

MACMURRAY RANCH SAFE HARBOR AGREEMENT:

STREAMFLOW ENHANCEMENT IN PORTER CREEK

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**SAFE HARBOR AGREEMENT BETWEEN GALLO GLASS COMPANY AND
NOAA’S NATIONAL MARINE FISHERIES SERVICE
FOR COHO SALMON AND STEELHEAD LOCATED ON THE
MACMURRAY RANCH, SONOMA COUNTY, CALIFORNIA**

1. INTRODUCTION

This Safe Harbor Agreement (“Agreement”) for Coho Salmon and Steelhead Trout (“Covered Species” [as further defined below]) on the MacMurray Ranch (“Enrolled Property” [as further defined below]) is made and entered into on the day of [INSERT DATE HERE], by and among Gallo Glass Company, which owns the Enrolled Property (“Landowner”); Gallo Vineyards, Inc., as lessee which manages the Enrolled Property, and NOAA’s National Marine Fisheries Service (“NMFS”), hereinafter referred to collectively as the “Parties” and each individually as a “Party.” This Agreement is authorized under and in compliance with Endangered Species Act (“ESA”) Section 10(a)(1)(A), 50 C.F.R. Section 222 (Sub-Part C), and the NMFS’ Final Safe Harbor Policy (64 FR 32717).

The Safe Harbor program encourages proactive management to benefit endangered and threatened species by non-federal landowners, providing regulatory assurances in the form of an ESA Section 10(a)(1)(A) permit that, subject to the caveats identified in Section 10 and 11 of this Agreement, future property-use restrictions will not be imposed through the incidental take provisions of Section 9 of the ESA and the extension of incidental take provisions to threatened species through protective regulations (adopted at the time of the issuance of the Enhancement of Survival Permit [“ESP”]) developed pursuant to Section 4(d) of the ESA under NMFS’ jurisdiction if those efforts attract Covered Species to their Enrolled Property or result in increased numbers or distributions of such species already present. This Agreement is a cooperative government/private effort to achieve biological goals for the Covered Species that are unlikely to occur on the Enrolled Property in the foreseeable future without such an Agreement.

The purpose of this Agreement is to promote the conservation, enhancement of habitat, and recovery of the Covered Species – the endangered Central California Coast (“CCC”) coho salmon (*Oncorhynchus kisutch*) and threatened CCC steelhead (*O.mykiss*) – on the Enrolled Property. This purpose will be fulfilled through these biological goals: the enhancement of salmonid habitat, improving hydrological conditions during spring and summer flow months, stocking coho salmon broodstock, and monitoring of coho salmon life history strategies on the Enrolled Property.

2. RECITALS

2.1. The Parties have entered into this Agreement in consideration of the following facts:

- i. As authorized by Section 10(a)(1)(A) of the ESA, NMFS may issue ESA Section 10(a)(1)(A) Enhancement of Survival Permits (ESP), and pursuant to NMFS' Safe Harbor Agreement Policy (64 FR 32717, *et seq.*; "Policy") and applicable regulations at 50 C.F.R. § 222.308, NMFS may issue Section 10(a)(1)(A) ESP to property owners or appropriate collaborators who agree to participate in Safe Harbor Agreements that satisfy the criteria set forth in the aforementioned Policy and regulation.
- ii. Gallo Glass Company owns the Enrolled Property and the water rights described in Section 6 below and subject to this Agreement.
- iii. This Agreement is reasonably expected to provide a net conservation benefit for each of the Covered Species and contribute, either directly or indirectly, to the recovery of the Covered Species, which in turn supports the issuance of an ESP by NMFS pursuant to Section 10(a)(1)(A) of the ESA in accordance with 50 C.F.R. § 222.308.
- iv. The Landowner developed certain Management Activities, identified in Section 9 of this Agreement, which are reasonably expected to benefit the Covered Species.
- v. Upon approval and subject to the satisfaction of any necessary conditions, a Safe Harbor Agreement serves as the basis for NMFS to issue a landowner an ESP under Section 10(a)(1)(A) of the ESA. Such a permit authorizes certain incidental taking of the covered species that may increase above the baseline condition established in such an agreement as a result of a landowner's identified Management Activities.
- vi. When a landowner meets all the terms of such an agreement, the ESP authorizes incidental taking of the covered species at a level that enables the landowner ultimately to return the enrolled property back to the identified baseline condition as defined in the agreement.

THEREFORE, the Parties hereto agree as follows:

3. DEFINITIONS

- 3.1. **Terms defined in the Endangered Species Act and Regulations.** Terms used in this Agreement and specifically defined in the ESA or in regulations adopted by NMFS under the ESA have the same meaning as in the ESA and those implementing regulations, unless this Agreement expressly provides otherwise.
- 3.2. **Terms defined in the Policy.** Terms used in this Agreement and specifically defined in the Policy (specifically, Part 2 at 64 FR 32722- 32723) have the same meaning as in the Policy, unless this Agreement expressly provides otherwise.
- 3.3. **"Baseline Condition"** means those conditions described in Section 7 of this Agreement.
- 3.4. **"Covered Species"** means those species identified in Section 5 of this Agreement.
- 3.5. **"Enrolled Property"** means the areas of land and water identified in Section 6 of this Agreement.
- 3.6. **"Reservoir"** means the offstream water storage reservoir located on the Enrolled Property.

- 3.7. **“Reservoir Releases”** means those activities described in Section 9.1 and that are associated with discharging stored water from the Reservoir to Porter Creek for the sole benefit of the Covered Species.
- 3.8. **“Management Activities”** means those actions and measures that are reasonably expected to benefit the Covered Species carried out by the Landowner on the Enrolled Property described in Section 9.
- 3.9. **“Non-Covered Species”** means all species not identified in Section 5 of this Agreement.
- 3.10. **“Original Landowner”** means the landowner who transfers part of its interest in the Enrolled Property to another entity (*e.g.*, to a Party Transferee).
- 3.11. **“Party Transferee”** means a non-federal entity that is not a Landowner and that acquires fee simple interest in the Enrolled Property from the Original Landowner.
- 3.12. **“Party Transferee Interest Date”** shall mean, with respect to a Party Transferee, the date by which all of the following have occurred with respect to such Party Transferee: (i) the Party Transferee has acquired fee simple interest in the Enrolled Property; (ii) the Party Transferee has agreed in a writing provided to NMFS to be bound by the terms of this Agreement; and (iii) NMFS has provided written confirmation of such Party Transferee’s eligibility to hold the ESP pursuant to Section 22.3.2.

4. BACKGROUND

Porter Creek is a focus area of NMFS’s efforts to recovery CCC coho salmon and the Landowner has been a collaborative partner in the effort. Since 2010, the Landowner has participated in the Russian River Coho Salmon Captive Broodstock Program (“RRCSCBP”). As a result, Porter Creek is routinely stocked with CCC coho salmon at various times of the year, on an annual basis (see Table 1). To enhance the survival of hatchery and non-hatchery juvenile coho salmon over the years, the Landowner has voluntarily released water from the Reservoir in response to requests made by NMFS and the California Department of Fish and Wildlife (“CDFW”). The most significant of these releases were made during California’s most recent drought as part of the annual Voluntary Drought Initiative Agreements between the Landowner, NMFS and CDFW from 2014 to 2016. Since undertaking this voluntary activity, the Landowner has embraced its important role in the recovery of the Covered Species and wishes to continue these activities pursuant to terms and assurances set forth in this Agreement.

