

1 James R. Wheaton (State Bar No. 115230)
2 Lowell Chow (State Bar No. 273856)
3 Nathaniel Kane (State Bar No. 279394)
4 ENVIRONMENTAL LAW FOUNDATION
5 1222 Preservation Park Way, Suite 200
6 Oakland, CA 94612
7 Tel: (510) 208-4555
8 nkane@envirolaw.org

9 *Attorneys for Petitioners Karuk Tribe of California, Environmental Law Foundation,*
10 *Pacific Coast Federation of Fishermen’s Associations, and Institute for Fisheries Resources*

11 BEFORE THE STATE WATER RESOURCES CONTROL BOARD

12 **PETITION FOR RULEMAKING**
13 **TO SET MINIMUM FLOWS ON THE SCOTT RIVER**

14 **Pursuant to the California Constitution, Article 1, Section 3**
15 **and Government Code Section 11340.6**

16 Karuk Tribe of California,
17 Environmental Law Foundation,
18 Pacific Coast Federation of Fishermen’s Associations,
19 and Institute for Fisheries Resources,
20 *Petitioners*

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1 **I. INTRODUCTION**

2 The Scott River goes dry in most summers. Even in the wettest years, flows today are less
3 than in the driest years half a century ago. As a direct result, populations of federal Endangered
4 Species Act– and California Endangered Species Act–listed salmonid species are in constant dan-
5 ger of extinction. The State Water Resources Control Board (State Board) has the authority and
6 the duty to act to set a minimum streamflow standard for the Scott River. The State Board has
7 already established emergency regulations that set minimum streamflows during the current
8 drought. It is time to make those protections permanent.

9 By this petition, the Karuk Tribe of California (Karuk Tribe or Tribe), Environmental Law
10 Foundation, Pacific Coast Federation of Fishermen’s Associations, and Institute for Fisheries Re-
11 sources formally request that the State Board do so.

12 The low flows in the Scott and the resulting decline in fish populations are relatively recent
13 phenomena. Until the 1970s, despite the development of a thriving agricultural economy in the
14 Scott Valley, flows remained high enough even in dry years to support fisheries. But starting in
15 the 1970s, the situation changed. Now, every summer, growers divert and pump enough water to
16 dewater the Scott in all but the wettest years. For instance, flows in 2017, the most recent very
17 wet year, were less than those in very dry years in the 1950s. Similar rivers in the Klamath Basin
18 have not similarly declined. The problem is not climate. The problem is that people are taking too
19 much water out of the river.

20 And the fish have stopped coming back. First to disappear were the spring-run Chinook,
21 which were extirpated in the 1970s. Fall-run Chinook are in decline. And Coho, a species which
22 finds its ideal habitat in the Scott, is at imminent risk of extirpation; it has been decades since the
23 Scott has seen the 6,500 Coho spawners NOAA Fisheries has specified as the recovery target. The
24 vanishing of the salmon is an ongoing crisis for the Karuk, whose cultural, economic, and religious
25 relationship with these species goes back millennia. And it is an existential disaster for California’s
26 commercial salmon fishing industry, leading to devastating shutdowns of the once abundant Klamath-supported ocean fisheries nearly every year.

27 The time for the State Board to act is now. Science shows a robust connection between
28

1 flows and fish population health. Low autumn flows prevent access to favored spawning locations,
2 leaving returning fish either blocked or forced to fruitlessly spawn in an inhospitable canyon
3 where winter floods scour their eggs. Without sufficient summer flow, Coho cannot survive their
4 first year—the long, hot summer where they must feed and grow in cold, clean fresh water before
5 migrating to the ocean. These low summer flows bring a disconnected river with degraded water
6 quality—lethally high temperatures, disconnected or dry pools, low dissolved oxygen, and para-
7 sites. Winter and spring high flows are necessary to flush sediment and algae, restore favorable
8 channel structure, and provide outmigration for juvenile salmonids.

9 No other agency can or will act to protect flows in the Scott. The California Department
10 of Fish and Wildlife (CDFW) has done its part by promulgating two flow recommendations—
11 including one for drought years—and transmitting them to the State Board. But the groundwater
12 sustainability agency (GSA) for the basin has declared that the recently enacted Sustainable
13 Groundwater Management Act (SGMA) will not restore flows in the Scott. The North Coast Re-
14 gional Water Quality Control Board has stated that it cannot achieve water quality objectives with-
15 out State Board action on flows. And the federal government will not act. Therefore, the State
16 Board must.

17 The State Board has already taken a promising first step. By promulgating emergency reg-
18 ulations in 2021 and readopting them in 2022, it has established that minimum flows are a neces-
19 sary tool for regulating the Scott. And it has begun the process of implementing that minimum
20 flow standard by requiring curtailments, limiting inefficient livestock watering restrictions, and
21 issuing information orders. While the river did not reach the emergency minimum flows in 2021
22 or 2022, the curtailments still had measurable, positive impacts on stream conditions. These steps,
23 while imperfect, have promise for efforts to protect flows during future drought years.

24 If the Governor were ever to revoke the drought Executive Order, however, the Scott would
25 lose the benefit of those emergency regulations. Summer flows in nondrought years routinely fail
26 to meet the 62 cfs September flow that CDFW found necessary for salmonid recovery. In fact,
27 only *once* in the last decade have flows in any water year type exceeded the 33 cfs September
28 drought minimum that CDFW says is necessary to prevent extirpation.

1 The State Board must, therefore, protect the Scott permanently. It must adopt, under its
2 statutory, public trust, and waste and unreasonable use authority and other authorities, a permanent
3 regulation setting minimum flows in the Scott that, informed by yearly hydrology and the needs
4 of these crucial species, will allow survival and recovery of Coho and Chinook.

5 **II. PARTIES**

6 The following parties petition the State Board:

7 **A. The Karuk Tribe**

8 Petitioner Karuk Tribe of California is a federally recognized Indian Tribe with a popula-
9 tion of approximately 3,700 enrolled members and 5,300 enrolled descendants. Its headquarters
10 is located in Happy Camp, along the Klamath River and in the vicinity of the Salmon and Scott
11 Rivers. The Karuk Tribe has lived in northern California since time immemorial.

12 The stated mission of the Karuk Tribe is to promote the general welfare of all Karuk peo-
13 ple; establish equality and justice for the Tribe; restore and preserve Tribal traditions, customs,
14 language, and ancestral rights; and secure for themselves and their descendants the power to ex-
15 ercise the inherent rights of self-governance. Among the many goals of the Tribe is the protection
16 and restoration of native fish and wildlife species that the Tribe has depended upon for traditional
17 cultural, religious, and subsistence uses. The fisheries, environmental and aesthetic assets, and the
18 cultural values associated with them are at the core of the interests the Tribe seeks to promote and
19 protect. A long-term goal of the Karuk Tribe is to restore fisheries habitat by improving hydrologic
20 function and water quality in the Klamath River and key tributaries. Since time immemorial, the
21 Karuk People have relied on aquatic species including salmon, lamprey, mussels, steelhead, and
22 sturgeon for survival. Over time the Tribe developed strategies to manage and enhance populations
23 of these species through active management techniques. Indeed, the Tribe has incorporated fish-
24 eries management into its religious and ceremonial practices.¹

25
26 ¹ Luis Neuner & S. Craig Tucker, Suits and Signs Consulting, Karuk Traditional Ecological
27 Knowledge and the Management of Spring Chinook Salmon (2023), at pp. 3-4, available at
28 <https://www.karuk.us/images/docs/dnr/20230202KarukTraditionalEcologicalKnowledgeAndTheManagementOfSpringChinookSalmonFINAL.pdf> (accessed March 22, 2023).

1 For example, the Spring Salmon Ceremony marked the beginning of the fishing season for
2 spring-run Chinook (Karuk: *ishyâat*), a rule adhered to not only by the Karuk but by other Klamath
3 tribes.² The ceremony took place only after the first fish, the “head of the run,” had migrated
4 upstream, allowing those fish to spawn unmolested.³ Because the Spring Salmon Ceremony re-
5 quires eating spring-run Chinook, the extirpation of the “springers” means that the Tribe can no
6 longer perform this ceremony.⁴

7 The last several decades have seen a general trend of declining fish populations in the
8 entire Klamath Basin, including the Scott River. The Scott River is one of the most important
9 Klamath tributaries providing spawning and rearing habitat for Chinook salmon, steelhead trout,
10 Pacific lamprey, and ESA-listed Coho salmon. As such, the Karuk Tribe has an immediate and
11 concrete interest in the mitigation of harms to and the long-term preservation of the fisheries and
12 wildlife resources in the Scott.

13 **B. Environmental Law Foundation**

14 ELF is a California nonprofit organization founded on Earth Day in 1991 that has a
15 longstanding interest in aiding the recovery of anadromous fish populations. ELF has been advo-
16 cating for improved flows in the Scott River for more than ten years. As such, ELF has a direct
17 interest in the State Board’s failure to regulate flows in the Scott and in the contents of any regu-
18 lation.

19 **C. Pacific Coast Federation of Fishermen’s Associations and
20 Institute for Fisheries Resources**

21 PCFFA is by far the largest trade organization of commercial fishing families on the west
22 coast and is organized as a federation of 17 local and regional commercial fishing port associa-
23 tions, marketing associations, and type-of-vessel owner groups representing approximately 750
24 family commercial fishing businesses west coast-wide, including in California, Oregon, and

25
26 ² *Ibid.*

27 ³ *Id.* at p. 4.

28 ⁴ *Id.* at p. 12

1 Washington. PCFFA’s individual members generally are small- and mid-sized commercial fishing
2 boat owners and operators, most of whom derive all or part of their income from the harvesting
3 of Pacific salmon, including salmon that originate in the Klamath Basin, and which can and do
4 spawn and rear in the Scott River when there are sufficient instream flows to allow that to suc-
5 cessfully happen. Northern California ports in which PCFFA has active member associations in-
6 clude the Ports of Bodega Bay, Fort Bragg, Eureka, and Crescent City, California. Ocean salmon
7 harvests in and around all these ports depend upon the abundance of salmon from the Klamath
8 Basin to determine whether those northern California and southern Oregon ocean salmon fisheries
9 will be open or closed in each year.

10 IFR is a separate nonprofit, public interest, marine resources protection and conservation
11 organization originally incorporated by PCFFA. It manages, directs, and helps fund most of
12 PCFFA’s many fisheries and habitat conservation and public education programs, including
13 salmon restoration projects in the Klamath Basin. Throughout northern California, Oregon, and
14 Washington, IFR also works to improve forest and agricultural land use practices generally, on
15 both private and public lands, to lessen their impacts on salmonid spawning and rearing habitat.

16 PCFFA and IFR both have a particularly longstanding and strong interest in the protection
17 and recovery of Klamath River salmon, and more specifically, Klamath fall-run Chinook, which
18 is the only Klamath-origin salmon species that is still abundant enough to allow for a commercial
19 ocean fishery. As adults, Klamath River fall-run Chinook salmon migrate from the Klamath River
20 (including from the Scott River) at least as far south as Monterey, California, and as far north as
21 central Washington State. Along hundreds of miles of California and Oregon coastline, and well
22 into central Washington State, Klamath fall-run Chinook are a dominant stock intermingling at
23 sea with many other stocks of salmon. Because of this ocean intermingling, opportunities for fish-
24 ing for *any* salmon stock within this more than 700-mile-long region are *significantly* affected by
25 the health and abundance of Klamath fall-run Chinook salmon. When Klamath spawner return
26 numbers are poor, fishing for *all* salmon in this area of the coast—even on *very abundant runs*—
27 can be severely restricted and even closed. This is what is called “weak stock management,” in
28 which the weakest (i.e., least abundant) salmon stock is the limiting factor in all other fisheries in

1 which it intermingles. PCFFA and IFR also work as organizations to protect Klamath-origin
2 spring-run Chinook and Southern Oregon/Northern California Coast (SONCC) Coho, both salmon
3 species with very similar habitat needs to those of fall-run Chinook, and so that protecting both
4 Coho and spring-run Chinook from the Klamath River also benefits fall-run Chinook.

