Measuring Brief

UNITED STATES COURT OF APPEALS
FOR THE TWELFTH CIRCUIT

CASE NO. 19-000987

NEW UNION OYSTERCATCHERS, INC.
Plaintiff – Appellant
v.
UNITED STATES ARMY CORPS OF ENGINEERS,
Defendant – Appellee
and
CITY OF GREENLAWN, NEW UNION,
Defendant – Appellant.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW UNION
NO. 66-CV-2017 (RMN)
Judge Romulus N. Remus.

Brief of New Union Oystercatchers – Appellant

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STATEMENT OF JURISDICTION

On July 17, 2017, appellant New Union Oystercatchers filed a complaint in United States District Court for the District of New Union. The district court had proper subject matter jurisdiction under 28 U.S.C. § 1331 and supplemental jurisdiction over related state law claims under 28 U.S.C. § 1367. On May 15, 2019, the district court issued an Order granting in part and denying in part cross motions for summary judgment. The district court's judgment was final because it resolved all claims among all parties. This Court has appellate jurisdiction under 28 U.S.C. § 1291.

STATEMENT OF ISSUES

I. Whether the city of Greenlawn has riparian rights that entitle it to withdraw water during a drought without any water conservation measures.

II. Whether the Army Corps of Engineers' operation of Howard Runnet Dam Works requires discretionary actions that are subject to the consultation requirement under § 7 of the Endangered Species Act, 16 U.S.C. § 1536.

III. Whether the city of Greenlawn violated § 9 of the Endangered Species Act, 16 U.S.C. § 1538, by causing an unauthorized "take" of endangered oval pigtoe mussels.

IV. Whether the district court properly enjoined the city of Greenlawn from making water withdrawals that threaten to extirpate a population of endangered oval pigtoe mussels without first balancing equities between beneficial uses.

STATEMENT OF THE CASE

This is an appeal from a final order of the district court granting in part and denying in part New Union Oystercatcher's ("NUO") motion for summary judgment, granting the Army Corp of Engineers' ("ACOE") motion for summary judgment, and granting in part and denying in part the City of Greenlawn's ("Greenlawn") motion for summary judgment. R. 4-5, 18. NUO commenced this action by filing a civil complaint under the Endangered Species Act's ("ESA") citizen suit provision, 16 U.S.C. § 1540(g), against ACOE for violating the § 7 consultation requirements of the ESA, and against ACOE and Greenlawn for violating § 9 of the ESA by

causing an illegal take of endangered oval pigtoe mussels. R. 4, 10. NUO also brought a supplemental claim against Greenlawn under state common law for violations of the riparian rights law of New Union. R.10. ACOE then filed cross claim against Greenlawn for violating § 9 of the ESA by causing an illegal take of endangered oval pigtoe mussels. *Id*. Greenlawn then filed counter claim against ACOE seeking declaration of its water rights as a riparian landowner. R. 10-11.

NUO appeals the district court's finding that ACOE's operations of Howard Runnet Dam Works ("Runnet Dam") were nondiscretionary and therefore not subject to the § 7 consultation requirement of the ESA or the § 9 takings provision of the ESA. NUO also appeals the district court's declaration concerning the scope and limits of Greenlawn's municipal riparian rights. In addition, NUO respectfully requests that this Court affirm the district court's finding that Greenlawn caused a taking of endangered oval pigtoe mussels under § 9 of the ESA and to uphold the district court's issuance of injunctive relief to prevent the extirpation of the Green River's remaining oval pigtoe population.

STATEMENT OF FACTS

In May 2017, after an extended drought, a sixty-mile stretch of Green River, from just below the city of Greenlawn and Runnet Dam to the estuary at Green Bay, was reduced to a series of stagnant pools and narrow trickles when ACOE stopped the flow of water through the dam works and Greenlawn withdrew nearly all of the remaining flow for its municipal use. R. 8-9. The resulting dewatering killed approximately 25% of the river's population of oval pigtoe mussels, a federally listed endangered species. R. 9-10. The reduced flows not only exposed mussel beds, preventing the mussels from remaining submerged, it also degraded oval pigtoe habitat by increasing siltation and by interrupting the migration of a co-evolved fish, the sailfin shiner, that mussels depend on for reproduction. *Id*.

The Runnet Dam was constructed by ACOE in 1947 after being authorized under the River and Harbor Act of 1945 for the purpose of flood control, hydroelectric power, and recreation. R. 6. Its purpose was later expanded to include fish and wildlife conservation by the Fish and Wildlife Coordination Act of 1958. *Id*. The dam works diverts the natural flows of the Green River into Howard Runnet Lake above Greenlawn, where it can be stored for flood control and recreation or spilled back into the river through turbines for power generation. R. 5-6. The city of Greenlawn was founded in 1893 and depends on the Green River for its municipal water supply, which it draws from the Bypass Reach, the historic channel of the Green River that passes through the city. R. 6. ACOE operates the dam and controls how much water is released into the Bypass Reach and how much is released through the spillway. *Id*.

ACOE has operated Runnet Dam under the same Water Control Manual ("WCM") since 1968, notwithstanding changing conditions and increased demands on the basin's water. R. 7-8. In the 50 years since the WCM was last calibrated, the population of Greenlawn has grown dramatically and several large agricultural operations moved into the upper basin increasing irrigation. *Id.* The water supply has also become less reliable due to increased frequency and severity of drought years. R. 8. The basin experienced only one drought between 1968 and 2000, but since 2006 drought conditions have become a common occurrence.[1] *Id.* Despite these changing conditions, ACOE has never updated the WCM. R. 7.

ACOE's 1968 WCM includes a provision for drought operations that includes a three-tiered schedule for reduced water releases based on water levels ("zones") in Howard Runnet Lake. R. 7. When "zone 2" levels were reached for the first time in 2016-17, ACOE initially

[1] Drought conditions occurred during 2006-2007, 2008, 2009-10, 2012, and 2016-17. This most recent drought was accompanied by above normal temperatures, increasing its severity. R. 8.

followed the WCM guidance but then abandoned it after the city objected to conservation measures.[2] R. 8. When the drought level reached "zone 3," ACOE continued its releases of water to the Bypass Reach, but discontinued all other releases through the dam's spillway. R. 8-9. Because Greenlawn's water withdrawals consumed nearly all of the flow to the Bypass Reach, these actions together caused downstream flows to drop from 25 cfs to nearly zero. R. 9.

The 1968 WCM includes a provision requiring the Army Corps to operate the dam "in a manner that complies with any water supply agreements entered into by [ACOE], and with the riparian rights of property owners established under New Union law." R. 7. At the time of the Runnet Dam's construction ACOE entered into an agreement with Greenlawn to provide the city with water "in such quantities and at such rates and times as it is entitled to as a riparian property owner under the laws of the State of New Union." R. 6.

Greenlawn's municipal water supply system is operated by Greenlawn Water Agency ("GWA"), which provides water throughout the city for industrial as well as domestic purposes. R. 5. Wastewater collected by the city's sewer system is treated and then discharged into the Progress River watershed rather than returning it to the Green River watershed. *Id*. During the summer the city's water use increases dramatically from watering of lawns and ornamental gardens.[3] *Id.* Only about 5% of water withdrawn by the city is actually returned to the Green River watershed, with the rest either consumed, redirected, or lost to evaporation. R. 5-6.

In addition to the impacts on oval pigtoe mussels, the elimination of all flowing water in the river had severe impacts on the river's navigability, fisheries, and estuary. Dewatering of the

[2] The WCM's "Zone 2" drought guidance recommended reducing the flow in the Bypass Reach from 50 CFS to 7 CFS (cubic feet per second). ACOE instead release 30 CFS to the Bypass Reach. R. 8.