	Juvenile Coho Salmon Releases in Porter Creek
Release Year (2010/2011)	12,424
Release Year (2011/2012)	9,122
Release Year (2012/2013)	10,198
Release Year (2013/2014)	8,045
Release Year (2014/2015)	8,084
Release Year (2015/2016)	0
Total	47,873

Table 1. Releases of juvenile coho salmon in Porter Creek by the RRCSCBP.

The Streamflow Enhancement Project is a 20-year initiative that is divided into two phases. Phase 1 is the experimental phase, during which Reservoir Releases made under the Summer Rearing Release, Fall Rearing Release and Smolt Emigration Release schedules, described in Section 9.1, are monitored for effectiveness, as described in Section 9.2. If Phase 1 is successful in meeting the goals identified in Section 9.1, SRCD will prepare an operational manual following Phase 1 protocols that, subject to Landowner’s approval in its sole discretion, will guide Reservoir Releases for the remaining 17 years, which is Phase 2: the implementation phase. Given the uncertainty of what Reservoir Releases, if any, will be made in Phase 2, the Parties agree that the term of this Agreement and ESP will last for the duration of Phase 1 only. If Phase 1 is successful and the Parties wish to implement Phase 2 with Safe Harbor Assurances, the Parties agree those assurances can be provided in a subsequent Agreement and ESP.

5. COVERED SPECIES

5.1. This Agreement covers the following species:

CCC steelhead Distinct Population Segment (“DPS”) (*Oncorhynchus mykiss*)
Threatened (71 FR 834; January 5, 2006)
Critical habitat (70 FR 52488; September 2, 2005)
Recovery plan (81 FR 70666; October 13, 2016);

CCC coho salmon Evolutionarily Significant Unit (“ESU”) (*O. kisutch*)
Endangered (70 FR 37160; June 28, 2005)
Critical habitat (64 FR 24049; May 5, 1999)
Recovery plan (77 FR 54565; September 5, 2012).

5.2. **Covered Species Description.** A brief overview of the life history of the Covered Species is provided below in order to illustrate the importance of survivorship at each life stage in the overall abundance and productivity of each species. More detailed information is available in NMFS (2016a) and NMFS (2016b) and the NMFS’ final rule listing the CCC steelhead DPS (71 FR 834).

- i. **Coho Salmon:** Adult coho may measure more than two feet (60 centimeters (cm)) in length and can weigh up to 35 pounds (16 kilograms (kg)); however, the average weight of adult coho is about eight pounds (3.6 kg). Adult coho salmon have dark metallic blue or greenish backs with silver sides and a light belly; their back and the upper lobe of their tail fin have numerous small black spots. The gum line in the lower jaw has grey pigment, a feature that distinguishes coho from Chinook salmon, which have distinctive black gums. Spawning adult coho salmon in inland rivers are dark with reddish-maroon coloration on their sides.

The life history of coho salmon in California has been well documented by Shapovalov and Taft (1954) and Hassler (1987). Coho salmon in California generally exhibit a relatively simple three-year life cycle (Shapovalov and Taft 1954; Hassler 1987). Adult coho salmon typically begin the freshwater migration from the ocean to their natal streams after heavy late-fall or winter rains breach the sand bars at the mouths of coastal streams (Sandercock 1991). Adult migration continues into March, generally peaking in December and January, with spawning occurring shortly after the fish return to the spawning grounds (Shapovalov and Taft 1954).

Female coho salmon choose spawning sites usually near the head of a riffle, just below a pool, where water changes from a laminar to a turbulent flow and where there is small to medium gravel substrate. Preferred spawning grounds have nearby overhead and submerged cover for holding adults, and they have clean, loosely compacted gravel (1.3 to 12.7 cm diameter) with less than 20 percent fine silt or sand

content. At suitable sites, the female creates a hollowed depression in the gravel into which she releases several hundred eggs. As they are deposited, the eggs are fertilized with milt from one or more attending males. The fertilized eggs are then covered with gravel by the female. Good spawning sites have subsurface flow that ensures good aeration of developing eggs and embryos, and the flushing of metabolic waste products. The lack of suitable gravel often limits successful spawning in many streams. Coho salmon are semelparous (spawn only once and then die).

Coho salmon eggs generally incubate for four to eight weeks, depending on water temperature. Egg survival and development rates depend on temperature and dissolved oxygen levels within the redd. According to Baker and Reynolds (1986), under optimum conditions, egg mortality can be as low as 10%, but under adverse conditions of high scouring flows or heavy siltation, mortality may be close to 100%. McMahon (1983) found that egg and pre-emergent fry survival drops sharply when fines make up 15% or more of the substrate. The newly-hatched fry remain in the gravel from two to seven weeks before emergence (Shapovalov and Taft 1954).

Upon emergence from the gravel, coho salmon fry seek out shallow water, usually along stream margins. As they grow, they often occupy habitat at the heads of pools, which generally provide an optimum mix of high food availability and good cover with low swimming cost (Nielsen 1992). Chapman and Bjornn (1969) determined that larger parr tend to occupy the head of pools, with smaller parr found further down the pools. As the fish continue to grow, they move into deeper water and expand their territories until, by July and August, they are in the deep pools. By early summer, juvenile coho salmon prefer well shaded pools at least one meter deep with dense overhead cover and abundant submerged cover composed of undercut banks, logs, roots, and other woody debris. Water temperatures supporting good survival and growth of juvenile coho salmon range from 10° Celsius (C) to 15°C (Bell 1973; McMahon 1983). Growth is slowed considerably at 18°C and ceases at 20°C (Stein *et al.* 1972; Bell 1973). Therefore, juvenile coho salmon are unlikely to occupy habitats that exceed 16.3°C maximum weekly average temperature (Welsh *et al.* 2001) though exceptions exist if food supplies are sufficient to sustain the higher metabolic rates associated with elevated water temperatures (Foott *et al.* 2014; Lusardi 2015, Bisson *et al.* 1988)

Preferred rearing habitat has little or no turbidity and high production of invertebrate forage. Juvenile coho salmon feed primarily on drifting terrestrial insects, much of which are produced in the riparian canopy, and on aquatic invertebrates growing in the interstices of the substrate and in the leaf litter within pools. As water temperatures decrease in the fall and winter months, fish stop or reduce feeding due

to lack of food or in response to the colder water, and growth rates slow down. During December-February, winter rains result in increased stream flows and by March, following peak flows, fish again feed heavily on insects and crustaceans and grow rapidly.

To prepare for the marine environment, subyearlings undergo a physiological transformation called smoltification. Smolt out-migration to the ocean typically occurs from April through June (Shapavalov and Taft 1954). Emigration timing is correlated with peak upwelling currents along the coast. Ocean entry at this time facilitates more growth and, therefore, greater marine survival (Holtby *et al.* 1990). At this point, the smolts are about 10 to 13 cm in length. After entering the ocean, the immature salmon initially remain in nearshore waters close to their parent stream. They gradually move northward, staying over the continental shelf (Brown *et al.* 1994). Although they can range widely in the north Pacific, the oceanic movements of California coho salmon are poorly understood.

- ii. **Steelhead:** Steelhead trout can reach up to 55 pounds (25 kg) in weight and 45 inches (120 cm) in length, though the average size is much smaller. They are usually dark-olive in color, shading to silvery-white on the underside with a heavily speckled body and a pink to red stripe running along their sides.

Steelhead spend anywhere from one to five years in saltwater, however, two to three years is most common (Busby *et al.* 1996). Some return as "half-pounders" that over-winter one season in freshwater before returning to the ocean in the spring.