5 **III. PETITION FOR RULEMAKING**

6 This Petition is brought under the Petition Clause of the First Amendment to the U.S. Con-
7 stitution and article I, section 3 of the California Constitution, both of which permit citizens to
8 petition the government for redress of grievances. The California Administrative Procedures Act
9 sets out the specific procedures for a petition for rulemaking: any “interested person may petition
10 a state agency requesting adoption” of a regulation. (Gov. Code § 11340.6.) Upon receipt of such
11 a request, the agency has 30 days to either schedule the matter for a hearing or deny the petition
12 in writing, with reasons given for any such denial. (*Id.* § 11340.7, subs. (a), (d).)

13 Under section 11340.6, a petition for rulemaking must state the “substance or nature of the
14 regulation, amendment, or repeal requested,” the “reason for the request,” and “[r]eference to the
15 authority of the state agency to take the action requested.”

16 The “substance . . . of the regulation” requested here is a permanent regulation setting a
17 minimum streamflow standard for the Scott River in all years that is protective of salmonid pop-
18 ulation recovery, with appropriate monitoring, informational, and enforcement requirements.

19 The “reason for the request” is, as discussed at length in the discussion that follows, the
20 consistent lack of flow in the Scott River during the summer and fall of even normal and wet
21 years, leading to significant harm to Chinook and Coho salmon, both of which are culturally and
22 economically vital species that are at significant risk of extirpation.

23 And as discussed in more detail below, the State Board has the authority to issue the re-
24 quested regulation under, inter alia, Water Code sections 174, 186, 1058, and 275; the waste and
25 unreasonable use doctrine; and the public trust doctrine.

26 **IV. FACTUAL BACKGROUND**

27 **A. The Scott River**

28 Flows have been declining in the Scott River since European settlers began intensive

1 agriculture in the late 19th century. This accelerated—to the point where salmonid populations
2 began to plummet—in the latter half of the 20th century. A robust body of research establishes
3 very clear causality: agricultural extractions of groundwater and surface water cause low flows,
4 and low flows impact fish populations.

5 While the State Board recently adopted temporary emergency regulations designed to ad-
6 dress flows in drought years (at least as long as the Governor’s drought proclamation remains in
7 effect and the State Board readopts the emergency regulations), there is no current regulatory
8 protection for flows in nondrought years nor any assurance such emergency regulations will be
9 enacted in the next drought. Summer and fall flows in these nondrought years have rarely met the
10 CDFW flow recommendations.⁵

11 1. Geographic Setting

12 The Scott is one of the most important rivers on the Pacific Coast for threatened Coho
13 (Karuk: *achvuun*) and Chinook salmon (Karuk: *àama* [fall Chinook] and *ishyâat* [spring Chi-
14 nook]), as well as a host of other species, including steelhead, mussels, and Pacific lamprey. The
15 Scott’s Coho population has been recognized as a “core independent” population of the ESA-
16 threatened Southern Oregon/Northern California Coast Evolutionarily Significant Unit (ESU).⁶
17 These species have experienced significant population declines.⁷

18
19 ⁵ CDFW, Interim Instream Flow Criteria for the Protection of Fishery Resources in the
20 Scott River Watershed, Siskiyou County (Feb. 6, 2017) (hereafter CDFW Flow Criteria), at p. 7,
attached as Exhibit A.

21 ⁶ National Marine Fisheries Service (NMFS), Final Recovery Plan for the Southern
22 Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (*Oncor-
23 hynchus kisutch*) (2014) (hereafter NMFS Recovery Plan), at pp. 2-10, available at
[https://www.fisheries.noaa.gov/resource/document/final-recovery-plan-southern-oregon-northern-
24 california-coast-evolutionarily](https://www.fisheries.noaa.gov/resource/document/final-recovery-plan-southern-oregon-northern-california-coast-evolutionarily) (accessed May 17, 2023). An “independent” population is one
25 which is capable of persisting in isolation over a 100-year time scale. (*Id.* at pp. 2-9.) A “core”
population is one for which NMFS has determined that recovery is necessary in order for the ESU
as a whole to reach recovery targets. (*Id.* at pp. 2-12 to 2-13.)

26 ⁷ CDFW Flow Criteria, *supra*, at pp. 8-13. On May 3, 2021, CDFW transmitted a package
27 containing four documents to the State Board: (1) a letter from Charlton H. Bonham to Eileen
28 Sobeck regarding the need for immediate action on the Scott River (hereafter CDFW Letter),
attached as Exhibit B; (2) the CDFW Flow Criteria, (3) a memorandum from Tina Bartlett, CDFW
with the subject Influence of Scott River in-stream flow on the distribution and migration timing

1 The Scott River is one of the major tributaries to the Klamath and one of the few streams
2 in northern California that is not blocked by a major dam and reservoir.⁸ Its headwaters are in the
3 7,000- to 8,000-foot Scott, Scott Bar, Marble, and Salmon Mountains. Numerous tributary creeks
4 join the Scott River in its broad alluvial plain—a plain which holds a large aquifer as well as
5 provides for a significant agricultural industry. The river flows south to north through this fertile
6 plain from the community of Callahan to Fort Jones. Downstream of Fort Jones, it turns sharply
7 west and drops steeply down a canyon to the confluence with the Klamath.

8 The climate in the Scott River Basin is characterized by cool, wet winters and hot, dry
9 summers. Flows peak during winter storms and the spring snowmelt. In the summer, after moun-
10 tain snow is gone, flows in the mainstem and tributaries are largely dependent on contributions
11 from groundwater.⁹

12 Salmon, especially Coho, use the steep canyon reach to migrate to better spawning terrain
13 in the Scott Valley and its tributaries.¹⁰

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21 of fall Chinook Salmon and Coho Salmon, dated May 3, 2021 (hereafter CDFW Flow Memo),
22 attached as Exhibit C; and (4) CDFW’s comments on the Scott Valley Groundwater Sustainability
23 Plan (hereafter CDFW SGMA Comments), attached as Exhibit D. The CDFW Flow Memo
contains updated population figures for Chinook and Coho at pages 9 to 11.

24 ⁸ See generally Siskiyou County Flood Control & Water Conservation District, Scott Valley
25 Groundwater Sustainability Plan (2022) (hereafter Scott Valley GSP), at pp. 22-28, available at
<https://sgma.water.ca.gov/portal/service/gspdocument/download/6317>.

26 ⁹ *Id.* at pp. 84-89.

27 ¹⁰ CDFW Flow Memo, *supra*, at p. 12-13; CDFW Flow Criteria, *supra*, at p. 11; NMFS
28 Recovery Plan, *supra*, at pp. 36-3 to 36-8.

Water Year	Water Year Type ^a	Mean Flows (cfs)		Water Year	Water Year Type ^a	Mean Flows (cfs)	
		Aug.	Sept.			Aug.	Sept.
1982	Very Wet	68.1 ▲	56.9 ▲	2003	Wet	87.7 ○	49.3 ▲
1983	Very Wet	269.1 ○	228.3 ○	2004	Normal	13.3 ■	14.0 ■
1984	Very Wet	51.3 ▲	51.9 ▲	2005	Dry	21.9 ■	16.1 ■
1985	Dry	31.1 ▲	39.0 ▲	2006	Very Wet	52.3 ▲	47.2 ▲
1986	Wet	34.1 ▲	43.9 ▲	2007	Normal	8.2 ■	7.1 ■
1987	Very Dry	13.4 ■	13.5 ■	2008	Normal	22.6 ■	16.9 ■
1988	Dry	15.0 ■	11.9 ■	2009	Dry	10.7 ■	7.0 ■
1989	Normal	20.6 ■	32.1 ■	2010	Normal	40.4 ▲	36.2 ▲
1990	Dry	13.8 ■	12.2 ■	2011	Very Wet	95.5 ○	61.7 ▲
1991	Very Dry	12.9 ■	11.5 ■	2012	Normal	17.3 ■	12.2 ■
1992	Very Dry	7.9 ■	25.8 ■	2013	Dry	11.3 ■	11.6 ■
1993	Wet	57.0 ▲	47.6 ▲	2014	Very Dry	6.9 ■	7.0 ■
1994	Very Dry	5.8 ■	4.8 ■	2015	Dry	7.1 ■	7.2 ■
1995	Very Wet	92.1 ○	48.9 ▲	2016	Wet	14.0 ■	10.0 ■
1996	Wet	32.2 ▲	28.0 ■	2017	Very Wet	49.2 ▲	52.3 ▲
1997	Wet	28.2 ■	37.2 ▲	2018	Dry	6.2 ■	8.1 ■
1998	Very Wet	119.3 ○	68.2 ○	2019	Wet	19.0 ■	24.2 ■
1999	Wet	71.0 ▲	58.1 ▲	2020	Very Dry	9.3 ■	6.3 ■
2000	Normal	19.3 ■	24.0 ■	2021	Very Dry	9.0 ■	9.5 ■
2001	Very Dry	5.5 ■	4.4 ■	2022	Very Dry	10.0 ■	9.2 ■
2002	Dry	14.9 ■	11.6 ■				

Source: Monthly Flow Data, *supra*.

^a Water year types are based on the total annual run off at the USGS gage at Somes Bar on the Salmon River.

Since 1980, coincident with rapidly intensifying agriculture, September flow in normal years is now less than half what it was in the period from 1942 to 1980—22.4 cfs as compared to 55.9 cfs.¹⁴ Table 2 on the next page takes the data from Table 1 and computes average September flows in the period between 1942 and 1970 and the forty years since 1980, along with a figure indicating the percentage of decline going from the first period to the second.¹⁵

¹⁴ CDFW Flow Memo, *supra*, at p. 8.

¹⁵ Flow monitoring data in the Scott only goes back to 1942. It should be noted that the period from 1942-1970 does not represent a period of unimpaired flow: increasing agricultural withdrawals, the local extirpation of beaver in the 19th century, mining impacts, and channelization all likely reduced both flow and habitat quality by the 1940s. (CDFW Flow Criteria, *supra*, at p. 16; NMFS Recovery Plan, *supra*, at pp. 36-2 to 36-5.) But as the period before 1970 contains the least impaired timeframe for which flow data is available, it is a useful comparison point. Between 1970 and 1979, irrigation withdrawals increased significantly, making the data from that decade not as useful an illustration of less-impaired conditions in the Scott Valley. (See Scott Valley GSP, *supra*, at p. 89.)

TABLE 2. Mean September Flows in the Scott River and Percentage of Decline by Water Year Type

Water Year Type	Mean September Flows (cfs)		% Decline
	1942-70	1980-2020	
Extremely Wet	81.8	76.9	6%
Wet	77.2	46.5	40
Normal	55.9	22.4	60
Dry	44.4	14.9	66
Critically Dry	33.1	9.7	71

Note that the average flow in Septembers of normal years is now well below the CDFW emergency minimum flow recommendation of 33 cfs for drought years.

These figures understate the extent of recent flow impacts. Table 3 below shows the mean September flows since 2012 only:

TABLE 3. Mean September Flows in the Scott River by Water Year, 2012-22

Water Year	Water Year Type	Mean September Flows (cfs)
2012	Normal	12.2
2013	Dry	11.6
2014	Very Dry	7.0
2015	Dry	7.2
2016	Wet	10.0
2017	Very Wet	52.3
2018	Dry	8.1
2019	Wet	24.2
2020	Very Dry	6.3
2021	Very Dry	9.5
2022	Very Dry	9.2

As shown above, in the last decade, even in the “normal” and “wet” years, September flows are a fraction of what they were in the middle of the 20th century, below the mean figures since 1980, and far below the CDFW interim recommendation of 62 cfs and its minimum drought requirements of 33 cfs. Notably, this decline is apparent even in the wettest years. The year 2017 was a “very wet” year, yet September flows were less than in “normal” years during the 1942-70

1 period and also below the recommended flow criteria.

