CASE NO. 24-7807

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

SAN LUIS OBISPO COASTKEEPER, et al.,

Plaintiffs-Appellees,

v.

COUNTY OF SAN LUIS OBISPO,

Defendant-Appellant.

Appeal from the United States District Court,
Central District of California, Case No. 2:24-cv-06854-SPG-AS,
Hon. Sherilyn Peace Garnett

BRIEF OF *AMICI CURIAE* FISHERIES BIOLOGISTS PETER MOYLE, THEODORE GRANTHAM, AND KARRIGAN BÖRK IN SUPPORT OF APPELLEES AND AFFIRMANCE

ENVIRONMENTAL LAW CLINIC
Mills Legal Clinic at Stanford Law School
Deborah A. Sivas (CA Bar No. 135446)
Matthew J. Sanders (CA Bar No. 222757)
Amanda Zerbe (CA Bar No. 352565)
Crown Quadrangle, 559 Nathan Abbott Way
Stanford, California 94305-8610
Telephone: (650) 725.8571
Facsimile: (650) 723.4426

Attorneys for Amici Curiae

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Cases

Constitutions and Statutes

Other Authorities

INTERESTS OF *AMICI CURIAE*

Scientists and university professors Dr. Peter Moyle, Dr. Theodore Grantham, and Dr. Karrigan Börk submit this *amicus* brief pursuant to Federal Rule of Appellate Procedure 29.[1] *Amici* are preeminent experts in the biology, ecology, and conservation of California's anadromous fish and have an abiding interest in ensuring that judicial interpretations of California Fish and Game Code section 5937 reflect the best available ecosystem science.[2]

INTRODUCTION

California's fish are in peril. In part due to an expansive network of dams across the state, 74 percent of California's trout and salmon are at risk of extinction over the next century. Peter B. Moyle et al., *State of the Salmonoids: Status of California's Emblematic Fishes* 18 (2017). One such imperiled species is the South-Central California Coast Steelhead Trout ("SCCC Steelhead"), a pastel-colored anadromous fish that relies on flowing waters to migrate to and from the Pacific. The SCCC Steelhead has been listed as "threatened" under the

[1] All parties have consented to this submission. *Amici* certify that no party or its counsel authored this brief in whole or in part and no party, counsel, or other person made a monetary contribution intended to fund its preparation or submission. Stanford Law School students Evan Lehmann and Zoe Robertson, as part of their Environmental Law Clinic work, contributed significantly to the drafting of this brief.

[2] *See* Addendum for additional information on *Amici.*

Endangered Species Act since 1997. 62 Fed. Reg. 43,937 (Aug. 18, 1997). In 2005, the National Marine Fisheries Service determined that Arroyo Grande Creek, where the County of San Luis Obispo ("the County") owns and operates the Lopez Dam, constitutes "critical habitat" that is "essential for conservation" of the SCCC Steelhead. 70 Fed. Reg. 52,488, 52,507 (Sept. 2, 2005).

Two decades later, the SCCC Steelhead remains dangerously imperiled, in the critical Arroyo Grande Creek watershed and beyond. *See* NOAA Fisheries, *South-Central California Coast Steelhead Maintain Threatened Listing Status: Prolonged drought and passage barriers reflect urgency of species recovery actions* (May 2, 2023) (alterations to SCCC Steelhead watersheds "have led to sharp declines in steelhead populations," particularly in watersheds with dams, like Arroyo Grande Creek, and identifying flow restoration as a recovery priority). Yet the County still has not fulfilled its unconditional legal obligation under California Fish and Game Code section 5937 ("Section 5937") to allow sufficient water through Lopez Dam to protect downstream fish. Accordingly, the trial court properly issued a preliminary injunction ordering the County to take immediate actions to protect the SCCC Steelhead.

In its preliminary injunction ruling, the district court relied on both Section 5937 and the federal Endangered Species Act, but this Court can affirm based on Section 5937 alone. Section 9 of the Endangered Species Act prohibits the "take"

of threatened species like the SCCC Steelhead and requires plaintiffs to show that a defendant's actions injure or kill members of the species. *See* 50 C.F.R. § 17.3 (defining "harm" for purpose of "take" under 16 U.S.C. § 1538). Section 5937 is broader and more protective than federal law. It requires that a dam owner "allow sufficient water at all times . . . to pass over, around or through the dam, to keep in good condition any fish that may be planted[3] or exist below the dam." Cal. Fish & Game Code § 5937. Thus, state law requires protection for "any fish" below a dam – not just species protected by the Endangered Species Act. And under Section 5937, dam owners must not only avoid harming these fish, but must affirmatively ensure that they are kept in "good condition," more than what the Endangered Species Act requires. State law, in other words, is extremely protective of California's fish and readily supports the district court's finding of likelihood of success on the merits here.

Given this robust legislative directive, the Court can and should conclude that no further balancing of equities or the public interest is required at the preliminary injunction stage for a Section 5937 claim – for the same reasons that such balancing is not appropriate under the Endangered Species Act. *See TVA v. Hill*, 437 U.S. 153, 174-94 (1978); *Cottonwood Env't L. Ctr. v. U.S. Forest Serv.*,

[3] For recreational or other purposes, hatchery-raised fish are sometimes introduced – i.e., "planted" – in waterbodies where they are not native.

789 F.3d 1075, 1090-91 (9th Cir. 2015); *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 422 F.3d 782, 793-94 (9th Cir. 2005). Section 5937 is a statutory expression of California's long history and strong policy of preserving its fish resources. By requiring that dam owners keep all downstream fish in good condition, the Legislature has already balanced the equities and prioritized protecting fish as in the public interest.