Only "winter" steelhead are found in the CCC steelhead DPS. The timing of upstream migration is correlated with seasonal high flows and associated lower water temperatures. Steelhead begin returning to the Russian River in December, with the run continuing into April. The minimum stream depth necessary for successful upstream migration is about 18 cm (Thompson 1972). The preferred water velocity for upstream migration is in the range of 40-90 cm/s, with a maximum velocity, beyond which upstream migration is not likely to occur, of 240 cm/s (Thompson 1972). Most spawning takes place from January through April. In contrast to other species of the genus *Oncorhynchus*, steelhead may spawn more than one season before dying (*i.e.*, they are iteroparous). Most adult steelhead in a run are first time spawners, although Shapovalov and Taft (1954) reported that repeat spawners are relatively numerous (about 17%) in California streams.

Steelhead spawn in cool, clear streams featuring suitable water depth, gravel size, and current velocity. Reiser and Bjornn (1979) found that gravels of 1.3-11.7 cm in diameter were preferred by spawning steelhead. The survival of embryos is reduced

when fines smaller than 6.4 millimeters (mm) comprise 20 to 25 percent of the substrate. Fry typically emerge from the gravel two to three weeks after hatching (Barnhart 1986).

Upon emerging from the gravel, fry rear in edgewater habitats and move gradually into pools and riffles as they grow larger. Instream cover is an important habitat component for juvenile steelhead both as velocity refuge and as a means of avoiding predation (Meehan 1991). However, steelhead also use riffles and other habitats not strongly associated with cover more than other salmonids during summer rearing. Young steelhead feed on a wide variety of aquatic and terrestrial insects, and emerging fry are sometimes preyed upon by older juveniles. In winter, they become inactive and hide in any available cover, including gravel, adjacent floodplains or woody debris.

Because rearing juvenile steelhead reside in freshwater all year, adequate flow, water quality and temperature are important to the population at all times. Water temperature influences juvenile steelhead growth rates, population density, swimming ability, and their abilities to capture and metabolize food, and withstand disease (Barnhart 1986; Bjornn and Reiser 1991). Rearing steelhead juveniles prefer water temperatures of 7.2-14.4°C and have an upper lethal limit of 23.9°C. However, they can survive short periods up to 27°C with saturated dissolved oxygen (DO) conditions and a plentiful food supply. Fluctuating diurnal water temperatures also aid in survivability of salmonids (Busby *et al.* 1996). DO levels of 6.5-7.0 mg/l affect the migration and swimming performance of steelhead juveniles at all temperatures (Davis *et al.* 1963). Reiser and Bjornn (1979) recommended that DO concentrations remain at or near saturation levels with temporary reductions no lower than 5.0 mg/l for successful rearing of juvenile steelhead. Low DO levels decrease juvenile steelhead swimming speed, growth rate, and food consumption rate, efficiency of food utilization, threat avoidance behavior, and ultimately survival. During rearing, suspended and deposited fine sediments can directly affect salmonids by abrading and clogging gills, and indirectly cause reduced feeding, avoidance reactions, destruction of food supplies, reduced egg and alevin survival, and changed rearing habitat (Reiser and Bjornn 1979).

Generally, throughout their range in California, steelhead that successfully survive to adulthood spend at least two years in freshwater before emigrating for the ocean. Emigration appears to be more closely associated with size than age. In Waddell Creek, Shapovalov and Taft (1954) found steelhead juveniles migrating downstream at all times of the year with the largest numbers of age 0+ and yearling steelhead moving downstream during spring and summer. Smolts can range from 14-21 cm in

length before entering the marine environment. While in the ocean, coded wire tag recoveries indicate that most steelhead tend to migrate north and south along the continental shelf (Barnhart 1986), before returning to their natal streams to spawn.

5.3. Covered Species Distribution.

- i. **Coho salmon:** The North American range of coho salmon extends from Point Hope, Alaska, south to streams in Santa Cruz County, California. Within this coastal area, NMFS designated seven evolutionary significant units (“ESUs”) of coho salmon, each with its own distinct geographic range. The coho salmon in the vicinity of the MacMurray Ranch belong to the southernmost ESU, the CCC coho salmon, which are endemic to coastal California streams from Punta Gorda in southern coastal Humboldt County, California, south to Aptos Creek in Santa Cruz County, California. The CCC coho salmon ESU also includes tributaries to the San Francisco Bay. The CCC coho salmon was listed under the Federal ESA as a threatened species in 1996 and as endangered in 2005 (70 FR 37160). Bjorkstedt et al. (2005) identified that each of the 12 largest coastal streams in this ESU have their own independent population of CCC coho salmon. Coho salmon are listed as Endangered under CESA.

The Russian River is the largest river and near the geographic middle of the CCC coho salmon ESU. Bjorkstedt *et al.* (2005) indicates that the Russian River historically supported the largest population of coho salmon in the ESU; however, this species was nearly extirpated from the Russian River by the late 1990s. Between 2000 and 2003, the documented annual returns of adult coho to the Russian River were less than ten fish, and few of the watershed’s tributaries contained juveniles of this species. The RRCSCBP was initiated in 2001 to reestablish self-sustaining runs of coho salmon in tributary streams within the Russian River Basin (Obedzinski *et al.* 2007). Under this program, offspring of captive and wild Russian River coho salmon are reared in a conservation hatchery and then released as juveniles into tributaries historically supporting the species, with the expectation that a portion of them will return to these areas as adults to naturally reproduce. The program involves the conservation of the remaining native Russian River coho salmon genome through genetic management that optimizes the genetic diversity of the progeny of the captive broodstock.

- ii. **Steelhead:** The current North American range of steelhead extends from western Alaska, south to coastal streams near the U.S. border with Mexico. NMFS designated 15 separate DPSs of steelhead in the watersheds of Washington, Idaho, Oregon, and California. The steelhead in the vicinity of the MacMurray Ranch belong to the CCC steelhead DPS, which includes all of the coastal streams from the Russian River south

to Aptos Creek in Santa Cruz County, California, plus all of the watersheds entering San Francisco and San Pablo Bays with the exception of the Sacramento River. CCC steelhead was listed under the federal ESA as a threatened species in 1997 (62 FR 43937).

Spence et al. (2008) identified 37 separate independent (or potentially independent) populations of steelhead in the CCC DPS, including six in the Russian River basin. The Russian River is the largest watershed within the CCC steelhead DPS and its six populations are estimated to have collectively supported a run of 32,000 adult fish, representing about 30% of the total historical (pre-development) number of steelhead in the entire DPS (Spence et al. 2008, revised figures 2012). Other estimates suggest the Russian River supported runs of 50,000+ adult steelhead (NMFS 2008). Wild steelhead are found in many of the tributaries to the Russian River; however, the estimated annual return of adult wild steelhead is now around 4,000 adult fish (McEwan 2001).