2 Since the 1970s, the number of days when the Scott experiences flows below 15 cfs has
3 increased dramatically.¹⁶ Before 1975, the Scott never saw flows below 15 cfs. In the last decade,
4 it averages flows below 15 cfs in all but the wettest summers.

5 The two charts in Figures 1 and 2 on the next page illustrate the trend of increasing severity
6 of flow conditions over time, plotted using the data and color-coding system from Table 1 above.

7 Climate change is not the major cause of the decline in flows in the Scott. Other rivers in
8 the Klamath Basin, including the Salmon and the Trinity, have not experienced a similar decline.¹⁷
9 Researchers instead attribute 60 percent of the decline in the Scott's flows to factors other than
10 climate change, particularly the expansion of groundwater use.¹⁸

11 And these low flows lead to disconnections and drying up of the riverbed itself. Dewater-
12 ing of the mainstem Scott is becoming common in dry and even normal years. Regular monitoring
13 of river-reach connection status, conducted by the Scott River Watershed Council, took place in
14 2022. This monitoring shows that despite precipitation events in September and November, the
15 mainstem of the Scott remained disconnected for more than twenty kilometers above Fort Jones
16 into November. And major tributaries such as Shackleford Creek, Moffet Creek, Kidder Slough,
17 Kidder Creek, Patterson Creek, and Etna Creek remained disconnected from the mainstem Scott
18 through mid-December. Modeling performed by Dr. Thomas Harter of UC Davis shows a rela-
19 tionship between flows and stream-reach disconnection.

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23 ¹⁶ CDFW Flow Criteria, *supra*, at p. 7; see also Flow Memo, *supra*, at p. 7.

24 ¹⁷ Robert W. Van Kirk & Seth W. Naman, *Relative Effects of Climate and Water Use on*
25 *Base-Flow Trends in the Lower Klamath Basin* (2008) 44 J. Am. Water Resources Assn. 1035,
1042 (hereafter Van Kirk & Naman), attached as Exhibit F.

26 ¹⁸ *Id.* at 1044-46. This study concluded that 61 percent of the decline in Scott late-summer
27 baseflows was attributable to factors other than climate, including irrigation and other
28 consumptive use. See also SS Papadopoulos & Associates Inc., *Groundwater Conditions in Scott*
Valley, California (2012) (hereafter Papadopoulos Report), at pp. 33-34, attached as Exhibit G.

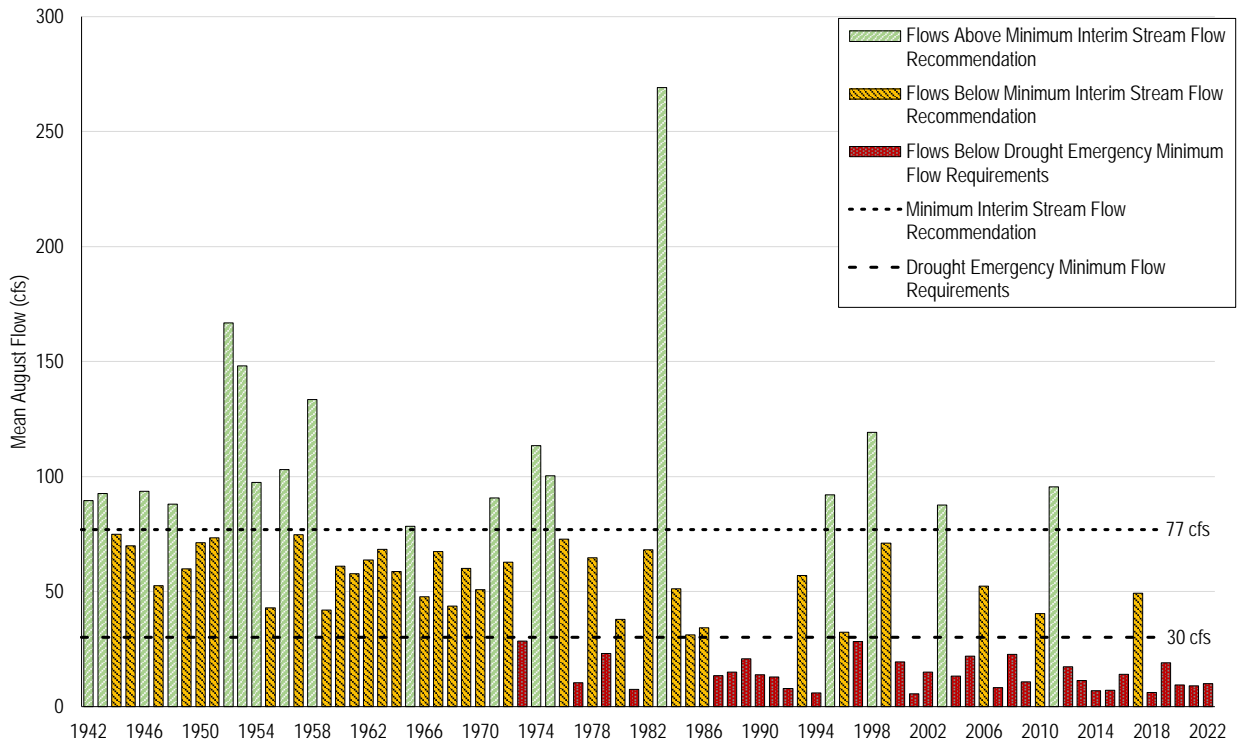


Figure 1. Mean August flows for the Scott River for the 1942 to 2022 water years.

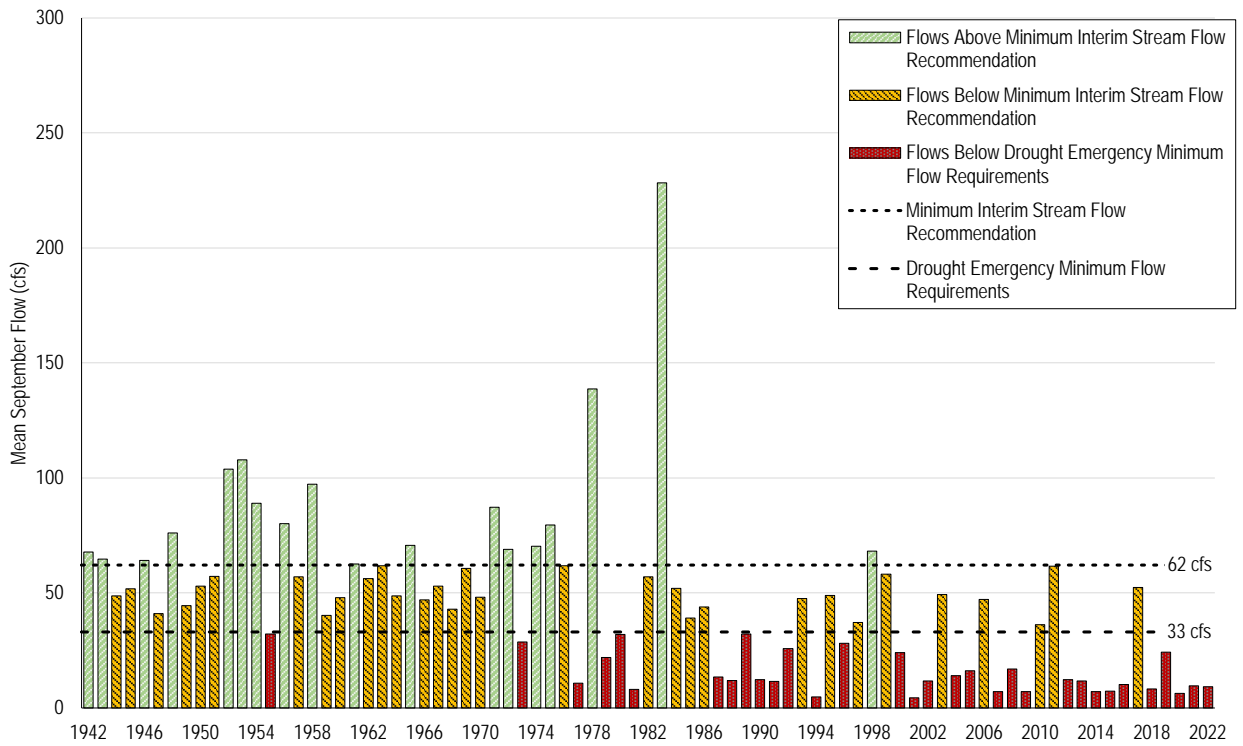


Figure 2. Mean September flows for the Scott River for the 1942 to 2022 water years.

1 **3. Flow Impacts on Salmonids**

2 The Scott’s low flows have had devastating impacts on native Chinook and Coho. Both
3 species need flows to migrate upstream to spawn, to rear, and to migrate downstream to the ocean.
4 And each species has a specific lifecycle that requires flows at different times of the year.

5 **a. Fall-Run Chinook**

6 Chinook usually migrate upstream during a narrow window in October.¹⁹ This migration
7 is constrained by flow: in years when October flows are above 22 cfs, more than half of Chinook
8 can travel upstream of Fort Jones to spawn.²⁰ But in years with low flows, Chinook struggle to
9 reach the Scott Valley and are forced to spawn in far less suitable habitat in the canyon reach.²¹
10 Spawning in the canyon is disadvantageous for Chinook because redds are more vulnerable to
11 scour during high winter flows.²²

12 Chinook rear for only a few months before migrating out of the Scott to the Pacific in the
13 spring and summer.²³

14 Chinook populations have declined significantly in recent years. While the fall run
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17 ¹⁹ CDFW Flow Memo, *supra*, at pp. 11-12. This discussion uses the term “Chinook” to
18 refer to fall-run Chinook. Spring-run Chinook have been extirpated in the Scott since the 1970s.
19 While they are not the focus of this Petition, the flow regulation requested by this Petition would
20 likely benefit efforts to recover and/or reestablish spring-run Chinook in the future.

21 ²⁰ *Id.* at p. 17.

22 ²¹ *Id.* at pp. 11-18.

23 ²² *Id.* at p. 14; CDFW Flow Criteria, *supra*, at pp. 10-11 (“Valley reaches allow access to
24 high quality spawning habitat that is largely connected to its floodplain. Valley reaches also
25 provide access to seasonal high quality rearing habitat that degrades as the dry season progresses.
26 The importance of connectivity between spawning reaches and floodplain habitat cannot be
27 understated. Floodplain connectivity allows water to spread out as flows increase, mitigating
28 increasing water velocities, protecting incubating eggs from scour and providing rearing juvenile
salmonids flow refuge, cover and feeding opportunities that is less abundant in canyon reaches.
Additionally, when adult salmon have access to upstream reaches for spawning, more rearing
habitat is seeded with juvenile fish. Access to more rearing habitat increases potential production,
which can in turn increase adult returns.”).

²³ CDFW Flow Criteria, *supra*, at p. 9.

1 averaged 4,977 from 1978 to 2020, that figure plummeted to only 1,738 in the period from 2015
2 to 2020, a decrease of 65 percent.²⁴ This decline in the Scott is more severe than the decline in the
3 Klamath basin as a whole.²⁵

4 In 2022, only 72 Chinook reached the fish counting station near Fort Jones.²⁶

5 **b. Coho**

6 The Scott’s Coho population is a “core independent” population of the SONCC ESU.²⁷ As
7 such, Coho’s recovery in the Scott is vital for the recovery of SONCC populations as a whole.²⁸
8 NMFS has concluded that a yearly Coho spawning population of 6,500 is necessary for recovery.²⁹
9 And it has set a depensation threshold—the figure below which extirpation is likely—at 250
10 spawners.³⁰ NMFS also found that “Altered Hydrologic Function” including “Water quantity and
11 flow regime” are a “Very High” stressor on fry, juvenile, and smolt Coho, and a “High” stressor
12 on eggs.³¹ NMFS identified the effect of limited flows on juvenile Coho, along with degraded
13 riparian conditions, as the two “key limiting stresses” on the species.³²

14 Coho salmon’s lifecycle is dependent on sufficient cold water year round. Coho migrate
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16
17

18 ²⁴ CDFW Flow Memo, *supra*, at p. 9.