[3] Greenlawn's average water use is 6 million gallons per day (MGD), but increases to 20 MGD during July and August. R. 5.

Green River impacts marine life of the basin's estuary by decreasing the flow of nutrients and freshwater, which increases salinity and allows salt-water predators to feed on oysters. R.10. As a result, the oystercatchers and fishermen who rely on the Green River's flows and estuaries for their livelihood also suffered substantial harm from the dewatering. R.10.

On May 17, 2017, NUO served Notice of Intent to sue on ACOE and Greenlawn under the Endanger Species Act's citizen suit provision, 16 U.S.C. § 1540(g). After waiting the requisite 60 days, NUO filed this action on July 17, 2017. The district court issued its Opinion and Order on the cross motions for summary judgment on May 15, 2019. Both NUO and Greenlawn filed timely notice of appeal leading to the present proceedings.

SUMMARY OF THE ARGUMENT

The district court improperly granted Greenlawn's motion for summary judgment to declare its riparian rights and improperly granted ACOE's motion for summary judgment dismissing the ESA claims against it. The district court properly granted NUO's and ACOE's motions for summary judgment declaring Greenlawn to be in violation of the ESA and properly issued an injunction to prevent further harm to the endangered oval pigtoe mussels.

First, the district court's declaration of Greenlawn's riparian rights should be set aside as speculative and nonbinding because a federal court has no authority to determine a substantive state right in the absence of guiding precedent. After noting that New Union law offered no guidance to resolve the conflict in question, the court should have abstained from making hypothetical declarations of state law. The substance of the declaration is also flawed because it is based on an incomplete analysis of relevant facts and applicable law, including reasonable use doctrine as it relates to municipal use, domestic use, and removal of water from the Green River watershed. The court also failed to consider Greenlawn's obligation to protect public trust resources or to recognize NUO's public right to navigate and use the fisheries of Green River.

Greenlawn's water rights do not extend to unnecessary and unreasonable uses that deprive others of public rights.

Second, the district court's dismissal of ESA claims against ACOE should be reversed because the facts show that ACOE's actions contributed to the destruction and harm of endangered oval pigtoe mussels. As a federal agency carrying out the operation of the dam, ACOE had a clear duty to examine whether consultation was necessary but failed to do so. The court's conclusion that ACOE lacked discretion to modify its operation of the dam is based on an incomplete analysis of relevant facts and applicable law and undue reliance on its determination of Greenlawn's water rights. The court was incorrect in holding that Greenlawn's water rights predetermined all of ACOE's choices concerning how to regulate the flows of water from Runnet Dam. Neither the water supply agreement nor the WCM contains express language exempting ACOE from compliance with the ESA, or otherwise prevented ACOE from exercising its duty to update the WCM to address changing conditions and demands on the basin's waters. ACOE's decision to depart from the WCM drought guidelines to accommodate Greenlawn's demands further demonstrates its discretion to do so. ACOE retains discretion as to how to meet its duty to Greenlawn while also fulfilling its duty to preserve and protect all uses and potential uses of the river, including the operation of the dam and with respect to fish and wildlife. ACOE's decisions and actions are therefore properly subject to provisions of the ESA.

Third, the district court was correct in finding that the extirpation of 25% of the Green River's endangered oval pigtoe mussel population constitutes a taking under § 9 of the ESA, and the issuance of an injunction to prevent future harm was proper under these circumstances. But for Greenlawn's unreasonable water withdrawals, the extirpation of mussels and harm to habitat and breeding would not have occurred. However, ACOE's discretionary actions in operating

Runnet Dam also contributed to this outcome. The district court's improper dismissal of ESA claims against ACOE precluded its proper analysis of ACOE's shared responsibility for this taking. Because ACOE had reason to believe that Greenlawn would withdraw the entire flow of water it released into the Bypass Reach, it was foreseeable that additional water releases would be needed prevent harm to fish and wildlife and other water users below the dam. ACOE could have mitigated these outcomes by exercising its discretion to modify its operation of Runnet Dam under these circumstances, and through timely action to update the WCM in light of changed conditions. Therefore, upon reconsideration, ACOE should be held accountable for its actions. The residents of Greenlawn, which includes many NUO members, should not bear the costs of ACOE's failure to comply with legal mandates.

An injunction is warranted under these circumstances and is consistent with the ESA's clear language affirming that the value of a species' continued existence is incalculable. Because Greenlawn's unreasonable water withdrawals continue to threaten the existence of the Green River population of oval pigtoe mussels, the court was under no obligation to first balance equities among rightful uses of the Green River. However, insofar as ACOE's operation of the dam is critical to the remaining flows of the river, the injunction should be broadened to assure that ACOE also takes necessary action to prevent future harm to the mussels and public resources of Green River.

STANDARD OF REVIEW

This case comes before this Court on appeal from the district court's order on motions for summary judgment. Summary judgment is appropriate where, based on the admissible evidence submitted by the parties, there is no genuine dispute of material fact, and a moving party is entitled to judgment in their favor as a matter of law. Fed. R. Civ. P. 56. An appellate court

reviews questions of law *de novo* with no deference to the opinions and conclusions of the district court. *Pierce v. Underwood*, 487 U.S. 552, 557 (1988).

ARGUMENT

I. BECAUSE RIPARIAN RIGHTS ARE LIMITED TO REASONABLE USES WITHIN THE WATERSHED FROM WHICH THEY DERIVE, THE CITY OF GREENLAWN IS NOT ENTITLED TO WITHDRAW WATER DURING A DROUGHT WITHOUT ANY CONSERVATION MEASURES.

Water rights are property rights governed by state law as pertaining to state lands and waters. *L. of Water Rights and Resources* § 3:9. Riparian water rights derive from ownership of riparian lands, which are lands abutting natural waterways such as rivers, streams, or lakes. *Id.* § 3.7. In general, riparian rights permit landowners "to withdraw water to make reasonable use of the water in the stream so long as that use does not interfere with the reasonable use of the flowing water by other riparian landowners." R. 11-12. In some states municipalities owning riparian land may thereby acquire municipal water rights "for the purpose of supplying its inhabitants with a public water supply." 141 A.L.R. 639 (Originally published in 1942). The scope and extent of municipal water rights varies from state to state as a result of different common law and statutory guidance. *Id.*

Because water rights are properly a matter of state law and New Union law has no established legal precedent or statutory guidance for resolving competing riparian claims, the district court's decision to "predict" New Union riparian law was improper. R. 12. The court's conclusions as to the nature and scope of Greenlawn's riparian water rights also failed to consider key facts and applicable law pertaining to Greenlawn's riparian rights, including municipal use, domestic us, and removal of water from the Green River basin, and its duty to protect public trust resources.

