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11 SUPERIOR COURT FOR THE STATE OF CALIFORNIA
12 IN AND FOR THE COUNTY OF HUMBOLDT

13 FRIENDS OF THE EEL RIVER, a public benefit
14 corporation,
15 Petitioner,
16 vs.

17 COUNTY OF HUMBOLDT, a state entity;
18 BOARD OF SUPERVISORS OF THE COUNTY
19 OF HUMBOLDT, a public entity,
20 Respondents.

Case No.

VERIFIED PETITION FOR WRIT OF
MANDATE

(Code of Civil Procedure § 1085)

21 Petitioner FRIENDS OF THE EEL RIVER (hereinafter “Petitioner” or “FOER”) petitions this
22 Court on their own behalf, on behalf of their members, on behalf of the general public, and in the
23 public interest pursuant to Code of Civil Procedure § 1085 for a writ of mandate directed to
24 Respondents COUNTY OF HUMBOLDT and the BOARD OF SUPERVISORS OF THE COUNTY
25 OF HUMBOLDT (hereinafter “Respondents” or “County”) to implement a program which protects the
26 public trust within the Lower Eel River by restricting or regulating groundwater pumping from the Eel
27 River Valley Groundwater Basin during dry and critical water years and to cease accepting
28 applications for the issuance of well drilling permits for new wells and modifications for existing wells
pending the establishment of such program. By this verified petition, FOER alleges as follows:

1. Petitioner brings this action to challenge the County’s failure to utilize its powers to
regulate the extraction of groundwater from wells in the Eel River watershed in a manner that protects

1 the public trust during low water years. The Eel River is a public trust resource under California's
2 Public Trust Doctrine, which establishes that the waters and wildlife of the state belong to the people,
3 and that the State acts as a trustee to manage and protect those resources for the benefit of the people of
4 the State. The Eel River provides habitat for many fish and wildlife protected under the Public Trust
5 Doctrine. It is also a navigable waterway used for boating, rafting and fishing. In recent dry years
6 during the late summer and early fall months, key stretches of the Lower Eel River have dried up or
7 had stream flows reduced to very shallow levels, interrupting the river's public trust uses. The
8 pumping of groundwater from the Eel River Valley Groundwater Basin for irrigation purposes has
9 contributed to and exacerbated the reduction of surface water depth in the Lower Eel River and
10 prolonged the duration that dewatered river stretches or reduced surface depths persist.

11 2. The stretch of the Lower Eel River from the confluence of the Van Duzen River to
12 Fernbridge has been identified as a groundwater dependent ecosystem unit which supports cold
13 freshwater habitat, wildlife habitat, habitat for rare, threatened and endangered species, migration of
14 aquatic organisms, and spawning, reproduction and early development habitat of fish. In particular, the
15 Lower Eel River serves as critical habitat for Chinook salmon (*Oncorhynchus tshawytscha*), coho
16 salmon (*Oncorhynchus kisutch*), and steelhead (*Oncorhynchus mykiss*), all of which are designated as
17 threatened or endangered. Areas of the river which are too shallow or lack surface flow inhibit the
18 migration of salmonids during the summer and fall. Additionally, the use of boats, kayaks and
19 paddleboards is disrupted in areas of the river where water depth is decreased or eliminated.

20 3. As fiduciary of the public trust, the County has the authority and the duty to enact an
21 ordinance to regulate groundwater pumping to reduce impacts to the Eel River's public trust uses
22 during low flow periods. Groundwater extractions influence surface water flow and water levels in the
23 Lower Eel River. Humboldt County has adopted an ordinance to regulate the construction,
24 reconstruction, repair, and destruction of water wells. However, the ordinance fails to reference or
25 require consideration and avoidance of the effects of groundwater pumping on surface flows or public
26 trust uses or resources. The County has not taken any action to review the impacts to the public trust
27 resulting from groundwater pumping from wells and its reduction of surface flows in the Lower Eel
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1 River, nor to create a program that would reduce or control groundwater extraction in low water years
2 in a manner that eliminates or reduces impacts on the public trust.

3 4. For these and other reasons identified below, the County has violated and continues to
4 violate the Public Trust Doctrine by failing to protect the Lower Eel River from numerous and
5 injurious extractions of groundwater causing injury to the Lower Eel River's public trust uses,
6 including but not limited to fish, wildlife and navigation. Accordingly, Petitioners request that
7 Respondents be compelled to develop a management plan for the Eel River Valley Groundwater Basin
8 that reduces groundwater pumping in anticipation of and during low flow periods as necessary to
9 reduce, minimize, or prevent impacts to the public trust, and that Respondents be enjoined from
10 accepting applications for the issuance of well drilling or modification permits affecting the Eel River
11 Valley Groundwater Basin until such time as the County is not in violation of their public trust duties.

12 **JURISDICTION AND VENUE**

13 5. This Court has jurisdiction of this proceeding pursuant to Code of Civil Procedure
14 section 1085.

15 6. Venue is proper in this court pursuant to Code of Civil Procedure § 394 because the
16 County of Humboldt is the Respondent and the public trust violations are occurring in Humboldt
17 County. Petitioner also resides in Humboldt County.

18 7. This petition is timely filed within any applicable statute of limitations. No statute of
19 limitations applies to ongoing violations of the public trust. Respondents' violations of the public trust
20 in the Lower Eel River are ongoing.

21 8. Petitioner has served Respondents with a written notice of Petitioners' intention to
22 commence the Public Trust Doctrine claims included in this action. The written notice was sent via e-
23 mail and First Class mail on August 16, 2022. A true and correct copy of the written notice and proof
24 of service is attached hereto as Exhibit A.

25 9. Pursuant to Code of Civil Procedure § 388, Petitioner will provide a copy of this
26 Petition to the Attorney General.

1 continuing duty to protect public trust resources in a manner consistent with the Public Trust Doctrine.
2 Humboldt County has adopted a limited groundwater management ordinance and keeps minimal
3 recordation of wells within the County, through a permitting system for well construction,
4 reconstruction, repair, and destruction.

5 14. Respondent BOARD OF SUPERVISORS OF THE COUNTY OF HUMBOLDT is the
6 governing body for the County of Humboldt.

