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MANAGING WATER RIGHTS USING FISHING RIGHTS AS A MODEL

SHELLEY ROSS SAXER*

I. INTRODUCTION

Water sustains life. Living creatures, plants, and habitats compete for sustenance, while the relationships among these interests intertwine when we view water from the human lens. Water supports fish, and fish provide culture, beauty, and nutrition. Water also supports natural habitats, plant life, living creatures, and crops to feed the world. Additionally, water creates hydropower, supports industrial processes, carries away waste, and cleanses the bodies of all forms of life. When there is insufficient water to support these needs, competition becomes fierce and many life-affecting choices must be made. But who will make these choices?

Historically, when water was abundant, it was distributed based upon first-in-time concepts.¹ Similarly, when the ocean was bountiful, fishermen could take whatever they could capture. The public trust doctrine serves as the governing legal framework for managing both of these resources.

Water is fluid and too unlike land to be treated as a property interest held by private parties. Instead, the public trust doctrine provides that water should be held by the state in trust for the public good.² The right to use water owned by the public is analogous to the right to use other natural resources, and such a right to use should be considered a

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1. Tom Tietenberg, *Tradable Permits in Principle and Practice*, 14 PENN ST. ENVTL. L. REV. 251, 270 (2006).

2. *See, e.g., Esplanade Properties, LLC v. City of Seattle*, 307 F.3d 978 (9th Cir. 2002) (noting that under Washington law, the public trust doctrine reserves a public property interest in tidelands and the waters flowing over them for the public good, and despite the sale of these lands into private ownership, the state may not give away or convey this interest).

revocable license or permit.³ Given that environmental changes make water an unstable resource from season to season and year to year, a method is needed to figure out how water rights should be allocated. One option is to look to another natural resource with similar characteristics: fish.⁴ Fish are not confined to a set location, they do not observe state or national boundaries, and their numbers vary from season to season and year to year, requiring management and allocation in times of scarcity.

A water right is a usufructuary right and, although it entitles the right holder to “a vested interest in that right, the right itself is something less than the full ownership of property because it is a right not to the corpus of the water but to the use of the water.”⁵ Because the right is defined as a usufruct, the water user has a right to enjoy the water, but the property ownership belongs to the state.⁶ In *Estate of Hage v. United States (Hage V)*, the Court of Federal Claims explained this with a comparison to real property:

It is important to . . . note the difference between water

3. See Jan G. Laitos & Richard A. Westfall, *Government Interference with Private Interests in Public Resources*, 11 HARV. ENVTL. L. REV. 1, 2 (1987) (“A private party may also acquire from the federal government the revocable right to use a public resource, often to the exclusion of others, in the form of a license or permit.”). The appropriative system, which most states use to allocate water rights, establishes that water rights are not connected with land ownership, and that the first person to use the water for a beneficial purpose has the right to continue using the same quality of water for that same purpose. *Montana v. Wyoming*, 131 S. Ct. 1765, 1772 (2011). Thus, the first-in-time concept of distribution is an integral part of this system. See Tietenberg, *supra* note 1, at 270. The appropriative doctrine, however, differs from the riparian system: the riparian system allocates water based upon whoever owns the land that abuts the water source, so the first-in-time concept does not apply to a pure riparian system. Joseph W. Dellapenna, *The Evolution of Riparianism in the United States*, 95 MARQ. L. REV. 53, 55 (2011); Todd S. Hageman, Note, *Franco-American Charolaise, Ltd. v. Oklahoma Water Board: The Oklahoma Supreme Court’s Resurrection of Riparian Rights Leaves Municipal Water Supplies High and Dry*, 47 OKLA. L. REV. 183, 184 (1994).

4. See Tietenberg, *supra* note 1, at 268.

5. *Red Canyon Sheep Co. v. Ickes*, 98 F.2d 308, 315 (D.C. Cir. 1938) (holding that the valuable nature of the privilege to graze, which would ultimately ripen into a permit under the Act, was subject to equitable protection against an illegal act); see also Sandra B. Zellmer & Jessica Harder, *Unbundling Property in Water*, 59 ALA. L. REV. 679, 697 (2008) (“[A] water right does not constitute ownership of the water itself; it is instead usufructuary, or ‘a right to use water.’” (quoting John C. Peck, *Title and Related Considerations in Conveying Kansas Water Rights*, J. KAN. B.A., Nov. 1997, at 38, 39)).

6. For example, “under California law[,] the title to water always remains with the state.” *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313, 318 (2001).

ownership and real property ownership; water is a usufructuary as opposed to a possessory right. Whereas real property ownership is defined by a right to exclude others from that property, water ownership is defined by the right to access and use that water.⁷

Government ownership of this public communal resource obligates the sovereign, as a trustee, to protect the resource for the public.⁸ Government ownership may also facilitate efficient use by private individuals through the use of market principles.⁹

As with fishing rights, the right to use water should be treated as a revocable license. Under this method, the government would hold water in trust. The public trust system requires a usage fee from all private actors wishing to use the public resource.¹⁰ If the government permits a private individual or entity to enjoy a public resource—such as water, fish, wildlife, grazing, timber, minerals, or other public rights held in trust—ownership is not conferred, but instead the user would pay the public for this right. This Article addresses the need to view water rights as licenses subject to government revocation, without just compensation, in the same way that fishing rights are viewed as licenses subject to government management.

The methods for managing and allocating water vary by state and region.¹¹ Similarly, the methods for managing and allocating fish vary by state, region, type of fish, and the water resource within which they reside. For comparison purposes, Part II focuses specifically on the methods used to address water resource allocation in the Sacramento–San Joaquin River Delta in California, and Part III looks at fish allocation issues in the Pacific Northwest. Part IV explores property

7. 82 Fed. Cl. 202, 211 (2008).

8. Zellmer & Harder, *supra* note 5, at 693 (discussing the Roman, English, and early American law recognition of the public trust over water and the universal regard for this public resource).

9. See Josh Eagle, *A Window into the Regulated Commons: The Takings Clause, Investment Security, and Sustainability*, 34 *ECOLOGY L.Q.* 619, 654 (2007) (“In order for government ownership to succeed, management institutions must take into account the incentives of the entrepreneurs embedded within them.”).

10. See Reza Dibadj, *Regulatory Givings and the Anticommons*, 64 *OHIO ST. L.J.* 1041, 1110 (2003).

11. Shelley R. Saxer, *The Fluid Nature of Property Rights in Water*, 21 *DUKE ENVTL. L. & POL’Y F.* 49, 51 (2010); see also Zellmer & Harder, *supra* note 5, at 681 (describing how interests in water are different in the West and the East in the United States); Dellapenna, *supra* note 3, at 53–55 (same).

rights in water and fish, particularly in regard to Fifth Amendment takings challenges when government regulations diminish water rights and fishing rights. Takings claims require the existence of a property right; and while the water rights claims for a taking have had mixed success, the fishing rights claims have been uniformly rejected by courts on the basis that these license rights are not considered property.¹²

This Article concludes by recognizing that both water and fish resources should be managed as ecosystems and governed by the public trust doctrine “to manage and protect [these resources] in a sustainable fashion . . . for the benefit of current and future generations.”¹³ Allowing private property rights in either fish or water may violate the public trust doctrine by giving away public resources to private interests.¹⁴ But, as this Article suggests, the conservation and preservation of the right to water (as a public resource) may be maintained by viewing water rights as similar to fishing rights.

II. ALLOCATING WATER IN CALIFORNIA

California has a storied history of water rights and the fight for water in the arid West. While the history is fascinating, this Article focuses on the Golden State’s equally fascinating current system of surface water allocation from the Sacramento–San Joaquin River Delta. The California system of water rights is a hybrid legal regime, meshing riparian rights with the prior appropriation doctrine. Riparian rights are based on ownership of land adjacent to the water source and are given priority over rights acquired based on first usage under the prior appropriation system.¹⁵ Appropriative water rights require that a

12. See *infra* notes 135–39 and accompanying text.

13. Mary Turnipseed et al., *The Silver Anniversary of the United States’ Exclusive Economic Zone: Twenty-Five Years of Ocean Use and Abuse, and the Possibility of a Blue Water Public Trust Doctrine*, 36 *ECOLOGY L.Q.* 1, 70 (2009); see also *United States v. Washington*, 573 F.3d 701, 703 (9th Cir. 2009) (“What matters for this case is that the treaties also reserved to the tribes the ‘right of taking fish . . . in common with all citizens of the United States.’” (quoting Treaty of Point No Point art. IV, Jan. 26, 1855, 12 Stat. 933, 934)); Saxer, *supra* note 11, at 51 (arguing that states should treat water as a public resource by only granting usufructuary rights insofar as it does not interfere with the public good).

14. See Turnipseed et al., *supra* note 13, at 65–66.

15. *Lux v. Haggin*, 10 P. 674, 732 (Cal. 1886). This California Supreme Court case is the basis for the hybrid California water allocation system. Currently, when there is a conflict between a riparian right, which was first in time as dictated by the title of the land, and an appropriation, the riparian right takes precedent. *Id.*; see also *United States v. Fallbrook Pub. Utility Dist.*, 101 F. Supp. 298, 302–06 (S.D. Cal. 1951) (affirming that *Lux* still applies) *Pleasant Valley Canal Co. v. Borrer*, 72 Cal. Rptr. 2d 1, 8–9 (Ct. App. 1998)

“beneficial use” of the water be made in order to obtain a license from the State Water Resources Control Board (SWRCB).¹⁶ While water is considered to be the property of the State of California,¹⁷ individuals and entities can acquire rights to use the water based upon owning riparian property¹⁸ or putting the water to a beneficial use.¹⁹

The SWRCB has authority to control, appropriate, use, and distribute state waters.²⁰ It is the state agency responsible for granting water permits to the federal water projects managed by the Bureau of Reclamation (BOR) and the state water projects managed by the Department of Water Resources (DWR).²¹ The federal Central Valley Project (CVP) and the State Water Project (SWP) facilitate the transfer of water from northern California to the drier parts of the state.²² These projects draw water from the same location at the southern edge of the Sacramento–San Joaquin Delta to supply the “end-users in Southern California.”²³

The federal BOR and the state DWR manage the CVP and SWP projects by contracting with local water agencies to allow the districts

(indicating that *Lux* is still the general standard in California and the hybrid system remains intact). However, if the appropriation was first in time, then that right has seniority. *Lux*, 10 P. at 733–34.

16. Gregory E. Good, *Administrative Adjudication of Riparian Water Rights in California After Imperial Irrigation District v. State Water Resources Control Board*, 19 GOLDEN GATE U. L. REV. 379, 380–82 & n.6 (1989) (quoting CAL. CONST. art. X, § 2).

17. CAL. WATER CODE § 102 (West 1992) (“All water within the State is the property of the people of the State, but the right to the use of water may be acquired by appropriation in the manner provided by law.”).

18. *Id.* § 101.