A. The State of New Union is the Proper Authority for Determining the Scope of Riparian Rights Guaranteed by the State.

"Except in matters governed by the Federal Constitution or by acts of Congress, the law to be applied in any case is the law of the state." *Erie R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938). While a federal district court may exercise supplemental jurisdiction to decide state law claims arising out of the same case and controversy as claims within the court's original jurisdiction, 28 U.S.C. § 1367(a), the court may also decline supplemental jurisdiction where a state law claim raises an issue of first impression. 28 U.S.C. § 1367(c)(1). Because the state is the proper arbiter of state law, "[a]bsent a strong countervailing federal interest, the federal court should not elbow its way . . . to render what may be an 'uncertain' and 'ephemeral' interpretation of state law." *Mitcheson v. Harris*, 955 F.2d 235, 238 (4th Cir.1992) (citing *Pennhurst State School & Hosp. v. Halderman*, 465 U.S. 89, 122 n. 32 (1984)). In the case of declaratory actions, federal courts have no proper interest in determining state law. *Id.*

When federal courts enforce substantive rights, they are enforcing "state-created rights" and not some right arising under federal law. *Guar. Tr. Co. of N.Y. v. York*, 326 U.S. 99, 107 (1945). Any interference with the state's proper exercise of its legislative and judicial powers is "an invasion of the authority of the state, and, to that extent, a denial of its independence." *Id.* at 79. Thus, "[n]eedless decisions of state law should be avoided both as a matter of comity and to promote justice between the parties, by procuring for them a surer-footed reading of applicable law." *United Mine Workers of Am. v. Gibbs*, 383 U.S. 715, 726 (1966) (explaining that a federal court's discretion to exercise supplemental jurisdiction "need not be exercised in every case in which it is found to exist").

Because riparian rights are state rights defined by the legislative and judicial powers of the state, a district court declaring such rights encroaches upon the powers of the state. *Erie R.*

Co., 304 U.S. at 78. Even where the determination of a state law issue is deemed necessary for deciding federal questions, a federal court decision that does not follow state law guidance will be unreliable. *United Mine Workers of Am.*, 383 U.S. at 726. The court's declaration of Greenlawn's riparian rights is thus tentative at best and should not regarded as dispositive with respect to the other claims before the court.

By declaring Greenlawn's riparian rights in the absence of any governing state law precedent, the district court presumed to decide a state law matter of first impression concerning fundamental rights guaranteed by the state. R. 12. Upon determining that New Union law provided no statutory guidance or legal precedents for resolving competing riparian claims to water, the court should have refrained from deciding the scope of Greenlawn's water rights. If the court found it necessary to address this question in order to resolve the federal claims, it could have stayed proceedings to seek guidance from the Supreme Court of New Union. Therefore, the court's declaration concerning the nature and scope of Greenlawn's riparian water rights is unreliable and should be set aside.

B. The District Court's Conclusions as to Greenlawn's Riparian Rights Reflects an Incomplete Analysis of Reasonable Use Doctrine That Omits Consideration of Key Facts and Applicable Common Law.

Even if the district court had good reason to make a determination as to Greenlawn's water rights, the conclusion of the court is flawed because it failed to consider relevant facts and applicable law. Notably, the court did not consider reasonable use doctrine or the watershed rule, and provided no legal authority for its interpretation of municipal domestic rights. The court's analysis also fails to address Greenlawn's water withdrawals for industrial uses, and the fact that its municipal water system removes water from the Green River watershed to the Progress River watershed. Nor did the court weigh Greenlawn's duty to protect public trust resources. Therefore, the court's conclusions as to the nature and scope of Greenlawn's water rights reflect

an incomplete analysis. A more thorough analysis that weighs these omitted factors compels the conclusion that Greenlawn's uncurbed water withdrawals during an extreme drought were excessive and unreasonable.

1. Because Riparian Rights Are Subject to Reasonable Use Doctrine, Greenlawn Must Share the Burden of Reduced Use During a Drought.

Riparian rights derive from ownership of riparian lands, which are lands abutting natural waterways such as rivers, streams, or lakes. *L. of Water Rights and Resources* § 3.7. Such rights are not quantified but usufructuary in nature and bestow on owners "a duty to share among themselves." *Id.* at § 3.10. "The fundamental principle" of riparian rights "is that each riparian proprietor has an equal right to make a reasonable use of the waters of the stream, subject to the equal right of the other riparian proprietors likewise to make a reasonable use." *United States v. Willow River Power Co.*, 324 U.S. 499, 505 (1945) (citations omitted). "The use of the stream or water by each proprietor is therefore limited to what is reasonable, having due regard for the rights of others above, below, or on the opposite shore." *Harris v. Brooks*, 225 Ark. 436, 443 (1955) (citing 56 Am. Jur. 728).

In order to be a "reasonable" a riparian use "must not substantially diminish" the quantity or quality of water available to other users. *Willow River Power*, 324 U.S. at 505-06. In the case of navigable waterways, riparian rights are also subject to "a dominant public interest in navigation." *Id.* at 507. Conversely, *unreasonable* uses are those that substantially impair the rightful uses of others or interfere with navigation. *See Harris*, 225 Ark. at 445 ("When one lawful use of water is destroyed by another lawful use the latter must yield, or it may be enjoined."); *City of Canton v. Shock*, 66 Ohio St. 19, 34 (1902) (finding liability where improper removal of water "materially diminished" flows).

Because riparian rights are correlative to the rights of others, drought conditions can be a

factor in determining whether a use is reasonable. In *City of Canton v. Shock*, the court explained that each riparian owner shares the burden of reducing withdrawals during drought conditions. *Id.* at 31 (finding "each party must bear the losses" of a dry season). In *City of Philadelphia v. Collins*, 68 Pa. 106 (1871), the city was found liable for damages caused by its water withdrawals for power generation during an extreme drought where these depleted the river to the point of interrupting navigation and ship traffic. Notably, the fact that Philadelphia was a municipality did not immunize it from liability for injury due to excessive water use even though it had not exceeded the amount it had contracted for from the dam operator. *Id*. Nor did the fact that the parties harmed were boatmen rather than riparian landowners preclude their right to relief. *Id*.

In the present case, the city of Greenlawn objected to conservation measures and continued using the same amount of water regardless of conditions. R. 8. It did not share the burden of the drought, as required by the court in *City of Canton*. Rather, like the municipality in *City of Philadelphia*, it persisted in continuing undiminished water withdrawals during increasingly severe drought conditions. R. 8. Under such circumstances, undiminished water use is unreasonable because it places a disproportionate burden on the equal rights of others. By consuming nearly all of the flow to the Bypass Reach, Greenlawn's water withdrawals impaired riparian uses of the river below the reach, which was reduced to a sixty mile stretch of stagnant pools and trickles.[4] R. 9. Thus, under reasonable use doctrine, Greenlawn's riparian rights require it to share the burden and reduce its water usage during a drought.

2. Greenlawn's Municipal Riparian Rights Are Not Strictly Domestic.

[4] Greenlawn's water withdrawals also interfered with the navigability of the river insofar as this requires flowing water. R. 9.

New Union belongs to a minority of states that recognize a municipality's riparian rights to include supplying water to residents, *Tubbs v. Potts*, 45 N.U. 999 (1909), but this does not imply that all municipal uses are to be equated with domestic use. While "[d]wellers in towns and villages watered by a stream may use the water for domestic purposes to the same extent that a riparian owner can," this traditionally includes only "so much of it as is necessary for domestic, fire, and sanitary purposes." *Barre Water Co. v. Carnes*, 65 Vt. 626, 627 (1893).

Authorities agree that water used for domestic purposes, including basic necessities like drinking, cooking, cleaning, maintaining livestock and growing a kitchen garden, takes priority over other riparian uses. *See* Robert E. Beck, *Waters and Water Rights* § 7.02(d)(2) (1991 & Supp. 1999). As stated in *Harris*, "[t]he right to use water for strictly domestic purposes—such as for household use—is superior to many other uses of water—such as for fishing, recreation and irrigation." 225 Ark. at 444. This principle, however, does not extend to municipal water withdrawals for other purposes. *City of Philadelphia*, 68 Pa. at 125-26. For example, in *City of Philadelphia*, municipal water withdrawals for power generation may be unreasonable and do not enjoy the priority granted to domestic purposes. *Id.* Other courts similarly distinguish between the municipal right of cities to supply water to residents for domestic needs and municipal supply for commercial use or power production. *City of Canton*, 66 Ohio St. at 34 ("right of the city to supply water to manufactories within its bounds for power purposes is only equal to the right of a lower proprietor to use water for the same purpose"); *See also* Robert E. Beck, Waters and Water Rights § 7.02(b)(1) (explaining domestic use priority arose from distinction between "natural needs" and "artificial wants" such as commercial gardens or other unnecessary uses). Thus, even in states following the minority rule for municipal use, only

"strictly domestic" uses enjoy priority over other water uses, which are generally held to be equal. *Id*.