7 15. FOER and its members have a direct and beneficial interest in ensuring that the County
8 fully complies with its duties under the Public Trust Doctrine and limits or regulates activities which
9 adversely affect public trust uses, especially species threatened with extinction like the Coho and
10 Chinook salmon, and steelhead trout. Unrestricted groundwater pumping from the Eel River Valley
11 Groundwater Basin, and continued issuance and modifications of well drilling permits, has resulted in
12 and will continue to contribute to the reduction or elimination of surface flows in the Lower Eel River
13 during the time of year when surface water is already largely depleted and salmonids are impeded from
14 migrating, increasing their risk of extinction. The lack of management of groundwater extraction in the
15 Eel River Valley Groundwater Basin and continued, unfettered pumping from existing and any
16 proposed new wells also impairs the public's use and enjoyment of the public trust by disrupting the
17 use of boats, kayaks and paddleboards in areas of the river where water depth is decreased or
18 eliminated. These existing and potential disturbances to aquatic and wildlife habitat and public use of
19 the trust in the Lower Eel River undermine the conservation and recreational interests of Petitioner and
20 its members.

21 16. The maintenance and prosecution of this action will confer a substantial benefit on the
22 public by assuring that the County meet its duty to address and eliminate public trust impacts to the
23 Lower Eel River from groundwater pumping in the Eel River Valley Groundwater Basin.

24 17. Petitioner has no plain, speedy, or adequate remedy in the ordinary course of law within
25 the meaning of Code of Civil Procedure § 1086, in that Respondents' failure to apply their public trust
26 duties in a manner that protects the public trust uses of the Lower Eel River is not otherwise
27 reviewable in a manner that provides an adequate remedy. Accordingly, Petitioner seeks this Court's
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1 review of Respondents’ failure to comply with their duty to take actions necessary to protect the public
2 trust and to rectify the violations of the Public Trust Doctrine summarized above and detailed below.

3 18. Unless stayed, Respondents’ issuance of permits for the construction of new and
4 expansion of existing wells will allow the depletion of the Eel River’s surface flows and adverse
5 effects on the public trust to continue despite it being contrary to the public interest. Petitioner and its
6 members will suffer irreparable harm by Respondents’ failure to take the required steps to protect the
7 public trust, including serious threats to threatened salmonids and the public’s use and enjoyment of
8 the Lower Eel River.

9 19. Petitioners have requested action from Respondents. Respondents have failed to act,
10 contrary to their duties under the Public Trust Doctrine and Petitioners have exhausted all available
11 administrative remedies before filing this petition.

12 **LEGAL BACKGROUND**

13 **The Public Trust Doctrine**

14 20. The State of California “holds all of its navigable waterways and the lands lying
15 beneath them as trustee of a public trust for the benefit of the people.” (*Colberg, Inc. v. State of Cal. ex*
16 *rel. Dept. of Public Works* (1967) 67 Cal.2d 408, 416.) The State and its subdivisions, including the
17 County, have an affirmative duty to take the public trust into account in the planning and allocation of
18 water resources, and to protect public trust uses whenever feasible. (*National Audubon Society v.*
19 *Superior Court* (1983) 33 Cal.3d 419, 446 (*National Audubon*); *Env’tl Law Foundation v. State Water*
20 *Resources Control Bd.* (2018) 26 Cal.App.5th 844, 868 (“*ELF*”).) The County must act, “so far as
21 feasible, to avoid or minimize harm” to the interests protected under the trust, including, where
22 necessary, controlling extractions from waters that are not navigable to protect waters that are.
23 (*National Audubon, supra*, 33 Cal.3d at pp. 426, 435-37.)

24 21. The duty under the public trust doctrine “exists as a matter of law itself.” (*United States*
25 *v. State Water Res. Control Bd.* (1986) 182 Cal.App.3d 82, 150. *See, e.g.* Public Resources Code
26 [“PRC”] § 85023;) Public trust uses “should not be destroyed” simply because the responsible
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1 governmental body “thought itself powerless to protect them.” (*National Audubon, supra*, 33 Cal.3d at
2 p. 452.)

3 22. The purpose of the public trust is to protect navigation, waterborne commerce, fishing,
4 and recreational and ecological uses. (*National Audubon, supra*, 33 Cal.3d at pp. 434–435.) The public
5 trust doctrine protects the public trust uses of navigable waters, including waters navigable by
6 recreational watercraft. (*Id.* at p. 435 & fn. 17.) The public trust doctrine also applies to activities that
7 affect fish in any water in the state. (*People v. Truckee Lumber Co.* (1897) 116 Cal. 397, 399; see also
8 *California Trout, Inc. v. State Water Resources Control Bd.* (1989) 207 Cal.App.3d 585, 629–630
9 (*California Trout*) [public trust in fish is not limited to navigable waters, but also “extends to all waters
10 within the state, public or private, wherein these animals are habited or accustomed to resort for
11 spawning or other purposes, and through which they have freedom of passage to and from the public
12 fishing grounds of the state.”].) To further the protection of public trust uses, the public trust doctrine
13 limits conduct affecting those uses, even if the conduct does not occur in, on, or immediately adjacent
14 to navigable waterways. (*Id.* at p. 437.) Thus, to the extent extraction of groundwater in the Eel River
15 watershed has the potential to affect the Eel River itself and fish in the Eel River, that extraction is
16 subject to the public trust doctrine. (*ELF, supra*, 26 Cal.App.5th at pp. 858- 862.)

17 23. Every state subdivision has a duty to consider the impacts of its actions on the public trust,
18 whether the Legislature has required it to do so by legislation or not. (*Ctr. for Biological Diversity, Inc.*
19 *v. FPL Grp., Inc.* (2008) 166 Cal.App.4th 1349, 1370, fn. 19.) How it discharges that duty is a matter
20 for the subdivision to decide in the first instance. (*National Audubon, supra*, 33 Cal.3d at p. 447 [“It is
21 clear that some responsible body ought to reconsider the allocation of the waters of the Mono
22 Basin.”].) But if the subdivision fails to discharge the duty, the courts have jurisdiction to remedy the
23 failure. (*San Francisco Baykeeper, Inc. v. State Lands Com.* (2015) 242 Cal.App.4th 202, 243.