What constitutes "good condition" under Section 5937 is a scientific question that must be evaluated on a case-by-case basis. Broadly, "good condition" means there must be "healthy individual fish in healthy populations that [are] part of healthy biotic communities." Peter B. Moyle et al., *Fish Health and Diversity: Justifying Flows for a California Stream* ("*Fish Health and Diversity*"), 23 Fisheries 6, 6 (1998). Where a dam impacts a non-native or stocked fish species, population levels immediately prior to the dam's construction may provide the only workable proxy for good condition. But for the native SCCC Steelhead in Arroyo Grande Creek, the analysis is more complex. Abundant evidence before the trial court in this case reveals that Lopez Dam, which cut off SCCC Steelhead access to the highest quality riparian habitat in Arroyo Grande Creek, has dramatically altered the remaining downstream ecology, flow regime, and geomorphology. That evidence strongly suggests that the County has failed to

keep the now-very-small SCCC Steelhead cohort that occupies Arroyo Grande Creek in good condition.

ARGUMENT

I. Section 5937 Reflects California's Deep History of Protecting Fish Resources and Evinces a Robust Legislative Priority for Protecting Fish Impacted by Dam Operations.

A. California has a storied commitment to protecting its fish.

In *TVA v. Hill*, 437 U.S. 153, 174 (1978), the Court held that the Endangered Species Act's history "indicates beyond doubt that Congress intended endangered species to be afforded the highest of priorities." So too does the history of Section 5937, which codified an unconditional legislative mandate to release enough water from dams to keep downstream fish, both native and planted, in good condition. And like the Endangered Species Act, Section 5937 was not enacted "on a clean slate." *TVA*, 437 U.S. at 174. Behind its mandate is a long history of California putting fish first.

Fish are the ultimate common pool resource. The California Supreme Court has long confirmed that "title to and property in fish within the waters of the state are vested in the state of California and held by it in trust for the people of the state." *People v. Monterey Fish Prods. Co.*, 195 Cal. 548, 563 (1925). As the California Supreme Court explained nearly 130 years ago:

> The dominion of the state, for the purposes of protecting its sovereign rights in the fish within its waters, and their preservation for the

> common enjoyment of its citizens . . . extends to all waters within the state, public or private, wherein these animals are habited or accustomed to resort for spawning or other purposes, and through which they have freedom of passage to and from the public fishing grounds of the state. To the extent that waters are the common passageway for fish, although flowing over lands entirely subject to private ownership, they are deemed for such purposes public waters, and subject to all laws of the state regulating the right of fishery.

People v. Truckee Lumber Co., 116 Cal. 397, 400-01 (1897).

More recently, the Court held that the state has an "affirmative duty" to protect the public trust in California's "streams, lakes, marshlands and tidelands" – and the fish that live there – for the benefit of all Californians. *National Audubon Society v. Superior Ct.*, 33 Cal. 3d 419, 441, 446 (1983); *see also Marks v. Whitney*, 6 Cal. 3d 251, 259 (1971) (noting that traditional public trust easements were defined "in terms of navigation, commerce, and fisheries" and the "right to fish, hunt, bathe, swim, and for other recreational purposes").[4] The courts have uniformly recognized the foundational public interest in protecting the state's fish and wildlife. *See, e.g.*, *Zack's, Inc. v. City of Sausalito*, 165 Cal. App. 4th 1163,

[4] California's early public trust cases drew on the seminal U.S. Supreme Court decision in *Illinois Central Railroad Co. v. Illinois*, 146 U.S. 387, 452 (1892), which held that the lands under Lake Michigan were "held in trust for the people of the state, that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties." *See, e.g.*, *People v. California Fish Co.*, 166 Cal. 576, 584 (1913).

1175 (2008) ("[T]he public rights of commerce, navigation, fishery, and recreation are so intrinsically important and vital to free citizens that their unfettered availability to all is essential in a democratic society."); *Ctr. for Biological Diversity, Inc. v. FPL Grp., Inc.*, 166 Cal. App. 4th 1349, 1363 (2008) (noting that "birds and wildlife . . . are natural resources of inestimable value to the community as a whole" and that their "protection and preservation is a public interest that is now recognized in numerous state and federal statutory provisions").

Against these background legal principles, California has consistently adopted robust fish protections. Less than two years after California was admitted to the Union, the Legislature committed to defending fish within state borders: Anyone who obstructed salmon migration, it declared, "shall be guilty of a misdemeanor." 1852 Cal. Comp. Laws 135. In 1910, the people of California adopted – separate from the public trust doctrine inherent in statehood – a constitutional right to fish. Cal. Const. art. I, § 25. That amendment moved through the Legislature in just over two months, and voters then approved it overwhelmingly – essentially a voter "declaration that fishing is important and that access to places to fish is of paramount concern." Francis Coats & Karrigan Bork, *California's Constitutional Right to Fish*, 51 Envtl. L. 1085, 1098 (2021).

Section 5937's origins likewise date to the late 1800s, when the Legislature first imposed flow requirements on California dam operators to protect

downstream fish populations. The 1870 Fish Act required dam owners to maintain fish passageways ("fishways") so that at "all seasons of the year, fish may ascend above such dam." 1870 Cal. Stat. 663-64. Because fishways require flowing water to operate, the 1870 Act implicitly created a year-round minimum flow requirement for dams. The 1880 Fish Act reaffirmed this de facto requirement, mandating that fishways be kept "in repair, and open, and free from obstructions to the passage of fish at all times." 1880 Cal. Stat. 122. It added the regulatory infrastructure to enforce these obligations, too. Specifically, the statute required the Fish and Game Commission to examine all dams in the state that were "naturally frequented by . . . migratory fish" and order fishway construction when fish populations could not otherwise ascend them. *Id* at 121-22.