In the present case it is uncontested that a substantial portion of Greenlawn's municipal water supply is directed to unnecessary lawns and ornamental gardens, as well as industrial uses, rather than the strictly domestic needs of its residents. R. 5. Thus, only such part of Greenlawn's municipal water use as its residents need for strictly domestic purposes is properly entitled to be held superior to other riparian uses. Based on facts before the court, over two thirds of Greenlawn's water use in July and August supports non-domestic wants rather than domestic needs. Like *City of Philadelphia*, where water withdrawals for power production were not privileged over navigation, Greenlawn's water withdrawals for industrial and ornamental purposes are not privileged over other public uses of the Green River. And like *City of Canton*, where domestic use of water was distinguished from use in manufacturing, Greenlawn's municipal water rights do not eliminate its responsibility to avoid unreasonable use of water for commercial and industrial uses. The district court was thus incorrect in concluding that the entirety of Greenlawn's water withdrawals were for domestic use and therefore exempt from reasonable use doctrine. While Greenlawn has every right to provide for the necessary sustenance of its residents, this does not relieve it of its duty to share the burden of the drought with respect to all of its other water uses, including industrial use and ornamental lawns and flower gardens.

3. Greenlawn's Removal of Water from the Green River Watershed is an Unreasonable Use.

Because riparian rights are usufructuary with respect to the riparian land from which they derive, such rights generally do not extend to uses that remove water from these lands. "The principle established by a long line of decisions is that the upper riparian owner has the right to

the use of the stream on his land for any legal purpose, provided he returns it to its channel uncorrupted and without any essential diminution." *City of Canton*, 66 Ohio St. at 32. Riparian owners may use the water that flows by or through their lands but may not unreasonably alter, remove or prevent its similar use by others. *See Harris*, 225 Ark at 443-44. This is sometimes referred to as the "watershed rule," whereby riparian rights do not extend to uses outside the watershed from which they derive. *See* Robert E. Beck, Waters and Water Rights § 7.02(a)(2).

Courts apply the watershed rule in cases where a party's removal of water from the drainage impacts the rights of other water users. *City of Canton*, 66 Ohio St. at 33-32 (finding municipal use unreasonable where water is provided to users beyond city limits or transported away for commercial use); *Pennsylvania R. Co. v. Miller*, 112 Pa. 34, 41 (1886) (finding railroad company exceeded reasonable use by diverting water to fill tanks for locomotives where this materially diminished the water available to other rightful users); *Scranton Gas & Water Co. v. Delaware, L. & W. R. Co.*, 240 Pa. 604, 611 (1913) (affirming injunction to prevent railroad company from pumping water away from riparian land to use elsewhere).

In the present case, there is no dispute that Greenlawn's water system removes water from the Bypass Reach of the Green River watershed and returns treated wastewater into the Progress River watershed. R. 5. The parties agree that less than 5% of the water thus removed is actually returned to the Green River. Id. at 5-6. It is also undisputed that such removal during times of drought materially diminished the flow of the river. *Id*. at 9. Thus, like the removal of water away from riparian lands in *Pennsylvania R. Co.*, Greenlawn's removal of water away from the Green River is similarly unreasonable insofar as the consequent decrease in flow impaired the rights of others. As held in *City of Canton*, the transport of water away from the watershed to a different watershed is an unreasonable use that may render the city liable for

injuries to the other rightful users of the watershed thereby depleted. Thus, Greenlawn's removal of water exceeds its riparian rights and constitutes an unreasonable use.

Because the district court's determination of Greenlawn's riparian water rights did not consider the fact that the city's water system removes water from the Green River watershed to Progress River watershed its conclusions reflect an incomplete analysis of the facts. A proper analysis also requires consideration of the watershed rule, as an applicable legal principle that is relevant to these facts. Accordingly, the court's determination of Greenlawn's riparian rights omitted key facts and applicable law.

In conclusion, the court's finding that Greenlawn's municipal riparian rights are exempt from any obligation to share the burden of the drought failed to consider core principles of reasonable use doctrine, including the limited scope of domestic use and restrictions imposed by the watershed rule. The court's ruling on this matter is therefore inaccurate and should be set aside.

C. Greenlawn's Riparian Rights Are Limited by Public Trust Law.

The city of Greenlawn's water rights are also limited by a duty to avoid harming public trust rights and resources. Public trust law derives from ancient legal principle by which sovereign states are understood to guarantee and hold in trust a public right to access coasts and rivers for commerce, fishing, and navigation. J. Inst. 2.1.1 (J.B. Moyle trans.). In American law, public trust rights are understood as belonging to the states. *Martin v. Lessee of Waddell*, 41 U.S. 367, 416-17 (1852) (finding state is owner of land under waterways and coastlines to hold in trust for public rights of navigation and fishing); *Arnold v. Mundy*, 6 N.J.L. 1, 8 (1821) (finding state sovereignty vested citizens with a public right to use fisheries). Public trust rights are state law rights and any legal disputes over such rights are properly a matter of state law as pertaining to the lands and waters within the boundaries of a state or adjacent to its coastline.

PPL Montana, LLC v. Montana, 565 U.S. 576, 603 (2012) ("public trust doctrine remains a matter of state law").

Although state common law concerning the scope of public trust rights admits to some variation from state to state, courts agree that citizens of every state possess such rights and states have a correspondent duty to protect the public rights to use fisheries and waterways. *Shively v. Bowlby*, 152 U.S. 1, 56-57 (1894) (states admitted to the union have the same public trust rights as the original states); *Illinois Central RR v. Illinois*, 146 U.S. 387, 452 (1892) (finding state could not grant private ownership of city waterfront because it was a public resource). State courts have also recognized a need to consider public trust rights in making water use decisions. *Nat'l Audubon Soc'y v. Superior Court*, 33 Cal. 3d 419, 446 (1983) (finding state had "an affirmative duty to take the public trust into account in the planning and allocation of water resources"); *United Plainsmen Ass'n v. N. Dakota State Water Conservation Comm'n*, 247 N.W.2d 457, 462 (N.D. 1976) (finding "Public Trust Doctrine requires, at a minimum, a determination of the potential effect of the allocation of water on the present water supply and future water needs of this State."). Thus, riparian rights are not exempt from public trust law and may be a factor in determining the extent of such rights.

Furthermore, because municipalities and counties derive their authority from the state, receiving by incorporation a share of the state's general police powers by which to enact and enforce local laws, they thereby also share the state's a duty to protect the rights of citizens. *See Envtl. Law Found. v. State Water Res. Control Bd.*, 26 Cal. App. 5th 844, 867-68 (Ct. App. 2018), *review denied* (Nov. 28, 2018) (finding county, as subdivision of state, "shares responsibility for administering the public trust"). Thus, cities and counties arguably share the state's responsibility for protecting public trust rights and resources.