24 **Humboldt County’s Well Regulations**

25 24. The County has adopted an ordinance to regulate the construction, reconstruction,
26 repair, and destruction of water wells. Humboldt County Code, Title VI, Div’n 3, Chapter 1, § 631.1
27 et seq. (“Well Ordinance”). The Well Ordinance was enacted pursuant to the County’s police powers
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1 in order to protect the health, safety, and general welfare of the people of the State of California. *Id.*, §
2 631.1.

3 25. The Well Ordinance requires any person who seeks to dig, bore, drill, deepen, modify,
4 repair, or destroy a well that may intersect groundwater must first obtain a permit authorizing the
5 proposed action. Well Ordinance, § 631-3. The application must include information on the proposed
6 minimum and maximum depth of the well, information about the casings and perforations proposed for
7 the well, the well’s proposed use, and “[o]ther information as may be necessary to determine if the
8 underground waters will be adequately protected.” *Id.*, § 631-4. In issuing a permit, the Well
9 Ordinance authorizes the County’s Department of Health and Human Services Public Health Branch
10 (“Health Branch”) to “condition the permit in any manner necessary to carry out the purposes of this
11 division.” *Id.*, § 631-6. “Conditions may include, but are not limited to, such quantity and quality
12 testing methods as the Department of Health and Human Services Public Health Branch finds
13 necessary.” *Id.* The Health Branch “shall deny an application for a permit if, in its judgment, issuance
14 of a permit is not in the public interest.” *Id.*, § 631-7.

15 26. There is no other ordinance applying the County’s police powers to groundwater wells
16 in the Eel River watershed. The Well Ordinance’s scope is limited to the construction, reconstruction,
17 repair, and destruction of groundwater wells. The Well Ordinance does not reference or require
18 consideration and avoidance of the effects of groundwater pumping on surface flows or public trust
19 uses or resources. The County has not adopted an ordinance that establishes the County’s procedures
20 and authority to regulate the quantity and/or timing of groundwater pumping from wells with a
21 hydrologic connection to the Lower Eel River which affect the depth or flows of surface water in the
22 Lower Eel River. The County has failed to develop and implement an adequate system to manage,
23 monitor, limit, or regulate groundwater extractions from new or existing wells to ensure protection of
24 the public trust or the County’s compliance with their duties under the Public Trust Doctrine.

25 **STATEMENT OF FACTS**

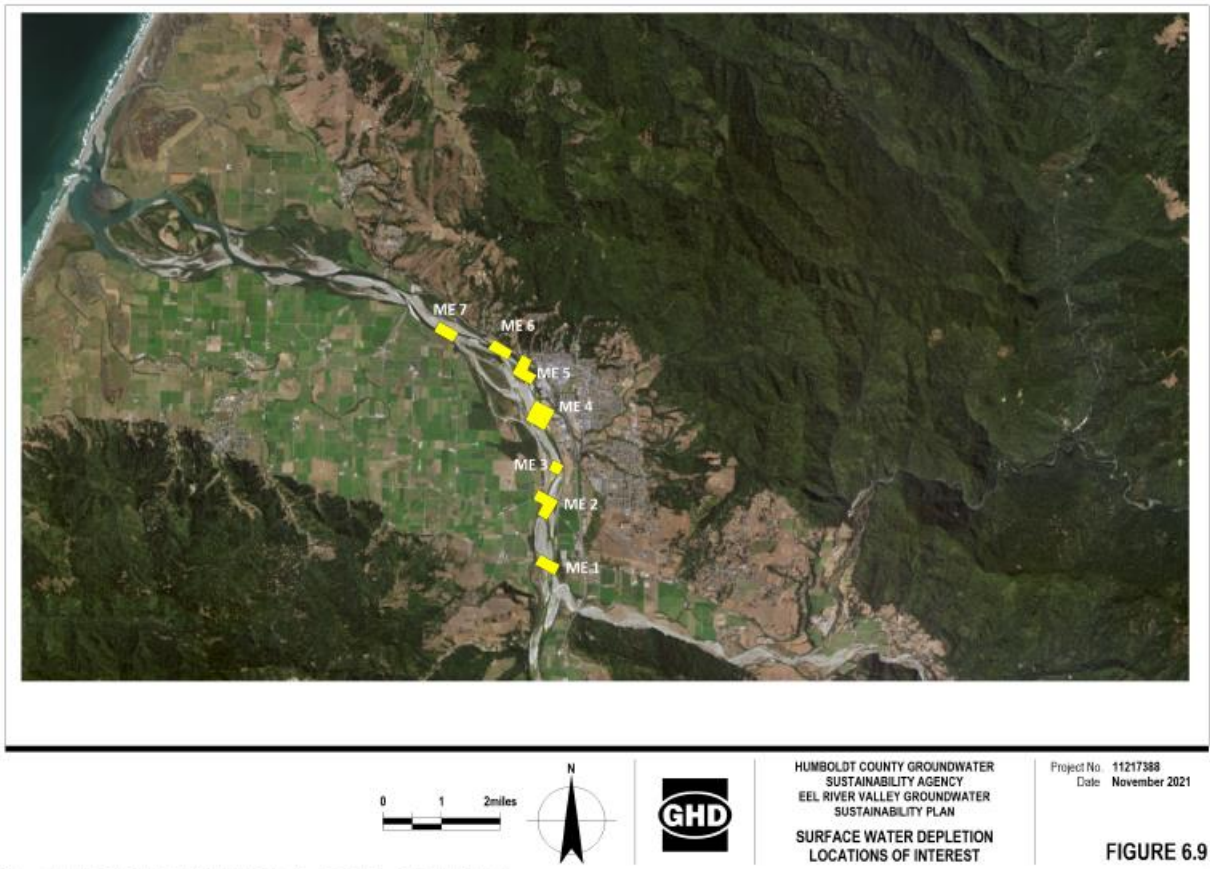
26 27. The Eel River watershed drains approximately 3,684 square miles, starting in the peaks
27 of the Coast Range in Mendocino County, Humboldt County and portions of Trinity, Glenn and Lake
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1 Counties, and flowing northwesterly to the Pacific Ocean just to the south of Humboldt Bay. The Eel
2 River watershed is the third largest watershed in California. The upper reaches of the watershed consist
3 primarily of mountainous, forested landscapes. The Lower Eel River is located in Humboldt County.
4 Beginning where the South Fork Eel River joins the mainstem Eel River from the west, the Lower Eel
5 River flows past Scotia and Rio Dell, where it exits a predominantly forested landscape into a large
6 plain area dominated by irrigated agricultural and dairy lands. These agricultural lands expand as the
7 river is joined by the Van Duzen River flowing from the east, its first major tributary above the Pacific.
8 Agricultural uses also dominate the lower drainage of the Van Duzen River. Downstream of the
9 confluence with the Van Duzen River, the City of Fortuna is located on the eastern side of the river.
10 Extensive agricultural lands extend along the western and southern side of the Lower Eel River from
11 Fortuna west to the Pacific Ocean.