But as California's water needs grew, compliance faltered. In the 1890s, reports emerged of dams and their water diversions running the state's rivers dry. Cal. State Bd. of Fish Comm'rs, *Biennial Report for the Years 1891-92*, at 22 (1892). For decades, dam owners unlawfully prioritized their preferred water uses over the fish populations living below. In 1912, the Fish and Game Commission lamented that few companies "made it a rule to allow sufficient water to pass through their dams to keep the fish in good condition." Cal. Fish & Game Com'n, *Twenty-Second Biennial Report For the Years 1910-12*, at 43 (1913). The Commission had had enough; it urged the Legislature to mandate, explicitly this

time, minimum below-dam flows year-round to protect fish across the state. Cal. Fish & Game Com'n, *Twenty-Third Biennial Report For Years 1912-1914*, at 32-33 (1914).

In 1915, the Legislature heeded the call. It imposed the state's first "good condition" requirement, amending section 637 of the Penal Code to read: "[T]he owners or occupants of any dam . . . shall allow sufficient water at all times to pass through such fishway to keep *in good condition* any fish that may be planted or exist below said dam." 1915 Cal. Stat. 820 (emphasis added). The requirement to protect fish was now explicit and without exception.

This uncompromising "good condition" requirement has since migrated to Section 5937. In 1933, the Legislature transferred Penal Code section 637 to the newly-minted Fish and Game Code section 525. 1933 Cal. Stat. 443; *see also* Felix E. Smith, *Purpose and Intent of Fish and Game Code Section 5937, The Public Trust and Good Condition* 4 (2014). Four years later, the Legislature broadened that section, clarifying that the "good condition" requirement applied to all dams, regardless of the presence of a fishway.[5] 1937 Cal. Stat. 1400; Joel C. Baiocchi, *Use It or Lose It:*

[5] The architecture of some dams prevents the creation of a fishway, but the Legislature recognized that the "good condition" requirement should apply to those dams, too. It added that "in the absence of a fishway," "owners of any dams shall . . . allow sufficient water to pass over, around or through the dam, to keep in

California Fish and Game Code Section 5937 and Instream Fishery Resources, 14 U.C. Davis L. Rev. 431, 434 (1980). To this day, that amended language remains in Section 5937, where the Legislature recodified section 525 in 1957. 1957 Cal. Stat. 1399; Robert B. Firpo, *The Plain "Dam!" Language of Fish & Game Code Section 5937: How California's Clearest Statute Has Been Diverted from Its Legislative Mandate*, 14 Hastings W.-Nw. J. Env't L. & Pol'y 1349, 1354 (2008). The Legislature has not touched Section 5937 in the 68 years since its codification, including in response to subsequent judicial determinations that agencies and courts must adhere to its mandate. And the California Attorney General has affirmed that those "seeking to appropriate water by means of a diversion dam must allow sufficient water at all times to pass through a fishway or through the dam in the absence of a fishway in order to keep in good condition any fish that may exist below the dam" because the "clear legislative intent" behind Section 5937 "was to protect California's fishery resources." 57 Ops. Cal. Att'y Gen. 577, 582 (1974).

In short, Section 5937's language and history reflects California's unwavering commitment to protecting its fish resources and the

---

good condition any fish that may be planted or exist below the dam." 1937 Cal. Stat. 1400.

Legislature's intent to privilege fishes' "good condition" above other beneficial uses of dams. If there were any doubt, the Legislature eliminated it in 2003 when it declared that "the protection and conservation of the fish and wildlife resources of this state are of utmost public interest." Cal. Fish & Game Code § 1600.[6]

B. Because the California Legislature has already balanced the equities and prioritized the public interest in favor of protecting fish under Section 5937, this Court need not do so.

Ordinarily, plaintiffs must satisfy four criteria to obtain a preliminary injunction in federal court: (1) they are likely to prevail on the merits, (2) they are likely to face irreparable harm without a preliminary injunction, (3) the balance of the parties' equities tips in their favor, and (4) an injunction would be in the public interest. *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008). But when the legislature intervenes – as here – to "guide or control the exercise of the courts' discretion," that test gets modified. *Cottonwood*, 789 F.3d at 1089-90 (citing *Amoco Prod. Co. v. Village of Gambell, AK*, 480 U.S. 531, 542 (1987)). In considering an injunction under the Endangered Species Act, for instance, courts may not balance the equities or public interest because Congress already struck any balance in favor of "affording endangered species the highest of priorities." *TVA*,

[6] The Legislature has expressed particular concern about the dramatic decline in native salmon and steelhead trout. Cal. Fish & Game Code § 6901.

437 U.S. at 194.[7] The Supreme Court emphasized that while courts are tasked with judicial review, "it is equally – and emphatically – the exclusive province of the Congress not only to formulate legislative policies and mandate programs and projects, but also to establish their relative priority for the Nation." *Id.* An identical analysis applies to Section 5937.