19. *Id.* § 100 (“The right to water or to the use or flow of water in or from any natural stream or watercourse in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served . . .”).

20. *See California v. United States*, 438 U.S. 645, 652–53 & n.7 (1978).

21. *See CAL. WATER CODE* § 179 (West 2006) (“The board succeeds to and is vested with all of the powers, duties, purposes, responsibilities, and jurisdiction vested in . . . this code, or any other law under which permits or licenses to appropriate water are issued, denied, or revoked . . .”).

22. *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313, 314 (2001). CVP service areas include Sacramento Valley. *Sacramento Valley Central Valley Project Water Service Contracts*, N. CAL. WATER ASS’N, <http://www.norcalwater.org/water-rights/sacramento-valley-central-valley-project-water-service-contracts/> (last visited Oct. 10, 2011). Further, SWP service areas include northern California regions such as Alameda, Butte, Plumas, Solano, Napa, and Santa Clara, as well as Yuba City and the Bay Area. *California State Water Project Water Contractors*, DEP’T WATER RES., http://www.water.ca.gov/swp/contractor_intro.cfm (last visited Oct. 5, 2011).

23. *See Tulare*, 49 Fed. Cl. at 314–15.

the right to withdraw water based on the water permits granted to the BOR and DWR by the SWRCB.²⁴ The allotment allowed under these county contracts will be impacted by the amount of water available in any given year, based upon natural causes.²⁵ While the BOR and DWR are responsible for the operating costs of the water system infrastructure, regardless of the amount of water granted to them each year by the SWRCB, the contracts between DWR and its water contractors “explicitly provide that the state will not be held liable for shortages due to drought or other causes beyond its control.”²⁶

At times when the BOR has failed to deliver specified water rights based on contracts promising CVP water to California water districts, the districts have filed suit against the United States alleging breach of contract claims and takings claims.²⁷ The supply of water under these CVP contracts has been diminished in some years due to drought and the need to keep water at levels sufficient to support fish and wildlife, meet water quality standards, and generate hydroelectric power.²⁸ However, in *Stockton East Water District v. United States*,²⁹ the Federal Circuit found that, even assuming the BOR had acted reasonably in allocating water rights,³⁰ the fact that it did not meet its contractual obligation to supply specified quantities of water to the districts did not relieve it of contractual liability unless it could show that “the shortages were the result of causes beyond the control of the United States.”³¹ Even if the government avoided liability as a matter of contract law, the water districts were allowed to bring takings claims for those years in which they did not receive sufficient water under the BOR contracts.³²

The price that water districts pay for water should reflect the uncertainty of the resource from year to year, as well as the need to support the infrastructure necessary to deliver the water that is available for allocation. However, water districts should not have to pay for water they do not receive. Courts should allow recovery under contract law

24. *Id.*

25. *Id.*

26. *Id.*

27. *See, e.g., Stockton E. Water Dist. v. United States*, 583 F.3d 1344, 1369 (Fed. Cir. 2009).

28. *Id.* at 1363.

29. *Id.* at 1344.

30. *Id.* at 1365.

31. *Id.* at 1369 (internal quotation marks omitted).

32. *Id.*

for government breaches, but water districts and other water users should not be allowed to make takings claims by asserting that water usage promised in a contract constitutes a property right, subject to a governmental taking. Water is a common resource belonging to the people, and the government should not be required to pay just compensation when it diminishes water deliveries based on changing hydrology projections from year to year.³³

As water in the West has continued to be a source of conflict between a growing population and competing needs, policy makers have struggled to incorporate rising environmental concerns into the allocation and management of this scarce resource. The Central Valley Project Improvement Act of 1992 (CVPIA)³⁴ demonstrated the federal shift in water policy away from the original purposes of supplying water—which were consumptive uses such as irrigation, domestic use, and industrial processes, in addition to electric energy production and navigation improvement³⁵—and instead to the CVPIA’s added purposes of fish and wildlife mitigation, protection, and restoration. The CVPIA altered the priority of the purposes by expressly listing these new purposes ahead of providing power.³⁶

In addition to policy changes focusing on environmental protection, the CVPIA encourages the use of economic principles to allocate water rights.³⁷ CVP contracts can now be renewed for only a twenty-five year term instead of a forty-year term, and they may be renewed only after an Environmental Impact Statement is completed.³⁸ This Act impacts the amount of water that is made available to the BOR for the operation of the CVP because it requires the BOR to annually dedicate 800,000 acre-feet of the CVP yield for fish, wildlife, and habitat

33. See CMIP3, BIAS CORRECTED AND DOWNSCALED WCRP CMIP3 CLIMATE AND HYDROLOGY PROJECTIONS, http://gdo-dcp.ucllnl.org/downscaled_cmip3_projections/dcpInterface.html (last visited Nov. 12, 2011) (archive of past years changing hydrology projections). Though there is currently no case that has alleged a taking based on hydrology, it is nonetheless an important concept that the government should not be held liable because of the fluctuating hydrology predictions.

34. Central Valley Project Improvement Act of 1992, Pub. L. No. 102-575, § 3402, 106 Stat. 4706, 4706.

35. *Stockton E. Water Dist.*, 583 F.3d at 1356.

36. *Id.* at 1356 (citing Central Valley Project Improvement Act § 3402).

37. Carl Boronkay & Timothy Quinn, *The Central Valley Project Improvement Act: An Urban Perspective*, 3 SAN JOAQUIN AGRIC. L. REV. 57, 57–58 (1993) (“The Act . . . introduce[d] basic economic reforms to narrow the gap between the cost to the taxpayer of supplying CVP water and the prices paid for the water by CVP water users.”).

38. *Id.* at 58.

restoration.³⁹ The limitations provided in the CVPIA have led to conflicts that are best exemplified by the *Stockton East Water District* decision.⁴⁰

Finally, the CVPIA promotes the voluntary marketing of CVP water in California by allowing water transfers for beneficial uses.⁴¹ Depending upon the circumstances and details of the transaction, these transfers may require approval by the SWRCB in order to address policy concerns such as unreasonable geographic concentration of market activity and unacceptable third-party impacts.⁴² While water marketing may help allocate water to its highest use based upon pricing,⁴³ transfers may not occur at an economically optimal level because of legal restrictions on such activity.⁴⁴ It is also not clear whether water rights are sufficiently certain to support an effective market scheme.

Assuming water markets can operate successfully, there is still concern that the market—and not policy makers—will allocate this public resource.⁴⁵ This concern is illustrated by the situation in Kings

39. Robert Jerome Glennon & John E. Thorson, *Federal Environmental Restoration Initiatives: An Analysis of Agency Performance and the Capacity for Change*, 42 ARIZ. L. REV. 483, 515–16 (2000).

40. See *Stockton E. Water Dist. v. United States*, 583 F.3d 1344, 1365–68 (Fed. Cir. 2009). In *Stockton*, the Government argued that the 1983 BOR contracts with water districts, which specified minimum and maximum water deliveries, rendered performance impossible because of the implementation of the 1992 CVPIA and the need to dedicate water to environmental uses. *Id.* at 1366–67. The court held that the government had not met its burden to show that the implementation of the CVPIA made performance impossible. *Id.* at 1360, 1367–68.

41. Boronkay & Quinn, *supra* note 37, at 61 (quoting Central Valley Project Improvement Act § 3405(a)).

42. *Id.* at 61–62.

43. See Lawrence J. MacDonnell, *Transferring Water Uses in the West*, 43 OKLA. L. REV. 119, 119 (1990) (noting that water transfers are economically attractive because of the “marked disparity in the value of water in many existing uses compared with water’s value in alternative uses”).

44. *Id.* at 120. See generally Craig Anthony Arnold, *Water Privatization Trends in the United States: Human Rights, National Security, and Public Stewardship*, 33 WM. & MARY ENVTL. L. & POL’Y REV. 785, 786–89 (2009) (discussing how states’ statutes regulating water rights negatively impacted water transfers in those states); Priyanka Sundareshan, *Using the Transfer of Water Rights as a Climate Change Adaptation Strategy: Comparing the United States and Australia*, 27 ARIZ. J. INT’L & COMP. L. 911, 930–35 (2010) (arguing that legal barriers such as the “artificial legal distinction” between surface water rights and rights to groundwater create inefficient outcomes when transferring water rights).

45. See CAL. WATER CODE § 1810 (West 2006); MacDonnell, *supra* note 43, at 127–28 (noting concerns about treating water as a commodity since it is a public resource and the community should control water use rather than individual users).

County, where farmers were selling their water to a large developer who planned to build 23,000 homes in southern California.⁴⁶ Because California now requires developers to show they have a sufficient water source before building,⁴⁷ farmers will sell their annual allotment of water to the developers to ensure their ability to meet California's allotment requirement. Due to the fact that new housing is more valuable than the water itself, farmers are then able to receive a price ten times the water's value.⁴⁸ Such sales were prompted by cutbacks in State Water Project deliveries from the Delta, forcing farmers to purchase replacement water on the market at prices that increased their irrigation costs and created an unacceptable business risk.⁴⁹ As a result, there may be a loss of agricultural production, which could potentially devastate the economy in some California communities that rely on agriculture for jobs, taxes, and general economic health.⁵⁰

Balancing the allocation of water, particularly in times of scarcity, has continued to pit urban users, farmers, and fishers against each other.⁵¹ The major problem is that while there is sufficient water in northern California, the central and southern parts of the state need to transfer water from the Sacramento–San Joaquin River Delta to supply farmers in the Central Valley and urban users in southern California.⁵² The storage and transfer of water from the north is accomplished by

46. Mark Grossi, *Kings County Farmers Land Lucrative Water Sales*, REVIVE THE SAN JOAQUIN (Nov. 21, 2010), <http://www.revivethesanjaquin.org/content/kings-county-farmers-land-lucrative-water-sales>.

47. CAL. GOV'T CODE § 66473.7(b)(1) (West 2009); CAL. WATER CODE §§ 10910, 10912 (West 1992); *see also* Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova, 150 P.3d 709, 718 (Cal. 2007) (discussing the level of certainty regarding the sufficiency of water supply required for a new development).

48. Grossi, *supra* note 46.

49. *Id.*

50. *Id.*

51. Jody Only, *Delta Debate Decision for Water Rights Farmers vs. Fishermen: Federal Judge Orders Tracy Pumps On*, EXAMINER.COM (May 26, 2010), <http://www.examiner.com/fishing-in-stockton/delta-debate-decision-for-water-rights-farmers-vs-fishermen-federal-judge-orders-tracy-pumps-on>. It is not necessarily clear, though, why some agricultural users are transferring their water supply. As suggested above, it may be because frequent supply cutbacks render farming less feasible, or that the amount of money urban areas can pay for the water far exceeds the net income that the farmers make through agriculture. In either case, the result—a strong desire to transfer water—nevertheless has the potential to devastate communities.