In the present case, New Union, as explained in *Shively*, acquired public trust obligations when it became a state. At the same time, the citizens of New Union, like the oyster catchers in *Arnold*, obtained a vested public right to use the state waterways for navigation, commerce, fishing, and any other public trust rights recognized by the state. Therefore, as citizens of New Union, NUO members and other fisherpersons have a lawful right to fish and catch oysters in the waters and estuaries of the Green River and the state has an obligation to protect this right. Furthermore, as explained in *Envtl. Law Found.*, when states delegate a portion of their police powers to municipalities, the obligation of trusteeship is similarly shared. Therefore, Greenlawn has a duty to protect the public trust and should avoid harming the public rights of others in exercising its water rights.

By withdrawing water to the extent of eliminating the entire flow of the Bypass Reach to the Green River, Greenlawn encroached on the vested rights of other water users. Importantly, the rights of New Union Oystercatchers need not be riparian rights to be valid rights entitled to consideration and protection under the laws of Greenlawn and the State of New Union. Greenlawn ignored these rights completely and ignored its duty to protect the public trust, which could have been accomplished by limiting its use of water and sharing the burden of the drought. Because the district court failed to recognize public trust law in its determination of Greenlawn's riparian rights, the court's conclusions reflect an inadequate analysis of applicable state law.

In conclusion, the district court's determination that Greenlawn's riparian rights are exempt from sharing the burden of the drought should be rejected because the court had no reliable basis on which to decide a state law matter of first impression, because it failed to consider important principles of riparian law, and because it failed to consider Greenlawn's duty

to protect the public trust rights of Petitioners. The court's declaration of Greenlawn's riparian rights therefore should be set aside.

II. BECAUSE THE ARMY CORPS OF ENGINEERS FAILED TO EVALUATE WHETHER ITS OPERATION OF HOWARD RUNNET DAM WORKS COULD AFFECT ENDANGERED OVAL PIGTOE MUSSELS, IT VIOLATED § 7 OF THE ENDANGERED SPECIES ACT, 16 U.S.C. § 1536.

The Endangered Species Act, at § 7(a), mandates that "[e]ach Federal agency shall, in consultation with and with the assistance of the Secretary [of Interior or Commerce], insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species." 16 U.S.C § 1536(a). As a Federal agency, the Army Corps has a clear mandate to comply with this provision to ensure that its actions conducted to operate the Howard Runnet Dam would not jeopardize Oval Pigtoe Mussels or any other threatened or endangered species.

A. The Army Corps' Operation of Howard Runnet Dam Works Is Not Exempt from Subsequently Enacted Federal Laws.

The argument that ACOE is not subject to ESA § 7(a) requirements because the construction of the dam works and the adoption of the WCM predate the ESA is incorrect. R. at 14. Notably, neither the court nor ACOE provides any legal precedent or rationale to support this claim. Nor is it clear to what extent this premise informs the court's conclusion that ACOE's operations of the dam were nondiscretionary and exempted from the ESA § 7. However, the argument lacks merit and must therefore be addressed. Because neither the statute authorizing the dam's construction nor the WCM provides any indication of Congressional intent to exempt the operation of the dam from the Endangered Species Act, there is no basis for this claim. In fact, legal precedent supports the opposite conclusion: that a change in law may require the operation of the dam to be updated to achieve compliance with a new legal mandate.

"The Supreme Court has held that Congress's power to exercise sovereign authority 'will remain intact unless surrendered in unmistakable terms.'" *O'Neill v. United States,* 50 F.3d 677, 686 (9th Cir.1995) (citing *Bowen v. Public Agencies Opposed to Social Sec. Entrapment*, 477 U.S. 41, 52, (1986)). Even if "there is no express provision in the statutory scheme retaining Congress's ability to amend, alter or repeal the provisions of [an] Act, this silence cannot be construed as a waiver of any of Congress's powers." *Peterson v. U.S. Dep't of Interior,* 899 F.2d 799, 808 (9th Cir. 1990). Thus, existing legal mandates are not locked in stone and held exempt from future legal mandates. As the Court observed in *Tennessee Valley Auth. v. Hill ("TVA"),* 437 U.S. 153, 194 (1978), "Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities."

With respect to government contracts or water control manuals, similar reasoning applies. "To presume that a sovereign forever waives the right to exercise one of its sovereign powers unless it expressly reserves the right to exercise that power in a commercial agreement turns the concept of sovereignty on its head, and we do not adopt this analysis." *Merrion v. Jicarilla Apache Tribe*, 455 U.S. 130, 148 (1982) (finding tribal government had authority to enact an excise tax on mineral extractions where this was not reserved in leasehold). Courts have applied a similar principle to water supply contracts, holding that contracts made decades prior to the enactment of the ESA were not thereby exempted from its requirements. *Nat. Res. Def. Council v. Houston,* 146 F.3d 1118, 1130 (9th Cir. 1998) (citing *Madera Irrigation Dist. v. Hancock*, 985 F.2d 1397, 1405–06 (9th Cir.1993)).

In the present case, the statute authorizing construction of the dam works contains no express provision exempting dams from future laws of Congress. River and Harbor Act of 1945,

Pub. L. No. 79-14, 59 Stat. 10 (1945). In keeping with established precedent, there is thus no reason from which to conclude that the dam works are exempted from compliance with the ESA. Similarly, there is no indication that the 1968 WCM contains any provision that would exempt the dam operations from compliance with the ESA. Therefore, the argument that ACOE is not subject to ESA § 7(a) requirements because the construction of the dam works and the adoption of the WCM predate the ESA lacks merit.

B. The Corps' Ongoing Operation of Howard Runnet Dam Works Requires It to Take Actions that May Affect Listed Species.

Because ACOE's ongoing operation of the Howard Runnet dam requires it to divert and release waters to implement the WCM and carry out its legal mandates, it is subject to the consultation requirement under § 7 of the Endangered Species Act.

Regulations promulgated to enact the Endangered Species Act define "action" as encompassing "all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies." 50 C.F.R. § 402.02. This includes agency actions conducted to carry out the ongoing operation of diversions and water projects. *O'Neill*, 50 F.3d at 680–81 (explaining why section 7(a)(2) of the ESA applies to a preexisting water service contract where the United States must act each year to supply the water). *Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276 (Fed. Cir. 2008) (contrasting agency action to divert water into fish a ladder from merely allowing it to remain it in stream).

In the present case, there is no dispute that the Army Corps' normal operation of Howard Runnet Dam Works requires it to divert water from the Green River into the reservoir or the Bypass Reach and to release water into the turbines for power production. Like the actions taken to supply the water service contract in *O'Neill*, the Army Corps' actions to implement the WCM are consistent with the definition of action under 50 C.F.R. § 402.02. Similarly, like the

diversions in *Casitas*, the Army Corps must take action to implement diversions of water into and out of Howard Runnet Dam. Moreover, because water diversions and releases effect the flow of the river which in turn effects fisheries and wildlife, such actions are of a type that could affect a threatened or endangered species. Therefore, the Army Corps' ongoing operation of Howard Runnet Dam requires it to engage in actions that fall within the meaning and scope of § 7(a) of the ESA.

C. The Army Corps' Ongoing Actions in Operating Howard Runnet Dam Works Require Discretion to Balance Competing Mandates.

In addition to the statutory requirements set forth in ESA § 7, regulations promulgated by the Department of Interior provide further that "Section 7 and the requirements of this part apply to all actions in which there is discretionary Federal involvement or control." 50 C.F.R. § 402.03. Thus, in order to be subject to the consultation requirement of the ESA, agencies must not only carry out actions, but have discretion to act or not act. "Agency discretion presumes that an agency can exercise "judgment" in connection with a particular action" and "not every action authorized, funded, or carried out by a federal agency is a product of that agency's exercise of discretion." *Nat'l Ass'n of Home Builders v. Defs. of Wildlife*, 551 U.S. 644, 668 (2007). Because the Army Corps' operation of Howard Runnet Dam Works involves discretionary actions in determining how to balance multiple objectives while maintaining compliance with legal mandates, it is subject to the consultation provision of §7(a).