5.4. Threats to the Covered Species

- i. **CCC Coho Salmon ESU:** The principal threats to CCC coho salmon ESU stem from logging, agriculture, mining, urbanization, stream channelization, dams, wetland loss, and water withdrawals and unscreened diversions for irrigation. These threats have contributed to the decline of the CCC coho salmon ESU. Land use activities associated with logging, road construction, urban development, mining, agriculture, and recreation have significantly altered coho salmon habitat quantity and quality (61 FR 56138). Impacts of concern associated with these activities include the following: alteration of streambank and channel morphology, alteration of ambient stream water temperatures, elimination of spawning and rearing habitat, fragmentation of available habitats, elimination of downstream recruitment of spawning gravels and large woody debris (“LWD”), removal of riparian vegetation resulting in increased stream bank erosion, and degradation of water quality (61 FR 56138). Of particular concern is the increased sediment input into spawning and rearing areas resulting from the loss of channel complexity, pool habitat, suitable gravel substrate, and LWD (61 FR 56138). Decreased LWD in streams has also reduced habitat complexity and contributed to the loss of cover, shade, and pools which are required by juvenile coho salmon (60 FR 38011).
- ii. **CCC Steelhead DPS:** The destruction, modification and curtailment of the CCC steelhead DPS habitat and range are the result of forestry, agriculture, mining and, most importantly, urbanization. Water storage, withdrawal, conveyance, and diversions for agriculture, flood control, and domestic purposes have greatly reduced or eliminated historically accessible habitat. Two major habitat blockages are Coyote

and Warm Springs Dams located in the Russian River Basin (NMFS 1996). Many other minor blockages likely exist throughout the range of this DPS. Blockages have been reported in 12 of 46 tributaries within the CCC steelhead DPS (Titus et al. 2002). Modification of natural flow regimes has had significant negative impacts on CCC steelhead directly and indirectly (e.g., mortality of adults/juveniles, alterations of fish communities and impacts to migration, spawning, rearing, and refuge).

Land use activities associated with logging, road construction, urban development, mining, agriculture, ranching, and recreation have resulted in the loss, degradation, simplification, and fragmentation of CCC steelhead habitat. In many watersheds such activities have significantly altered streambank and channel morphology, stream temperature, water quality, access, sediment/large wood recruitment and depletion, all of which significantly affect all life stages of CCC steelhead.

5.5. Importance of Private Lands. Both the historical and current existing freshwater habitats of CCC coho salmon and CCC steelhead are largely on properties owned by private citizens, states, and local governments. Non-federal lands represent 95 percent of CCC coho salmon and CCC steelhead habitats. Therefore, conservation on non-federal properties is critical to the survival and recovery of these species. NMFS strongly believes that a collaborative stewardship approach to the proactive management of listed salmon and steelhead involving government agencies and the private sector is critical to achieving the ultimate goal of the ESA. The “Safe Harbor” approach provides an avenue to garner the non-federal landowners’ support for species conservation on non-federal lands. Through implementation of the Safe Harbor Policy (64 FR 32717), NMFS is able to create incentives for non-federal property owners to implement conservation measures for listed salmonid species by providing certainty with regard to possible future land, water, or resource use restrictions should the Covered Species later become more numerous as a result of the property owners’ actions.

Porter Creek on MacMurray Ranch is designated a critical habitat (freshwater spawning and rearing sites and migration corridors) for the Covered Species. Porter Creek is also designated as a “Core Area” in NMFS’s CCC Coho Recovery Plan (NMFS 2012) and home to a “Supporting Population” for CCC steelhead in NMFS’s Multi Species Recovery Plan (NMFS 2016). Restoration of these areas is the highest priority for near-term restoration projects and threat abatement actions, which both are necessary to recover the species (NMFS 2012, NMFS 2016).

6. ENROLLED PROPERTY

6.1. The Enrolled Property is the area over which Safe Harbor assurances apply. The Parties reasonably expect that the Covered Species may occupy a portion of the aquatic habitats

on the Enrolled Property as a result of the beneficial Management Activities undertaken pursuant to this Agreement. The Enrolled Property is the bed, bank, and channel within the ordinary high water mark of Porter Creek, where it flows across the Landowner's MacMurray Ranch, located in Russian River Valley at 9015 Westside Road, Healdsburg, California 95448 (see Figure 1).

6.2. The MacMurray Ranch is approximately 1500 acres that includes: heavily wooded and steep undeveloped areas on the northeastern slope of Mount Jackson; portions of Porter Creek and multiple intermittent streams; the Reservoir, a 253-acre-foot capacity offstream reservoir; 427 acres of vineyard and associated facilities on lower hillsides and the valley floor; and 3 residences. These land uses are supported by water diverted from the Russian River into the Reservoir under the terms and conditions of the Landowner's existing water rights. As described in Section 4, the Landowner is allowed to use these water rights to enhance salmonid habitat within the Enrolled Property; however, that voluntary use of the rights is subordinate to the Landowner's need to use those water rights to support its ongoing land-uses on MacMurray Ranch. These water rights include Application 31743 and related petitions for change for licenses 3697 (application 10795), 4216 (Application 14178), 4729A (Application 13684A), and 5559 (Application 13384). Collectively these rights add up to 750 acre-feet of water. There are no diversions from Porter Creek within the Enrolled Property contemplated during the life of this Agreement and ESP.

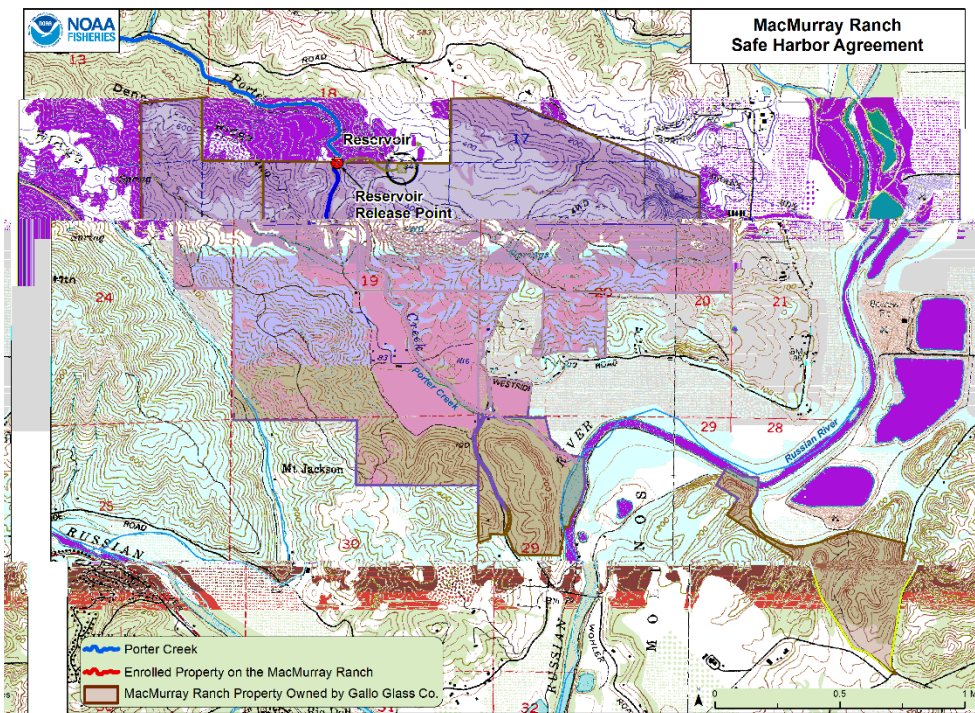


Figure 1. Map of the Enrolled Property

7. BASELINE CONDTION

7.1. The Baseline Condition for this Agreement is based on the habitat of the Covered Species on the Enrolled Property and is designed to allow for the identification of any present or future beneficial or adverse effects to the Covered Species or their habitat resulting from the Reservoir Releases described in Section 9.1. Given the similarities of freshwater habitat utilized by CCC steelhead and CCC coho salmon, this Agreement uses the same Baseline Condition for both species. The Baseline Condition for the Covered Species in this Agreement is the flow in Porter Creek from where it enters, flows through, and exits the Enrolled Property at any point in time without the influence of the Reservoir Releases described in Section 9.1.