52. CONG. BUDGET OFF., U.S. CONG., WATER USE CONFLICTS IN THE WEST: IMPLICATIONS OF REFORMING THE BUREAU OF RECLAMATION'S WATER SUPPLY POLICIES 27 (1997).

managing a system of dams, canals, tunnels, and power plants which must be paid for by the water users, regardless of how much water is delivered from the state and federal water projects.⁵³ The powerful water pumps that deliver this Delta water from the Sacramento, San Joaquin, and American rivers in the north to the Bay Area, the central coast, and approximately two-thirds of southern California, trap and interfere with salmon, steelhead, and sturgeon populations and impact the southern-resident whales that feed on the salmon.⁵⁴

Beginning in 2005, the interests of the urban user, the farmer, and the fish collided in newsworthy litigation when a group of sport-fishing and environmental organizations challenged a finding by the United States Fish and Wildlife Service (FWS) that the Delta smelt was not jeopardized by the impacts of the Delta's federal and state water diversion programs.⁵⁵ The court in *Natural Resources Defense Council v. Kempthorne* held that the biological opinion prepared by the FWS was inadequate,⁵⁶ in part because the opinion did not take into account the issue of climate change.⁵⁷ The judge deciding the *Kempthorne* case, Judge Oliver Wanger, also held in a related case, *Pacific Coast Federation of Fishermen's Ass'ns v. Gutierrez*,⁵⁸ that the biological opinion prepared by the National Marine Fisheries Service (NMFS) in 2004 for various salmonid species was flawed.⁵⁹ Among other inadequacies, both biological opinions failed to take into account the effects of global climate change on the Delta's hydrology when determining whether the Delta water projects jeopardized these threatened and endangered species and their habitats under the Endangered Species Act.⁶⁰

By the end of 2007, Judge Wanger began issuing orders restricting the operations for the Delta pumps and reducing and halting water exports in order to protect the affected fish species.⁶¹ These restrictions

53. Grossi, *supra* note 46.

54. See Only, *supra* note 51.

55. Carolyn Brickey et al., *How to Take Climate Change Into Account: A Guidance Document for Judges Adjudicating Water Disputes*, 40 ENVTL. L. REP. 11215, 11217 (2010).

56. 506 F. Supp. 2d 322, 387–88 (E.D. Cal. 2007).

57. *Id.*

58. 606 F. Supp. 2d 1122 (E.D. Cal. 2008).

59. *Id.* at 1193; see also Brickey et al., *supra* note 55, at 11217 (discussing same and comparing *Gutierrez* to *Kempthorne*).

60. *Gutierrez*, 606 F. Supp. 2d at 1183–84.

61. Interim Remedial Order Following Summary Judgment and Evidentiary Hearing at 2–3, *Natural Res. Def. Council v. Kempthorne*, 506 F. Supp. 2d 322 (E.D. Cal. Dec. 14, 2007)

caused an uproar. Water shortages and economic woes generated cries for “people above fish” after the drought, which had resulted in fallow farmland, unemployment, and economic decline in the Central Valley.⁶² However, in May 2010, Judge Wanger reviewed the revised biological opinion for salmonid and found that water officials acted arbitrarily and capriciously, and that “consulting and action agencies . . . must take the hard look under [the National Environmental Policy Act] at the draconian consequences visited upon [the p]laintiffs, the water supply of California, the agricultural industry, and the residents and communities devastated by the water supply limitations imposed”⁶³ Judge Wanger similarly found that the Delta smelt biological opinion was arbitrary and capricious and failed to take into account the impact on humans when considering water cutbacks to urban and agricultural users.⁶⁴

Final judgment on the remaining Delta smelt claims was issued on March 29, 2011, and the court ordered the FWS to complete a new Delta smelt biological opinion by October 1, 2011.⁶⁵ In May 2011, Judge Wanger agreed to amend the judgment to adjust the remand schedule such that a final biological opinion and other required analyses be completed by December 1, 2013, instead of the initial October 1, 2011 deadline.⁶⁶

Now that California’s most recent three-year drought has finally ended,⁶⁷ the current controversy may also be coming to an end. Indeed, the federal government and water contractors agreed, in February 2011, to relax restrictions on pumping operations until the end of June 2011, while federal agencies continue to monitor Delta conditions to determine whether pumping must be limited.⁶⁸

The Delta litigation illustrates the dynamic nature of water

(No. 1:05-cv-01207).

62. 155 CONG. REC. H5099, 5103–04 (daily ed. May 5, 2009) (remarks of Rep. Calvert).

63. Consol. Salmonid Cases, 713 F. Supp. 2d 1116, 1171 (E.D. Cal. 2010).

64. Consol. Delta Smelt Cases, 717 F. Supp. 2d 1021, 1069–71 (E.D. Cal. 2010).

65. Delta Smelt Consol. Cases, No. 1:09-CV-00407, 2011 WL 1740308, at *1 (E.D. Cal. May 4, 2011).

66. *Id.* at *8.

67. See Zeke Barlow, *California’s Drought is Officially Over*, VENTURA CNTY. STAR (Mar. 30, 2011), <http://www.vcstar.com/news/2011/mar/30/californias-drought-is-officially-over/>.

68. See Bettina Boxall, *Temporary Truce Reached in California Delta Smelt Water Restrictions*, L.A. TIMES (Feb. 25, 2011), <http://articles.latimes.com/2011/feb/25/local/la-me-smelt-20110225>.

allocation in an environment faced with many challenges, including changing climate, drought conditions, increasing demand for water resources, and uncertainty regarding the impact of water limitations on fish, habitats, crops, power generation, and humans. While assigning private property rights has the potential to prevent a tragedy of the commons and to promote the efficient use of a limited resource, it is difficult in this dynamic system to provide certainty of the extent and consistency of such rights. In addition, any establishment of a market in natural resources will require an initial allocation of rights. This allocation may be based on previous usage and priorities established as part of our water law regimes, but such an arrangement may not be fair because “[t]hose who are initially able to obtain the largest water rights reap the benefits of future trades to more beneficial uses.”⁶⁹

Identifying water usage rights as property is problematic because the rights initially belong to the state, and the state should be able to restrict water usage without being required to pay a permit holder for the right to retain the water instream. Finally, the public nature of this resource is such that policy makers, rather than the private marketplace, should determine the appropriate allocation of water on a continuing basis in order to properly support agricultural economies and designate land use for growing populations with water needs.

III. ALLOCATING FISH IN THE PACIFIC NORTHWEST

The nation’s fishery resources are managed under the auspices of the Magnuson–Stevens Fishery Conservation and Management Act (Magnuson–Stevens Act), which was enacted in 1975 “to protect United States fisheries by extending the exclusive fisheries zone of the United States from 12 to 200 miles and to provide for management of fishing within the 200-mile zone.”⁷⁰ Under the Magnuson–Stevens Act, Regional Fishery Management Councils (RFMCs) are required to “prepare[] and submit[] to the Secretary of Commerce a fishery management plan (FMP) with respect to each fishery within its

69. See Nicole L. Johnson, *Property Without Possession*, 24 YALE J. ON REG. 205, 229–30 (2007) (noting that an “arbitrary initial allocation” of water can lead to inefficiencies over time and creates distributive justice concerns).

70. Wash. State Charterboat Ass’n v. Baldrige, 702 F.2d 820, 823–24 (9th Cir. 1983) (citing H.R. REP. NO. 94-445, at 21 (1975), *reprinted in* 1976 U.S.C.C.A.N. 593, at 593–94). However, it could be argued that the controversy only temporarily took a rest due to a wet year, and that new litigation will take place once new biological opinions are issued.

geographical area of authority.”⁷¹ Fish allocation based on these FMPs is subject to regulation under the Magnuson–Stevens Act, but must also take into account other applicable law, including Indian treaty fishing rights.⁷² The United States Secretary of Commerce (Secretary), in conjunction with the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Fisheries Service (NMFS), manages fishery resources subject to the Magnuson–Stevens Act.⁷³ For the Pacific Northwest region, the Magnuson–Stevens Act empowers the Pacific Coast Fishery Management Council (PFMC), as one of the RFMCs, to make recommendations to the Secretary for FMPs covering fisheries along the United States’ western territorial waters.⁷⁴

The Magnuson–Stevens Act requires that FMPs contain conservation and management measures, which are consistent with ten national standards as stated in 16 U.S.C. § 1851(a)(1)–(10):

- (1) Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield⁷⁵ from each fishery for the United States fishing industry.
- (2) Conservation and management measures shall be based upon the best scientific information available.
- (3) To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.
- (4) Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.
- (5) Conservation and management measures shall, where

71. *Midwater Trawlers Coop. v. Dep’t of Commerce*, 393 F.3d 994, 998 n.6 (9th Cir. 2004) (citations omitted) (quoting *Washington v. Daley*, 173 F.3d 1158, 1162 (9th Cir. 1999)).

72. *Midwater Trawlers*, 393 F.3d at 998.

73. *United States v. Washington*, 143 F. Supp. 2d 1218, 1220 (W.D. Wash. 2001).

74. *Id.*

75. Optimum yield is defined, in part, as the amount of fish which “will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems . . .” 16 U.S.C. § 1802(28)(A) (2006).

practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

(6) Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

(7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

(8) Conservation and management measures shall, consistent with the conservation requirements of this chapter (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of paragraph (2), in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

(9) Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

(10) Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.⁷⁶

In addition to the above-required national standards, “[t]he Magnuson–Stevens Act provides discretionary authority for the NMFS . . . to ‘establish a limited access system for the fishery in order to achieve optimum yield,’” by taking into account considerations such as

- (A) present participation in the fishery;
- (B) historical fishing practices in, and dependence on, the fishery;
- (C) the economics of the fishery;
- (D) the capability of fishing vessels used in the fishery to engage in other fisheries;
- (E) the cultural and social framework relevant to the fishery and any affected fishing communities;
- (F) the fair and equitable distribution of access privileges in the fishery; and

76. 16 U.S.C. § 1851(a)(1)–(10) (2006).

(G) any other relevant considerations.⁷⁷

The United States Pacific Northwest region provides a good illustration of how state and federal fishing rights are allocated by federal and state authorities among competing uses in both interior water bodies and the ocean. Environmental, economic, and tribal interests must be weighed in analyzing the right to capture these important resources and must be distributed based upon year-to-year projections of fish availability.⁷⁸ For example, as noted above in Standard Two, the Magnuson–Stevens Act requires that fish allocation be based on the “best scientific information available” for purposes of conservation and management of fisheries.⁷⁹

The federal government maintains jurisdiction over fishery resources, but under the Magnuson–Stevens Act, states retain jurisdiction over resources within state territories.⁸⁰ A state also has jurisdiction over fishing vessels registered under the law of that state when operating outside state territories, so long as such vessels are not subject to federal fishing regulations.⁸¹ In any case, the state’s laws must be consistent with the FMP or applicable federal fishing regulations.⁸² Individual states cannot enforce regulations against vessels registered under the law of other states when those vessels are operating in the federal exclusive economic zone (EEZ) adjacent to state territorial waters and submerged land that extends three miles from the state coastline.⁸³

The prohibition against regulating other states’ vessels can be modified by legislation when necessary to promote management of

77. *Gen. Category Scallop Fishermen v. Sec’y of U.S. Dep’t of Commerce*, 720 F. Supp. 2d 564, 575 (D.N.J. 2010) (quoting 16 U.S.C. § 1853(b)(6) (2006)).