1. Conditions for Agency Exemption from § 7 Consultation Requirement.

Because § 402.03 limits applicability of § 7 to discretionary actions, a body of case law has arisen around the question of when federal agencies are properly exempted from the consultation requirement. *Nat'l Ass'n of Home Builders*, 551 U.S. at 671-72 (holding "that a federal agency need not consult with FWS with respect to an action that the agency is required to

take by law"); *Sierra Club v. Babbitt*, 65 F.3d 1502, 1509 (9th Cir. 1995) (where an agency lacks discretion "consultation would be a meaningless exercise").

In cases where courts found that compliance with statutory mandates eliminated agency discretion, the consultation requirement was held inapplicable. *Nat'l Ass'n of Home Builders*, 551 U.S. at 671-72 (finding directive to transfer permit from federal to state agency nondiscretionary where statutory conditions were met); *Platte River Whooping Crane Critical Habitat Maint. Tr. v. F.E.R.C.*, 962 F.2d 27, 32 (D.C. Cir. 1992) (finding permit renewal nondiscretionary where statute prohibited modification of permits upon renewal). However, where an agency retained some discretion concerning *how* to comply with statutory directives, the consultation requirement was still applicable. *In re Operation of Missouri River Sys. Litig.*, 421 F.3d 618, 631 (8th Cir. 2005) (statutory duty to support navigation did not restrict Corps' discretion to decide how best to balance this with other interests).

In cases involving contractual agreements, the issue of discretion depends on the specific terms of the contract and whether subsequent agency actions are necessary to carry out the contract. *Sierra Club v. Babbitt*, 65 F.3d 1502, 1509 (9th Cir. 1995) (finding agency approval of road construction projects "nondiscretionary" where agreement enumerated grounds for disapproval and no subsequent action was required of agency); *O'Neill v. United States*, 50 F.3d at 680–81 (finding pre-existing contract did not eliminate discretion where subsequent agency action was necessary to implement contract); *Nat. Res. Def. Council v. Houston*, 146 F.3d 1118, 1126 (9th Cir. 1998) (finding water contracts restricting changes to some terms upon renewal did not eliminate agency discretion to modify other terms). The consultation requirement was applicable as long as an agency retained some degree of discretion as to subsequent actions. *Id.*

2. ACOE's Statutory Mandates Do Not Eliminate Its Discretion in Operating Runnet Dam.

In the present case, the ACOE's operation of Runnet Dam is restricted by two authorizing statutes, by an agreement with Greenlawn to provide the city with such water "as it is entitled to as a riparian property owner under the laws of the State on New Union," and by a water control manual. R. at 6. Accordingly, the issue of the agency's discretion turns on the terms of these statutes and contracts.

First, the dam's authorizing statute is the River and Harbor Act of 1945, which set forth requirements for ACOE's preliminary proposals and reports that led to the construction of the dam, and declares the intent of Congress to "recognize the interests and rights of states" in determining water utilization and control "to preserve and protect to the fullest extent established and potential uses, for all purposes, of the waters of the Nations rivers." Pub. L. No. 79-14, 59 Stat. 10 (1945). While this law directs ACOE to consider the interests and rights of states in its construction and operation of Howard Runnet Dam, it also appears to grant the agency broad discretion in determining how balance these with all other water uses.

The second applicable statute is the Fish and Wildlife Coordination Act of 1958, which expanded the purpose of all federal water projects by mandating that "adequate provision . . . shall be made . . . for the conservation, maintenance, and management of wildlife resources thereof, and habitat thereon." 16 U.S.C. § 663(a) (encoding Pub. L. No. 85-624, 72 Stat. 563 (1958)). This too appears to grant the agency considerable discretion in determining how to provide for wildlife resources. Like the statute in *In Re Operation of Missouri River Sys. Litig.*, both of these applicable statutes allow ACOE considerable discretion in determining how to carry out their mandates. Therefore, neither of the statutes addressing operation of the Runnet Dam appear to eliminate ACOE's discretion.

3. ACOE's Contractual Obligations Do Not Eliminate Its Discretion in Operating Runnet Dam.

Turning to ACOE's contractual agreement with the city of Greenlawn, this requires ACOE to provide Greenlawn with as much water as it is entitled to as a riparian property owner. Because riparian rights are governed by the principle of reasonable use and subject to other limitations as discussed above, this agreement does not direct the agency to provide Greenlawn with a specific amount of water. This leaves the agency considerable discretion to interpret the extent Greenlawn's riparian rights under the state law of New Union. Even if the district court's declaration concerning Greenlawn's rights is taken as dispositive, the ACOE retains discretion to determine how to balance the water needs of Greenlawn with its other statutory mandates to preserve and protect all other water uses and to provide for wildlife resources with respect to its ongoing operation of the Dam Works. Thus, like the contracts in *O'Neill* and *Nat. Res. Def. Council*, this agreement does not eliminate the agency's discretion.

Lastly, the ACOE's WCM for the dam provides it with "parameters" to follow in the operation of the dam, including provisions for water storage, releases, and flood control, with targets and thresholds to guide the timing of various actions. R. at 6. This document includes the specific guidelines for operations during drought conditions, as well as a general provision that requires ACOE to operate the dam works in "a manner that complies with any water supply agreements" it has entered into "and with the riparian rights of property owners under New Union law." R. 7. This last provision essentially incorporates the agreement with Greenlawn into the WCM, which, as shown above, does not eliminate the agency's discretion.

In addition, several factors suggest that the parameters set forth in the WCM function more as guidelines than mandatory actions. First, the ACOE's actions in April 2017 indicate that the District Commander retained discretion to operate the dam in a manner that diverged from

the WCM drought guidelines by increasing its releases to the Bypass Reach to accommodate Greenlawn's objections to conservation measures.[5] R. 7, 8-9. Second, more generally, to the extent that the 1968 WCM may fail to provide for ACOE's legal mandates to comply with the rights of New Union and to preserve and protect other water uses and wildlife resources, the agency requires discretion to depart from the WCM guidelines as needed to avoid violating the law. Third, ACOE retains discretion to update the WCM as needed in accordance with 33 C.F.R. § 222.5, which provides that "[n]ecessary actions will be taken to keep approved water control plans up-to-date. For this purpose, plans will be subject to continuing and progressive study by personnel in field offices of the Corps of Engineers." Thus, the WCM is not a fixed contractual duty, but functions as a set of guidelines that does not eliminate ACOE's discretion to modify its provisions if these become outdated or conflict with other legal mandates.

Therefore, because neither the statutory or contractual restrictions prevent ACOE from retaining discretion to modify its operation of Howard Runnet Dam works as necessary to meet its legal mandates, ACOEs actions are subject to the consultation requirement of the ESA. 50 C.F.R. § 402.03.

D. The Army Corps' Failure to Review Its Actions at the Earliest Possible Time to Determine Whether They Could Affect Listed Species, Violates § 7 of the Endangered Species Act.

An agency subject to the consultation requirement "shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required." 50 C.F.R. § 402.14. "An agency may avoid the consultation requirement only if it determines that its action will have no effect on a listed species or critical habitat." *Karuk Tribe of California v. U.S. Forest Serv.*, 681 F.3d 1006,

[5] The WCM drought provisions recommended reducing flows from 50 cfs to 7cfs, but ACOE chose to release 30 cfs (cubic feet per second).