12 28. A number of beneficial uses are identified for the Lower Eel River. These include, but
13 are not limited to, contact and non-contact water recreation, fishing, cold freshwater habitat, wildlife
14 habitat, habitat for rare, threatened and endangered species, migration of aquatic organisms, spawning,
15 reproduction and early development habitat of fish, Native American culture, municipal water supply,
16 and agricultural water supply.

17 29. The Eel River is a public trust resource under California's Public Trust Doctrine. The
18 Public Trust Doctrine establishes that the waters and wildlife of the state belong to the people, and the
19 State acts as a trustee to manage and protect those resources for the benefit of the people of the state.
20 The Eel River is a navigable waterway used for boating, rafting and fishing, and provides water supply
21 for domestic and agricultural purposes. It also provides habitat for many fish and wildlife protected
22 under the Public Trust Doctrine, including coho and chinook salmon and steelhead as well as other
23 special status fish and wildlife.

1 30. As the Lower Eel River flows out of the mountains and onto the coastal plain, the river
2 bed broadens out and river depths become more shallow. At roughly seven locations between the
3 confluence of the Van Duzen River and the Fernbridge Bridge, there are shallower stretches of the
4 river known as “riffles” where water flows increase in speed. At least seven riffles are located within
5 the areas depicted on the map as ME 1 through ME 7 prepared by the Humboldt County Groundwater
6 Sustainability Agency (“Humboldt County GSA”) included as Figure 6.9 of the Eel River Valley



22 Groundwater Sustainability Plan (“GSP”) and reproduced here. Monitoring completed on behalf of the
23 County (page 24, Stillwater Sciences, 2021) indicate that between 2006 and 2020, low flow through
24 one or more of these riffles blocked adult salmonid passage until the first high flows during the fall.
25 (Stillwater Sciences, 2021, Assessment of Groundwater Dependent Ecosystems for the Eel River
26 Valley Basin Groundwater Sustainability Plan (Technical Memorandum), p. 24.)
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1 These stretches are characterized by rocks and gravel near the water surface. The combination of
2 shallow, fast-moving water flowing through rocks and gravel oxygenates the water and provides
3 important habitat to food sources for fish, including benthic and aquatic macroinvertebrates. These
4 stretches are critical to migrating salmon. When there is insufficient flow in the river, these riffle
5 sections are the first stretches of the river where surface flows will become shallower. California
6 Department of Fish and Wildlife uses a standard of 0.7 feet as the minimum critical riffle depth to
7 allow passage of adult salmonids (pg. 5 of GSP). Where the river depth is reduced to less than 0.7 feet,
8 that shallow stretch effectively blocks salmon from migrating upstream or downstream at that location
9 when flows are reduced during the fish migration periods.

10 31. Although annual average rainfall within the Eel River watershed is about 55 inches –
11 more than double the statewide annual average – almost all of that rainfall occurs during the rainy
12 season from October through April. Annual precipitation throughout the Eel River watershed is
13 concentrated in the wet season with 90 percent of rain falling between October and April.

14 32. Although during storm events in winter and early spring, high flows in the Eel River at
15 Scotia can exceed 100,000 cubic feet per second (“cfs”), during the summer and early fall months,
16 median monthly flow rates at the same gage over the last 108 years drop from approximately 1000 cfs
17 at the beginning of June to about 100 cfs by early September. At these flow rates, historically the
18 Lower Eel River has nevertheless maintained surface flows throughout the summer and early fall.

19 33. The County has identified water year classifications for the Lower Eel River. A water
20 year is the 12-month period from October 1 through September 30. For example, water year 2021 ran
21 from October 1, 2020 through September 30, 2021. Using rain data collected within the watershed and
22 applying an equation that also factors in the precipitation from the previous water year, the water year
23 type calculation generates an Index Rank of from 1 to 30. An Index Rank of 22 to 30 is categorized as
24 a “wet” water year. An Index Rank of 16 to 21 is categorized as an “above normal” water year. An
25 Index Rank of 10 to 15 is categorized as a “below normal” water year. An Index Rank of 5 to 9 is
26 categorized as a “dry” water year. An Index Rank of 1 to 4 is categorized as a “critical water year” .
27 Since 1992, the Lower Eel River has endured four critical water years in 1992, 2009, 2014, and in
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1 2021. During that same time period, five dry water years occurred in 1994, 2001, 2008, 2015 and
2 2020. Thus, over the last three decades, the first 15 years (from 1992 to 2007) saw only three dry or
3 critical years, while the second half of the period saw six.

4 34. Underlying the Lower Eel River, the lower Van Duzen River, and their adjacent
5 agricultural-dominated watersheds is the Eel River Valley Groundwater Basin. The Eel River Valley
6 Groundwater Basin is hydraulically connected to the Lower Eel River. The main aquifers in the Eel
7 River Valley Groundwater Basin include the deeper Carlotta formation overlaid by a sequence of
8 unconsolidated alluvial deposits. The alluvial aquifer is estimated to be up to 200 feet thick. The
9 alluvial aquifer is unconfined and with high hydraulic conductivity. The alluvial aquifer is the primary
10 water source of most agricultural wells in Eel River Valley Groundwater Basin. The alluvial aquifer is
11 hydraulically connected to Eel River surface waters.