78. *See, e.g., Midwater Trawlers Coop. v. Dep’t of Commerce*, 393 F.3d 994, 1003 (9th Cir. 2004) (discussing the Act’s requirement that “allocations between treaty and nontreaty fishers be based on the ‘best scientific information available’” (citing and quoting 16 U.S.C. § 1851(a)(2))); *Midwater Trawlers Coop. v. Dep’t of Commerce*, 282 F.3d 710, 719 (9th Cir. 2002) (“[T]he Makah Tribe is entitled, pursuant to the Treaty of Neah Bay, to one-half the harvestable surplus of Pacific whiting that passes through its usual and accustomed fishing grounds, or that much of the harvestable surplus as is necessary for tribal subsistence, whichever is less.”).

79. 16 U.S.C. § 1851(a)(2).

80. *Marble v. Dep’t of Fish & Wildlife*, 234 P.3d 1062, 1069 (Or. Ct. App. 2010) (citing 16 U.S.C. § 1856 (2006)).

81. *Id.*

82. *Id.*

83. *Id.* at 1063 n.2, 1070.

limited regional resources, as was done in the Dungeness Crab Act in 1996. The Dungeness Crab Act authorized Oregon, Washington, and California “to enforce certain [s]tate regulations against all vessels operating in the exclusive economic zone and fishing for Dungeness crab,”⁸⁴ so long as the state did not discriminate “against a vessel that *presently* ‘is operating’ in its adjacent EEZ under the authority of an out-of-state permit.”⁸⁵ As a result, the court in *Marble v. Department of Fish and Wildlife*⁸⁶ held that Oregon did not discriminate against a vessel *presently* holding an Oregon crab permit when Oregon considered past crab landings to determine the allocation of crab-pot limits by the vessel, but did not include landings for vessels registered under another state during the qualifying period for the allocation determination.⁸⁷

Allocation decisions may be challenged under federal regulations and various treaties. In *Midwater Trawlers Co-Operative v. Department of Commerce*, the Ninth Circuit reviewed a challenged allocation of Pacific whiting fish between treaty and non-treaty fishers.⁸⁸ The challenged allocation was based on a sliding scale method instead of a biomass method.⁸⁹ The court concluded that even though the Fisheries Service’s use of the sliding scale method may have been initially based on a political compromise with the Makah Tribe, this method was supported by the best available scientific information because it accounted for the fish’s migratory pattern—something not accomplished using the biomass method.⁹⁰ The allocation was required because the “Makah possesses an undisturbed right to take fish at its usual and accustomed fishing grounds pursuant to the Stevens Treaties, which have been interpreted to reserve for Indian tribes the right to up to half of the harvestable surplus whiting, while reserving the other half for non-treaty fishers”⁹¹

84. *Id.* at 1070 (citing Pub. L. No. 104-297, § 112(d) (1996), *repealed by* Pub. L. No. 105-674, § 2 (g) (1998)).

85. *Id.* at 1072.

86. *Id.* at 1064.

87. *Id.* at 1064, 1072.

88. 393 F.3d 994, 997–1002 (9th Cir. 2004).

89. *Id.* at 1003.

90. *Id.* at 1003–04 (noting that the biomass approach underestimated the number of fish passing through the tribe’s fishing grounds).

91. *See* *United States v. Washington*, 143 F. Supp. 2d 1218, 1220–21 (W.D. Wash. 2001) (“[H]arvestable surplus of whiting is defined as the total number of fish that may be taken while observing all conservation needs that prevent demonstrable harm to the stock, and treaty harvest is limited only by this conservation principle.”).

States in the Pacific Northwest are also responsible for managing fisheries and fishing vessels within their jurisdictions. Over the years, the Washington Department of Fish and Wildlife (WDFW) developed rules for salmon fishing in the Puget Sound. These rules were created by forecasting the number of salmon expected to return for the season, allocating the forecasted number between treaty and non-treaty fishermen, and then holding public meetings to obtain agreement between the gear groups of gillnetters and purse seiners.⁹² In 2008, when the WDFW was unable to obtain agreement between gillnetters and purse seiners, it adopted a rule allocating fishing opportunity based on the number of fishing days, rather than capping the total catch for each group.⁹³ A trial court held this rule to be arbitrary and capricious.⁹⁴

The court in *Puget Sound Harvesters Ass'n v. Washington State Department of Fish & Wildlife*⁹⁵ upheld the trial court's invalidation of this rule as arbitrary and capricious because it did not take into account "both time on the water and gear efficiency to estimate relative shares of the fish harvest," even though it had historical catch rates from previous seasons, which reflected higher catch rates for gillnet gear.⁹⁶ The court observed that the development of these rules should reflect the defined management objectives for the fisheries:

- (1) Ensure the conservation of target species—meet spawning goals;
- (2) Minimize catch or impacts on incidental species (bycatch);
- (3) Monitor and sample all fisheries;
- (4) Maintain the economic well-being and stability of the fishing industry;
- (5) Fully utilize the non-Indian allowable catch; and,
- (6) Fairly allocate harvest opportunity between gear groups.⁹⁷

Thus, both federal and state laws utilize allocation rules to ensure

92. *Puget Sound Harvesters Ass'n v. Dep't of Fish & Wildlife*, 239 P.3d 1140, 1141–42 (Wash. Ct. App. 2010).

93. *Id.* at 1142.

94. *Id.* at 1144.

95. *Id.* at 1140.

96. *Id.* at 1147–48.

97. *Id.* at 1146 (discussing objectives for Puget Sound commercial salmon fisheries).

conservation of fish species for the benefit of the fishing industry and other interest groups. International laws are beyond the scope of this Article, although fish and water resources are certainly impacted by the actions of other nations and their citizens. The state and federal allocation of fishing rights does not require that these rights be recognized as property rights. As discussed in Part IV, *infra*, fishing rights are not considered property in challenges to government regulation based on the Takings Clause of the Fifth Amendment. Similarly, water rights should not be considered property subject to a takings challenge and should, instead, be treated as revocable licenses.

IV. PROPERTY RIGHTS IN UNCAPTURED FISH AND WATER

A. *Ecosystem Challenges*

The allocation systems for water and fish must deal with the ecosystem challenges associated with fragile and interconnected resources. Both water and fish allocation systems have been criticized for their failure to take into account ecosystem management.⁹⁸ Instead of taking on the ecosystem as a whole, fishing regulations have focused on specific species,⁹⁹ whereas prior appropriation and riparian rights

98. See, e.g., Donna R. Christie, *Living Marine Resources Management: A Proposal for Integration of United States Management Regimes*, 34 ENVTL. L. 107, 114, 153 (2004) (noting the 1996 reauthorization of the Magnuson–Stevens Act, its major changes, and the remaining criticisms); Sarah M. Kutil, Comment, *Scientific Certainty Thresholds in Fisheries Management: A Response to a Changing Climate*, 41 ENVTL. L. 233, 239 (2011) (noting that even though the Magnuson–Stevens Act was amended in 2006 to increase its focus on conservation, the Act is flawed because it does not “provide a framework for or require a scientific certainty threshold . . . to manage fisheries”); cf. Brickey et al., *supra* note 55, at 11221, 11226–27 (discussing water management concerns, including the conjunctive management of surface and groundwater, the negative externalities from conservation, the need for integrated land use planning with water supply availability, and the need for a flexible water rights approach to manage large fluctuations in water supply). However, unlike fish populations, which are organic resources subject to extinction if their levels drop too low, fresh water is not in danger of extinction (though it may potentially cause extinction of organic resources if it is in short supply and unable to support aquatic ecosystems).

99. Turnipseed et al., *supra* note 13, at 6 (observing that “unsustainable fishing practices have been responsible for some of the most harmful effects on ocean ecosystems” and explaining that management by species can result in a high discard rate with three fish thrown back for every ten fish captured); see also Christie, *supra* note 98, at 135 (explaining that fisheries management in the United States historically focused on a single species and that “this species-by-species approach has contributed to a seeming ‘domino effect’ in the collapse of fisheries”); Robin Kundis Craig, *Protecting International Marine Biodiversity: International Treaties and National Systems of Marine Protected Areas*, 20 J. LAND USE & ENVTL. L. 333, 359 (2005) (“[O]ne of the most important limitations of regulation directed specifically at

have focused on water resources in specific water bodies.¹⁰⁰ Yet, it is only through an emphasis on ecosystem management that we can effectively protect and manage our fish and water resources.¹⁰¹

In addition, by applying the public trust doctrine to federal ocean management, the government will be required to protect ecosystems as it acts as a trustee to protect the public uses of these valuable trust resources.¹⁰² Economic-based market systems may be used to protect ecosystems from overexploitation by commodities users such as commercial fisherman and water consumers, but only if these ecosystems can be valued for the additional amenities they provide, such as recreation and tourism.¹⁰³

Like fish, the available water supply is dependent upon natural conditions, which may vary drastically from season to season and year to year and are currently out of direct human control. Both of these resources are intricately connected to fragile ecosystems, which can be permanently damaged by overexploitation. As common resources, both water and fish are subject to a tragedy of the commons scenario, which may be partially resolved by private ownership.¹⁰⁴

Our current model for fishing management has its limitations, but the underlying theories of natural resource economics are applicable to our water management challenges. The United States has attempted to control overfishing and overinvestment in the fishing industry by having government agencies set annual allocations (quotas) based upon

fishing is that such regulation tends to focus exclusively on the targeted species, without consideration of the larger ecosystem on which it depends.”).

100. See Dellapenna, *supra* note 3, at 55, 64–65.

101. Christie, *supra* note 98, at 168 (“Both exploited and protected species should be managed through a comprehensive system that takes an ecosystem-based approach to decisions concerning the level of removal allowed for species.”); Craig, *supra* note 99, at 369 (“Only an international law regime that addresses *all* of those threats [to marine biodiversity]—pollution, overfishing and its associated problems, loss of habitat, and invasive species—both individually and collectively can effectively halt, and hopefully reverse, the increasing trend of marine species extinctions and loss of marine biodiversity at all levels.”); see also THE WHITE HOUSE COUNCIL ON ENVTL. QUALITY, FINAL RECOMMENDATIONS OF THE INTERAGENCY OCEAN POLICY TASK FORCE 14 (2010) (describing how it is time for the Nation to focus on ecosystem management to effectively use and protect environmental resources).