8. AUTHORITY AND RESPONSIBILITIES OF THE PARTIES

8.1. **Authority of the Landowner.** As described in Section 2.1.ii, the Landowner's rights regarding the Enrolled Property and the relevant resources therein allow it to enter into this Agreement. Jim Collins, Vice President of Premium Winegrowing for E. & J. Gallo Winery, possesses the authority to execute this Agreement on behalf of Landowner at the time of signature.

8.2. **Responsibilities of the Landowner.** The Landowner commits to the following, including the full funding thereof. The Landowner shall:

- i. Be the recipient of the ESP.
- ii. Carry out the Management Activities on the Enrolled Property in the manner described in Section 9 of this Agreement.
- iii. Propose an "Annual Plan" for making the three types of Reservoir Releases (described in Section 9.1) during the calendar year for NMFS review and approval.
 - a. The Landowner will develop the Annual Plan in coordination with staff from TU, SRCD, NMFS, and UC Sea Grant. Landowner shall provide the Annual Plan to NMFS by March 15th of each year.
 - b. The Annual Plan will include:
 1. contact information of staff at each organization involved in implementing the Annual Plan;
 2. the expected volume (in acre-feet) and rate of water that can be discharged to Porter Creek for each Reservoir Release type without hindering the existing land uses at MacMurray Ranch, which are described in Section 6.2;
 3. the desired results of each Reservoir Release in terms of water quality objectives and salmonid habitat;
 4. an adaptive management strategy for modifying Reservoir Releases in response to unforeseen circumstances that have affected, or is anticipated to affect, the accomplishment of the goals for the three types of Reservoir Releases (described in Section 9.1);

5. the timing for the stocking of captive broodstock coho salmon for the calendar year, if known;
 6. lessons learned from monitoring results from the previous year including the total volume of water used for Reservoir Releases in the previous year;
 7. changes to the monitoring plan, if any; and
 8. a schedule for implementing the actions in the Annual Plan.
- c. NMFS shall endeavor to provide comments on and approve the proposed Annual Plan within 14 days. Once NMFS has approved the Annual Plan, the Landowner will implement it according to the agreed-upon implementation schedule.
- iv. Not engage in any action that reduces the Enrolled Property to a condition below the Baseline Condition articulated in Section 7 of this Agreement.
 - v. Carry out any monitoring and reporting as described in Section 15.
 - vi. Notify NMFS within 45 days of any transfer of the fee simple interest or water rights appurtenant to of the Enrolled Property to a non-Landowner.
 - vii. Notify NMFS 14 days prior to any of the following circumstances and shall provide NMFS, its contractors, and agents access to the Enrolled Property in order to rescue individuals of the Covered Species that may be impacted by the following circumstances:
 - a. The Landowner conducting any alteration or modification that Landowner reasonably determines is likely to return the Enrolled Property to the Baseline Condition, in whole or part.
 - viii. Comply with any limitations on take and implement all avoidance and minimization measures identified in Section 12 of this Agreement.
 - ix. Allow reasonable access by NMFS or another mutually agreed-upon party onto the Enrolled Property for purposes related to this Agreement, including conducting population or life-history surveys of the Covered Species, stocking broodstock of the Covered Species, implementing habitat restoration projects agreed upon by Landowner, capturing or relocating the Covered Species, and verifying compliance with this Agreement.
 - x. Report to NMFS any dead, injured, or ill specimens of the Covered Species observed on the Enrolled Property.
 - a. Within three working days after locating a dead or injured Covered Species, the Landowner shall notify the North-Central Coast Office (National Marine Fisheries Service, 777 Sonoma Avenue, Room 325. Santa Rosa, California 95404, (707) 575-6050, by telephone) of its finding. The verbal notification must include the date, time, and location of the discovery; cause of injury or death of the Covered Species, if known; and any other pertinent information.
 - b. Within three weeks of the discovery, the Landowner must also send an email message or written report to the North-Central Coast Office containing the details included in the verbal notification and, if possible, a photograph. The

person to whom the written message should be delivered, and corresponding email address if applicable, should be determined at the time of the phone call. If no individual recipient is identified at or following the initial telephone report, the Landowner shall direct the written notice to the NMFS contact in Section 16.2 by first-class U.S. mail.

8.3. Responsibilities of NMFS. National Marine Fisheries Service shall:

- i. Provide all assurances outlined in Section 10 of this Agreement.
- ii. Exercise all possible means to avoid the last resort of revoking the ESP, where continuation of the permitted activity would likely result in jeopardy to one or both of the Covered Species.
- iii. Coordinate fish rescues or relocation efforts as NMFS deems necessary.
- iv. Assist the Landowner in developing the Annual Plan.
- v. Review the Landowner's proposed Annual Plan for Reservoir Releases (discussed in Section 8.2.iii).
- vi. Provide the Landowner with requested technical assistance as practicable.
- vii. Provide the Landowner information on private, state, or federal funding programs for salmonid habitat improvement, including those for threatened and endangered species, except as exempted from disclosure under applicable law or policy.
- viii. Provide the Landowner with requested assistance, as practicable, in furtherance of obtaining any regulatory approvals from other federal, state, and/or local agencies for actions undertaken by the Landowner in furtherance of this Agreement

9. LANDOWNER'S MANAGEMENT ACTIVITIES FOR THE COVERED SPECIES

Unless this Agreement is terminated in accordance with Section 18.2 of this Agreement, the Landowner shall carry out the following Management Activities on the Enrolled Property in accordance with the timeframes discussed herein and allow those Management Activities to remain in effect as discussed herein.

- 9.1. For the life of the ESP and upon approval from NMFS, the Landowner will make Reservoir Releases, which will not exceed 150 acre-feet in sum during each calendar year unless more is authorized by the Landowner. In accordance with Section 8.2.iii of this Agreement, the Landowner will propose Reservoir Releases to NMFS in its Annual Plan. The Landowner shall not undertake a Reservoir Release until the Annual Plan has been approved by NMFS. Reservoir Releases the Landowner may propose to NMFS include:
 - i. **Smolt Emigration Release:** These are pulse releases generally made during a brief period between April and May. These releases will generally occur if the flow in Porter Creek (i.e., Baseline Condition) has not made a hydrological connection with the Russian River that facilitates smolt emigration. Determining whether smolt

emigration has occurred is based on results of streamflow monitoring and coho Salmon monitoring as described in Section 9.2.i and 9.2.iii below, respectively. The goal of such releases is to enhance conditions that allow smolts to emigrate from Porter Creek to the mainstem Russian River.

- ii. **Summer Rearing Release:** These are sustained releases generally made throughout the months between June and October. These releases will generally commence before the pools located in the reach upstream of the Upper Valley Bridge become disconnected from one another and before water quality in those pools become unsuitable for rearing salmonids. Determining when to make these releases is based on direct observation and the results of streamflow monitoring (Section 9.2.i), water quality monitoring (Section 9.2.ii), and coho salmon monitoring (9.2.iii). The goal of this release is to increase juvenile summer survival by maintaining good water quality and flow in pools within the non-alluvial sections of the Enrolled Property upstream of the Upper Valley Bridge.
- iii. **Fall Rearing Release:** These are sustained releases generally made throughout the months between November and December, but may occur later depending on storage availability in the reservoir and hydrologic conditions. These releases will generally commence when the Baseline Condition (i.e., unimpaired non augmented flow) is approaching or at zero cubic feet per second; or during fall stocking of captive broodstock coho salmon. Determining when to make these releases is based on direct observation and the results of streamflow monitoring (Section 9.2.i), water quality monitoring (Section 9.2.ii), and coho salmon monitoring (9.2.iii). The goal of this release is to maintain any hydrologic connectivity between pools until the first rains can maintain surface flows in Porter Creek.