12 35. The stretch of the Lower Eel River from the confluence of the Van Duzen River to
13 Fernbridge has been identified as a groundwater dependent ecosystem unit. The Sustainable
14 Groundwater Management Act defines a “groundwater dependent ecosystem” as “ecological
15 communities of species that depend on groundwater emerging from aquifers or on groundwater
16 occurring near the ground surface.” (23 CCR § 351(m).) The specific beneficial uses that are
17 dependent in groundwater flows into the river include cold freshwater habitat, wildlife habitat, habitat
18 for rare, threatened and endangered species, migration of aquatic organisms, spawning, reproduction
19 and early development habitat of fish.

20 36. The Lower Eel River is critical habitat for several species of salmon designated as
21 threatened or endangered, including Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon
22 (*Oncorhynchus kisutch*), and steelhead (*Oncorhynchus mykiss*). Chinook migrate up the Eel River in
23 late summer and fall. Adult Coho salmon migrate upstream from mid-fall to early winter. Steelhead
24 migrate upstream on the Eel River beginning in the fall.

25 37. During the summer and early fall months, the shallow riffle zones found in the river
26 between Fernbridge and the confluence of the Van Duzen can inhibit migrations of salmonids when
27 those areas are too shallow or there is reduced to no surface flow. Where water depth at these riffle
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1 areas is 0.4 feet or less, adult Chinook salmon migration will be blocked. Depths of 0.5 to 0.6 feet in
2 these riffle areas will inhibit adult Chinook salmon migration.

3 38. During the summer and fall months, kayaking, paddleboarding and other boating
4 activities occur on the Lower Eel River. The use of boats, kayaks and paddleboards is disrupted in
5 areas of the river where water depth is decreased or eliminated.

6 39. In 2021, about 13,000 acres of agricultural land in the Lower Eel River and Van Duzen
7 River watersheds was irrigated by pumping groundwater from the Eel River Valley Groundwater
8 Basin. More than 85% of pumped groundwater was applied to grazed pasture or hay crop production
9 for livestock. Irrigation is seasonal, beginning in April during critical and dry water years and waiting
10 until May for normal water years and June for wet water years. Irrigation ceases on or about October
11 1st of each year. An analysis prepared as part of the County's development of a Groundwater
12 Sustainability Plan estimates that the total volume of groundwater pumped from the Eel River Valley
13 Groundwater Basin ranges from about 10,700 acre-feet in a wet year to about 14,500 acre-feet in a
14 critical year. This correlates to average water use rates of 0.8 acre-feet of water per irrigated acre per
15 year for wet years and up to 1.2 acre-feet of water per irrigated acre per year during a critical year. In
16 2019, the California Department of Water Resources estimated that irrigators within the Eel River
17 Valley Groundwater Basin were pumping almost 41,000 acre-feet per year or about 3 acre-feet of
18 water per irrigated acre per year. DWR's 2019 report was based on hydrologic conditions and land use
19 information for 2014, a critical year.

20 40. Both the areal extent and the rate of groundwater pumping for irrigation increase in dry
21 and critical water years. The County estimates that, during dry and critical water years, irrigators
22 increase the acres of land irrigated by groundwater from about 12,200 acres in a below normal water
23 year to 13,500 acres and 14,800 acres in dry and critical water years. Likewise, the County estimates
24 that the amount of groundwater per acre increases from 0.9 acre-feet per acre in a below normal water
25 year to 1.0 and 1.2 acre-feet per acre in dry and critical years, respectively. Thus, in a critical water
26 year, the County estimates that irrigators in the Lower Eel River extract about 14,450 acre-feet of
27 water from the Eel River Valley Groundwater Basin. One acre-foot of water equals 325,851 gallons.

1 41. Flow rates and river depths of the Lower Eel River are naturally reduced in the summer
2 and early fall months. Flow rates and river depths in the Lower Eel River during the summer and fall
3 months of dry years are generally lower than those during wet year types. However, historically, there
4 are very few examples of the river losing all of its surface flow at riffle or other locations. Petitioner is
5 informed and believes, and thereupon alleges that, prior to 2014, the river did not lose all of its surface
6 flow at any riffle locations in the Lower Eel River since 1912. “Analysis of precipitation and
7 streamflow data for the North Coast and in the Eel basin particularly suggests that the length and
8 severity of low flow periods in the Eel River have increased more than can be explained by variations
9 in rainfall.” GSP, p. 24.

10 42. Petitioner is informed and believes, and thereupon alleges, that in August 2014, there
11 was no surface flow in the Lower Eel River in the vicinity of riffle ME 4. (*See, supra*, Para. 30.)

12 43. Petitioner is informed and believes, and thereupon alleges, that various entities and
13 news reports documented that the Lower Eel River’s surface flows were not flowing on September 4,
14 2014. Petitioner is informed and believes, and thereupon alleges, that in mid-September 2014, there
15 was no surface flow or only a few inches of surface flow in the lower Eel River in the vicinity of ME
16 7. Petitioner is informed and believes, and thereupon alleges, that during periods of no surface flow,
17 the stretch of dry riverbed extended for as long as approximately 100 to 200 yards. Petitioner further
18 alleges on information and belief that this condition persisted for about two weeks.

19 44. Petitioner is informed and believes, and thereupon alleges, that in August and
20 September 2021, surface flows in the Lower Eel River once again ceased for a stretch of the river
21 upstream of Fernbridge. On August 30, 2021, biologists for the California Department of Fish &
22 Wildlife (“DFW”) documented at least three riffle areas near the Sandy Prairie Gravel Bar Extraction
23 Project where flows in the river were insufficient to allow any feasible path for adult salmon to ascend
24 the river. Petitioner is informed and believes, and thereupon alleges, that the riffle disruption observed
25 by DFW persisted until September 15, 2021, when the operator of the Extraction Project, at the request
26 of DFW, dug several channels through the depleted riffle areas to connect fish runs through this area.

1 45. There is a hydraulic connection between the Lower Eel River and underlying alluvial
2 groundwater aquifer. Groundwater extractions from the alluvial aquifer influence surface water flow
3 and water levels in the Lower Eel River. In preparing the Groundwater Sustainability Plan, “[t]he
4 integrated groundwater-surface water model was used to estimate the volume of surface water
5 depletion caused by groundwater extraction in the Basin and provide the basis for minimum
6 thresholds.” GSP, p. 5.