1027 (9th Cir. 2012) (internal quotation omitted); *AquAlliance v. U.S. Bureau of Reclamation*, 287 F. Supp. 3d 969 (E.D. Cal. 2018), appeal dismissed sub nom; *AquAlliance v. United States Bureau of Reclamation*, No. 18-16666, 2019 WL 4199912 (9th Cir. June 25, 2019).

While courts grant considerable deference to agency determinations as to whether their actions will affect listed species, there must be some evidence of "a rational connection between facts found and conclusions made." *Friends of Santa Clara River v. U. S. Army Corps of Engineers*, 887 F.3d 906, 920–21 (9th Cir. 2018) (quoting *League of Wilderness Defs./Blue Mountains Biodiversity Project v. Connaughton*, 752 F.3d 755, 760 (9th Cir. 2014)). An agency action that "entirely failed to consider an important aspect of the problem" is not entitled to deference. *Nat'l Ass'n of Home Builders*, 551 U.S. at 658 (quoting *Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 43 (1983)).

In the present case there is no indication in the record that ACOE made any effort to evaluate whether its operation of Runnet Dam could affect endangered oval pigtoe mussels or any other listed species. It appears, rather, that they "entirely failed to consider" their duties under the Endangered Species Act and proceeded to operate the dam without making any factual determination as to whether it would affect a listed species. Thus, the Corps' failure to complete the threshold inquiry, as required by 50 C.F.R. § 402.14, arbitrarily and capriciously precluded any further determination as to whether consultation was necessary. Therefore, by failing to conduct any reasonable evaluation of whether its operation of the Runnet Dam could affect threatened or endangered species and thereby precluding any determination as to whether consultation was necessary, the Army Corps violated § 7 of the ESA.

In conclusion, because there is no merit to the claim that Howard Runnet Dam Works is exempt from the ESA because its construction and control manual predate this statute, and

because ACOE is a federal agency whose ongoing actions to operate the dam require discretion to comply with its several legal mandates, ACOE's failure to make any effort to comply with the ESA requirement to determine whether its actions could affect listed species, ACOE's failure to comply violates § 7 of the Endangered Species Act.

III. THE ACTIONS OF BOTH GREENLAWN AND ACOE CAUSED REDUCED FLOWS TO THE GREEN RIVER THAT HARMED THE ENDANGERED OVAL PIGTOE MUSSELS CONSTITUTING "TAKES" UNDER § 9 OF THE ENDANGERED SPECIES ACT, 16 U.S.C. § 1538.

Under § 9 of the Endangered Species Act, 16 U.S.C. § 1538, a take occurs when conduct harms or kills any listed threatened or endangered species. "The term take means to harass, harm, pursue, hunt, shoot, wound kill, trap, capture or collect, or attempt to engage in any such conduct." 16 U.S.C. § 1532(19). "Take is defined… in the broadest possible manner to include every conceivable way in which a person can 'take' or attempt to 'take' any fish or wildlife." *Strahan v. Coxe,* 127 F.3d 155, 162 (1st Cir. 1997). Additionally, "activities not intended to harm an endangered species, such as habitat modification, may constitute unlawful takings under the ESA unless the Secretary permits them." *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687, 701. (1995)

A. Greenlawn's Actions Contributed to the Take of Oval Pigtoe Mussels.

U.S. Fish and Wildlife Service (USFWS) regulations define "harm" to specifically include conduct that modifies or destroys habitat. This includes "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 C.F.R. §17.3. The purpose of the ESA is "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved…" 16 U.S.C. §1531(b). The Supreme Court has clarified that the text, structure, and legislative history of the ESA support the conclusion that the

definition of "harm" includes "significant habitat modification or degradation that actually kills or injures wildlife." *Sweet Home,* 515 U.S. at 707.

Provisions in §10 of the ESA further indicates that such harm extends to both deliberate and incidental takings. *Sweet Home*, 515 U.S. at 700. In particular, § 10 provides that applicants may request an incidental take permit "if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." 16 U.S.C. §1539(a)(1)(B). "The fact that Congress in 1982 authorized the Secretary to issue permits for takings that §9(a)(1)(B) would otherwise prohibit . . . strongly suggests that Congress understood §9(a)(1)(B) to prohibit indirect as well as deliberate takings." *Sweet Home,* 515 U.S. at 700.

The Court in *Sweet Home* further emphasized that a determination of *harm* does not rely on how directly one's actions impact the endangered species, but rather the effect that the actions actually have on the species. *Id.* The concern is with whether those actions actually kill or injure wildlife. *See Palila v Hawaii Dept. of Land and Nat. Res.,* 649 F. Supp. 1070, 1080 (1986) (finding feral sheep consumption of seedlings constituted harmful habitat modification of endangered Palila); *Nat. Res. Def. Council v. Zinke,* 347 F. Supp. 3d 465, 520 (E.D. Cal. 2018) (finding water transfers effected downstream habitat modification harming endangered salmon). Thus an impact to essential breeding behaviors or breeding habitat, even where indirect, is a form of habitat modification causing harm to the species and constitutes a take under §9 of the ESA.

In addition, actions that occur outside of the habitat and are not aimed at harming the species directly may also cause an "incidental take" so long as the actions are fairly traceable to the modification of habitat that harmed the species. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992). Thus, in *Strahan,* the State of Massachusetts, by licensing certain types of fishing

operations, indirectly caused fishermen to harm the endangered Northern Right whales. 127 F.3d at 171. *See also Loggerhead Turtle v. County Council,* 92 F. Supp. 2d 1296, 1309 (2000) (finding a county was responsible for permitting beach residents to use lights in a manner that caused harm to endangered turtles).

In the present case, Greenlawn's excessive withdrawals of water from the Bypass Reach during drought conditions caused reduced flows to the Green River, which in turn modified the habitat of endangered oval pigtoe mussels. R. 9. These reduced flows harmed the mussels by exposing mussel beds, which prevented the mussels from remaining submerged, killing approximately 25% of the rivers oval pigtoe population. The reduced flows also degraded mussel habitat by increasing siltation and by interrupting the migration of a co-evolved fish, the sailfin shiner, that mussels depend on for reproduction. *Id*. These impacts further harmed the mussels by eliminating suitable sites for mussel beds and interfering with the mussels breeding. *Id.*

Thus, like the water transfers in *Nat. Res. Def. Council* that harmed salmon habitat downstream, Greenlawn's dewatering of the Bypass Reach harmed endangered oval pigtoe habitat downstream. And, like the sheep grazing in *Palila*, Greenlawn's water withdrawals also harmed mussel breeding habitat by interfering with migration of the sailfin shiner. Therefore, Greenlawn's excessive water withdrawals, by eliminating the flow of water from the Bypass Reach into the Green River, caused a habitat modification that harmed the oval pigtoe mussels and constitutes a take under §9 of the ESA.

B. ACOE's Actions Contributed to the Take of the Oval Pigtoe Mussels.

For reasons based on the legal authorities as explained above, ACOE's actions in operating the Runnet Dam are also fairly traceable to the modification of habitat that harmed the oval pigtoe mussels. *Sweet Home,* 515 U.S. at 700; *Palila,* 649 F. Supp. at 1080; *Nat. Res. Def. Council,* 347 F. Supp. 3d at 520. As in the case of Greenlawn's actions, a take need not be

intentional to actually occur. *Strahan*, 127 F.3d at 171; *Loggerhead Turtle,* 92 F. Supp. 2d at 1309.