9.2. The Landowner shall allow for the following monitoring to occur within the Enrolled Property to assess the effectiveness of the Management Activities identified in Section 9.1.

- i. **Streamflow Monitoring:** TU will operate two streamflow gauges within the Enrolled Property from May through October during the term of this Agreement, to evaluate the benefit of releases on summer base flow and spring freshets. TU will install two pressure transducers within the Enrolled Property and visit each gauge site approximately monthly to measure streamflow and download data from the pressure transducers. In addition to collecting stage data and measuring streamflow, TU and UC Sea Grant representatives will walk as much of Porter Creek as possible to identify where the stream is flowing, intermittent, or dry during each site visit, and to identify any other flow depth/velocity features to characterize the quality of habitat for over-summering salmonids in Porter Creek.

- ii. **Water Quality Monitoring:** UC Sea Grant will monitor water quality to (1) assess the existing conditions in the stream reach affected by the Reservoir Releases and determine whether the resulting flows are meeting habitat and water quality objectives, and (2) serve as a reference for comparison with the stream monitoring and coho salmon monitoring results to gauge improvements associated with the Reservoir Releases.

Protocols and quality assurance methods for all data collected are included in the “Coastal Tributary Improvement Program Quality Assurance Project Plan (QAPP)” (SRCD 2004). UC Sea Grant will collect continuous stream temperature data using data loggers deployed in May or June through October of each year during the term of this Agreement or the three years of the Wildlife Conservation Board grant. . UC Sea Grant will conduct ambient water quality measurements (instantaneous temperature, dissolved oxygen, pH, conductivity) in late summer in conjunction with making annual temperature data logger field checks for the term of the Wildlife Conservation Board grant. .

Data will be compiled by SRCD from written field data sheets and entered into the SRCD’s database. SRCD staff will then interpret the data according to the criteria set forth in the SRCD QAPP and include it in the project monitoring report.

- iii. **Coho Salmon Monitoring:** Annually, the Russian River Coho Broodstock Program releases approximately 10,000 juvenile coho salmon into Porter Creek as part of a coho salmon recovery effort in the Russian River watershed. Fifteen percent of those juveniles are implanted with Passive Integrated Transmitter (PIT) tags, uniquely coded electronic tags that can be detected at stream locations using PIT tag detection systems (antennas and transceivers). In order to evaluate the ability of juvenile coho salmon to migrate out of Porter Creek as smolts at different stream flows during the spring, UC Sea Grant will install a PIT tag detection system near the mouth of Porter Creek and operate it during the spring season. When a PIT-tagged fish swims over the antennas, the individual tag number, data, and time will be logged, and direction of movement will be determined using the timing of passage over upstream and downstream arrays. This will allow UC Sea Grant to compare the number and timing of fish migrating out of Porter Creek and relate this data to Reservoir Release timing and quantity as well as Baseline Condition stream flow.

Prior to the first season of flow augmentation, UC Sea Grant will place a paired antenna array in the stream channel and install a solar-powered transceiver (reader) on the stream bank. Following installation, the PIT tag detection system will be operated between March and June of annually during the term of this Agreement. The

equipment will be checked biweekly and during storms or when more frequent data is needed to evaluate a Reservoir Release. Snorkeling surveys will be conducted on an as-needed basis (approximately four per spring), to determine whether fish have become trapped in pools upstream of the PIT tag antennas.

- 9.3. The Landowner will not exercise its riparian rights to divert water from Porter Creek for the life of this Agreement.
- 9.4. The Landowner will allow NMFS, after reasonable prior notice and in coordination with the Landowner, access to the Enrolled Property for purposes of: (1) ascertaining compliance with the Agreement, (2) enabling NMFS staff or their contracting designees to stock captive broodstock juvenile coho salmon in Porter Creek on the Enrolled Property, (3) allowing access for NMFS staff or their contracting designees to engage in population and habitat surveys of coho salmon and steelhead in portions of Porter Creek on the Enrolled Property, and (4) removing and relocating the species. Access to the Enrolled Property for monitoring and Management Activities will be scheduled to reasonably accommodate and avoid interference with commercial or other uses of the property.

10. ASSURANCES

- 10.1. Upon execution of this Agreement by all Parties, and the satisfaction of all other applicable legal requirements, NMFS will issue the Landowner an ESP under Section 10(a)(1)(A) of the ESA; whereby, provided that the Landowner has complied fully with this Agreement and the ESP, and so long as the continuation of the permitted activity would not be likely to result in jeopardy to Covered Species or the adverse modification or destruction of their designated critical habitat, NMFS assures the Landowner that it:
 - i. May incidentally take Covered Species under the ESA in accordance with the ESP as a result of Reservoir Releases as described in Section 9.1 of this Agreement.
 - ii. May take Covered Species by altering or modifying the Enrolled Property to such an extent the Enrolled Property is returned to Baseline Condition at any time during the life of the ESP.
- 10.2. NMFS provides no assurances with regard to any action (including the alteration or modification of the Enrolled Property) that may affect Non-Covered Species, including the take of Non-Covered Species and the adverse modification or destruction of their designated critical habitat
- 10.3. NMFS provides no assurances with regard to any action not associated with Reservoir Releases as described in Section 9.1 or a return to Baseline Condition that may affect the Covered species, including the take of Covered Species and the adverse modification or destruction of their designated critical habitat resulting from those actions.

11. INCIDENTAL TAKE OF COVERED SPECIES

- 11.1. After the ESP is issued, and as further specified in the ESP, the Landowner will be authorized to take Covered Species incidental to the Reservoir Releases provided for in Section 9.1 and activities that may return the Enrolled Property to Baseline Condition, provided that the Landowner has complied fully with this Agreement and the ESP, and so long as neither the ESP nor this Agreement has been terminated or revoked as provided for in Sections 18 and 19 below.
- 11.2. Nothing in this Agreement authorizes the Landowner to kill or injure any Covered or Non-Covered Species where such take is not incidental to the Reservoir Releases made pursuant to Section 9.1 of this Agreement or incidental to an action that returns the Enrolled Property to the Baseline Condition.
- 11.3. Any take of Covered Species that occurs as a result of a reduction in the quality and/or quantity of the established Baseline Condition described in Section 7 on the Enrolled Property is not authorized by this Agreement.
- 11.4. As identified in Sub-Section 8.2.v.iii of this Agreement, the Landowner is required to notify NMFS of any new planned activity that Landowner reasonably believes is likely to return the Enrolled Property to the Baseline Condition.
- 11.5. Landowner will provide NMFS access to the Enrolled Property to capture and relocate any individual Covered Species that are reasonably likely to be affected by any planned activity that may return the Enrolled Property to the Baseline Condition, in part or in whole.
- 11.6. If incidental take exceeds the ESP, the Landowner will discontinue the take-causing activity and will confer with NMFS about modifications to the activity which might allow resumption or amendment of the ESP.
- 11.7. **Management Activities and the extent of incidental take that would likely result.**
 - i. **Reservoir Releases in Section 9.1.** Incidental take of the Covered Species during NMFS approved Reservoir Releases is unlikely and only expected should unforeseeable or unavoidable circumstances arise. For example, feral pigs, trespassing marijuana growers, maintenance activities, and earthquakes may damage water systems within the Enrolled Property. Although unlikely, such damage could occur to the infrastructure needed to make Reservoir Releases. If such damage were to occur prior to or during the Reservoir Releases, flows on the Enrolled Property could diminish unexpectedly and leave individual Covered Species stranded in isolated pools subjected to predation or beached on gravel bars. Under such a scenario, incidental take would likely be in the form of mortality or injury of the Covered Species in the juvenile and fry life stages. However, the risk of such incidental take can be minimized and may be avoided by the Landowner's implementation of the measures outlined in Sections 12.1.i, and 12.1.ii.
- 11.8. **Return to Baseline Conditions and the extent of incidental take that would likely result.** As flows in the Enrolled Property recede to the Baseline Condition as a result of