7 46. The GSP impact analysis of groundwater extractions on stream flow focuses on critical
8 riffle locations on the Eel River (surface water depletion locations of interest ME 1 through ME 7 on
9 Figure 6.9 of GSP). The modeling prepared in support of the GSP includes an analysis of the average
10 monthly change in river stage at the seven riffle areas in the Lower Eel River between Fernbridge and
11 the confluence of the Van Duzen River resulting from groundwater pumping when the river is flowing
12 at 130 cfs on an average monthly basis. The model presents monthly average flow rates. Monthly flow
13 rates do not capture the flow variability in the Lower Eel River that occurs over the month-long period.
14 Nevertheless, the simulated flow rates for the fall period at ME 1 through ME 7 are typically below the
15 minimum fish passage flows of 130 cfs identified by the GSP. Critical flow conditions in the Lower
16 Eel River only occur during the summer and fall months (when flows are well below 130 cfs).

17 47. The Hydrologic Model Technical Memorandum appendix to the GSP also presents
18 maximum, average, and minimum changes in monthly average stream flow due to groundwater
19 extraction at the surface water depletion locations of interest in Tables 8 through 14. These tables
20 indicate that the maximum reduction in streamflow under current conditions due to pumping ranges
21 from 9 to 12 percent in late summer and early fall. For example, the GSP modeling indicated that
22 groundwater pumping likely would reduce flow in the Eel River near monitoring location ME-7 by up
23 to 14 cfs in the summer months. According to the National Marine Fisheries Service (“NMFS”), “[t]he
24 historical record at the Scotia gage indicates that minimum flows range from 15-27cfs in August.” In
25 its comments on the GSP, NMFS states that “[t]his modeled reduction in flow near ME-7 is attributed
26 to groundwater use and may be removing a majority of the flow in the Eel River during the summer
27 and early fall, leading to disconnected and dry reaches....”

1 Supreme Court imposed a continuing duty to so review and, if necessary, change the management of
2 those tributaries to protect the resource. Respondent, Humboldt County failed to uphold this duty by
3 neither monitoring, regulating, nor limiting extractions of groundwater, nor undertaking any review of
4 whether changes to their current practices regarding well-drilling permits, including the absence of any
5 review, reporting, and conditions on operations of such wells, are necessary to fully protect the public
6 trust resources in the Lower Eel River.

7 54. By the conduct (or lack thereof) described above, Respondent Humboldt County is
8 allowing destruction or degradation of the Lower Eel River itself and the fish and recreational uses
9 therein, which are public trust resources under California's Public Trust Doctrine. Specifically, the
10 County is failing to protect the Lower Eel River from numerous and injurious extractions of
11 interconnected groundwater through their ongoing failure to review the impacts of groundwater
12 extractions on the Lower Eel River during low flow periods; failure to develop and implement a
13 program to monitor, regulate, and limit extractions of groundwater so as to reduce the extent or
14 duration of impacts to surface flows in the Lower Eel River in anticipation of or during low water
15 periods; and by engaging in a pattern and practice of issuing new well drilling permits, without any
16 analysis of the impacts those potential groundwater extractions could have on the Lower Eel River
17 during low flow periods. In turn, these groundwater extractions are causing injury to the Lower Eel
18 River and the fish and wildlife therein during low flow periods.

19 55. Respondent Humboldt County's failure to protect the Lower Eel River from numerous
20 and injurious extractions of interconnected groundwater, causing injury to the Lower Eel River and the
21 populations of fish and wildlife therein, violates the Public Trust Doctrine. As a result, Respondent
22 Humboldt County is causing irreparable harm to the Petitioners and the people of the State of
23 California.

24 56. There is no adequate remedy at law for this injury to public trust resources.
25 Respondents will continue to neglect their duties under the Public Trust Doctrine unless ordered by the
26 Court to do otherwise.

1 57. Unless Petitioners are granted relief as set forth herein, they will suffer irreparable harm
2 in that Respondents' ongoing failure to manage groundwater resources interconnected with the Lower
3 Eel River in a manner consistent with the Public Trust Doctrine is injuring public trust resources to the
4 detriment of Petitioners, to public trust resources and to the people of the State.

5 **PRAYER FOR RELIEF**

6 1. An order from the Court declaring that the County has a duty to utilize its police powers
7 to protect Public Trust values in the lower Eel River from the impacts of groundwater well pumping.

8 2. Alternative and peremptory writs or preliminary and permanent injunctions compelling
9 Respondent Humboldt County to develop by a date certain a regulatory program establishing the
10 County's authority to restrict groundwater pumping and, in anticipation of and during low flow
11 periods, implement such restrictions on groundwater pumping from the Eel River Valley Groundwater
12 Basin in a manner consistent with the Public Trust Doctrine as it applies to the Lower Eel River;

13 3. Alternative and peremptory writs or preliminary and permanent injunctions compelling
14 Respondent Humboldt County to cease accepting applications for the issuance of well drilling permits
15 for new wells and expansions of any existing wells for groundwater from the Eel River Valley
16 Groundwater Basin until such time as the County is not in violation of their public trust duties.