102. Turnipseed et al., *supra* note 13, at 68.

103. Robin Kundis Craig, *Valuing Coastal and Ocean Ecosystem Services: The Paradox of Scarcity for Marine Resources Commodities and the Potential Role of Lifestyle Value Competition*, 22 J. LAND USE & ENVTL. L. 355, 362–63 (2007).

104. See Eagle, *supra* note 9, at 623.

scientific advice regarding available catch levels.¹⁰⁵ This model of sole government ownership is an economic approach based on the theory that such ownership “rationalizes resource use by eliminating wasteful competition for the resource among fishermen and by internalizing individually generated externalities.”¹⁰⁶ However, as a “private” owner, the government must regulate to limit resource usage, and also facilitate the investment by fishermen to extract the resource.¹⁰⁷

Some systems of allocating water rights and fishing rights have been based upon prior usage. Such a prior use requirement for allocation of rights may create an incentive to “race to capture” either water or fish to establish a historical usage basis by which future allocations will be determined.¹⁰⁸ For fish, the allocation of individual fishing quotas (IFQ) is used to limit the taking of fish to preserve fish stocks.¹⁰⁹ Because these quotas are typically issued based upon a prior fishing history,¹¹⁰ regulators may attempt to avoid a race to capture by limiting the qualifying period to preceding years well in advance of the regulation implementation. This approach helps diminish “the incentive [for fishermen] to pour money and time into the fishery in order to get a bigger quota share”¹¹¹

For water, similar race to capture concerns exist, particularly in those states using prior appropriation to determine water rights. In a particularly famous illustration of this problem, William Mulholland

105. *Id.* at 644–46 (discussing the Magnuson–Stevens Act and the efforts of the Gulf of Mexico Fishery Management Council).

106. *Id.* at 643 (noting, however, that there is a distinction between public and private ownership in that the government is not profit oriented like a private owner is).

107. *See id.* at 623–24.

108. Jonathan Remy Nash, *Allocation and Uncertainty: Strategic Responses to Environmental Grandfathering*, 36 *ECOLOGICAL L.Q.* 809, 811 (2009). As Remy explains,

To prevent the creation of an incentive for actors to increase their current activities in order to receive a larger allocation of resource access in the future, the government may choose to base allocations not on current activities, but on recent activities that predate the announced intention to implement limitations on resource access.

Id.

109. *Id.* at 819.

110. *See, e.g.,* Van Valin v. Locke, 671 F. Supp. 2d 1, 13 (D.D.C. 2009) (“While present participation in the fishery is one factor that the Secretary must examine when considering fishery management measures, another factor is historic harvest participation levels.”).

111. Nash, *supra* note 108, at 826 (quoting *Alliance Against IFQS v. Brown*, 84 F.3d 343, 348 (9th Cir. 1996)).

appropriated the Owens Valley water for Los Angeles. In 1906, Senator Frank Flint of California introduced a bill to obtain rights-of-way across federal land for Los Angeles to proceed with the water transport from the Owens Valley.¹¹² Although the bill easily won Senate approval, Congressman Sylvester Smith, a member of the House Public Lands Committee, stalled the bill and proposed that the project could move forward so long as “the Owens Valley would have a nonnegotiable first right to the water, and any surplus water could not be used for irrigation in the San Fernando Valley.”¹¹³ Senator Flint then made an impassioned appeal to President Roosevelt:

Smith’s prohibition on using surplus water in the San Fernando Valley left the city no choice but to leave any surplus in the Owens Valley or dump it in the ocean. In the first case, water rights the city had purchased at great expense might revert to the valley under the doctrine of appropriative rights; in the second case, the city would violate the California constitution, which forbade “inefficient use” of water.¹¹⁴

Roosevelt agreed with Flint and wrote, “[T]his water is more valuable to the people of Los Angeles than to the Owens Valley.”¹¹⁵ Los Angeles proceeded with Mulholland’s plan to store unused water in a natural underground storage reservoir in the San Fernando Valley and turn the Valley’s arid land into valuable agricultural plots.¹¹⁶ Mulholland’s plan to divert as much water as possible for Los Angeles was designed to avoid “the use-it-or-lose-it principle in the doctrine of appropriative rights.”¹¹⁷

Fishing allocations under a FMP are valuable rights, but they have not traditionally been viewed as property rights belonging to fishers.¹¹⁸ Instead, property rights in this resource arose only when the fish were

112. MARC REISNER, *CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER* 79 (1993).

113. *Id.* at 79–80.

114. *Id.* at 81–82.

115. *Id.* at 82.

116. *Id.* at 73–74.

117. *Id.* at 73. What is also interesting is that the key public trust case in California, *National Audubon Society v. Superior Court (Mono Lake)*, 658 P.2d 709 (Cal. 1983), resulted from Mulholland’s effort to bring water from the Eastern Sierra to Southern California.

118. Nash, *supra* note 108, at 819.

captured within the limits of fishing permits.¹¹⁹ The concept of the IFQ, discussed above, created a category of “property rights in the form of issuing licenses to fish for a specified quantity of the species in question.”¹²⁰ These rights were transferable by private sale and created a private market, supported by the concept of limiting access to fishery resources.¹²¹ By restricting entry to the commons through the establishment of property rights in the fish stocks, economists hoped to solve the potential collapse of our fish resources.¹²² However, the Magnuson–Stevens Act limits these IFQ rights by notifying permit holders that these licenses are revocable at any time without compensation because the license “shall not create, or be construed to create, any right, title, or interest in or to any fish before the fish is harvested.”¹²³ Thus, the advantage of using private property rights to incentivize efficiency is “somewhat undercut by the temporary nature of the created property interest.”¹²⁴ Nevertheless, “fishers usually do not have property rights in wild fish before they are harvested from the sea.”¹²⁵

In contrast, water rights have more frequently been viewed as property rights protected not only by priority in relation to others based on first-in-time, first-in-right ownership, but also against excessive government restriction of these rights under Fifth Amendment Takings law.¹²⁶ Although water rights have been referred to as property rights, such rights are “not to the water itself but to the priority to the use of water from a particular source.”¹²⁷ Thus, water rights may have value

119. *See id.*

120. Harry N. Scheiber & Christopher J. Carr, *From Extended Jurisdiction to Privatization: International Law, Biology, and Economics in the Marine Fisheries Debates, 1937–1976*, 16 BERKELEY J. INT’L L. 10, 16 (1998).

121. *Id.* at 16, 54.

122. Will Walsh, Comment, *Fishy Business*, 59 ALA. L. REV. 1661, 1662–63 (2008).

123. *Id.* at 1674 (quoting 16 U.S.C. § 1853(d)(3)(D) (2000)).

124. *Id.* at 1676; *see also* Katrina M. Wyman, *The Property Rights Challenge in Marine Fisheries*, 50 ARIZ. L. REV. 511, 514 (2008) (advocating a broader view of property rights in fisheries to take into account both aquaculture and wild fisheries).

125. *See* Wyman, *supra* note 124, at 527.

126. Richard A. Epstein, *Playing by Different Rules? Property Rights in Land and Water* 3 (N.Y.U. L. & Econ. Res. Paper Ser., Working Paper No. 10-56, 2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1719688##.

127. MacDonnell, *supra* note 43, at 121. Thus, what is ultimately at issue is the right to use. What complicates this matter even more are the cases that have dealt with contract rights to water, rather than appropriative or riparian rights. *See* Kern Cnty. Water Agency v. Belridge Water Storage Dist., 22 Cal. Rptr. 2d 354, 360 (Ct. App. 1993); *Empire W. Side*

between private persons, but they should be subject to revocation by the government acting for the public trust, without payment of just compensation.¹²⁸ Establishing certainty by recognizing property rights in water may help improve market efficiency, but the water supply is as uncertain as the yearly harvest opportunity for fish and these two resources may not be amenable to privatization in the way that real property has been successfully privatized to avoid a tragedy of the commons.¹²⁹

B. The Takings Clause

The Takings Clause of the Fifth Amendment states the following: “nor shall private property be taken for a public use without just compensation.”¹³⁰ The United States Supreme Court in *Armstrong v. United States*¹³¹ recognized that this guarantee “was designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.”¹³² If we have been receiving water and we get less than we need—perhaps because the government has determined that the water is needed for the fish—should the government pay us just compensation because it has taken away a property right? If fish die or diminish in number because there is not enough water to support them or our needs have reduced their numbers, do the fishermen deserve just compensation because the government has allowed their fishing rights to dissipate due to overexploitation?¹³³

Irrigation Dist. v. Lovelace, 85 Cal. Rptr. 552, 555 (Ct. App. 1970). Then, to further cloud the issues, there is also a line of cases that have ruled on the issue of taking groundwater rights. See *Orange Cnty. Water Dist. v. Arnold Eng'g Co.*, 127 Cal. Rptr. 3d 328, 339 (Ct. App. 2011); *Starrh & Starrh Cotton Growers v. Aera Energy*, 63 Cal. Rptr. 3d 165, 182–83 (Ct. App. 2007) (analogizing that groundwater rights are akin to real property rights).

128. George J. Mannina Jr., *Is There a Legal and Conservation Basis for Individual Fishing Quotas?*, 3 OCEAN & COASTAL L.J. 5, 49–50 (1997) (citing *Acton v. United States*, 401 F.2d 896, 899 (9th Cir. 1968)).

129. See Epstein, *supra* note 126, at 59–60.

130. U.S. CONST. amend. V.

131. 364 U.S. 40 (1960).

132. *Id.* at 49.

133. The issue, then, is whether fishermen can state a takings cause of action if they can show that water authorization reduced their take of fish. It might be difficult, because there is generally no property right to wild animals until they are reduced to possession under the right of capture. Patrick Stoklas, Comment, *Popov v. Hayashi*, *A Modern Day Pierson v. Post: A Comment on What the Court Should Have Done With the Seventy-Third Home Run Baseball Hit by Barry Bonds*, 34 LOY. U. CHI. L.J. 901, 910 (2003). In essence, the “right to

When water rights are restricted in order to serve public needs, such as with the protection of endangered species or habitat preservation, such regulations have been subject to takings claims to prevent individual farmers or other entities from bearing a public burden.¹³⁴ In contrast, courts in fishing cases have recognized that the Secretary of Commerce is allowed to allocate fish even where “the interests of some groups of fishermen [are sacrificed] for the benefit as the Secretary sees it of the fishery as a whole.”¹³⁵ Both fishermen and farmers have investments that are affected by reductions in supply. Fishermen have invested in boats, nets, and other fishing gear, while farmers have invested in farm equipment and farmland. However, the supplies of both fish and water are dynamic and the government should be allowed to allocate these natural resources for the public good without exposure to takings claims.

The first requirement of a takings claim is the existence of a private property right that is compensable under the Fifth Amendment.¹³⁶ While takings claims involving water rights have had mixed success because of the uncertain nature of these rights as property,¹³⁷ takings claims involving fishing rights have been uniformly dismissed because “[h]olders of fishing permits issued pursuant to the Magnuson–Stevens Act do not possess a valid property interest in such permits.”¹³⁸ Water rights are similar to fishing rights and grazing rights and, as such, should not be treated as property. Instead, these rights should be treated as

fish” is the right to have an opportunity to fish, but if no fish are caught, then there can be no taking under traditional property principles.