19 ²⁵ *Ibid.*

20 ²⁶ CDFW, Klamath River Project Adult Fish Counting Facility In-season Update (Jan. 13,
21 2023) (hereafter Jan. 13, 2023 Fish Counting Update), at p. 1, attached as Exhibit H. It is likely
22 that a number of Chinook spawned in the canyon reach during the 2022 run.

23 ²⁷ NMFS Recovery Plan, *supra*, at pp. 2-10.

24 ²⁸ *Id.* at pp. 2-12 to 2-13.

25 ²⁹ *Id.* at pp. ES-5, 4-6.

26 ³⁰ *Id.* at pp. 2-18, 2-35.

27 ³¹ *Id.* at pp. 36-15 to 36-17.

28 ³² *Id.* at pp. 36-15 to 36-16.

1 upstream in late fall and early winter, peaking in November and early December.³³ Coho tend to
2 stage in the mainstem Klamath near the confluence with the Scott and wait for freshwater flows
3 to increase before attempting to migrate.³⁴ If insufficient flows are present during this period, an
4 entire cohort may fail to migrate. As of December 26, 2022, only 236 adult Coho—fewer than the
5 depensation level of 250 spawners—have been identified at the fish counting station in Fort
6 Jones.³⁵

7 Coho prefer to spawn in areas with less current than the mainstem Scott, such as in flood-
8 plains and tributaries.³⁶ Sufficient flows are therefore necessary for Coho to access those tributar-
9 ies during the spawning season. As discussed above, in fall 2022 many tributaries were not
10 connected as of mid-December.

11 Upon emerging, Coho need to rear for 18 months in cold water before out-migrating.³⁷
12 High temperatures associated with low flows thus greatly limit Coho’s rearing success.³⁸ And
13 disconnections restrict the fish from moving to more hospitable stream reaches. Connection be-
14 tween pools is also vital for the movement of the invertebrates that juvenile Coho rely on for food;

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16 ³³ CDFW Flow Memo, *supra*, at p. 13.

17 ³⁴ *Ibid.*

18 ³⁵ Jan. 13, 2023 Fish Counting Update, *supra*, at p. 1; NMFS Recovery Plan, *supra*, at pp.
19 2-18, 2-35. The Scott River fish counting station was removed on December 26, 2022 due to high
20 flows associated with significant winter storms. It is not clear how many additional Coho migrated
21 after the counting station was removed. The Scott River Watershed Council conducted spawning
22 ground surveys in January 2023 on sections of the Scott as well as French, Miners, and Sugar
23 Creeks. (Scott River Watershed Council, 2022-2023 Coho Salmon Spawning Ground Surveys
24 (2023), at p. 1, attached as Exhibit I.) The surveys found “fewer than expected” redds, live fish,
25 and Coho carcasses based on the number of fish passing the CDFW fish counting station. (*Id.* at
26 p. 3.) It is possible that high flows allowed greater dispersal of Coho throughout the Scott basin
27 or that higher than usual turbidity masked redds and other observations. (*Ibid.*)

28 ³⁶ CDFW Flow Memo, *supra*, at p. 12-13; CDFW Flow Criteria, *supra*, at p. 11; NMFS
Recovery Plan, *supra*, at pp. 36-3 to 36-8. Major tributaries to the Scott include Etna, French,
Miners, Kelsey, Kidder, Mill, Patterson, Shackleford and Sugar Creeks.

³⁷ CDFW Flow Criteria, *supra*, at pp. 11-12.

³⁸ NMFS Recovery Plan, *supra*, at p. 3-27.

1 with less food, competition increases and fewer and smaller juveniles survive the summer.³⁹ Coho
2 have shown the highest in-river productivity in years with the highest flows.⁴⁰

3 And while certain of the three brood years of Coho have shown signs of recovery, the
4 population remains listed as threatened. The low flows of 2020 were close to the last straw for one
5 cohort, with only a December rainstorm permitting passage to spawning areas.⁴¹

6 Low flows in 2022 continued to put stress on salmonids. Late fall rains in 2021 permitted
7 fish passage starting in October 2021.⁴² But a long dry spell followed, leaving the 2021-22 water
8 year with well-below-average precipitation.⁴³ And while spring rains permitted out-migration, the
9 fall of 2022 has proven to be potentially disastrous, with only 72 Chinook and 236 Coho making
10 it past the fish counting station into the main stem of the Scott.⁴⁴ Higher flows are necessary to
11 preserve these species.

12 4. Agriculture in the Scott River Basin

13 The decline in Scott flows is largely attributable to the increase in intensity in agricultural
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15 ³⁹ *Id.* at pp. 3-27 to 3-28.

16 ⁴⁰ *Ibid.*; CDFW Flow Criteria, *supra*, at p. 18.

17 ⁴¹ CDFW Flow Memo, *supra*, at p. 18. Coho keep a fairly rigid three-year cycle of
18 spawning, rearing for 18 months in fresh water, then migration, and return. Thus, the Scott coho
19 population can be divided into three cohorts, or brood years, each of which return to spawn every
20 three years. (*Id.* at p. 12.) Brood Year 1 was devastated by the 2013-14 drought year, when its run
21 was reduced from 2,644 fish in 2013 to 250 in 2016; only 365 returned in 2019. Brood Year 3
22 increased from 80 fish in 2009 to 727 in 2018. (*Ibid.*) Fortunately, and due in no small part to the
23 efforts of CDFW, Tribes, the Scott Valley Watershed Council, local landowners, and the State
24 Board, more than 80,000 juvenile Coho from the 2020 brood year survived to out-migrate in 2022.
(CDFW, Scott and Shasta River Juvenile Salmonid Outmigration Monitoring (June 24, 2022), at
25 p. 1, attached as Exhibit J.)

26 ⁴² CDFW, Klamath River Project Adult Fish Counting Facility In-season Update (Jan. 7,
27 2022), at p. 1, attached as Exhibit K. CDFW reported 1,324 Chinook and 829 Coho passing the
28 fish counting station in fall 2021 and winter 2022.

⁴³ State Board, Finding of Emergency and Informative Digest (June 20, 2022) (hereafter
Informative Digest), at p. 6, available at https://www.waterboards.ca.gov/drought/scott_shasta_rivers/docs/2022/ssd-digest-06202022.pdf (accessed March 3, 2023).

⁴⁴ Jan. 13, 2023 Fish Counting Update, *supra*, at p. 1.

1 use over the past half-century. Scott flows have declined much more than in other rivers with
2 similar watershed characteristics but which lack intensive agriculture.⁴⁵ And irrigation withdraw-
3 als increased 115 percent between 1953 and 2001 while irrigated land area increased by 89 percent
4 during the same period.⁴⁶ This finding is consistent with a groundwater modeling study that found
5 that the impact of increased pumping (leaving aside surface diversions) between the 1980s and
6 2000 is responsible for a decrease in 16 cfs of Scott baseflows.⁴⁷

7 As of 2020, agriculture uses approximately 69,000 acre-feet (AF) per year in the Scott, of
8 which 26,000 AF comes from surface water diversions and 42,000 AF comes from groundwater
9 pumping.⁴⁸ And this use has increased recently, with an estimated use of 68,000 AF in 2018 and
10 2019 compared to an estimated average use of 61,500 AF per year from 2015 to 2017.⁴⁹ Ground-
11 water levels in monitoring wells also declined between 3.4 and 7.6 feet between 2019 and 2020.⁵⁰

12 **5. Previous Efforts to Address Flow Issues in the** 13 **Scott Have Been Unsuccessful**

14 Despite the involvement of the courts, the State Board, NOAA Fisheries, CDFW, the GSA,
15 and the Regional Board, no agency has yet succeeded in establishing a binding and effective per-
16 manent stream flow standard on the Scott.

17 **a. The Scott River Adjudication**

18 The first major attempt to provide flows in the Scott was the statutory adjudication that the

19 ⁴⁵ Kirk & Van Naman, *supra*, 44 J. Am. Water Resources Assn. at 1045-46.

20 ⁴⁶ *Id.* at 1046.

21 ⁴⁷ Papadopoulos Report, *supra*, at p. 32. “Baseflows” refers to the summer flow remaining
22 in the river system when recent precipitation or snowmelt are not contributing to flow.

23 ⁴⁸ Dept. of Water Resources, Adjudicated Basins Annual Reporting System (2021), Excerpt
24 from Scott River Stream System Annual Report, 10/01/2019–9/30/2020 (hereafter Scott River
25 Adjudication Annual Report), available at <https://sgma.water.ca.gov/adjudbasins/report/preview/215> (accessed May 18, 2023). The remaining 1,000 AF is for domestic use. This reporting is
26 based on estimation, as growers are not required to meter their groundwater extractions.

27 ⁴⁹ *Ibid.*

28 ⁵⁰ *Ibid.*

1 Siskiyou Superior Court entered in 1980. The Scott River Decree reserves 30 cfs to the U.S. Forest
2 Service in September, with higher amounts in other months, for “minimum subsistence-level fish-
3 ery conditions including spawning, egg incubation, rearing, downstream migration, and summer
4 survival of anadromous fish, and can be experienced only in critically dry years without resulting
5 in depletion of the fishery resource.”⁵¹ It additionally reserves 32 cfs in September for other envi-
6 ronmental flows, but at a lower priority right.⁵² As discussed above, the USFS 30 cfs flow has not
7 been satisfied even in recent normal precipitation years.

8 The adjudication simply does not give USFS’s flow right a sufficiently high priority to
9 protect a 30 cfs flow in dry years. This is because the USFS flow right is too junior to require
10 curtailment of other rights if flows are below 30 cfs. Paragraph 45 of the adjudication decree gives
11 the Forest Service a first-priority right in Schedule D4; but that level of right does not permit
12 curtailment of rights in most other schedules. As former State Board Executive Director Thomas
13 Howard put it in a letter to the Forest Service: “[T]he vast majority of the water rights recognized
14 in the Adjudication Decree are not subject to curtailment during periods when flows are insuffi-
15 cient to satisfy the Forest Service instream flow rights.”⁵³

16 Moreover, even where the USFS right does require curtailment, there is no watermaster on
17 the Scott mainstem.⁵⁴ As a result, until the State Board adopted the emergency regulations in 2021,
18 no entity was responsible for monitoring diversions or pumping. And no entity was responsible
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21 ⁵¹ Siskiyou County Superior Court, Decree No. 30662, Scott River Stream System (1980),
22 ¶ 45 (hereafter Scott River Decree), available at https://www.sswatermaster.org/_files/ugd/25fb50_732ff15e812b4e6bbaff52a6e89afe4c.pdf (accessed May 18, 2023).

23 ⁵² *Ibid.*

24 ⁵³ Thomas Howard, State Board, Letter to Patricia Graham, USFS, Dec. 3, 2013, at p. 1,
25 attached as Exhibit L.

26 ⁵⁴ The portion of the Scott Valley covered by a watermaster has steadily decreased. Now,
27 only portions of the French and Wildcat Creek watersheds are covered—a tiny fraction of the total
28 area. See Siskiyou County Superior Court, Notice of Reduction of Scott River Watermaster
Service Area (Dec. 20, 2018), available at https://www.sswatermaster.org/_files/ugd/25fb50_3406687f26c24a06a207c3629ad930e4.pdf (accessed May 18, 2023.).