When ACOE made the decision to release more water to the Bypass Reach than the WCM guidelines recommended, it accommodated the Greenlawn's excessive water withdrawals. As noted above, ACOE increased its releases only after Greenlawn objected to reducing its water withdrawals through conservation measures. R. 8. Under these circumstances it was foreseeable that Greenlawn was likely to withdraw all of the flow released to the Bypass Reach. Therefore, like the state in *Strahan* and the county in *Loggerhead Turtle*, ACOE's actions facilitated the harm caused by Greenlawn's water withdrawals and shares responsibility for the resulting take of oval pigtoe mussels. Although both parties were intending to act within their legal duties, an incidental take nevertheless occurred.

By increasing its outflows to the city, ACOE also caused the lake levels to drop at a faster rate than they would have if it had followed the WCM, which in turn caused the "zone three" drought conditions to occur sooner than they would have otherwise. ACOE's subsequent action to comply with the WCM "zone 3" guidance by cutting off releases into the hydropower spillway cut off the remaining outflow to the Green River. Because it was foreseeable that Greenlawn would use all of the water in the Bypass Reach, it was equally foreseeable that the curtailment of outflows through the turbines would have a devastating effect on the river. ACOE's actions, however well-intended, had the effect of eliminating the flow of water to the Green river, which in turn caused the modification of habitat that harmed the oval pigtoe mussels constituting a take under § 9 of the ESA.

Notably, ACOE's actions do not absolve the City of Greenlawn of shared responsibility for the take because each party acted independently. Greenlawn's withdrawal of nearly all the

water from the Bypass Reach was not made necessary by ACOE's decision to accommodate their request. ACOE also acted independently in deciding to accommodate the city and in terminating the spillway outflows. Thus both parties made independent actions that caused the dewatering of the Green River that harmed the oval pigtoe mussels and violated § 9 of the ESA.

In conclusion, the actions of both Greenlawn and ACOE contributed to the dewatering of the Green River that caused the habitat modification that harmed the endangered oval pigtoe mussels. Therefore, each party committed a "take" in violation of § 9 of the Endangered Species Act, 16 U.S.C. § 1538.

IV. INJUNCTIVE RELIEF IS PROPER DUE TO THE "INCALCULABLE" VALUE OF THE ENDANGERED OVAL PIGTOE MUSSELS.

Under the ESA's citizen suit provision, any person or governmental agency that is in violation of the ESA may be enjoined. 16 U.S.C. §1540(g). Thus an injunction is a proper remedy under the ESA. "The plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost." *TVA*, 437 U.S. at 184 (1978). A balance of equities is not required when the future risk to the species is reasonably certain. There is no way to balance equities between agency activities and the survival of a species when species eradication is understood by Congress to be "incalculable." *Id.*, at 187.

A. Injunctive Relief is Proper Due to the Potential for the Elimination of the Green River's Oval Pigtoe Mussel Population.

Congress has made it abundantly clear that it "intended endangered species to be afforded the highest of priorities." *TVA* at 174. "Once Congress, exercising its delegated powers, has decided the order of priorities in a given area, it is for the Executive to administer the laws and for the courts to enforce them when enforcement is sought." *Id.*, at 194. "An injunction is the appropriate remedy for a substantive procedural violation of an environmental statute." *Thomas v. Peterson*, 753 F.2d 754,764.

Courts have issued injunctive relief in cases where the threat of irreparable future harm to a threatened or endangered species was immanent or reasonably certain. *See Def. Of Wildlife v. Bernal*, 204 F3d 920, 925 (9th Cir. 1992) (finding court must issue injunction where threat of harm to species is reasonably certain); *Forest Conservation Council v. Rosboro Lumber Co*., 50 F.3d 781, 783 (1995) (finding reasonably certainty of harm to endangered owl habitat sufficient to justify a permanent injunction); *Marbled Murrelet v. Babbitt*, 83 F. 3d. 1060, 1068 (1996) (finding injunction justified where timber harvest posed "reasonable certainty of imminent harm" to Murrelet nesting area). In contrast, courts have denied injunctions where future harm was uncertain due to the unpredictability of factors impacting the species. *Arkansas Project v. Shaw*, 775 F.3d 641, 663 (5th Cir. 2014) (finding injunction inappropriate where risk of future harm was to whooping cranes was uncertain).

In the present case, all parties agree that the risk of future drought is reasonably certain. R. 11. There is also no doubt that future drought conditions are likely to cause repeated water shortages in the Green River watershed. Under these conditions, a continuing pattern of excessive water withdrawals by Greenlawn and continued reliance by ACOE on the outdated 1968 WCM are certain to cause a disaster for the Green River's remaining population of oval pigtoe mussels. The status quo, if unchecked, is highly likely to end in the total extirpation of the mussels. Like the risk to nesting habitats in *Forest Conservation Counsel* and *Marbled Murrelet*, the risk that future water shortages pose to oval pigtoe mussels is nearly certain to kill more mussels and eliminate more mussel habitat. Unlike the uncertain causation of the whooping crane deaths in *Shaw*, the forces impacting the oval pigtoe mussel are known and predictable. Therefore, an injunction is the proper remedy to prevent the extirpation of the oval pigtoe mussels during drought conditions.

B. Balancing of Equities is Not Appropriate Because the Value of the Endangered Oval Pigtoe Mussel is Incalculable.

As the Supreme Court in *TVA*, made clear, the value of a genetically unique species is "incalculable.", 437 U.S. at 178. Thus, when the future existence of a species is threatened, there is no simple way to conduct an adequate cost benefit analysis. Federal courts are simply not equipped "to make such fine utilitarian calculations," *Id*. at 187. Therefore, a court may only balance the equities when there has been a violation of §9 of the ESA but the violation does not pose a threat of future harm.

In cases where takings were accompanied by a continuing threat to the survival of an endangered species, courts have favored injunctive relief to prevent continued harm or extinction. *Id*., at 169 (finding value of species could not be weighed in cost benefit analysis of dam). In contrast, courts disfavor injunctions in situations where there is little risk of continued harm. *Amoco Prod. Co v. Vill of Gambell, AK*, 480 U.S. 531, 545 (1987) (finding costs weighed against injunction where future harm was improbable); *Weinberger v. Romero-Barcelo,* 456 U.S. 305, 318 (1982) (finding against injunction where technical violation of WCPA did not pose continued threat).

In the present case the continuing threat to endangered oval pigtoe mussels is all but certain. Like the snail darter in TVA, the cost of the mussels continued survival is incalculable. Therefore, injunctive relief is appropriate. The district court was thus correct to enjoin Greenlawn from making excessive water withdrawals during drought conditions. Because ACOE's continued reliance on the outdated WCM is also a threat to the mussels, the district court's injunction should be expanded. ACOE has a duty to update the WCM to address the changing climate conditions and changing needs of water users throughout the basin and to

balance these with the lawful riparian rights of Greenlawn and the public trust rights of the citizens of New Union.

CONCLUSION

In conclusion, for the forgoing reasons, NUO asks this court to find that the district court's declaration with respect to Greenlawn's riparian rights is improper and should be set aside, as Greenlawn has a responsibility to limit its use of water during drought conditions. NUO further asks this court to reverse the district court's grant of summary judgment dismissing the ESA claims against ACOE, as ACOE has a duty to consider the effects of its actions on endangered species.

On the other hand, NUO asks this Court to affirm the district court's finding that Greenlawn violated § 9 of the ESA and to affirm the district court's injunction against Greenlawn. In addition, NUO respectfully asks this Court to affirm the need for a further injunction against ACOE to assure the continued survival of the endangered oval pigtoe mussel population.