17 4. Costs of suit, expenses, including reasonable attorney fees according to the California
18 Code of Civil Procedure § 1021.5, and other provisions of law; and

19 5. Such other and further relief as the Court deems appropriate.
20

21 Dated: October 27, 2022

LOZEAU | DRURY LLP

22 
23 Michael R. Lozeau
24 Attorneys for Petitioner Friends of the Eel River
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VERIFICATION

1 I, Michael R. Lozeau, am an attorney for Petitioner in this action. I am verifying this Petition
2 pursuant to California Code of Civil Procedure section 446. Petitioner is absent from the County of
3 Alameda, in which I have my office. I have read the foregoing petition and complaint. I am informed
4 and believe that the matters in it are true and on that ground allege that the matters stated in the
5 complaint are true.
6

7 I declare under penalty of perjury under the laws of the State of California that the foregoing is
8 true and correct.

9 Date: October 27, 2022


Michael R. Lozeau

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EXHIBIT A



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michael@lozeaudrury.com

By U.S. Mail & E-mail

August 16, 2022

Virginia Bass, Chair
Mike Wilson, Vice Chair
Rex Bohn
Michelle Bushnell
Steve Madrone
Kathy Hayes, Clerk of the Board
Board of Supervisors for Humboldt County
825 5th Street, Room 111
Eureka, CA 95501
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Scott A. Miles, Interim County Counsel
Office of the County Counsel
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Eureka, CA 95501
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Re: Notice of Humboldt County's Failure to Comply With its Duty to Consider and Protect the Public Trust Uses of the Lower Eel River From Adverse Effects of Groundwater Extractions During Late Summer of Low Water Years

Dear Chair Bass, members of the Board, Ms. Hayes and Mr. Miles:

In lieu of any formal process provided by the County of Humboldt to address the County's compliance with its duties to take the Public Trust Doctrine into account in its planning and decisions affecting the allocation of water resources, and to protect public trust uses whenever feasible, Friends of the Eel River ("FOER") is providing this notice to you of the County's violation of its public trust duties by failing to consider and protect public trust uses of the Lower Eel River. Specifically, FOER seeks immediate action by the County to comply with its Public Trust Doctrine duties by employing its regulatory authority over groundwater wells in the Eel River Valley Groundwater Water Basin to restrict groundwater extractions to the extent feasible to prevent any reduction in surface flows resulting from such groundwater pumping below levels that adversely affect public trust uses, including habitat for endangered and threatened salmonids, boating, and swimming. Absent an enforceable agreement by the County committing to address the impacts to the public trust described below, FOER intends to file a lawsuit seeking a court order mandating that the County comply with its public trust duties.

Since 1998, the County has exercised its authority to regulate the construction, modification and removal of groundwater wells. However, once drilled and constructed, the County's permitting requirements do not place any oversight or restrictions on the operation of

such groundwater wells, including no limits on the rate and quantity of groundwater that can be extracted.

In recent years, the Eel River has experienced historically unprecedented drought conditions and low river flows. These conditions have had significant adverse impacts on surface flow conditions in the Lower Eel River. Although the Lower Eel River's surface flows are naturally reduced during the summer and early fall months, historically, the surface flows have almost never been reduced to nothing. Based on flow records maintained by the United States Geological Survey ("USGS") since 1910, the only time the Lower Eel River recorded the elimination of surface flows downstream of its confluence with the Van Duzen River, was in 1912. That one-time occurrence did not repeat again until 2014. During the summer and early fall of that year, the river's surface flows ceased at one or more shallow riffle areas located between the mouth of the Van Duzen River and Fernbridge.

Those two incidents, spaced out over a hundred-year period, have now given way to a pattern of surface flow disruptions in the Lower Eel River the occurrence of which is accelerating. In August and September 2021, surface flows in the Lower Eel River once again ceased for a stretch of the river upstream of Fernbridge. On August 30, 2021, biologists for the California Department of Fish & Wildlife documented at least three riffle areas near the Sandy Prairie Gravel Bar Extraction Project where flows in the river were insufficient to allow any feasible path for adult salmon to ascend the river. It is FOER's understanding that the riffle disruption observed by DFW persisted until September 15, 2021, when the operator of the Extraction Project, at the request of DFW, dug several channels through the depleted riffle areas to connect fish runs through this area. According to the Humboldt County Groundwater Sustainability Agency's ("County GSA") proposed Eel River Valley Groundwater Sustainability Plan ("GSP"), "[a]nalysis of precipitation and streamflow data for the North Coast and in the Eel basin particularly suggests that the length and severity of low flow periods in the Eel River have increased more than can be explained by variations in rainfall." GSP, p. 24.

A critical source of surface flows in the Lower Eel River is the shallow alluvial aquifer that underlays the coastal plain through which the Lower Eel River flows. The alluvial aquifer also is the primary water source of agricultural wells in the Eel River Valley Groundwater Basin. At present, it is estimated that about 350 wells are extracting groundwater for purposes of irrigating from about 12,000 acres to almost 15,000 acres of land. The higher withdrawal volume occurs during the driest, critical water years. The County GSA estimates that the amount of groundwater being pumped per acre increases from 0.9 acre-feet per acre in a below normal water year to 1.0 and 1.2 acre-feet per acre in dry and critical years, respectively. Thus, in a critical water, the County GSA estimates that irrigators in the Lower Eel River extract about 14,848 acre-feet of water from the Eel River Valley Groundwater Basin. As recently as 2019, DWR estimated that irrigators pump about 41,000 acre-feet per year from the Groundwater Basin.

The Groundwater Basin's alluvial aquifer is strongly connected to Eel River surface waters. In preparing the GSP, the County GSA relied on hydraulic modeling that provides the

County GSA's quantification of the volume of water removed from the Lower Eel River by groundwater pumping for irrigated lands. GSP, p. 5. According to the modeling, the simulated flow rates during the fall at the shallow riffles located between the confluence of the Van Duzen River and Fernbridge are now typically below the minimum fish passage flows of 130 cfs identified by the GSP. Moreover, these flow rates are monthly averages. As a result, there likely are periods of time less than one month in duration where the river surface flows are reduced even further or, on some occasions eliminated.

The modeling also presents maximum, average, and minimum changes in monthly average stream flow due to groundwater extraction at the riffle locations in the Lower Eel River. The modeling results indicate that the maximum reduction in streamflow under current conditions due to pumping ranges from 9 to 12 percent. For example, the GSP modeling indicates that groundwater pumping likely would reduce flow in the Eel River in the riffle area just upstream of Fernbridge by up to 14 cfs in the summer months. According to NMFS, "[t]he historical record at the Scotia gage indicates that minimum flows range from 15-27cfs in August." In its comments on the GSP, NMFS states that "[t]his modeled reduction in flow near [Fernbridge] is attributed to groundwater use and may be removing a majority of the flow in the Eel River during the summer and early fall, leading to disconnected and dry reaches...."