1 for informing junior rights holders that insufficient water was available to meet the USFS water
2 right and to require curtailments of those rights if diversions did not cease voluntarily.

3 And the Scott River adjudication has another major flaw: it regulates certain, but not all,
4 groundwater extractions in the Scott Valley. Following the Legislature’s declaration that ground-
5 water in the Scott Valley should be adjudicated as being connected to the Scott River (Water Code
6 section 2500.5), the court included some, but not all, of the groundwater in the Scott Valley.⁵⁵ A
7 map included in the adjudication delineates a zone near the river where the court declared the
8 groundwater to be “interconnected.”⁵⁶ This has led to a situation where claimants listed in Sched-
9 ular C of the adjudication are governed by the adjudication, but those with land outside the adju-
10 dicated zone may drill groundwater wells and pump groundwater with almost no oversight. And
11 for those growers within the adjudicated zone, there is no numeric limit on pumping—the adju-
12 dication permits pumping sufficient to irrigate certain acreage without specifying maximum acre
13 footage of water use.⁵⁷

14 Moreover, the zone established by the court is too small and is unsupported by evidence.
15 The report that formed the basis of the adjudication’s line demarcating the “interconnected” zone
16 was not based on streamflow calculations nor did it consider the cumulative depletion impact from
17 pumping over many years.⁵⁸ Rather, it relied only on inferences based on the relative permeability
18 of the sediments in the Scott Valley.⁵⁹ Indeed, the report acknowledged that it lacked the
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20 ⁵⁵ Scott River Decree, *supra*, ¶¶ 1, 4, 20.

21 ⁵⁶ *Id.* ¶ 4; Scott River Adjudication Map, attached as Exhibit M.

22 ⁵⁷ Scott River Decree, *supra*, ¶ 20, sched. C.

23 ⁵⁸ State Water Resources Control Board, Report on the Hydrogeologic Conditions of Scott
24 Valley Siskiyou County, California (1975) (hereafter 1975 Hydrogeologic Report), attached as
25 Exhibit N; see also Deborah L. Hathaway, Memorandum, Stream Depletion Impacts Associated
26 with Pumping from Within or Beyond the “Interconnected Groundwater” Area as Defined in the
27 1980 Scott Valley Adjudication (Aug. 27, 2012) (hereafter Hathaway Memo), pp. 1-2, attached as
28 Exhibit O.

⁵⁹ See 1975 Hydrogeologic Report, *supra*, at pp. iii, 5-18; Hathaway Memo, *supra*, at p. 2
(stating the 1975 Hydrogeologic Report “does not support a conclusion that pumping from beyond
the zone would not result in a stream depletion impact within the same irrigation season or in

1 information to draw a bright line between “ground water obviously not interconnected” and
2 “ground water freely and completely interconnected.”⁶⁰ And according to a technical memoran-
3 dum using the Scott Valley Groundwater Model, pumping outside the adjudicated zone has a clear
4 and measurable impact on Scott River flows, impacts which have accumulated over time.⁶¹

5 **b. The Regional Board Has Not Acted on Flows**

6 In 2005, the North Coast Regional Water Quality Control Board adopted a Scott River
7 Total Maximum Daily Load (TMDL) for temperature and sediment.⁶² However, this program did
8 not address flows, despite the recognized relationship between temperature and flow. Instead, the
9 TMDL attempted to remedy impairments to temperature solely by improving shade.⁶³ As dis-
10 cussed above, any improvements in shade have not reversed the decline in salmonid populations.

11 Beginning in 2006, the Regional Board waived Waste Discharge Requirements for agri-
12 cultural dischargers in the Scott and Shasta Valleys pursuant to Water Code section 13269. The
13 Regional Board renewed that waiver in 2012 and 2017.⁶⁴ The Regional Board has proposed to
14 renew these waivers in 2023. In the Staff Report for the proposed waiver renewal, the Regional

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16
17 future years”).

18 ⁶⁰ 1975 Hydrogeologic Report, *supra*, at p. iii.

19 ⁶¹ Hathaway Memo, *supra*, at p. 4.

20 ⁶² North Coast Regional Water Quality Control Board, Staff Report for the Action Plan for
21 the Scott River Watershed Sediment and Temperature Total Maximum Daily Loads (2005),
22 available at https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/scott_river/staff_report/ (accessed May 18, 2023).

23 ⁶³ *Id.* at p. xviii. Lowered groundwater levels resulting from overpumping also lead to loss
24 of riparian vegetation. (NMFS Recovery Plan, *supra*, at p. 36-16.) Overpumping therefore hurts
25 temperatures both by reducing influxes of cool water and also by decreasing shade.

26 ⁶⁴ The Karuk Tribe filed a petition with the State Board challenging the 2018 renewal on
27 multiple grounds. (Petition Challenging Scott River TMDL Conditional Waiver of Waste
28 Discharge Requirements (Petition No. A-2602), available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/petitions.shtml [list of petitions]; https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/petitions/a2602petition.pdf [copy of petition].)

1 Board notes that a flow standard is a “[c]ritical [e]lement [m]issing from the [w]aivers” for meet-
2 ing water quality objectives in the Scott.⁶⁵ The Staff Report goes on to note that in both the Scott
3 and the Shasta, flows are directly linked to temperatures.⁶⁶ The Regional Board states that its
4 agricultural discharge waivers do not provide “an approach to addressing flow needs.” Rather, it
5 points to the need for State Board action: “The Division of Water Rights has the strongest authority
6 to [address low flows]. Both watersheds have critical issues related to instream flows that impact
7 their respective TMDLs.”⁶⁷

8 **c. CDFW Flow Criteria**

9 In 2017, pursuant to Public Resources Code sections 10000 to 10005, CDFW established
10 an interim instream flow criteria for the Scott, with minimum late-summer flows of 62 cfs (or the
11 river’s natural flow) along with higher amounts in other months.⁶⁸ But neither the State Board nor
12 the Regional Board has taken action to implement this flow criteria through a Basin Plan amend-
13 ment, a permanent regulation under their waste and unreasonable use or public trust authority, or
14 any other regulatory tool. On June 15, 2021, CDFW sent a second letter to the State Board again
15 urging immediate action and setting out proposed “drought emergency minimum flow recommen-
16 dations” intended to preserve salmonid survival during the severe drought that the river was (and
17 is) experiencing.⁶⁹

21 ⁶⁵ North Coast Regional Water Quality Control Board, Staff Report for Draft Order No.
22 R1-2023-0005 Short-Term Renewal of Order No. R1-2018-0018, Scott River TMDL Conditional
23 Waiver of Waste Discharge Requirements, and Order No. R1-2018-0019, Shasta River TMDL
24 Conditional Waiver of Waste Discharge Requirements (hereafter Ag Waiver Staff Report), at p. 11,
25 available at https://www.waterboards.ca.gov/northcoast/board_info/board_meetings/12_2022/pdf/3/220926_Staff-Report.pdf (accessed May 18, 2023).

26 ⁶⁶ *Id.* at pp. 11-13.

27 ⁶⁷ *Id.* at p. 11.

28 ⁶⁸ CDFW Flow Criteria, *supra*, at pp. 25-26.

⁶⁹ CDFW Emergency Flow Letter, *supra*, at p. 1.

1 **d. State Board Notices of Unavailability**

2 In 2014-16 and again in 2020, facing a dry year, the State Board issued Notices of Un-
3 availability to junior water rights holders.⁷⁰ Yet in none of those years were flows sufficient to meet
4 the USFS flow right of 30 cfs or emergency CDFW flow recommendation of 33 cfs during late
5 summer.⁷¹ Instead, flows in September of each of those years did not exceed 10 cfs.

6 One reason these notices were unsuccessful in restoring flows is that they did not address
7 extractions of interconnected groundwater. Because groundwater is closely connected to Scott
8 River flows, even ending surface water diversions will not allow flows to recover if groundwater
9 extraction both within and outside the adjudicated zone is not addressed.⁷² Additionally, without
10 watermaster service or an emergency regulation in place, no regulatory entity monitored or cur-
11 tailed diversions.

12 **e. SGMA**

13 Despite high hopes, the Sustainable Groundwater Management Act (SGMA) has not pro-
14 vided a plan for adequate flows in the Scott. SGMA requires that Groundwater Sustainability
15 Agencies (GSAs) adopt plans that, among other things, avoid “undesirable results” including im-
16 pacts on interconnected surfaces waters and the beneficial uses and users that rely on them. (Wat.
17 Code § 10721, def. (x).)

18 The Siskiyou County Flood Control and Water Conservation District, composed of the
19 County’s five supervisors and acting as the GSA for the Scott Basin, adopted a Groundwater Sus-
20 tainability Plan in 2021.⁷³

21 But the GSP, by its terms, is not designed to restore flows to levels compatible with species
22 recovery: “Given the history of stream depletion associated with groundwater pumping outside
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24 ⁷⁰ See, e.g., State Water Resources Control Board, Notice of Unavailability of Water
25 (2020), attached as Exhibit P.

26 ⁷¹ CDFW Flow Memo, *supra*, at p. 5.

27 ⁷² See Hathaway Memo, *supra*, at pp. 1-4.

28 ⁷³ Scott Valley GSP, *supra*.

1 the adjudicated zone, SGMA does not require the GSA to address undesirable results associated
2 with depletion of interconnected surface water.”⁷⁴ This is for at least two reasons: the exclusion
3 of the adjudicated zone and the refusal to address conditions prior to 2015.

4 SGMA provides that it does not “apply” to “adjudicated areas” including to the Scott River
5 Stream System. (Wat. Code § 10720.8, subds. (a), (e).) The GSP excludes the adjudicated area
6 and pumping from that area from its determination of whether groundwater pumping causes “un-
7 desirable results” for depletions of interconnected surface waters in the Scott River.⁷⁵

8 The Scott Valley GSP also relies on SGMA to consider all stream depletions that occurred
9 before January 1, 2015 as not being “undesirable results.”⁷⁶ The GSP concludes that it need only
10 address depletions that are more severe than those occurring on that date—despite this date falling
11 several years into one of the worst droughts California has ever seen (prior to the present drought,
12 that is).

13 As a result of these two dubious interpretations of SGMA, the GSP does not require any
14 reduction in pumping within the adjudicated zone. And outside the adjudicated zone, it requires
15 reversals of streamflow depletion by only 15 percent.⁷⁷ The GSP is explicit that it does not expect
16 to restore adequate streamflows in the Scott—a project it refers to as the “aspirational watershed
17 goal.”⁷⁸ And the GSP does not quantify what this aspirational watershed goal is, but notes that the
18 State Board has not acted to establish instream flow requirements based on the CDFW Flow Cri-
19 teria.⁷⁹

20 In sum, the GSP as written is not designed to either set a minimum streamflow standard
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22 ⁷⁴ *Id.* at p. 209.

23 ⁷⁵ *Id.* at p. 208.

24 ⁷⁶ *Id.* at p. 208; see Wat. Code § 10727.2, subd. (b)(4).

25 ⁷⁷ Scott Valley GSP, *supra*, at p. 213.

26 ⁷⁸ *Id.* at p. 209.

27 ⁷⁹ *Id.* at p. 208.

1 for the Scott or to manage groundwater in such a way as to meaningfully address any standard
2 that could be implemented.⁸⁰

3 **f. 2021 Emergency Regulations**

4 In the summer of 2021, following a petition by the Karuk Tribe and ELF, the State Board
5 adopted drought-related emergency regulations setting a minimum flow standard for the Scott
6 River. (Cal. Code Regs., tit. 23, § 875 et seq.) The regulations additionally contain restrictions on
7 inefficient livestock watering and information and reporting requirements.