134. See *infra* text accompanying notes 138–70. But see MacDonnell, *supra* note 43, at 123 (“In California, the public trust doctrine has been found to require a reconsideration of the amount of water that may be used under an existing water right.”).

135. *Fishermen’s Finest, Inc. v. Locke*, 593 F.3d 886, 899 (9th Cir. 2010) (quoting *Alliance Against IFQs v. Brown*, 84 F.3d 343, 350 (9th Cir. 1996)); see also *N.C. Fisheries Ass’n v. Gutierrez*, 518 F. Supp. 2d 62, 89 (D.D.C. 2007) (“[C]ourts have declined to second-guess the Secretary’s judgment simply because the provisions of a [Fishery Management Plan] or a plan allocation ‘have a greater impact upon’ one group or type of fishermen.” (quoting *Nat’l Fisheries Inst., Inc. v. Mosbacher*, 732 F. Supp. 210, 225 (D.D.C. 1990))).

136. See *Sacramento Grazing Ass’n v. United States*, 96 Fed. Cl. 175, 189 (2010) (citing *Sacramento Grazing Ass’n v. United States*, 66 Fed. Cl. 211, 216–17 (2005)) (“[T]aking cannot exist without an underlying compensable property right.”).

137. See Saxer, *supra* note 11, at 51–53; John D. Leshy, *A Conversation About Takings and Water Rights*, 83 TEX. L. REV. 1985, 2006 (2005) (“[C]hronic uncertainty about the validity and measure of many water rights has some important implications for takings law.”).

138. *Gen. Category Scallop Fishermen v. Sec’y of U.S. Dep’t of Commerce*, 720 F. Supp. 2d 564, 576 (D.N.J. 2010) (citing *Am. Pelagic Fishing Co. v. United States*, 379 F.3d 1363, 1374 (Fed. Cir. 2004)).

licenses that are revocable by the government without requiring just compensation.¹³⁹

State and federal courts have varied views on whether property rights in water exist.¹⁴⁰ Some courts have treated water rights as property and conducted a takings analysis,¹⁴¹ while others have found that no property rights in water exist and have dismissed the claim because the first requirement for a takings challenge has not been met.¹⁴² One court stressed the difference between land ownership rights and usufructuary rights in water, but then continued in that same decision to find a taking of water rights.¹⁴³

Early court decisions recognized property rights in water sufficient for a takings claim.¹⁴⁴ In *Dugan v. Rank*,¹⁴⁵ for example, the United States Supreme Court concluded that the United States government committed a partial taking of water by operating a dam that would have reduced the natural amount of water flowing in the San Joaquin River by almost three-fourths.¹⁴⁶ Recent decisions have also recognized property rights in water. In *Hage v. United States (Hage IV)*,¹⁴⁷ the

139. Recall that under California case law, water right permits are under the jurisdiction of the SWRCB and are subject to modification for public interest and public trust purposes. *United States v. State Water Res. Control Bd.*, 227 Cal. Rptr. 161, 185-87 (Ct. App. 1986). It follows that post-1914 appropriative water right holders were on notice at the time they filed their application that what they were obtaining was a license, and it was subject to modification. *See supra* notes 16–19 and accompanying text.

140. *See supra* Part II.

141. *See, e.g.*, *Esplanade Props., LLC v. City of Seattle*, 307 F.3d 978, 984 (9th Cir. 2002); *Boise Cascade Corp. v. United States*, 296 F.3d 1339, 1343 (Fed. Cir. 2002).

142. *See, e.g.*, *Klamath Irrigation Dist. v. United States*, 67 Fed. Cl. 504, 532 (2005) (characterizing the claimant's right as a contract right rather than a property right); *Mono Lake*, 658 P.2d 709, 723 (Cal. 1983) (rejecting the notion that the public trust approach to water constitutes a taking).

143. *See Hage V*, 82 Fed. Cl. 202, 211 (2008) (noting the difference between water ownership as the right to access and use water versus land ownership as the right to exclude, and then finding a taking based on the government fencing around the water and streams).

144. *See, e.g.*, Rivers and Harbors Act § 2, Pub. L. No. 75-392, 50 Stat. 844, 850 (1937) (“[T]he Secretary of the Interior . . . may acquire by proceedings in eminent domain, or otherwise, all lands, rights-of-way, water rights, and other property necessary for said purposes . . .”); *Ivanhoe Irrigation Dist. v. McCracken*, 357 U.S. 275, 296–97 (1958) (recognizing a property right but finding no taking); *United States v. Gerlach Live Stock Co.*, 339 U.S. 725, 752–55 (1950) (finding the riparian owner held rights which could only be acquired by the government through condemnation or acquisition); *Int'l Paper Co. v. United States*, 282 U.S. 399, 405–07 (1931) (finding a taking of the plaintiff's water rights).

145. 372 U.S. 609 (1963).

146. *Id.* at 623.

147. 51 Fed. Cl. 570 (2002).

Court of Federal Claims acknowledged that “[t]he surface waters which flow from federal land to Plaintiffs’ patented lands are a vested water right,”¹⁴⁸ although in *Hage V* the court distinguished between having title to the water and owning the right to use the water.¹⁴⁹ The *Hage V* court noted that there is a “difference between water ownership and real property ownership; water is a usufructuary as opposed to a possessory right.”¹⁵⁰ Nevertheless, the court held that “the Government’s construction of fences around the water and streams amounts to a physical taking during the time period in which Plaintiffs’ still had a grazing permit and their cattle had the right to water at these streams.”¹⁵¹ Thus, while the court distinguished water rights from real property ownership based upon its usufruct nature, it still found a private property right in water sufficient to support a takings claim.¹⁵²

The “contractually-conferred right to the use of water” was identified as property subject to a taking in *Tulare Lake Basin Water Storage District v. United States*.¹⁵³ The *Tulare* court recognized that “under California law[,] the title to water always remains with the state,”¹⁵⁴ but concluded “that plaintiffs’ right to the *use* of water is a compensable contractual right”¹⁵⁵ The court determined that the “right to the use” of the water is a “physical taking” when the federal government preserved water to protect fish under the Endangered Species Act and “rendered the usufructuary right to that water valueless.”¹⁵⁶

A few years later in *Casitas Municipal Water District v. United States*,¹⁵⁷ the Federal Circuit followed the *Tulare* decision to conclude that the diversion of water for a fish ladder was a permanent physical taking of water from Casitas.¹⁵⁸ The *Casitas* decision did not directly address the issue of whether water rights are property rights because, for

148. See *Hage V*, 82 Fed. Cl. at 210 (citing *Hage IV*, 51 Fed. Cl. at 576–80).

149. *Id.* at 211.

150. *Id.*

151. *Id.*

152. *Id.* at 212.

153. *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313, 314 (2001).

154. *Id.* at 318 (citing CAL. WATER CODE § 102 (Deering 1977)).

155. *Id.* at 318 n.6.

156. *Id.* at 319 (finding a “physical taking” and comparing this denial of a right to use water to the invasion of air space above a landowner’s property that was found to be a taking in *United States v. Causby*, 328 U.S. 256, 265 (1946)).

157. 543 F.3d 1276 (Fed. Cir. 2008).

158. *Id.* at 1296 (“The water, and Casitas’ right to use that water, is forever gone.”).

purposes of the summary judgment motion at issue in the case, the government “conceded that Casitas has a valid property right in the water in question.”¹⁵⁹ However, the dissent in *Casitas* observed that “Casitas does not own the water in question because all water sources within California belong to the public,”¹⁶⁰ and, since California subjects water rights permits to the public trust doctrine, there can be no takings claim if there is no property interest in the water.¹⁶¹ The dissent further opined that “because Casitas possesses a usufructuary interest in the water and does not actually own the water molecules at issue, it is difficult to imagine how its property interest in the water could be physically invaded or occupied.”¹⁶²

State law regarding property rights in water is similarly divergent. The Court of Federal Claims in *Klamath Irrigation District v. United States* recognized no property rights in water,¹⁶³ except as created based upon contracts between the water users and the United States.¹⁶⁴ Under Oregon law, the water users in *Klamath* were not allowed to assert a takings claim because they did not have a property right in the water and, thus, were restricted only to contract remedies.¹⁶⁵ Nebraska law also appears to restrict private ownership of water rights.¹⁶⁶ The Nebraska Supreme Court in *Spear T Ranch, Inc. v. Nebraska Department of Natural Resources (Spear II)* did not reach the question of private ownership of water, but the court did hold that surface water users who were adversely impacted by groundwater withdrawals could not assert an inverse condemnation claim.¹⁶⁷ Although the same court had stated in its earlier *Spear I* decision that “[a] right to appropriate

159. *Id.* at 1288.

160. *Id.* at 1297 (Mayer, J., dissenting) (citing CAL. WATER CODE §§ 102, 1001 (West 1992)).

161. *Id.* at 1297.

162. *Id.* at 1298.

163. *Klamath Irrigation Dist. v. United States*, 67 Fed. Cl. 504, 540 (2005).

164. *Id.* at 523–24 (noting that according to Oregon state law, the United States government held ownership title to the water).

165. *Id.* at 540 (concluding that landowners have potential contract claims only as against the United States).

166. See Zellmer & Harder, *supra* note 5, at 736–37 (noting that the Spear T Ranch, Inc. v. Knaub (*Spear I*), 691 N.W.2d 116, 127 (Neb. 2005), decision is problematic and that earlier Nebraska courts had concluded that surface water appropriators “did in fact possess vested property rights”).

167. 699 N.W.2d 379, 386 (Neb. 2005) (finding that the government agency “did not have authority to regulate ground water users or administer ground water rights for the benefit of surface water appropriators”).

surface water however, is not an ownership of property” for purposes of supporting a claim for conversion or trespass,¹⁶⁸ it based its *Spear II* takings claim denial on the government’s lack of a duty to act, rather than on the lack of a property interest held by the plaintiff water user.¹⁶⁹ Although many state and federal decisions have found water to be a compensable property interest, there remains great inconsistency as to the nature of this right.¹⁷⁰

While water rights have readily been considered property rights by some courts, grazing rights, granted by the federal government, are not considered property rights compensable under the Fifth Amendment.¹⁷¹ For example, in *Alves v. United States*,¹⁷² the Federal Circuit relied on the Supreme Court’s holding in *United States v. Fuller*¹⁷³ to find that neither grazing permits nor grazing preferences constitute a compensable property interest under the Fifth Amendment.¹⁷⁴ In *Sacramento Grazing Ass’n, Inc. v. United States*, both grazing rights and water rights were at issue.¹⁷⁵ The Court of Federal Claims determined that there is “no property right to forage,”¹⁷⁶ but noted that “[u]nder New Mexico law, the right to use water is a property right separate and severable from a right to land”¹⁷⁷ and entitles the water user to bring a claim that the United States Forest Service has taken a vested right to use range stock water.¹⁷⁸ It is an interesting contrast that grazing rights are not compensable property rights, whereas water rights needed to raise the cattle are subject to a takings claim.¹⁷⁹

168. *Spear I*, 691 N.W.2d at 127.