To determine whether to apply the final two *Winter* factors, courts "look to the underlying statute." *Cottonwood*, 789 F.3d at 1090. In *TVA v. Hill*, the Court relied heavily on the Endangered Species Act's use of the word "shall" in finding an unambiguous "statutory directive" to conserve species. 437 U.S. at 180 (emphasizing that "all Federal departments and agencies *shall* seek to *conserve endangered species*"). Section 5937 uses the same language: It says dam owners "*shall* allow sufficient water . . . to pass over, around or through the dam, to *keep in good condition any fish* that may be planted or exist below the dam." Cal. Fish & Game Code § 5937 (emphasis added). This statutory directive is similarly "unconditional." *San Luis & Delta-Mendota Water Auth. v. Haugrud*, 848 F.3d 1216, 1234 (9th Cir. 2017).

[7] The Endangered Species Act is not the only context where courts' *Winter* discretion is limited. *See, e.g.*, *Virtual Media Grp., Inc. v. City of San Mateo*, Case No. 01-1089, 2002 WL 485044, at *3 (N.D. Cal. Mar. 27, 2002), aff'd by 66 Fed. Appx. 129 (9th Cir. 2003) ("[A] legislatively declared public nuisance constitutes a nuisance per se against which an injunction may issue without allegation or proof of irreparable injury.").

An unconditional requirement to release water for fish necessarily deprioritizes other possible uses, even the drinking water uses that the County claims, without evidence,[8] are threatened by an injunction here. "[C]ompliance with a rule requiring the release of sufficient water to keep fish alive necessarily limits the water available for appropriation for other uses." *California Trout, Inc. v. State Water Res. Control Bd*. ("*Cal Trout I*"), 207 Cal. App. 3d 585, 601 (1989). For this reason, Section 5937's unconditional requirement "set[s] forth" the state's "priority given to the preservation of fish." *Id.* So, while many interests may be at play, the statute's language strikes the balance in favor of the fish.

This legislative priority limits agencies' and courts' discretion. They may not balance competing interests under *Winter* because "the Legislature has already balanced the competing claims for water from the streams affected by section 5946 [which incorporates and reinforces the applicability of Section 5937 to permits to appropriate water in portions of the Eastern Sierra][9] and determined to give priority

[8] As the District Court observed, the County's supporting declarations stated that some of the County's drinking water comes from Lopez Dam, but failed to "explain how the proposed relief hinders its ability to supply water." Order Granting in Part Plaintiffs' Motion for Preliminary Injunction ("District Court Order"), at 24-25.

[9] As discussed further below, *Cal Trout I* and *Cal Trout II* challenged the State Water Board's failure to comply with Section 5937 for diversions from the Mono Lake basin, via a claim to enforce section 5946's statutory command that any permit or license to appropriate water from the district must be conditioned on full compliance with Section 5937. The Legislature's purpose in enacting section 5946 was "manifest," the court explained, from its legislative history, which declared it

to the preservation of their fisheries." *California Trout, Inc. v. Superior Ct.* ("*Cal Trout II*"), 218 Cal. App. 3d 187, 201 (1990); *see also Cal Trout I*, 207 Cal. App. 3d at 625, 632 (holding that "[t]he Legislature, not the Water Board, is the superior voice in the articulation of public policy concerning the reasonableness of water allocation" and that courts "have no warrant to override the Legislature's rule in section 5946 concerning that balance"); *Bring Back the Kern v. City of Bakersfield*, Case No. BCV-22-103220, 2023 WL 7346235, at *7 (Cal. Super. Ct. Oct. 30, 2023) (holding that case law "very clearly confirms that Section 5937 was deliberately adopted by the State Legislature after balancing the competing uses of water and is enforceable as a legislative mandate").

In *Cottonwood*, this Court recognized that "the ESA strips courts of at least some of their equitable discretion in determining whether injunctive relief is warranted" because Congress "afford[ed] first priority to the declared national policy of saving endangered species." 789 F.3d at 1090 (quoting *TVA*, 437 U.S. at 185). The same logic applies to Section 5937, which strips courts of discretion to second-guess the Legislature's clear priority for keeping fish below dams in "good condition." *Bring Back the Kern*, 2023 WL 7346235, at *10 (finding, after surveying Section's 5937's history and the cases interpreting it, that courts have

---

necessary "to prevent further destruction of fish life" in the district and protect the area's recreation-dependent economy. *Cal Trout I*, 207 Cal. App. 3d at 601.

"no jurisdiction to override the State Legislature and re-weigh the competing interests when it comes to addressing the underlying, substantive issue"). Accordingly, this Court need not consider the final two *Winter* factors. But even if it does, the public interest in saving the highly imperiled SCCC Steelhead from extinction, the high likelihood of Plaintiffs' success on the merits of their Section 5937 claim, and the County's failure to demonstrate harm support the trial court's decision.

II. Appellant's Argument that Historic Levels Define "Good Condition" Is Scientifically and Legally Erroneous.

The district court correctly held that Plaintiffs were likely to succeed on the merits under Section 5937. District Court Order, at 22-23. On appeal, the County argues that "[t]he California courts interpret the term 'good condition' under Section 5937 to mean maintaining the fish below the dam at the historical level present prior to the construction of a dam." Opening Br. at 26. If the SCCC Steelhead population was in poor condition before the dam, it claims, it need not restore the population to "good condition." This argument is wrong.

The County cites *Cal Trout II* for this sweeping position. But, as discussed below, that decision did not define the phrase "good condition" generally – or, frankly, at all. And since 1990, when *Cal Trout II* was decided, no court or agency has applied the "history fishery" language to Section 5937's "good condition"

requirement.[10] Nor, from a scientific perspective, is it possible to articulate the kind of universal interpretation that the County urges. To the contrary, the determination of whether a particular fish species in a particular watershed is in "good condition" involves a complex, multi-tiered evaluation of individual, population, and community health. For a native species struggling to survive, like the SCCC Steelhead, that assessment is not the same as merely estimating how many fish existed immediately before a dam's construction in a degraded watershed.