8 The flow standard in the emergency regulations is based on the drought minimum flows
9 recommended by CDFW in 2021.⁸¹ The regulations permit the State Board to curtail both surface
10 water diversions and groundwater pumping when flows drop below the minimums. In 2021, the
11 State Board curtailed flows and pumping almost immediately upon adoption of the regulation. In
12 the summer of 2022, the State Board again imposed curtailments when flows dropped in July. The
13 curtailments remained in place until large rainstorms arrived in December.⁸²

14 The regulations also impose restrictions on livestock watering during the winter.⁸³ Winter
15 livestock diversions often use large amounts of water delivered through leaky ditches.⁸⁴ These
16

17 _____
18 ⁸⁰ And even if the GSP did adequately address streamflow impacts from groundwater
19 pumping, the GSP would not have authority over surface water diversions. Only the State Board
20 has the authority to curtail all forms of water withdrawal in the Scott.

21 ⁸¹ CDFW Emergency Flow Letter, *supra*, at p. 2. These flows were slightly modified by
22 CDFW in 2022. The State Board incorporated these modifications when it readopted the
23 Emergency Regulations in 2022. (State Water Resources Control Board, Resolution
24 No. 2022-0025 (June 21, 2022), available at https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2022/rs2022-0025.pdf.)

25 ⁸² State Board, Addendum 36 to the Order for Reported Water Rights in the Scott River
26 Watershed Issued September 9, 2021 (for water rights included in List A), Order WR 2021-0083-
27 DWR (for water rights included in List B), and Order WR 2021-0084-DWR (for water rights
28 included in List C) (Dec. 27, 2022), available at https://www.waterboards.ca.gov/drought/scott_shasta_rivers/docs/2022/scott-addendum36.pdf (accessed March 2, 2023).

⁸³ Cal. Code Regs., tit. 23, § 875.7, as amended.

⁸⁴ Informative Digest, *supra*, at pp. 60-62.

1 diversions—especially on smaller tributaries during dry winters—can completely dewater
2 streams, stranding Coho redds.

3 The regulations permit diverters and pumpers to comply by proposing “local cooperative
4 solutions” rather than by simply ceasing diversions or pumping. These solutions—for surface wa-
5 ter—permit diversions and pumping at some levels greater than zero, but with restrictions in place
6 to prevent dewatering of streams. For groundwater, the local cooperative solutions are permitted
7 to reduce groundwater pumping by a total of 30 percent.

8 Under Water Code section 1058.5, emergency regulations to regulate flows may only be
9 adopted either in certain extremely dry years or while a Governor has declared a drought emer-
10 gency. The Governor issued his drought emergency proclamation for the Klamath Basin, including
11 the Scott, on May 10, 2021, and it remains in effect.⁸⁵

12 The emergency regulations also require reporting—in some cases for the first time—of
13 key information relating to water pumping and surface water diversions. (Cal. Code Regs., tit. 23,
14 § 875.6.)

15 The success of the emergency regulations has been mixed. In 2021, curtailments went into
16 effect only in September, after most diversions had already occurred. Nonetheless, the State Board
17 found improvements in groundwater levels.⁸⁶ And the winter restrictions on livestock watering
18 had positive effects on winter habitat, especially during the long dry spell from January to March
19 2022. Perhaps as a result, spring outmigration numbers for both Coho and Chinook were strong—
20 a surprising result given the lack of precipitation the previous summer and the long stretch with
21 no rain during the winter.⁸⁷

22 But the summer of 2022 told a different story. Late spring rains kept the river flowing into
23

24 ⁸⁵ Governor’s Executive Proclamation of a State of Emergency Due to Drought (May 10,
25 2021), available at <https://www.gov.ca.gov/wp-content/uploads/2021/05/5.10.2021-Drought->
26 [Proclamation.pdf](https://www.gov.ca.gov/wp-content/uploads/2021/05/5.10.2021-Drought-); Governor’s Exec. Order No. N-7-22 (Mar. 28, 2022); Governor’s Exec. Order
27 No. N-3-23 (Feb. 13, 2023); Governor’s Exec. Order No. N-5-23 (Mar. 24, 2023).

27 ⁸⁶ Informative Digest, *supra*, at p. 24.

28 ⁸⁷ *Ibid.*

1 appropriate proceedings or actions . . . to prevent waste, unreasonable use, unreasonable method
2 of use, or unreasonable method of diversion of water in this state.” (*Id.* § 275.) Courts have con-
3 firmed that the State Board has the authority to fulfill its waste and unreasonable use duties
4 through a regulation limiting water withdrawals. (*Light v. State Water Resources Control Bd.*
5 (2014) 226 Cal.App.4th 1463, 1483-88.)⁹⁰

6 **B. The State Board’s Duty to Act**

7 The State Board has well-established duties to protect public trust resources and prevent
8 waste and unreasonable use of water resources. Both of these doctrines also confer authority on
9 the State Board to issue a regulation that establishes minimum flows in the Scott River.

10 **1. The State Board’s Public Trust Authority and Duty**

11 The State Board has the authority and the duty to protect public trust uses in California’s
12 navigable waters. Forty years ago, the California Supreme Court held that the public trust doctrine
13 “imposes a duty of continuing supervision over the taking and use of . . . appropriated water.”
14 (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 447 (*National Audubon*.) The
15 State Board must “consider the effect of such diversions upon interests protected by the public
16 trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests.” (*Id.* at
17 426.) And in exercising its continuing supervision, “the state is not confined by past allocation
18 decisions which may be incorrect in light of current knowledge or inconsistent with current
19 needs.” (*Id.* at 447.) The court recognized that failing to consider and mitigate impacts to public
20 trust values “may result in needless destruction” of those resources. (*Id.* at 426.)

21 Public trust uses include fisheries, navigation, and commerce, but are not limited to that
22 “traditional triad” and can evolve over time “in tandem with the changing public perception of the
23

24
25 ⁹⁰ The recent decision in *Water Curtailment Cases* (2022) 83 Cal.App.5th 164 is no bar to
26 such a regulation. That court held that a different procedure—curtailments triggered by a simple
27 State Board declaration that certain diverters lacked available water under their priority rights—
28 could not be used against riparian and pre-1914 diverters and not without evidentiary hearings.
(*Id.* at 191.) But the court specifically limited the scope of its decision to State Board actions under
that procedure and did not disturb the Board’s authority under the “public trust doctrine, applicable
emergency regulations, or other appropriate authority.” (*Id.* at 196.)

1 values and uses of waterways,” and can include “habitat for birds and marine life” and as subjects
2 of study as well as for their scenic value as open space. (*National Audubon, supra*, 33 Cal.3d at
3 434-35.)

4 In 2018, the Court of Appeal confirmed that the public trust doctrine places the same duties
5 and grants the same authority to the State Board when groundwater extractions affect public trust
6 uses in navigable waters. (*Environmental Law Foundation v. State Water Resources Control Bd.*
7 (2018) 26 Cal.App.5th 844, 858 (*ELF*.) The *National Audubon* case concerned nonnavigable trib-
8 utaries to Mono Lake, which, like the Scott River, is a navigable waterway. (*National Audubon,*
9 *supra*, 33 Cal.3d at 437.) The *ELF* court considered whether the public trust doctrine applies to
10 extractions of groundwater that affect surface flows. It held that those extractions do implicate the
11 public trust: “the analysis begins and ends with whether the challenged activity harms a navigable
12 waterway and thereby violates the public trust.” (*ELF, supra*, 26 Cal.App.5th at 859-60.) And it
13 reaffirmed that the public trust doctrine “imposes an affirmative duty on the state to act on behalf
14 of the people to protect their interest in navigable water.” (*Id.* at 857.) Further, the court held that
15 this duty is not subsumed or extinguished by the enactment of SGMA in 2014. (*Id.* at 863.)

16 As a result, the public trust doctrine empowers the State Board to restrict both groundwater
17 extraction and surface water diversions as necessary to protect flows in the Scott. And the doctrine
18 demands that the state affirmatively act to protect the people’s interest in a healthy, navigable
19 Scott River that hosts abundant fisheries.

20 2. Waste and Unreasonable Use Doctrine

21 The State Board has an affirmative duty to prevent waste and unreasonable use. The Con-
22 stitution prohibits the “waste or unreasonable use or unreasonable method of use of water.” (Cal.
23 Const., art. X, § 2.) The Supreme Court has held that the Constitution “establishes state water
24 policy” that all “uses of water . . . must now conform to the standard of reasonable use. (*National*
25 *Audubon, supra*, 33 Cal.3d at 443.) And the Legislature has directed that the Board “shall take all
26 appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent
27 waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of
28 water in this state.” (Wat. Code § 275.)

1 Courts have repeatedly upheld the State Board’s authority to directly regulate water ex-
2 traction that results in insufficient flows. (E.g., *Stanford Vina Ranch Irrigation Co. v. State* (2020)
3 50 Cal.App.5th 976, 999-1008 (*Stanford Vina*); *Light, supra*, 226 Cal.App.4th at 1482-90.) And
4 extractions of groundwater may be restricted to prevent waste and unreasonable use. (*City of*
5 *Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1240-42.)

6 *Light* demonstrates the State Board’s authority to adopt regulations that prevent diversions
7 of surface and groundwater that unreasonably harm salmonids. In response to sudden diversions
8 on the Russian River for vineyard frost protection that dropped flows, leading to juvenile salmon
9 deaths, the Board adopted a regulation declaring such diversions unreasonable use unless they
10 complied with certain rules. (*Light, supra*, 226 Cal.App.4th at 1473-76.) The Court of Appeal
11 upheld the regulation, holding that the Board’s authority under the Constitution and the Water
12 Code extended to promulgating regulations for the protection of the salmonids at risk from the
13 vineyards’ actions. (*Id.* at 1482-88.) Moreover, the court held that the “Board has the ultimate
14 authority to allocate water in a manner inconsistent with the rule of priority, when doing so is
15 necessary to prevent the unreasonable use of water.” (*Id.* at 1489.)

16 *Stanford Vina* provides an illustration of the State Board’s authority to adopt emergency
17 measures regulating pre-1914 and riparian water rights, even where a stream had been adjudicated.
18 During the 2012-16 drought, the State Board issued emergency regulations to protect flows in
19 Deer, Mill, and Antelope Creeks, all Sacramento tributaries with vulnerable salmonid populations,
20 explicitly declaring diversions causing flows to fall below CDFW-recommended minimum levels
21 to be a waste and unreasonable use of water. (*Stanford Vina, supra*, 50 Cal.App.5th at 989.) Shortly
22 after adoption of the emergency regulations, the Board issued curtailment orders.

23 After a challenge from one of the large diverters, the court found that the regulations were
24 within the State Board’s regulatory authority under Water Code sections 275 and 1058.5 and arti-
25 cle X, section 2 of the Constitution. (*Stanford Vina, supra*, 50 Cal.App.5th at 1002-03.) It further
26 found that the Board could issue regulations to curtail not only post-1914 appropriators, but ripar-
27 ian diverters and pre-1914 appropriators. (*Ibid.*) Further, and relevant to the Scott, the Court held
28 that the State Board could issue emergency regulations setting emergency flows even on streams

1 subject to an adjudication. (*Id.* at 1007.) And the Court held that the Board did not need to hold
2 an evidentiary hearing before issuing the curtailment orders. (*Id.* at 1003-04.)

3 After *Light* and *Stanford Vina*, therefore, there is no doubt that the State Board has the
4 power to: (1) issue both emergency and nonemergency regulations setting minimum flows; (2) is-
5 sue curtailment orders against all surface water users, including those within an adjudication; and
6 (3) do so quickly and without holding an evidentiary hearing pertaining to each water right user.