the seasonal termination of the Reservoir Releases, individuals of the Covered Species could be stranded in isolated pools or beached on gravel bars. Incidental take in this scenario will likely be in the form of mortality or injury of the Covered Species in the juvenile and fry life stages. However, the risk of such incidental take can be minimized and may be avoided by the Landowner's implementation of the measures outlined in Section 12.1.iii.

11.9. Nothing in this Agreement authorizes the Landowner to take Non-Covered Species.

12. AVOIDANCE & MINIMIZATION MEASURES

12.1. The Landowner is committed to supporting the presence of Covered Species at the Enrolled Property and will manage and maintain the Enrolled Property to provide benefits to the Covered Species. In keeping with this commitment, the Landowner agrees to implement the following measures:

- i. Before making any Reservoir Release the Landowner will inspect for damage the infrastructure necessary for making the release. If any damage is observed, the Landowner will contact NMFS for further direction before making the planned Reservoir Release.
- ii. When the Landowner is making Reservoir Releases, the Landowner will routinely inspect for damage the infrastructure needed to make those releases. If any damage is observed, the Landowner may continue making Reservoir Releases as planned, but must notify NMFS and UC Sea Grant within 24 hours of the observation.
- iii. When the Landowner is reducing the Reservoir Releases to zero or returning the Enrolled Property to the Baseline Condition, the Landowner will slowly ramp down releases at a rate that does not cause the stage in Porter Creek to decline faster than one inch every hour, unless otherwise directed by NMFS.

13. EFFECTIVE DATE AND DURATION OF THE AGREEMENT AND TAKE AUTHORIZATION DURATION

13.1. This Agreement is effective upon the issuance of the ESP by NMFS, will remain in effect for the same 3 year-period as the ESP and will expire simultaneously with the initial expiration date of the ESP, unless the term is extended as provided herein or this Agreement is terminated in accordance with Section 19 of this Agreement or as otherwise provided for by law or regulation. This Agreement may be extended by mutual, written consent of the Parties, and ESP extensions will be processed in accordance with 50 C.F.R. § 222.304.

14. EXPECTED NET CONSERVATION BENEFIT

14.1. The direct and indirect effects of this Agreement, from the Management Activities and the future return to the Baseline Condition, may include the following. Management

Activities are expected to benefit the Covered Species by increasing smolt emigration success and juvenile rearing habitat, ultimately resulting in increased population abundance and distribution. However, Management Activities could also harm, kill, or cause the capture of Covered Species as result of stranding or beaching during Reservoir Releases. Reservoir Releases could cause take in the form of harassment, direct mortality or injury to juvenile or adult life stages of the Covered Species by disrupting feeding behavior, disrupting migration behavior, stranding or causing other behavior modifications or disruptions. If, at some future time, the Enrolled Property is reduced to the Baseline Condition in accordance with this Agreement, dewatering and relocation activities could harm, kill, or cause the capture of Covered Species.

14.2. The NMFS recovery plans for CCC coho salmon (NMFS 2012) and CCC steelhead (NMFS 2015) use a Conservation Action Planning process to rank potential recovery threats as low, medium, or very high among identified populations (see Table 2).

Species	Population	Agriculture	Channel modification	Residential development	Roads and Railroads	Water diversion / Impoundments	Livestock ranching	Mining	Severe weather
CCC coho salmon	Russian River	High	High	Very High	High	Very High	High	High	High
CCC steelhead	Porter Creek		High	High		High	---	---	---

Table 2: Threats that ranked high or very high for CCC coho salmon, and CCC steelhead, recovery during recovery plan development (NMFS 2012, 2015).

The Reservoir Releases considered within this Agreement are not activities that could be classified as many of the threats outlined in Table 2. Nothing in this Agreement or authorized by the ESP is expected to threaten the recovery of the Covered Species.

14.3. The NMFS recovery plans for CCC coho salmon (NMFS 2012) and CCC steelhead (NMFS 2016) include the following necessary recovery actions that are consistent with the Reservoir Releases and the biological goals (in Section 1) described in this Agreement:

- i. NMFS 2016at § 25.2.1.3: Develop criteria making compensatory releases from large dams; provide policy and funding for the above actions to maximize benefits for fisheries and agriculture.
- ii. NMFS 2012 at § 4.2.2.2: Work with the State Water Resources Control Board (“SWRCB”) and landowners to improve flow regimes for adult migration to spawning habitats and smolt outmigration.
- iii. NMFS 2012 at § 4.2.2.1. Work with SWRCB and landowners to improve over-summer survival of juveniles by re-establishing summer baseflows (from July 1 to October 1) in rearing reaches that are currently impacted by water use.
- iv. NMFS 2012 at § 4.2.1.3: Manage reservoirs and dam releases to maintain suitable rearing temperatures and migratory flows in downstream habitats (e.g., pulse flow programs for adult upstream migration and smolt outmigration).

- v. NMFS 2012 at § 10.1.3.1: Expand broodstock releases within core, then remaining phase 1, then phase 2 streams within the watershed.
- 14.4. The NMFS's Final Safe Harbor Policy (64 FR 32717) states that net conservation benefits may result from increasing the connectivity of habitats, maintaining or increasing populations, enhancing and restoring habitats, and creating areas for testing and implementing new conservation strategies, all of which are consistent with the Management Activities identified in Section 9.
- 14.5. Taking into account the benefits reasonably expected from the Management Activities, the return to the Baseline Condition, the incidental take related to Management Activities, and the minimization and avoidance measures, this Agreement: (1) will not operate to the disadvantage of the Covered Species; (2) will enhance the survival of the Covered Species; and (3) is reasonably expected to result in a net conservation benefit to the Covered Species that will contribute, directly or indirectly, to their recovery. The expected net conservation benefit would not be realized if not for the assurances provided by this Agreement.

15. MONITORING & REPORTING

- 15.1. The Landowner will be responsible for monitoring and reporting as described in this Agreement, including as follows:
- i. For each calendar year that this Agreement is in effect, the Landowner will monitor the volume of water used for Reservoir Releases.
 - ii. The Landowner will provide NMFS with the current storage level in the Reservoir within 48 hours of a request.
 - iii. The Landowner will provide NMFS with all monitoring reports relating to the Enrolled Property prepared by UC Sea Grant, SRCO, and TU required by the Prop 1 Grant Program.
 - iv. The Landowner will provide NMFS with any reports required by SWRCB pursuant to the Landowner's water rights, as outlined in Section 6.