A. The County misapplies *Cal Trout II*, which used "historic fishery" as a "good condition" proxy for one creek's previously stocked trout fishery that had been eliminated by water diversions.

The circumstances that led to the *Cal Trout* line of cases were unique and distinct from the facts here. Like other waterbodies in the Eastern Sierra, Mono Lake and the tributaries that feed it were historically fishless, but trout were

[10] In *Natural Resources Defense Council v. Patterson*, 333 F. Supp. 2d 906 (E.D. Cal. 2004), the district court held that the U.S. Bureau of Reclamation was subject to and had violated Section 5937 with respect to its operation of Friant Dam. In that case, it was undisputed that the Bureau released no water from the dam and thus had not released sufficient water to maintain historic fisheries. *Id*. at 924-25 (citing *Cal Trout II*). Accordingly, the court granted plaintiffs' motion for summary adjudication as to liability, but did not attempt to define what would satisfy Section 5937's "good condition" requirement. *Id.* at 925. Notably, in settlement, the parties ultimately applied the approach presented here, not a "historic fishery" standard. Nathan Matthews, *Rewatering the San Joaquin River: A Summary of the Friant Dam Litigation*, 34 Ecology L. Q. 1109, 1130-31 (2007).

introduced around the turn of the twentieth century to create a recreational fishery. After acquiring water rights to the lake and four tributaries, the City of Los Angeles obtained permits in 1940 to appropriate water for transport to the Los Angeles area. *National Audubon Society*, 33 Cal. 3d at 427-28. After it completed its aqueduct project in 1970, the City was able to divert the full flow of the four tributaries, causing the lake to shrink over the next decade and leading concerned parties to file *National Audubon Society*, which alleged violation of the public trust doctrine. *Id.* at 428-29. Concluding that the State Water Resources Control Board ("State Water Board") had failed to consider the public trust doctrine in granting the permits, the California Supreme Court issued a landmark decision ordering reconsideration of the City's water permits and reallocation of diverted water to address ecosystem impacts. *National Audubon Society*, 33 Cal. 3d at 448, 453. In doing so, the Court noted that "[t]his opinion is but one step in the eventual resolution of the Mono Lake controversy." *Id.* at 452.

Sure enough, two years later, concerned parties sued again. This time, they sought to rescind the City's water right licenses on the separate ground that these licenses violated Section 5937 (via section 5946) by failing to include a condition for the release of water to protect stocked trout in the tributaries feeding the lake. *Cal Trout I*, 207 Cal. App. 3d at 592. As explained above, the *Cal Trout I* court ultimately found that the State Water Board had a non-discretionary duty to

comply with the mandate of Section 5937 (via section 5946). *Id.* at 631. The court thus directed the State Water Board to attach appropriate conditions to the existing licenses to satisfy Section 5937. *Id.* at 632.

But the litigation did not end there. On remand, the State Water Board indicated its intent to conduct a single proceeding to comply with both its public trust obligations as to the level of Mono Lake (as required by *National Audubon Society*) and its Section 5937 obligations to maintain fish in the lake's four tributaries in "good condition" (as required by *Cal Trout I*). *Cal Trout II*, 218 Cal. App. 3d at 196-97. The Board also argued that it intended to use the Instream Flow Incremental Methodology ("IFIM") for determining the flows necessary to protect fish, and that doing so would take years. *Id.* at 197-98.

As to the delay in IFIM modeling,[11] Darrell Wong, a fishery biologist with the Department of Fish and Game (now the Department of Fish and Wildlife), attested that while IFIM studies for the tributary creeks had not yet been completed, "other techniques are available that would allow me to make preliminary estimates of the flows which would be acceptable to maintain desirable fisheries and aquatic habitat." *Id.* at 198-99. "These can be completed much more

[11] The court also rejected the Water Board's plea for delay based on its desire to combine the analyses required by *National Audubon Society* and *Cal Trout I*. The court reasoned that the environmental values supported by the lake and the condition of fish in its tributaries were "convergent," and both were supported by reducing diversions from the creeks. 218 Cal. App. 3d at 206.

quickly," Mr. Wong explained, "because they do not require the extensive collection of field data required by the IFIM studies. Using these techniques, I could provide interim flow recommendations in thirty days or less." *Id.* at 199. Largely on this basis, the court held:

> There is nothing in the law which precludes the Water Board from imposing the condition as we directed [in *Cal Trout I*], and thereafter expeditiously hearing and setting flow rates "to . . . restore the uses protected by [section 5946]" based on approximate data presently available. Once the best approximate compliance with section 5946 had been assured the Water Board could thereafter proceed with more elaborate study looking to refinement of those rates in subsequent proceedings.

Id. at 209.

Critically for the present case, the City of Los Angeles argued that it needed more direction as to two of the tributaries – Walker and Parker Creeks – because long disuse "complicates the calculation of their appropriate flow rates." *Id.* at 210. For Parker Creek specifically, the City claimed that "the absence of an existing fish population makes it hard to know how much water ought to be released." *Id.* But to the court, it was simple. All Mono Lake tributaries, including Parker Creek, had historically held "good trout populations." *Cal Trout I*, 207 Cal. App. 3d at 596. The court accordingly responded to the City's argument with a single sentence: "The answer is – enough to restore the historic fishery." *Cal Trout II*, 218 Cal. App. 3d at 210. It continued, "[w]e are given no reason to suppose that the methodology advanced by . . . the [Darrell] Wong

declaration is unsuited to supplying an approximation of this amount." *Id.* There is no other mention of "historic fishery" in the opinion.