7 **3. The State Board’s Racial Equity Resolution**

8 In 2021, the State Board adopted Resolution No. 2021-0050, Condemning Racism, Xeno-
9 phobia, Bigotry, and Racial Injustice and Strengthening Commitment to Racial Equity, Diversity,
10 Inclusion, Access, and Anti-Racism (Racial Equity Resolution).⁹¹ The Racial Equity Resolution
11 recognizes that “the Water Boards’ programs were established over a structural framework that
12 perpetuated inequities based on race.”⁹² It further recognizes that:

13 The colonization, displacement, and genocide of Native American people in
14 the United States have contributed to the loss of water resource and watershed
15 management practices that supported Native American people’s traditional
16 food sources and ways of life. Watersheds are now primarily managed
17 through large-scale diversion of water for municipal, industrial, agricultural,
18 and commercial beneficial uses to the detriment of traditional, local, and cul-
19 tural uses and without compensation, recognition, or replacement. Historical
20 land seizures, broken promises related to federal treaty rights, and failures to
21 recognize and protect federal reserved rights, have resulted in the loss of as-
22 sociated water rights and other natural resources of value, as well as cultural,
23 spiritual, and subsistence traditions that Native American people have prac-
24 ticed since time immemorial.

25 As a result, California Native American Tribes continue to face barriers to
26 defining, quantifying, accessing, protecting, and controlling their ancestral
27 lands, water rights, instream flows, cultural resources, and beneficial uses.
28 Redistribution of water has reduced or eliminated access to healthy traditional
food sources such as smelt, salmon, freshwater mussels, and freshwater
plants. Disconnection from traditional ancestral land and water and the un-
availability of traditional foods have been linked to serious and pervasive
health issues. In addition, low or non-existent instream flows, and associated
water quality problems, impair or prevent water-related cultural, spiritual,
and subsistence practices. These injustices are exacerbated by climate change

26 ⁹¹ Available at [https://www.waterboards.ca.gov/board_decisions/adopted_orders](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2021/rs2021-0050.pdf)
27 /resolutions/2021/rs2021-0050.pdf (accessed January 28, 2023).

28 ⁹² *Id.* at p. 2.

1 and complex water resource and watershed management processes.

2 The historical seizures of land from people of color have had, and continue
3 to have, long-standing, oppressive impacts that extend beyond the loss of the
4 land itself. These impacts include the loss of the associated water rights and
5 other natural resources of value, lack of access to affordable and reliable gov-
6 ernmental services, and forced relocation to areas with fewer or lower quality
7 natural resources.⁹³

8 The Racial Equity Resolution calls on the State Board to “take action to address racial
9 Inequity . . . as part of the programs the Water Boards[] carry out for the communities we serve.”⁹⁴
10 It “[c]ommits to making racial equity, diversity, inclusion, and environmental justice central” to
11 the State Board’s work, including ensuring that the outcomes the Board influences “are not deter-
12 mined by a person’s race.”⁹⁵ It “reaffirms” the State Board’s “commitment to the protection of
13 public health and beneficial uses of waterbodies in all communities, and particularly Black, In-
14 digenous, and people of color communities disproportionately burdened by environmental pollu-
15 tion through . . . impaired surface waters and degraded aquifers.”⁹⁶ And it “[r]eaffirms [the
16 Board’s] commitment to improving communication, working relationships, and co-management
17 practices with all California Native American Tribes, including seeking input and consultation on
18 the Water Boards’ rules, regulations, policies, and programs to advance decisions and policies that
19 better protect California’s water resources.”

20 VI. REQUEST FOR ACTION

21 A. The State Board Should Issue a Permanent Streamflow Regulation for the 22 Scott River

23 The State Board has a duty under the public trust doctrine to protect fish populations in the

24 ⁹³ *Id.* at p 3. The Karuk Tribe does not concede, despite the wording of the Racial Equity
25 Resolution, that it or any other Tribe has “lost” any water rights. Rather, the State and Federal
26 governments continue to fail to recognize and/or quantify tribal rights, including rights to flows
27 sufficient to sustain the abundant fisheries that have supported Tribal ways of life, that exist and
28 have existed since time immemorial.

⁹⁴ *Id.* at p. 4.

⁹⁵ *Id.* at p. 7.

⁹⁶ *Ibid.*

1 Scott River. It has a duty to prevent waste and unreasonable use of water. It has stated that depriving
2 Tribes of water and the ecosystems that depend on that water is the result of racial discrimination,
3 displacement, and genocide perpetrated in part by the State of California and has
4 committed to rectifying those wrongs. It has plenary legal authority to act. It has already determined
5 that dewatering the Scott in drought years is unreasonable and requires action. There is no
6 legal or factual reason why the State Board should permit the Scott to go dry during normal or wet
7 years. It must act now.

8 The Scott River is in a precarious position. As long as the drought emergency persists and
9 the State Board continues to readopt the emergency regulations, there will be a bare minimum
10 flow requirement in place for the river. But the Governor could revoke the executive order declaring
11 such an emergency at any time. Whether that occurs this year or in the future, the river will
12 lose its flow protection. Because the river does not meet the CDFW flow criteria in normal and
13 wet years, more precipitation could ironically bring worse outcomes than if the drought—and the
14 emergency regulation—were to continue.⁹⁷ And this dynamic will continue: California routinely
15 cycles through wet and dry years. The only constant is increasing water withdrawals and decreasing
16 flows. A permanent flow regulation would replace ad hoc, emergency management with a
17 sustainable, long-term approach that is protective of public trust values.

18 The unreasonableness of the harms to the Scott is highlighted by the flow records over the
19 last half century. Before the 1970s, the Scott routinely experienced late summer flows in excess
20 of the CDFW recommendations of 62 cfs September. In fact, flows dropped below the CDFW-
21 recommended levels on only a few occasions, and rarely in other than dry or very dry years.⁹⁸

24 ⁹⁷ With recent precipitation, it is highly unlikely that 2022-23 will be a “critically dry year”
25 for the purposes of Water Code Section 1058.5, subdivision (a)(2). But the Scott suffers from low
26 flows in normal and wet years as well. And while parts of California have seen extremely high
27 precipitation this winter, the Scott basin has seen below-average to average precipitation for this
date for the water year. (See data available at <https://www.cnrfc.noaa.gov/?product=hucPrecipSeasonal&zoom=8&lat=41.484&lng=-122.402> (accessed May 18, 2023).)

28 ⁹⁸ Before 1973, records show mean August below 60 cfs in 1947, 1949, 1955, 1959, 1964,
and 1966. They show mean September flows below 60 cfs in 1944, 1945, 1947, 1950-51, 1955,

1 Indeed, before 1972, Scott flows *never* dropped below the drought minimum 30 cfs, and never did
2 so for two years in a row until 1987. It was also in the 1980s that the Scott began to experience
3 very low flows for the first time: flows dropped below 10 cfs for the first time in 1981; they have
4 been at or below 10 cfs in six of the last ten years.

5 The last normal year where flows exceeded the drought minimum flows of 30 cfs in August
6 or 33 cfs in September was 2010. The last wet year where flows exceeded these drought minimums
7 was 2003.

8 But the drought minimum flows are appropriate only for drought years: they “are not in-
9 tended to set the stage for long-term management considerations, nor should they be construed to
10 provide adequate protections for salmonids over extended periods of time.”⁹⁹ CDFW’s flow cri-
11 teria for years that are not drought emergencies are 77 cfs in August and 62 cfs in September. The
12 last year that the river met these numbers was the very wet year of 1998.

13 And the river is not just failing to meet flow targets—it routinely experiences flows low
14 enough to result in significant disconnections. Since 1980, flows in dry years have dropped to near
15 zero. And flows in normal and wet years have also regularly dropped below 22 cfs—the minimum
16 level necessary to allow Coho access to the Scott Valley and its tributaries.¹⁰⁰

17 The recent droughts have not explained the drop in flows—water use does.¹⁰¹ Agricultural
18 acreage, groundwater withdrawals, and intensity of cultivation have all increased simultaneously
19 with the drop in flows.¹⁰² But even if agricultural use does not further intensify, the climate is
20 changing. And modeling suggests that a warmer climate could bring smaller snowpacks, more
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23 _____
24 1957, 1959, 1960, 1962, 1964, 1966-68, and 1970.

25 ⁹⁹ CDFW Emergency Flow Letter, *supra*, at p. 1.

26 ¹⁰⁰ CDFW Flow Memo, *supra*, at p. 17.

27 ¹⁰¹ Van Kirk & Naman, *supra*, 44 J. Am. Water Resources Assn. at 1042-46.

28 ¹⁰² Scott Valley GSP, *supra*, at pp. 89.

1 abrupt floods, and higher temperatures.¹⁰³ Thus, in order to prevent additional harm to salmonid
2 populations, and pursuant to the Governor’s Water Supply Strategy, the State Board must take
3 proactive steps to address flows.¹⁰⁴

4 In *ELF*, the Court of Appeal held that the State Board has a duty to protect public trust
5 resources in the Scott from harm caused by groundwater extraction. (*ELF, supra*, 26 Cal.App.5th
6 at 858.) The historical record detailed in this Petition demonstrates that until 2021, it had not done
7 so. For decades, water extractions have increased year over year and the river has dwindled and
8 salmon stocks have dropped. The decrease in flows directly harms the public’s right to the Scott
9 as a navigable river by allowing frequent stream disconnections. And the devastating effects on
10 salmon are harms to public trust resources including “fisheries,” “habitat for . . . marine life,” and
11 scenic and cultural value. (*National Audubon, supra*, 33 Cal.3d at 434-35.) For decades, the State
12 Board took no action to analyze or halt these harms. But to its immense credit, the State Board
13 finally enacted the emergency drought regulations in 2021. But the Board cannot rest on its laurels;
14 it cannot now allow the river to return to the unregulated race to the bottom that previously existed.

15 And the Board should recognize what it did in enacting the Scott emergency regulations,
16 the Mill and Deer emergency regulations in 2014-15, and the Russian River frost protection reg-
17 ulations: allowing unlimited water withdrawals that cause existential harm to fisheries is a waste
18 and an unreasonable use of water. (See *Stanford Vina, supra*, 50 Cal.App.5th at 989; *Light, supra*,
19 226 Cal.App.4th at 1473-76.)

20 Further, the current declines in flows and the concomitant declines in salmon populations
21 should offend the State Board’s self-professed commitment to racial justice. The Scott River is an
22 exemplar of the dynamic described in the Racial Equity Resolution: settlers divested Indigenous
23 people of their lands and their historic use of the waters of their homeland.¹⁰⁵ And the State of
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25
26 ¹⁰³ NMFS Recovery Plan, *supra*, at pp. 3-43 to 3-44.

27 ¹⁰⁴ Water Supply Strategy, *supra*, at pp. 2, 14.

28 ¹⁰⁵ See Racial Equity Resolution, *supra*, at p. 3.

1 California has permitted ongoing, increasing water extractions over the past 150 years with no
2 permanent, binding streamflow protections in place.

3 As a direct result, the Karuk Tribe and other Tribes are experiencing severe impacts on
4 their way of life. Salmon are crucial to the Tribe’s religion and provide a vital source of food. In
5 order to hold the annual Spring Salmon Ceremony each spring, the priest must catch and eat a
6 Spring Chinook salmon. Without this sacrament, this ceremony is at risk. During annual World
7 Renewal Ceremonies, dance owners are obligated to celebrate by serving fresh fall Chinook.
8 Again, a loss of fish undermines these ceremonial and cultural practices. In order to vindicate the
9 language of its recent Racial Equity Resolution, the State Board must act to restore flows and
10 fisheries that were unjustly taken from the Tribe.

11 **B. There Is No Legal Impediment to a Permanent Flow Regulation**

12 To the extent that objections may exist to the State Board’s authority and duty to adopt a
13 permanent streamflow regulation for the Scott River, any such concerns are unfounded.

14 For example, enacting a flow regulation, emergency or otherwise, should not require read-
15 judication of the river. In *Stanford Vina*, the Court of Appeal held that even judicially decreed
16 water rights were “limited by the rule of reasonableness.” (*Stanford Vina, supra*, 50 Cal.App.5th
17 at 1007.) Thus, the existence of the Scott River adjudication is no obstacle to a flow regulation:
18 the State Board has both the duty and the authority to regulate both surface and groundwater
19 extractions to the extent that they prevent the river’s reaching adequate flows.