169. *Spear II*, 699 N.W.2d at 385.

170. Zellmer & Harder, *supra* note 5, at 738 (“Outside of the navigational servitude context, the federal courts have been wildly inconsistent regarding takings claims brought by appropriators with state-sanctioned water rights.”); *see also In re Hood River*, 227 P. 1065, 1087 (Or. 1924) (“No one has any property in the water itself, but a simple usufruct.”).

171. *Sacramento Grazing Ass’n v. United States*, 96 Fed. Cl. 175, 189 (2010).

172. 133 F.3d 1454 (Fed. Cir. 1998).

173. 409 U.S. 488, 494 (1973) (holding there are no compensable property rights in grazing permits issued under the Taylor Grazing Act).

174. *Alves*, 133 F.3d at 1457.

175. *Sacramento Grazing Ass’n*, 96 Fed. Cl. at 188.

176. *Id.* at 189.

177. *Id.* at 191.

178. *Id.* at 190.

179. *Id.* at 192 (citing *Templeton v. Pecos Valley Artesian Conservancy Dist.*, 332 P.2d 465, 471 (N.M. 1958), a New Mexico case which held “that water rights holders are ‘entitled to the waters . . . that flowed . . . at the time of their appropriation’”); *see also Acton v. United States*, 401 F.2d 896, 899 (9th Cir. 1968) (“Grazing permits create no interest or estate in

Rather than following the water law precedents, which generally established a property right for purposes of the Takings Clause, the fishing rights cases relied on the grazing decisions to hold that fishing permits are not property protected by the Fifth Amendment.¹⁸⁰ Citing *Fuller* and *Alves*, the Federal Circuit in *Conti v. United States* found that the swordfishing permit at issue in *Conti* was similar to the grazing permits and thus did not constitute a property interest.¹⁸¹ The court declined to recognize “a property interest in the government’s discretionary decision not to exercise its explicitly granted authority to revoke, suspend, or modify the permit.”¹⁸² The Federal Circuit later extended the reasoning in *Conti* to the commercial fishing permits at issue in *American Pelagic Fishing Co. v. United States*.¹⁸³ The court concluded “that American Pelagic did not and could not possess a property interest in its fishery permits”¹⁸⁴ because, without the right to assign, sell, or transfer these permits, they held only a revocable license, not a property right.¹⁸⁵

Fishing rights were also compared to grazing rights in *Palmyra Pacific Seafoods, L.L.C. v. United States*¹⁸⁶ and *Organized Fishermen of Florida v. Watt*,¹⁸⁷ to find that no compensable property interest exists for these revocable licenses and permits. In *Palmyra*, the Federal Circuit affirmed that in order to have a cause of action for a Fifth Amendment Taking, there must be a protectable property interest and a ban on fishing that results in a reduction of the value of a fishing license does not affect any compensable property interest.¹⁸⁸ The *Palmyra* court discussed the *Colvin Cattle* case and used the *Colvin* holding that “the government’s prohibition on grazing did not constitute a taking of the

public lands, only a privilege which may be withdrawn.”).

180. *Vanek v. Alaska Bd. of Fisheries*, 193 P.3d 283, 292 (Alaska 2008) (“Although we have treated limited entry permits as property for other purposes such as inheritance and child support, the federal cases are persuasive in their reasoning that fishing permits do not confer property interests for the purposes of takings claims.”).

181. *Conti v. United States*, 291 F.3d 1334, 1341 (Fed. Cir. 2002) (“Applying traditional notions of property and existing rules and understandings, we conclude that Mr. Conti’s swordfishing permit, like the grazing permits in *Fuller* and *Alves*, falls short of conferring a cognizable property interest.”).

182. *Id.* at 1342 n.5.

183. 379 F.3d 1363, 1374 (Fed. Cir. 2004).

184. *Id.*

185. *Id.*

186. 561 F.3d 1361, 1367 (Fed. Cir. 2009).

187. 590 F. Supp. 805, 815 (S.D. Fla. 1984).

188. *Palmyra Pac. Seafoods*, 561 F.3d at 1367.

ranch owner's property" to support its determination that "the government's prohibition on commercial fishing in the waters surrounding Palmyra [did not take] their rights to run a commercial fishing operation on the island."¹⁸⁹ The court in *Organized Fishermen of Florida v. Watt* used grazing permit cases from the Ninth and Tenth Circuit Courts of Appeal to conclude that just as a grazing permit may be withdrawn by the government at any time without paying compensation, a commercial fishing permit may be restricted or cancelled without compensation because such permits are a privilege and, by nature, revocable.¹⁹⁰

Courts continue to uniformly find that fishing rights are not property interests compensable under the Fifth Amendment.¹⁹¹ Relying on a "wealth of federal precedent,"¹⁹² the court in *Burns Harbor Fish Co. v. Ralston* concluded that although a license might be property in relation to a third party¹⁹³ and within the meaning of the Due Process Clause,¹⁹⁴ any necessary environmental restriction by Indiana is not a compensable Taking, and is merely "a cost of doing business."¹⁹⁵ The *Burns Harbor* court acknowledged that the State of Indiana was "the very entity that authorized Burns Harbor's licenses to fish in the first instance" and that "the State which 'giveth' may take or limit a license in almost any reasonable way."¹⁹⁶

The court of Federal Claims in *Arctic King Fisheries, Inc. v. United States* also pointed out that, in addition to the fact that fishing permits

189. *Id.* (discussing *Colvin Cattle Co. v. United States*, 468 F.3d 803 (Fed. Cir. 2006)).

190. 590 F. Supp. at 815–16 (citing *Pankey Land & Cattle Co. v. Hardin*, 427 F.2d 43, 45 (10th Cir. 1970); and *Osborne v. United States*, 145 F.2d 892, 896 (9th Cir. 1944)).

191. *See, e.g.*, *Gen. Category Scallop Fishermen v. U.S. Dep't of Commerce*, 720 F. Supp. 2d 564, 576 (D.N.J. 2010) ("Holders of fishing permits issued pursuant to the Magnuson–Stevens Act do not possess a valid property interest in such permits."); *Gonzalez v. U.S. Dep't of Commerce*, 695 F. Supp. 2d 474, 504 (S.D. Tex. 2010) (finding that plaintiffs did not "demonstrate a property interest with respect to the federal shrimping permits"); *Burns Harbor Fish Co. v. Ralston*, 800 F. Supp. 722, 726–27 (S.D. Ind. 1992) (confirming that fishing licenses are not property requiring protection under the Takings Clause of the Fifth Amendment); Douglas F. Britton, *The Privatization of the American Fishery: Limitations, Recognitions, and the Public Trust*, 3 OCEAN & COASTAL L.J. 217, 235 (1997) ("Historically speaking, fishermen have not been successful in their pursuit of takings claims for the compensation of restricted fishing rights or lost fisheries resources, mostly due to the historical treatment of fish, and the doctrine of *res communes*.").

192. *Burns Harbor Fish Co.*, 800 F. Supp. at 727.

193. *Id.* at 722, 728.

194. *Id.* at 730.

195. *Id.* at 728–29.

196. *Id.* at 728.

have not been recognized as possessing sufficient property characteristics, there is a concern “that the government not be required to pay compensation for value that it created.”¹⁹⁷ Similarly, water users originally granted the usufructuary right to water by the government should not be compensated for a taking when the government reduces or eliminates access to this public resource in order to protect its continuing value to all.¹⁹⁸

Even when fishing rights are viewed in the context of individual fishing quotas (IFQs) such that conferring a property interest would establish a market in the permits,¹⁹⁹ “[i]t is also settled law that a license to perform an act upon public lands and waterways does not vest the holder with a permanent property right which, if revoked, is subject to compensation under the [T]akings [C]lause of the Fifth Amendment.”²⁰⁰ The Magnuson–Stevens Act endorses this settled law and explicitly provides “that an IFQ is a revocable permit which does not confer any right to compensation if revoked or limited.”²⁰¹

Treating fishing rights as revocable licenses instead of property for purposes of the Takings Clause is not without its problems. This settled law may create a disincentive for fishermen to invest in equipment and places the government in the dual position of being both a regulator for conservation purposes and a facilitator of those who will capture and sell these natural resources.²⁰² Professor Josh Eagle argues that these conflicting roles will compromise the effectiveness of fishing regulation and, in combination with the fisherman’s incentive to fight conservation,

197. *Arctic King Fisheries, Inc. v. United States*, 59 Fed. Cl. 360, 371 (2004) (citing *United States v. Fuller*, 409 U.S. 488, 493 (1973)).

198. *See* Leshy, *supra* note 137, at 2022–23 (observing that “the nation’s taxpayers have been bestowing gifts on farmers for decades” and it would be anomalous to require the taxpayers to compensate the farmers when it decides to “end the gift-giving”); *see also* Abraham Bell & Gideon Parchomovsky, *Givings*, 111 YALE L.J. 547, 563 (2001) (“Any government redistribution of private property necessarily involves givings and takings, and any government destruction of property can be matched with a government creation of property.”).

199. *See* Britton, *supra* note 191, at 247–48 (discussing the property characteristics of individual fishing quotas, but observing that they are only recognized as a privilege that can be revoked).

200. *See* Mannina, *supra* note 128, at 49.

201. *Id.* at 50; *see also* John A. Duff, *Offshore Management Considerations: Law and Policy Questions Related to Fish, Oil, and Wind*, 31 B.C. ENVTL. AFF. L. REV. 385, 390–91 (2004) (citing 16 U.S.C. § 1851(a)(4) (2000) and noting that “the government protected itself against a future claim that any restriction or abolition of the interest should be compensable as a violation of the Takings Clause of the Fifth Amendment”).

202. Eagle, *supra* note 9, at 624.

the Magnuson–Stevens Act will not achieve its goal of sustainable fisheries unless it is changed to account for these concerns.²⁰³

Besides causing difficulty with investment security and sustainability,²⁰⁴ the failure to recognize a fisherman’s property rights in fishery resources has also limited tort damages for private individuals suffering economic losses due to negligent damage to natural resources.²⁰⁵ The holding in the seminal maritime case of *Robins Dry Dock & Repair Co. v. Flint*,²⁰⁶ “has been interpreted to mean that in order for a plaintiff to recover for economic losses, the plaintiff must hold a property interest in what is damaged”²⁰⁷ In the Ninth Circuit, however, commercial fishermen have recovered economic losses for damages to fishery resources caused by pollution or oil spills under what has been called the *Oppen* Exception, even though the fishermen “do not possess a private property interest in the fisheries”²⁰⁸

Finally, while fishing licenses and IFQs are not considered property for a Fifth Amendment takings claim,²⁰⁹ they may be recognized as property for other purposes. For example, several cases recognize a property interest for the purposes of procedural due process claims. In order to assert a procedural due process claim, there must be a protectable liberty or property interest and a denial of adequate procedural protection.²¹⁰ While courts have acknowledged that fishing permits are not considered property for some purposes, they have allowed due process challenges when permit holders allege they have

203. *See id.* at 644–45.