To fashion a remedy the second time around, the *Cal Trout II* court adopted an approach "acceptable to all the litigants":

> As we have noted, the function of balancing of the public interest between contending uses ordinarily performed by the Water Board is not applicable because the balancing has already been accomplished by the Legislature. Moreover, as related, the problem is narrowed by the fact that the requisite administrative expertise of determining the streamflows necessary to establish and maintain fisheries resides principally in the Department of Fish and Game. . . . In view of the history of this litigation, the positions taken by the parties, the importance of the matters in issue, and *the need for prompt action*, the appropriate method to obtain compliance is to specify beyond possibility of cavil that the trial court shall determine and impose interim release rates taking into consideration the recommendations of the Department of Fish and Game.

Id. at 211 (emphasis added).

Two points about *Cal Trout II* merit emphasis. First, the court's single use of the phrase "historic fishery" was specific to the case's posture and facts. Because the court had already held that the relevant tributaries once sustained "good trout populations," *Cal Trout I*, 207 Cal. App. 3d at 596, restoring the "historic fishery" served as an expedient proxy for "good condition" of the fishery at issue – and provided a simple response to the City's claim that it was "hard to know how much water should be released." *Cal Trout II*, 218 Cal. App. 3d at 210. But while that approach was logical where all parties agreed the historic fishery

was good prior to flow diversions, it fails where the parties disagree about the fishery's historic condition, or where – as here – the defendant argues that a dwindling historic fishery should excuse it from its legal mandate to keep fish in *good* condition. Indeed, a listed species facing the ongoing threat of extinction is plainly not in "good condition," regardless of when its population declined.

Second, the objective in *Cal Trout II* was to reestablish a planted recreational fishery for non-native brown trout – the remedy that the petitioners themselves sought. *See* Declaration of John L. Turner, at 2 (1986) (explaining, in *Cal Trout I* trial court proceedings, that petitioners requested "flows sufficient to restore the fisheries that existed downstream . . . prior to the diversions"). Using historic fish counts for a robust recreational fishery made sense in that case, but it does not follow here, where Plaintiffs aim to sustain a declining wild fish population, not a recreational fishery. "Fishery" is an activity leading to the harvesting or use of a fishery resource. NOAA Fisheries, *Pacific Salmon and Steelhead Fisheries Management Glossary* (2022). The "fish" that Section 5937 protects, however, include mollusks, amphibians, and other creatures for which the term "historic fishery" is meaningless. Cal. Fish & Game Code § 45; *Cal Trout I*, 207 Cal. App. 3d at 605 n. 11. And the State Water Board itself has relied on Section 5937 even where there was no historic fishery at all. *See, e.g.*, *In re Walker River Irrigation District*, No. WR 90-16, 1990 WL 263415, at *3 (Cal.

State Water Res. Control Bd. 1990) (Section 5937 mandated the "maintenance of a highly valued fishery consisting most importantly of an introduced, and periodically restocked, species"). In many circumstances – like those present here – "historic fishery" is not a proxy for "good condition."

B. The evaluation of whether SCCC Steelhead below Lopez Dam are in "good condition" should be based on individual, population, and community health, not some undefined notion of "historic fishery."

Regardless, no state agency has simply relied on pre-construction fish numbers to assess "good condition," as Defendant suggests here. To the contrary, each watershed and fish population is different and must be evaluated on an individualized basis from an ecosystem perspective.

In response to *Cal Trout II*, for example, the State Water Board held evidentiary hearings to determine Section 5937-compliant flow rates in the Mono basin. Public Hearing Tr. ("Mono Lake Hearing"), *In re City of Los Angeles and Mono Lake Tributaries*, No. 1631, 1994 WL 16804395 (State Water Res. Control Bd. 1994). It relied on briefing and testimony of the Department of Fish and Game because, as the *Cal Trout II* court emphasized, "in the statutory scheme by which the Water Board is to consider the means by which to protect fisheries . . . the Department of Fish and Game is recognized as having a primary expertise." 218 Cal. App. 3d at 210; *see also In re Big Bear Mun. Water Dist.*, No. WR 95-4, 1995 WL 92133, at *19 (Cal. State Water Res. Control Bd. 1995) (recognizing that the

Department of Fish and Game "has both the primary expertise of the State in dealing with fish and wildlife issues and the primary responsibility for interpreting the Fish and Game Code").

Department of Fish and Game biologist Darrell Wong, who had worked in the Mono basin for decades and on whose testimony the *Cal Trout II* court relied, testified that "it is a fact that really maintaining good condition, from a biological perspective, requires maintaining good conditions for the entire stream ecosystem." Mono Lake Hearing at 6. To keep the brown trout in good condition in the Mono basin, Mr. Wong explained, the Department "seeks to maintain *natural systems of fish and wildlife* with self-sustaining populations." *Id.* at 7 (emphasis added). He continued:

> Ideally, you have good numbers of different age classes, which results in a good stable population, and habitat should not be artificially limited. So there's a real need with whatever flow regime is in a stream to maintain adequate physical, biological, and chemical parameters which together constitute the ecology of the stream. The whole stream ecosystem.
>
> The ecological health of the stream is dependent on aquatic and riparian ecosystems together. We've heard a lot of testimony regarding riparians so far. This requires natural stream processes with well-vegetated banks and a diverse riparian system. There's general agreement among researchers that there is a linkage between stream ecology and fish populations.

