory takings. On appeal from that ruling, the Federal Circuit did not dispute that regulatory restrictions on water use should generally be analyzed as regulatory takings.\(^{89}\) Other courts have criticized the ruling in *Tulare Lake* and declined to follow it.\(^{90}\) In sum, after all the sturm and drang occasioned by the *Tulare Lake* takings ruling, its per se physical takings theory seems to be dead and buried, or nearly so.

On appeal in the *Casitas* case, while the Federal Circuit declined to embrace the theory that a restriction on water use constitutes a taking, it ruled that the plaintiff still presented a viable per se physical takings claim because the regulators required that water be passed through newly constructed fish ladders. As explained in detail elsewhere, this decision was seriously flawed and ignored significant precedent to the contrary.\(^{91}\)

On the positive side, the physical takings ruling in this case is probably

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\(^{86}\)See id. at 598–99.

\(^{87}\)76 Fed. Cl. 100, 103 (2007).


\(^{89}\)See *Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276, 1295 n.16 (Fed. Cir. 2008) (declining to “opine on whether Tulare was rightly decided”).

\(^{90}\)See, e.g., Allegretti & Co. v. Cnty. of Imperial, 42 Cal. Rptr. 3d 122, 132 (Ct. App. 2006) (“we disagree with Tulare Lake’s conclusion that the government’s imposition of pumping restrictions is no different than an actual physical diversion of water”).

\(^{91}\)See Echeverria, *supra* note 85.
confined to the facts of the case, including specific concessions made by the government for the sake of the appellate argument. In a subsequent decision in the Casitas case the Federal Circuit concluded that the plaintiff failed to present a ripe claim, resulting in dismissal of the entire case,\textsuperscript{92} suggesting that the Federal Circuit’s earlier discussion of the physical takings theory in this case can probably be dismissed as dictum.

The second type of water takings case that has generated considerable ferment with respect to the “takings” issue involves government-caused inundations of private property. As discussed, in Arkansas Game & Fish the U.S. Supreme Court ruled that temporarily recurring inundations caused by government can give rise to viable takings claims. Unfortunately, the opinion for the Court is likely to create confusion about the appropriate takings test in this type of case. In the main, the Court’s opinion suggests that the analysis should follow the outline established by Penn Central. The Court refers to the severity of the impact of the government action as a relevant factor, along with the claimant’s “reasonable investment-backed expectations.”\textsuperscript{93} The opinion also includes a somewhat confusing reference to the need to consider “the character of the land at issue,”\textsuperscript{94} which is not a normal consideration in takings litigation. Perhaps what the Court has in mind is that the degree and severity of prior flooding should be factored into the analysis of the reasonableness of the owner’s investment-backed expectations. The opinion makes no reference to the traditional third factor in the Penn Central analysis, the character of the governmental action. Perhaps the Court thought mention of this factor was redundant in a case self-evidently involving inundation. But the omission is noteworthy because the Penn Central decision says, in its discussion of the character factor, that “[a] ‘taking’ may more readily be found when the interference with property can be characterized as a physical invasion by government than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good.”\textsuperscript{95} Perhaps, in light of Penn Central, the Court thinks government-caused temporary inundations should be more likely to produce successful takings claims than other temporary regulations of property use. Time will tell.

\textsuperscript{92}See Casitas Mun. Water Dist. v. United States, 708 F.3d 1340 (Fed. Cir. 2013).

\textsuperscript{93}Arkansas Game & Fish Comm’n v. United States, 133 S. Ct. 511, 522 (2012).

\textsuperscript{94}Id.

Finally, the Court’s opinion highlights the importance of an established element of takings analysis that is likely to have particular salience in a takings case arising from government-caused inundation, that is, the requirement that the alleged harm to the property interest must be the predictable consequence of a government-authorized action.\(^\text{96}\) While this element of a successful takings claim is ordinarily not contested, it will likely be an issue with some frequency in inundation cases, where flooding may result from accidents caused by the actions of government officials with unpredictable outcomes. In addition, as several of the Court’s citations confirm,\(^\text{97}\) litigation in this area will raise the important but relatively obscure issue of the distinction between a takings case and a claim sounding in tort.

\section*{§ 8B.06 Looking to the Future—The Effects of Climate Change on Takings Litigation}

The new wild card in water regulation and management is obviously climate change. Increased global temperatures and changed weather patterns are predicted to produce significant reductions (and some increases) in precipitation in different locations around the country. As succinctly stated in the 2014 National Climate Assessment report, “[m]ore winter and spring precipitation is projected for the northern United States, and less for the Southwest, over this century.”\(^\text{98}\) What are the implications of these predicted changes for takings litigation involving water?

(1) More severe water shortages and more serious flooding could both give rise to more takings cases. Government restrictions on water withdrawals to reduce the adverse effects of shortages on water users and/or to mitigate the environmental effects of dwindling instream flows could be fodder for takings claims. At the same time, government efforts to manage larger volumes of floodwaters could also generate more takings claims, especially following the recent Arkansas Game & Fish case.

(2) To the extent takings awards, or the mere threat of takings liability, deter government officials from takings steps to respond to decreases in water shortages, or to higher flood flows, the environmental damages and other social harms due to climate change could be exacerbated.

\(^{96}\)See generally Echeverria, supra note 3.

\(^{97}\)See Arkansas Game & Fish, 133 S. Ct. at 522 (citing Ridge Line, Inc. v. United States, 346 F.3d 1346, 1355–56 (Fed. Cir. 2003) (discussing the distinction between a tort claim and a takings claim)).

(3) Increased water shortages due to climate change could make the
distribution of wealth even more unequal than it is today. Climate
change will increase the scarcity of water resources in significant
parts of the country and, together with the demands of a growing
population, tend to raise the price of water to consumers, farmers,
and others. The water-haves will become wealthier than the water-
have-nots. To the extent takings doctrine helps protect asserted
entitlements to water, it may interfere with equitable sharing of water
resources in an era of scarcity.

(4) An important legal question is how climate change may affect “rea-
sonable investment-backed expectations” in water rights. Some
courts have ruled that investment-backed expectations should take
into account the nature and severity of the challenges facing society
that can reasonably be expected to prompt a regulatory response. 99
Going forward, the already apparent and predicted future effects of
climate change should arguably bar virtually any water right holder
from claiming an investment-backed expectation to exploit a water
right free from climate-related regulatory controls.

(5) Adaptation is widely understood to be an important, inevitable
response to climate change. Strong legal protections for preexisting
water interests, pursuant to the Takings Clause or otherwise, could
be maladaptive in the sense that water rights holders may feel they
have a constitutional entitlement not to reduce water use in the face
of increasing water shortages. (On the other hand, the use it or lose it
principle of western water law has been widely discussed as a poten-
tial obstacle to voluntary water conservation efforts.)

(6) Finally, depending on the level of changes in water supplies due to
climate change and the nature and extent of the resulting problems,
climate change could create pressures to change our basic concep-
tions of property rights in water. As Justice Antonin Scalia famously
remarked in his decision for the Court in Lucas, “changed circum-
stances or new knowledge may make what was previously permis-
sible no longer so.” 100

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99 See generally Echeverria, supra note 7.