204. *See, e.g.,* Kacy A. Collons, Comment, *ITQS as Collateral Rightly Understood: Preserving Commerce and Conserving Fisheries*, 14 UCLA J. ENVTL. L. & POL’Y 285, 321 (1996) (concluding that making ITQs compensable property rights subject to takings claims would make them more attractive to lenders, but would also severely limit the government’s ability to adjust these rights to achieve conservation goals).

205. Britton, *supra* note 191, at 225.

206. 275 U.S. 303 (1927).

207. Britton, *supra* note 191, at 224.

208. *Id.* at 225–26 (stating that *Union Oil Co. v. Oppen*, 501 F.2d 558 (9th 1974), created the *Oppen* exception).

209. *See* *Am. Pelagic Fishing Co. v. United States*, 379 F.3d 1363, 1374 (Fed. Cir. 2004); *Gen. Category Scallop Fishermen v. Sec’y of U.S. Dep’t of Commerce*, 720 F. Supp. 2d 564, 576 (D.N.J. 2010) (noting that there is no property interest in a scallop fishing permit); *Gonzalez v. U.S. Dep’t of Commerce*, 695 F. Supp. 2d 474, 504 (S.D. Tex. 2010) (holding that plaintiffs did not show they had a property interest in federal shrimping permits subject to a Fifth Amendment Taking).

210. *See* *Bd. of Regents v. Roth*, 408 U.S. 564, 569–71 (1972).

suffered a deprivation without proper process.²¹¹ Fishing licenses and permits have also been considered property for purposes of attaching tax liens²¹² and dividing marital property interests.²¹³

The issue of property rights in natural resources needs to be governed by a uniform principle, but private property ownership is not the appropriate model for all resources. Fish and water resources are particularly difficult to treat as private property because of the difficulties of excluding non-owners, their migratory nature, and their interconnectedness with other ecosystems. To elaborate,

It is fairly easy to assign and enforce property rights to some resources and ecosystems such as agricultural fields, trees or a lake because excluding non-owners from using the resource is fairly straightforward. However, it is much more difficult to assign and enforce property rights to resources such as migrating fish populations, biological diversity, nutrient cycles, water cycles, and many other ecological services. The reason is that it is either too expensive or literally impossible to exclude non-owners from using these resources and services, partly because they are highly interconnected with other ecosystems thereby transcending several property rights regimes.²¹⁴

211. See, e.g., *Foss v. Nat'l Marine Fisheries Serv.*, 161 F.3d 584, 588 (9th Cir. 1998) (“[F]or procedural due process purposes, [plaintiff] has a protectible property interest in receiving the IFQ permit.”); *LaBauve v. La. Wildlife & Fisheries Comm’n*, 444 F. Supp. 1370, 1378–79 (E.D. La. 1978) (noting that although the Louisiana Supreme Court does not recognize a property interest in a fishing license, the plaintiff had an interest sufficient to receive due process of law before deprivation); *Mertins v. Comm’r of Natural Res.*, 755 N.W.2d 329, 336–37 (Minn. Ct. App. 2008) (observing that some jurisdictions do not recognize a property interest in fishing permits, but holding that commercial fishing licenses are sufficient interests to be characterized “as property interests entitled to procedural-due-process protection under the Minnesota and U.S. Constitutions”).

212. See Jon David Weiss, *A Taxing Issue: Are Limited Entry Fishing Permits Property?*, 9 ALASKA L. REV. 93, 112 (1992) (concluding that because fishing permit holders may easily transfer entry permits, these permits may be considered property subject to a federal tax lien).

213. See, e.g., *Edelman v. Edelman*, 3 P.3d 348, 352 (Alaska 2000) (upholding lower court finding that the fishing permit at issue was husband’s separate property and not part of the marital estate); *McGee v. McGee*, 974 P.2d 983, 989 (Alaska 1999) (upholding lower court treatment of fishing quota shares as divisible marital property); *Johns v. Johns*, 945 P.2d 1222, 1226 (Alaska 1997) (upholding trial court’s finding that husband’s Individual Fishing Quotas (IFQs) are marital property); *Ferguson v. Ferguson*, 928 P.2d 597, 600 (Alaska 1996) (holding that IFQs distributed during marriage are divisible marital property).

214. Craig, *supra* note 103, at 372 (quoting Robert Costanza, *The Ecological, Economic, and Social Importance of the Oceans*, 31 ECOLOGICAL ECON. 199, 204 (1999)).

As we find ourselves in a world of scarcity, regulation of these resources at the local, national, and international levels is needed to control overexploitation and a tragedy of the commons. This issue has the potential for a sweeping impact on environmental cases. The potential can be illustrated by a recent international case involving lobsters poached from South African waters: *United States v. Bengis*.²¹⁵ In *Bengis*, the Second Circuit held that South Africa “has a property interest in rock lobsters unlawfully harvested from its waters.”²¹⁶ However, the court based this holding not by finding lobsters to be property, but rather by finding that since South Africa had the right to seize and sell lobsters captured in excess of legal limits, it had a property right in the revenue from lobsters taken illegally.²¹⁷ Even though the United States government argued in its briefs that “South Africa’s interest in the wild lobsters was a *res publicae* or public trust interest and that such an interest qualified as a property interest under [U.S.] restitution statutes . . . the [court] did not reach that issue, [and] instead focused on the already-poached lobster.”²¹⁸ Thus, finding a unifying principle for property rights in environmental resources is still undecided, but the public trust doctrine continues to emerge as a promising contender.

The public trust doctrine was first applied to navigable waters in *Arnold v. Mundy*, where the plaintiff brought a trespass action against the defendant who harvested oysters from the plaintiff’s oyster bed.²¹⁹ The New Jersey Supreme Court held that the plaintiff could not prevail because the public has rights to fish in navigable waters, which belong to the state and cannot be granted to private interests.²²⁰ “Trust purposes were traditionally confined to navigation, commerce, and fisheries, but later held to include recreation and preservation of trust lands in their natural state.”²²¹ The public trust doctrine has more recently been

215. 631 F.3d 33, 35 (2d Cir. 2011).

216. *Id.*

217. *Id.* at 40.

218. E-mail from Michael B. Gerrard, Andrew Sabin Professor of Prof’l Practice, Dir., Ctr. for Climate Change Law, Columbia Law Sch., to Michael Kidd, Faculty of Law, Univ. of KwaZulu-Natal (Feb. 3, 2011, 11:40 EST) (quoting, with permission, Marcus Asner of the S.D.N.Y. U.S. Attorney’s Office) (on file with author).

219. 6 N.J.L. 1, 7–8 (1821).

220. *Id.* at 11.

221. Christian L. Marsh & Peter S. Prows, *California’s New Water Legislation: A Bucket of Reform or But a Drop?*, NAT. RESOURCES & ENV’T, Fall 2010, at 37, 38.

extended by California and Hawaii to include water resources.²²² Both nationally and internationally, the concept of public ownership of fish and water resources, as governed by the public trust doctrine, seems to be the most viable framework.

V. CONCLUSION

Water allocation considerations must take into account habitat preservation, impacts on endangered species in relation to insufficient stream water, full utilization of available water, and allocation fairness based on a variable water supply resulting from weather and climate shifts. Equipment modernization and water-treatment method improvement may also impact how much water is sent downstream to junior right holders if senior appropriators invest in new equipment.²²³ Continued damage to the ecosystems from overexploitation of resources, the growing demand for the resources, the uncertainty of supply, and the improving capture technology are challenges that require government intervention in allocation decisions.

Water and fishing rights may also conflict with each other as water is appropriated and redirected through the building of dams, such that fish and fish habitats are destroyed and there is a loss of fishing rights because of that destruction.²²⁴ When rivers are dammed or overdrawn, the fish population is decimated as a result.²²⁵ Tribal, commercial, and

222. *Mono Lake*, 658 P.2d 709, 728 (Cal. 1983); *In re Water Use Permit Applications (Waiahole Ditch)*, 9 P.3d 409, 445 (Haw. 2000); see also Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries*, 16 PENN ST. ENVTL. L. REV. 1, 19–20 (2007) (discussing the impacts that California public trust cases, including *Mono Lake*, have had on the attitudes of eastern states in considering an expansion of their “public trust philosophies”).

223. See, e.g., *Montana v. Wyoming*, 131 S. Ct. 1765, 1773, 1779 (2011) (concluding that Wyoming did not breach the Yellowstone River Compact by using more efficient irrigation methods, which reduced the downstream flow to Montana because, under the plain terms of the Compact and the doctrine of appropriation, Montana was not guaranteed a set quantity of water and because Wyoming is allowed to switch to the more efficient sprinkler irrigation “so long as no additional water is diverted from the stream and the conserved water is used on the same acreage for the same agricultural purpose as before”).

224. See Starla Kay Roels, *Borrowing Instead of Taking: How the Seemingly Opposite Threads of Indian Treaty Rights and Property Rights Activism Could Intertwine To Restore Salmon to the Rivers*, 28 ENVTL. L. 375, 390 (1998) (“Just as the government deprived the Causbys of the use of their property by destroying the beneficial ownership of property [as a chicken farm], tribes cannot make use of their property because hydroelectric dams have essentially destroyed the beneficial ownership of treaty fishing rights.” (citing *United States v. Causby*, 328 U.S. 256, 259, 267 (1946))).

225. See *Marsh & Prows*, *supra* note 221, at 38.

recreational fishermen have had no recourse against the government for resulting losses when the fish population is devastated because the loss in fishing rights are not considered compensable property under the Fifth Amendment. Conversely, when the government takes action to restore fisheries by building fish ladders or requiring that water be left in streams to support fish habitat, water users are treated as property owners in most state and federal courts and may bring takings claims for the deprivation of compensable water rights.

This dichotomy in treating water rights as property and fishing rights as revocable licenses is only defensible based on case precedent that developed along independent strands. The fishing rights cases relied on grazing rights cases, with the *American Pelagic* decision holding that no property right exists in uncaptured fish. Meanwhile, the water rights cases relied on the real property ownership model to find property rights in projected water availability, even though such water rights are considered to be usufructuary in nature. Water and fish are natural resources that should be governed by the public trust doctrine in similar forms. When the state grants rights of access to these resources, the rights must be considered revocable licenses subject to the state's responsibility to manage and conserve those resources. For the public good, the state must be able to take back those access rights it has previously granted, without having to pay just compensation.