The 2021-2022 wet season has now come to a close. Precipitation to date in Humboldt County for the 2021-2022 water year is about 67% percent of normal (https://ggweather.com/seasonal_rain.htm). Likewise, Eel River stream flows measured at the USGS's stream flow gage at Scotia, California, indicate that surface flows at that upstream location on August 10, 2022 (134 cfs) are well below the median (144 cfs) and average (158 cfs) flow rates for this time of year (https://waterdata.usgs.gov/ca/nwis/uv/?site_no=11477000&agency_cd=USGS). Rather than any diminution in the quantity of groundwater being extracted from the shallow alluvial aquifer connected to the Lower Eel River, these conditions are leading to more groundwater extraction. As a result, FOER is informed and believes that there is a high risk that the Lower Eel River's surface flows will be either eliminated again or reduced to levels injurious to fish. Without ensured reductions in summer and early fall groundwater extractions, these conditions are certain to recur in the future.

The Lower Eel River is critical habitat for several species of salmon designated as threatened or endangered, including Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*Oncorhynchus kisutch*), and steelhead (*Oncorhynchus mykiss*). The National Marine Fisheries Service also has designated the river as essential fish habitat for Pacific Coast salmon. Chinook migrate up the Eel River in late summer and fall. Adult Coho salmon migrate upstream from mid-fall to early winter. Steelhead migrate upstream on the Eel River beginning in the fall. Thus, during the late summer and early fall months, reductions in flows over the shallow riffle zones found in the river between Fernbridge and the confluence of the Van Duzen can inhibit migrations of salmonids when those areas are too shallow or there is no surface flow. Where water depth at these riffle areas is 0.4 feet or less, adult Chinook salmon migration will be

blocked. Depths of 0.5 to 0.6 feet in these riffle areas will inhibit adult Chinook salmon migration.

In addition to these fish impacts, during the summer and fall months, kayaking, paddleboarding and other boating activities occur on the Lower Eel River. The use of boats, kayaks and paddleboards is disrupted in areas of the river where water depth is decreased or eliminated.

These low water year impacts to trust uses are exacerbated by groundwater pumping from wells permitted by the County. Indeed, in some critical water years, the groundwater pumping may be the straw that breaks the camel's back, eliminating the remaining surface flows in shallow areas of the Lower Eel River or reducing surface flow depths to levels which block fish passage and other activities. The groundwater pumping also extends the duration of these critically low surface flow conditions.

The County has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible. *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 446; *Env't'l Law Foundation v. State Water Resources Control Bd.* ("ELF") (2018) 26 Cal.App.5th 844, 868. Because the groundwater extraction from wells over which the County has police power authority is adversely affecting the Lower Eel River and its public trust uses, the groundwater extraction is subject to the Public Trust Doctrine. *ELF*, 26 Cal.App.5th at 858-62. Nevertheless, with the exception perhaps of the modeling efforts in the GSP, the County has not taken any action to review the impacts to the public trust resulting from groundwater pumping from wells and its reduction of surface flows in the Lower Eel River. The County has not taken any steps to apply its authority to create a monitoring, reporting, regulatory and management program that would reduce or otherwise control the pumping of groundwater in a manner that eliminates or reduces, wherever feasible, the impacts from groundwater extraction on the public trust values of the Lower Eel River. Because of these omissions, the County is violating its affirmative duty to consider the public trust and protect it whenever feasible.

FOER hereby requests the County to take immediate steps to create and implement a program by which the County can utilize its police powers to limit the volume, rate, and timing of groundwater being extracted through wells located in the Lower Eel River Valley so as to eliminate the adverse effects of groundwater pumping on the public trust uses of the Lower Eel River. Should the County refuse to take such steps or further delay such steps, FOER is prepared to file a petition for writ of mandate in Superior Court seeking the issuance of a writ of mandate compelling the County to develop by a date certain a management plan addressing how the County will establish its authority to restrict groundwater pumping and implement such restrictions on groundwater pumping from the Eel River Valley Groundwater Basin in a manner that ensures the Lower Eel River's trust uses are not diminished or adversely effected. The Petition also would seek an order requiring the County to cease accepting applications for the issuance of well drilling permits for new wells and expansions of any existing wells for

Re: Notice of Intent to File Suit
To Enforce the Public Trust Doctrine
August 16, 2022
Page 5 of 6

groundwater extractions from the Eel River Valley Groundwater Basin until such time as the County complies with its public trust duties.

If the County is interested in discussing FOER's concerns and wishes to explore possible resolutions that could obviate the need for FOER to file the lawsuit described above, the County should contact FOER's counsel Michael Lozeau ((415) 596-5318; michael@lozeaudrury.com) or FOER Executive Director Alicia Hamann ((707) 382-8859; alicia@eelriver.org) as soon as possible.

Sincerely,



Michael R. Lozeau
Lozeau Drury LLP
Attorneys for Friends of the Eel River

PROOF OF SERVICE

I, Toyer Gear, declare as follows:

I am a resident of the State of California, and employed in Oakland, California. I am over the age of 18 years and am not a party to the above-entitled action. My business address is 1939 Harrison Street, Suite 150, Oakland, California, 94612.

On August 16, 2022, I served a copy of the foregoing document entitled:

Notice of Humboldt County's Failure to Comply With its Duty to Consider and Protect the Public Trust Uses of the Lower Eel River From Adverse Effects of Groundwater Extractions During Late Summer of Low Water Years

on the following parties:

Virginia Bass, Chair
Mike Wilson, Vice Chair
Rex Bohn
Michelle Bushnell
Steve Madrone
Kathy Hayes, Clerk of the Board
Board of Supervisors for Humboldt County
825 5th Street, Room 111
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Scott A. Miles, Interim County Counsel
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<input checked="" type="checkbox"/>	BY MAIL. By placing the document listed above in a sealed envelope with postage thereon fully prepaid for First Class mail, in the United States mail at Oakland, California addressed as set forth above.
<input checked="" type="checkbox"/>	BY EMAIL. By sending the documents as an electronic mail attachment in PDF format to the e-mail address above.
<input type="checkbox"/>	BY FACSIMILE TRANSMISSION. By sending the documents via facsimile transmission to the fax telephone number identified above.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed August 16, 2022 at Pittsburg, California.


Toyer Gear