Id. at 8. The California Department of Fish and Game's briefing affirmed this perspective, making clear that "[t]he 'good condition' requirement must

include the protection and maintenance of the physical, biological, and chemical conditions which interact to form the stream ecosystem." Cal. Dep't of Fish & Game Closing Br. at 5, *In re City of Los Angeles and Mono Lake Tributaries*, 1994 WL 16804395. That is, when a stream system is in good condition, the fish in the stream will be too. Mono Lake Hearing at 9.

Building on the Department of Fish and Game's ecosystem approach to the "good condition" assessment, Dr. Moyle and three other fisheries biologists subsequently developed a more detailed three-tiered framework for applying Section 5937. Written Testimony of Peter B. Moyle before Cal. State Water Res. Control Bd. ("Moyle Testimony"), at 2-3 (Oct. 14, 2003); Moyle et al., *Fish Health and Diversity*, at 7, 10-12; *see also* Theodore E. Grantham & Peter B. Moyle, *Assessing Flows for Fish Below Dams: A Systematic Approach to Evaluate Compliance with California Fish and Game Code 5937* ("*Assessing Flows*"), U.C. Davis Center for Watershed Science, at 7 (2014). This framework requires analysis at the individual, population, and community levels and can be used to protect (1) an unusual assemblage of native species, (2) fisheries for non-native game fish (like the brown trout in Mono), and (3) anadromous fish (like the SCCC Steelhead in Arroyo Grande Creek). Moyle Testimony at 2. To satisfy Section 5937, a fish must be in good condition *at all three levels*. *Id.*

For each level, "good condition" means:

- *Individual*: individual fish (1) have a "robust body conformation," (2) are "relatively free of disease, parasites, and lesions," (3) have "reasonable growth rates for the region," and (4) "respond in an appropriate manner to stimuli."

- *Population*: fish populations have "(1) multiple age classes (evidence of reproduction), (2) a viable population size, and (3) healthy individuals (as above)."

- *Community*: fish communities "(1) [are] dominated by co-evolved species, (2) [have] a predictable structure as indicated by limited niche overlap among the species and by multiple trophic levels, (3) [are] resilient in recovering from extreme events, (4) [are] persistent in species membership through time, and (5) [are] replicated geographically."

Moyle et al., *Fish Health and Diversity*, at 10-12; *see also* Grantham & Moyle, *Assessing Flows*, at 7.

Although few courts since *Cal Trout II* have waded into Section 5937's waters, the three-tiered framework has become the "most broad-based and applicable standard for assessing [Section] 5937's good condition component." Karrigan S. Börk et al., *The Rebirth of California Fish & Game Code Section 5937*: *Water for Fish*, 45 U.C. Davis L. Rev. 809, 907 (2012). For instance, in two Section 5937 cases challenging dam owners' diversion of water from Putah Creek, the trial court essentially adopted this framework based on Dr. Moyle's testimony. *Id.* at 871; Moyle et al., *Fish Health and Diversity*, at 7, 9-12. Likewise, settlement of the Section 5937 suit against the Bureau in the Friant Dam case (see footnote 9 above) embraced the individual/population/community framework, again citing Dr.

Moyle's expert testimony. *See* Nathan Matthews, *Rewatering the San Joaquin River*, at 1131.

The State Water Board, too, has now embraced this three-tiered approach. In its 2019 decision amending the Bureau of Reclamation's permits for the Cachuma Project on the Sana Ynez River below Bradbury Dam, the Board expressly adopted and applied the three-tiered framework to achieve sustainable production of steelhead in the Santa Ynez River system, finding that it was "a reasonable and proper interpretation of 'good condition,' as the term is used in section 5937." *In re U.S. Bureau of Reclamation*, No. WR 2019-0148, at 53-59 (State Water Res. Control Bd. 2019). In doing so, it explained that Department of Fish and Wildlife scientist Dr. Robert Titus and the water recipients' fisheries biologist both supported the use of this framework. *Id.* at 53.

The Bradbury Dam watershed at issue there and the Lopez Dam watershed are strikingly similar. The Santa Ynez River is a spawning ground and nursery stream of "major importance" for the Southern California Steelhead population (which is distinct from and lives south of the SCCC Steelhead), just as Arroyo Grande Creek is a core recovery area for the SCCC Steelhead. *Id.* at 57. Although there was some conflicting testimony in the Cachuma Project proceedings as to viable population size for the Southern California Steelhead, and historic population estimates were relevant to that issue, the Water Board concluded that

current low population numbers fell short of Dr. Moyle's population criteria for good condition. *Id.* at 58. Of note, the Water Board agreed that "the presence of extensive habitat for all life history stages over long reaches of the stream" is a "reasonable surrogate" for an actual population estimate and that there was not enough of such habitat below the Bradbury Dam to maintain the population in good condition. *Id.* The evidence before the trial court here supports a similar conclusion for the SCCC Steelhead in Arroyo Grande Creek.