20 And the State Board has the statutory and constitutional authority to act even if there is no
21 drought emergency. Water Code section 174 gives the Water Board the power to “exercise the
22 adjudicatory and regulatory functions of the state in the field of water resources.” Section 186
23 gives the Board “any powers . . . that may be necessary or convenient for the exercise of its duties
24 authorized by law.” Section 1058 empowers it to “make such reasonable rules and regulations as
25 it may from time to time deem advisable.” And section 275 states that the Board “shall take all
26 appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent
27 waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of
28 water in this state.” The *Light* court held that these authorities gave the Board the power to issue

1 the frost protection regulation on the Russian River. (*Light, supra*, 226 Cal.App.4th 1481-82.)
2 Importantly, this regulation was not reliant on a drought proclamation, but was a permanent reg-
3 ulation issued in response to a recurring dewatering of the river. And it covered groundwater ex-
4 tractions. (Cal. Code Regs., tit. 23, § 862, subd. (a).)

5 Nor must the State Board be necessarily bound by the rule of priority in issuing any regu-
6 lation. (*Stanford Vina, supra*, 50 Cal.App.5th at 1007.) In other words, should the Board find that
7 curtailing water rights in an order other than the traditional rules is necessary to best protect public
8 trust resources and avoid unreasonable use, it may do so. For instance, the Board could find that
9 certain pumping locations or methods have outsized impacts on the river and should be curtailed
10 before other, even more junior water rights. The Board may lawfully make such a finding.

11 In sum, the Board has a duty to act. And there is no legal impediment to acting and there
12 is every reason to act now.

13 **C. Any Regulation Should Improve Upon the Emergency Regulations**

14 As discussed above, the emergency regulations have been a necessary first step towards
15 protecting the Scott's flows. For the first time, they have set a binding minimum flow standard,
16 enforced that standard through curtailments, and collected key information. Yet the implementa-
17 tion of that minimum flow standard has suffered from severe limitations.

18 The experience of the summer of 2022 is highly concerning for the effectiveness of the
19 regulations as currently written. The Scott failed to achieve a level of flow anywhere near the
20 required levels in the summer and fall of 2022—averaging less than 10 cfs from mid-July into the
21 late fall. The parties to this petition are highly concerned that local cooperative solutions that cap
22 groundwater pumping reductions at 30 percent are insufficient to maintain minimum flows. (See
23 Cal. Code Regs., tit. 23, § 875, subd. (f)(4)(D).) Further, we have concerns that such local coop-
24 erative solutions do not contain sufficient monitoring and reporting requirements to show that the
25 reductions are actually taking place. These agreements may also be approved without public notice
26 and comment. While the State Board may have seen these measures as appropriate for an emer-
27 gency regulation, we urge the Board to improve any local cooperative solution procedure in a
28 permanent regulation to ensure that such solutions have sufficient effects on flows, are measurable

1 and monitored, and that the public can play a role in developing them. While recognizing that an
2 incentive for voluntary participation is valuable, a permanent regulation should have the flexibility
3 to increase pumping restrictions above 30 percent if necessary to protect flows.

4 A second issue with the emergency regulations is that Board staff have waited to impose
5 curtailments until flows have already dropped to near the minimum flow. While this approach can
6 be successful in certain hydrological settings, we have concerns that a regulation for the Scott
7 must be more proactive to protect flows in this highly interconnected system. Because late-sum-
8 mer flow in the Scott Valley is so closely tied to groundwater, it may be necessary to curtail
9 groundwater extractions well before river flows drop in order to preserve connectivity between
10 the river and groundwater.

11 We hope that a permanent regulation—and staff’s implementation of that regulation—in-
12 corporates the best available modeling to ensure that groundwater levels stay sufficiently high
13 during the summer to support sufficient flows. For example, due to historically low rainfall, it was
14 likely foreseeable that flows would be very low in the summer of 2022 despite some late spring
15 rains. But staff did not impose curtailments on any water users until July 2, 2022.¹⁰⁶ Despite cur-
16 tailments, flows dropped below 10 cfs within weeks. The State Board should explore more proac-
17 tive approaches using full-year precipitation data and modeling to project flows for the whole
18 summer, not just the week ahead.

19 A permanent regulation should also not be restricted to drought or low-precipitation years.
20 Flood flows are necessary to scour fine sediment from gravel, distribute beneficial large wood,
21 and restore channel function, especially in less-degraded parts of the watershed.¹⁰⁷ And higher
22 summer flows—above the 62 cfs recommended by CDFW in September—may be appropriate in
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25 ¹⁰⁶ State Board, Addendum 32 to Order for Reported Water Rights in the Scott River
26 Watershed Issued September 9, 2021, Order WR 2021-0083-DWR, and Order WR 2021-0084-
27 DWR (July 1, 2022) (Curtailment Orders), available at https://www.waterboards.ca.gov/drought/scott_shasta_rivers/docs/2022/scott-addendum32.pdf (accessed March 3, 2023).

28 ¹⁰⁷ NMFS Recovery Plan, *supra*, at pp. 3-19, 3-43.

1 high-precipitation years to allow fish populations to not just survive, but to recover.¹⁰⁸ A process
2 to set a permanent flow regime should allow for fish to benefit from the abundance of wet years
3 as well as simply preventing the worst-case scenarios in dry years.

4 **D. Any Analysis of Economic Impact Should Favor Adoption of a Flow**
5 **Regulation**

6 Under Government Code section 11346.3, an economic impact analysis is required for a
7 permanent regulation. Such an analysis should find in favor of a flow regulation.

8 First, any required economic impact analysis must find that the benefits of the regulation
9 outweigh any factors to the contrary. Under section 11346.3, when the State Board proposes to
10 adopt a regulation, it must consider, among its factors, benefits of the regulation to the “the state’s
11 environment.” (Gov. Code § 11346.2, subs. (b)(1)(D) [nonmajor regulations], (c)(1)(F) [major
12 regulations].) In enacting the California ESA, the Legislature declared that it is “the policy of the
13 state to conserve, protect, restore, and enhance any endangered species or any threatened species
14 and its habitat” (Fish & G. Code § 2052), and as a result, “all state agencies, boards, and commis-
15 sions shall seek to conserve endangered species and threatened species and shall utilize their au-
16 thority in furtherance of the purposes” underlying the ESA (*id.* § 2055). As Coho are listed as
17 threatened under the ESA—and as their population has declined significantly since that listing—
18 it is a clear and significant benefit to the state to adopt a regulation that furthers the survival of
19 this evolutionarily significant unit of the species.

20 Second, the State Board should consider the economic impact of a regulation in light of
21 *National Audubon’s* direction that the State Board should protect public trust resources “whenever
22 feasible.” (*National Audubon, supra*, 33 Cal.3d at 446.) The standard for economic feasibility of
23 a regulation is not whether there will be economic impacts. Regulations are not “ ‘infeasible’ be-
24 cause they impose financial burdens on some businesses or consumers.” (*California Manufactur-*
25 *ers & Technology Assn. v. State Water Resources Control Bd.* (2021) 64 Cal.App.5th 266, 282; see
26

27 ¹⁰⁸ *Id.* at pp. 3-27 to 3-28 (increased flows lead to better outcomes for Coho along a number
28 of parameters: higher migration success, smolt size, survival rate, abundance, and growth rate).

1 *id.* at 282-83 [quoting *United Steelworkers of America, AFL-CIO-CLC v. Marshall* (D.C. Cir.
2 1980) 647 F.2d 1189, 1265 (“A standard is not infeasible simply because it is financially burden-
3 some . . . , or even because it threatens the survival of some companies within an industry.”)].
4 The State Board should find that any economic burdens a regulation imposes are justified in light
5 of the existential risk to Coho and Chinook populations in the Scott.

6 An economic impact analysis should also take into account the benefits of a regulation that
7 would allow for salmonid recovery. Tribes, including the Karuk, have relied on annual salmon
8 runs for millennia. And while the cultural and religious importance of salmon transcends econom-
9 ics, the decline of populations has significant economic impacts as well. Karuk people—largely
10 as a result of historic dispossession, discrimination, and disinvestment—experience unemploy-
11 ment rates over 16 percent and poverty rates over 40 percent.¹⁰⁹ Subsistence fishing is an important
12 source of food for many Karuk people, people for whom the weekly cost of groceries is a signifi-
13 cant economic burden. Restoring salmon populations in Karuk territory will thus have a significant
14 positive impact on the economic life for Karuk people.

15 And the State Board must also consider the positive impacts on the California fishing in-
16 dustry. Once a billion-dollar industry, the California commercial salmon fishing fleet has been
17 prohibited from fishing within the Klamath Management Zone (KMZ) for the past several years
18 due to insufficient Klamath-origin salmon stocks. Restoring flows to the Scott is vital for allowing
19 Klamath salmon populations to recover to the point that the State’s once extremely valuable com-
20 mercial salmon fishing industry can recover.¹¹⁰ This is also true for California’s economically
21 important recreational salmon fishing industry, once also an important economic powerhouse for
22 many coastal, San Francisco Delta and inland river communities, and a major draw for tourism in
23

24 ¹⁰⁹ Karuk Tribe, *Comprehensive Economic Development Strategies 2021-2026* (2021), at
25 pp. 11-13, available at [https://www.karuk.us/images/Karuk_Tribe_CEDS_-_Public_Review](https://www.karuk.us/images/Karuk_Tribe_CEDS_-_Public_Review_Draft_9_14_21.pdf)
26 [_Draft_9_14_21.pdf](https://www.karuk.us/images/Karuk_Tribe_CEDS_-_Public_Review_Draft_9_14_21.pdf) (accessed January 28, 2023).

27 ¹¹⁰ For a recent measure of the value of commercial salmon fisheries to the State’s economy
28 see Southwick Associates, *Report on the Economic Impacts of Salmon in the State of California*
(2012), available at [https://ifrfish.org/wp-content/uploads/2023/01/Southwick-Report-CA-](https://ifrfish.org/wp-content/uploads/2023/01/Southwick-Report-CA-Salmon-Values-2012.pdf)
[Salmon-Values-2012.pdf](https://ifrfish.org/wp-content/uploads/2023/01/Southwick-Report-CA-Salmon-Values-2012.pdf) (accessed March 13, 2023).

1 much of the state. All of these major California economic sectors suffer greatly when the salmon
2 runs they are built upon diminish and effectively disappear.

3 **VII. CONCLUSION**

4 For the reasons stated above, the State Board should act immediately to fulfill its duties
5 under the waste and unreasonable use doctrine, the public trust doctrine, and its stated policy under
6 the Racial Equity Resolution by adopting a permanent flow regulation on the Scott River.

7 The regulation should have the following features:

- 8 ▪ Establish minimum flows based on CDFW’s 2017 Flow Criteria, with consider-
9 ation of higher minimums as hydrologically appropriate;
- 10 ▪ Include mandatory monitoring and information reporting to demonstrate com-
11 pliance and refine modeling;
- 12 ▪ Include mandatory groundwater pumping limitations—both within and without
13 the adjudicated zone—sufficient to preserve adequately high groundwater lev-
14 els to maintain stream connection during the summer and fall;
- 15 ▪ Maintain the Emergency Regulation’s prohibition on inefficient livestock wa-
16 tering.

17 There is no time for further delay. The State Board must act.

18 Respectfully submitted,

19 Dated: May 23, 2023

20 ENVIRONMENTAL LAW FOUNDATION



21 By: Nathaniel Kane

22 *Attorneys for Petitioners Karuk Tribe of California,*
23 *Environmental Law Foundation, Pacific Coast*
24 *Federation of Fishermen’s Associations, and Institute*
25 *for Fisheries Resources*