The holistic ecosystem approach used in the three-tiered framework is critical to evaluating "good condition" because "more water is not always better for fish" and "more water alone is rarely sufficient" to sustain healthy fish populations. Ellen E. Hanak et al., *Myths of California Water: Implications and Reality*, 16 Hastings W.-Nw. J. Env't. L. & Pol'y 3, 41 (2010). This is so because fish "adapted to cold, clear waters, such as salmonids, do not benefit from higher release of warm, nutrient-rich water" and because "water without sufficient physical habitat does little good." *Id*. at 41-42 (noting further that "[h]abitat needs connectivity and complexity, along with the ability to adjust to changing conditions"). In short, "[n]ative aquatic species need more than water to prosper," including "abundant and complex physical habitat" and "high water quality." *Id*. at 42. Consistent with these scientific principles, the National Marine Fisheries Service recently applied Dr. Moyle's three-tiered framework to assess the

environmental impacts of granting permits to take threatened coho salmon in the Shasta River watershed. *Env't Prot. Info. Ctr. v. Van Atta*, 692 F. Supp. 3d 879, 900 (N.D. Cal. 2023).

In sum, the County's reliance in this case on conflicting evidence about SCCC Steelhead abundance immediately prior to construction of Lopez Dam is scientifically and legally unsound. Basic conservation science tells us that whether a native fish species like SCCC Steelhead is in "good condition" is a complex question requiring a multifaceted ecosystem assessment. The "historic fishery" language used in *Cal Trout II* as a proxy for an extirpated non-native brown trout recreational fishery in the Mono Lake watershed does not begin to address that complexity.

CONCLUSION

For these reasons, *Amici* support affirmance.

DATED: March 14, 2025

Respectfully submitted,

ENVIRONMENTAL LAW CLINIC
Mills Legal Clinic at Stanford Law School

By: */s/ Deborah A. Sivas*
Deborah A. Sivas

Attorneys for Amici Curiae

CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32(a)(7)(c) and Ninth Circuit Rule 32-1, I certify that the attached brief is proportionately spaced, has a typeface of 14 points, and contains 6,989 words, excluding those parts of the brief exempt under Rule 32(a)(7)(B)(iii).

/s/ Deborah A. Sivas
Deborah A. Sivas

ADDENDUM

Dr. Peter Moyle is a Distinguished Professor Emeritus at the University of California, Davis Center for Watershed Sciences. Since 1969, he has studied the ecology and conservation of freshwater and anadromous fishes. A significant portion of his more than 160 publications have focused on the impacts of dams, diversions, and other factors on anadromous fishes in California. Accordingly, Dr. Moyle's work has enjoyed wide use by courts, agencies, and political entities alike. California courts have repeatedly relied on Dr. Moyle's testimony as an expert witness to determine appropriate flow releases. *See, e.g., United States v. Sweeney*, No. 217CV00112, 2022 WL 17555626, at *9 (E.D. Cal. Dec. 9, 2022) (describing Dr. Moyle as a "highly esteemed fish scientist"). The California Department of Fish and Game and the National Marine Fisheries Service have adopted Dr. Moyle's definition of "good condition" under California Fish and Game Code Section 5937.

Dr. Theodore Grantham is an Associate Professor of Cooperative Extension in the Department of Environmental Science, Policy, and Management (ESPM) at the University of California, Berkeley. He is a freshwater ecologist with over twenty years of professional experience in river science, hydrology, and water resources management. A core focus of his work is environmental flow science—an interdisciplinary field focused on understanding the quantity and quality of river flow rates required to sustain aquatic species in their habitats. His publications

have described the effects of low flows on South-Central California Coast Steelhead Trout ("SCCC Steelhead"), quantified the flow rates needed for SCCC Steelhead passage, charted flow rate alterations, and identified the need for improved flows below dams in California. Courts have recognized Dr. Grantham and Dr. Moyle as "some of the most highly qualified subject matter experts in the country" in mitigating the harmful effects of dams on fish populations. *Bring Back the Kern v. City of Bakersfield*, No. BCV-22-103220, 2023 WL 7346235, at *11 (Cal. Super. Ct. Oct. 30, 2023).

Dr. Karrigan Börk is a Professor of Law, Co-Director of the California Environmental Law and Policy Center, and Director of the Center for Watershed Sciences, all at University of California, Davis. He holds both a Ph.D. in Ecology from the University of California, Davis, and a J.D. from Stanford Law School. Dr. Börk's work ranges from hatchery plans to manage anadromous fish populations to law review articles examining the issues involved in ecological restoration. He has written a definitive text on the history and application of Section 5937 with co-author Dr. Moyle. Karrigan S. Börk et al., *The Rebirth of California Fish & Game Code Section 5937: Water for Fish*, 45 U.C. Davis L. Rev. 809 (2012).

In this brief, *Amici* explain the unique role of Section 5937 in protecting California's fisheries, a resource of utmost public importance. In addition to

delineating the history of the statutory scheme, *Amici* describe how "good condition" has been interpreted by agencies and courts, and the ecological implications of the different interpretations that this Court may consider. They also describe how the Legislature's crafting of Section 5937 intersects with the preliminary injunction standard in this case. *Amici* thus offer an indispensable perspective on the evolution of Section 5937 as applied to this case.

RELEVANT STATUTES

Except for the following, all relevant statutes, etc., are contained in the brief or addendum of Defendant-Appellant and the brief or addendum of Plaintiffs-Appellees.

California Fish & Game Code Section 5937 – Passage of water through fishway or over dam for fish below dam

The owner of any dam shall allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam. During the minimum flow of water in any river or stream, permission may be granted by the department to the owner of any dam to allow sufficient water to pass through a culvert, waste gate, or over or around the dam, to keep in good condition any fish that may be planted or exist below the dam, when, in the judgment of the department, it is impracticable or detrimental to the owner to pass the water through the fishway.