16. CONTACT INFORMATION

- 16.1. Any notice permitted or required by this Agreement shall be in writing, delivered personally or sent via certified United States mail, postage prepaid and return receipt requested to the persons listed below, and/or to such other address as any Party may from time to time specify to the other Parties in writing. Any notice sent by certified mail shall be deemed given five (5) days after deposit in the United States mail. Notices may be delivered by facsimile or other electronic means, provided that they are also delivered personally or by certified mail:

Alecia Van Atta
Assistant Regional Administrator, California Coastal Office
National Marine Fisheries Service
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404

Jim Collins
Vice President of Premium Winegrowing
E. & J. Gallo Winery
845 Healdsburg Ave
Healdsburg, California 95448

17. MODIFICATION

17.1. **Modification of the Agreement.** This Agreement may be amended only with the written consent of each of the Parties hereto in accordance with all applicable laws and regulations.

- i. **Minor Modifications.** Minor Modifications potentially include, but are not limited to the following: corrections of typographic, grammatical, and similar editing errors that do not change the intended meaning; correction of any maps or exhibits to correct errors in mapping; minor changes to survey, monitoring or reporting protocols; clarifications of vague or undefined language or phrases; transfer of the Enrolled Property, in whole or in part to a Party Transferee, in accordance with Section 23 of this Agreement; and, transfer of the ESP, in whole or in part, in accordance 50 C.F.R. § 222.305. Any Party may propose Minor Modifications to this Agreement by providing written notice to all other Parties. Such notice shall include a statement of the reason for the proposed Minor Modification and an analysis of its environmental effects, including its effects on Management Activities and on listed species. The Parties shall use reasonable efforts to respond to proposed modifications within sixty (60) days of receipt of such notice. Proposed Minor Modifications shall become effective, and the Agreement shall be deemed modified accordingly, immediately upon all Parties' written approval. Among other reasons, a Party may object to a proposed Minor Modification based on a reasonable belief that such modification would result in adverse effects on the environment that are new or significantly different from those analyzed in connection with this Agreement or additional take not analyzed in connection with the this Agreement. If a Party objects to a proposed Minor Modification, the proposal is not approved as a Minor Modification but may be processed as an amendment in accordance with subsection 17.1.ii of this Agreement.

- ii. **Amendment.** Any modifications to this Agreement other than those made pursuant to subsection 17.1.i of this Agreement shall be processed as an amendment of this Agreement in accordance with all applicable legal requirements, including but not limited to the ESA, National Environmental Policy Act, and applicable federal regulations.
- iii. **Modification of the Permit.** Modification of the Permit is governed by the ESA and 50 C.F.R. §222.306.

18. TERMINATION

18.1. Unless terminated as specified in Sections 18.2 or 18.3 of this Agreement or extended in accordance with Section 13.1 of this Agreement, this Agreement will terminate on the last day of the term noted in Section 14.1 of this Agreement.

18.2. **Termination of the Agreement by the Landowner.** The Landowner may terminate this Agreement in accordance with two alternative processes described below: (1) termination due to “circumstances beyond Landowner’s control” that offers take coverage for the return of the Enrolled Property to Baseline Condition; and (2) “early termination” for any reason that does not offer take coverage for the return to the Baseline Condition.

i. **Circumstances Beyond the Landowner’s Control.**

- a. Should the Landowner seek to terminate this Agreement due to circumstances beyond its control, it shall provide NMFS written notice at least 60 days before the intended termination date, as described in the Policy. Unless the Parties mutually agree otherwise in writing, this Agreement will terminate 60 days after NMFS’s receipt of the Landowner’s notice of intent to terminate.
- b. Upon NMFS’s receipt of the advance notice of termination, NMFS will hold a coordination meeting with the Landowner regarding the disposition of the Covered Species on the Enrolled Property. After such meeting and upon a finding of circumstances outside of the Landowner’s control:
 - 1. As described in the ESP, the Landowner may take Covered Species through the alteration or modification of Enrolled Property to such an extent that the Enrolled Property is returned to the Baseline Condition if such a return would not be likely to result in jeopardy to the Covered Species or adverse modification or destruction of the Covered Species’ designated critical habitat.
 - 2. In all of the circumstances described above, the Landowner will fulfill its responsibilities under Section 8.2 of this Agreement,
- c. Within 30 days of the cessation of permitted activities, the Landowner shall deliver the ESP to NMFS via certified or overnight mail.

ii. **Voluntary Early Termination.**

- a. Should the Landowner seek to terminate this Agreement for any reason other than for circumstances outside of its control, Landowner will provide NMFS written notice of the intent to terminate and request for cancellation of the ESP at least 60 days before the intended termination date. Unless the Parties mutually agree otherwise in writing, this Agreement will terminate 60 days from NMFS's receipt of the Landowner's notice of intent to terminate.
- b. On the termination date, the Landowner may cease the activities discussed in Section 9 (Management Activities) and the ESP will be void.
- c. Within 30 days of the cessation of permitted activities, the Landowner shall deliver the ESP to NMFS via certified or overnight mail.

18.3. **Termination by NMFS.** NMFS may terminate this Agreement in accordance with the laws and regulations in force at time of such termination and the Safe Harbor Policy.

19. PERMIT SUSPENSION OR REVOCATION.

19.1. NMFS may suspend or revoke the ESP in accordance with the laws and regulations in force at the time of such suspension or revocation.

20. NON-COVERED AND NEWLY LISTED SPECIES.

20.1. **Incidental Take and Non-Covered Species.** The Landowner shall not have incidental take authority with respect to Non-Covered Species unless and until the ESP is amended to include such species or other authorization is provided pursuant to the ESA. The Landowner may request the technical assistance of NMFS to (1) identify possible measures to avoid take and avoid causing jeopardy to such species; (2) identify any modifications to this Agreement that may be necessary to provide coverage for the species; and (3) determine whether to seek amendment of this Agreement and the ESP.

20.2. **Newly Listed Species.** In the event that a species is listed under the ESA subsequent to the issuance of the ESP, the Parties may, if appropriate, mutually agree to amend this Agreement to include the subsequently listed species as one of the Covered Species through the amendment process described in Section 17 of this Agreement.

21. REMEDIES.

21.1. **Money Damages.** NMFS shall not be liable for any monetary damages for any breach of this Agreement, any performance or failure to perform an obligation under this Agreement, or any other cause of action arising from this Agreement, except in the case of property damage or injury (including death) caused by the negligence or willful misconduct of NMFS or any of its contractors, agents, employees or volunteers.

- 21.2. **Injunctive and Temporary Relief.** The Parties acknowledge that listed species are unique and that their loss as a species would result in irreparable damage to the environment and, therefore, injunctive and temporary relief may be appropriate to ensure compliance with the terms of this Agreement.
- 21.3. **Enforcement Authority of the United States.** Nothing contained in this Agreement is intended to limit the authority of the United States government to seek civil or criminal penalties or otherwise fulfill its enforcement responsibilities under the ESA or other applicable law.
- 21.4. **Dispute Resolution.** The Parties recognize that good faith disputes concerning implementation of, or compliance with, or suspension, revocation, or termination of this Agreement or the ESP may arise from time to time. The Parties agree to work together in good faith to resolve such disputes, using the dispute resolution procedures set forth in this Subsubsection or such other procedures upon which the Parties may later agree. However, if at any time any Party determines that circumstances so warrant, it may seek any available remedy without waiting to complete dispute resolution. If NMFS has reason to believe that the Landowner may have violated the ESP or this Agreement, it will notify the Landowner in writing of the specific provisions which may have been violated, the reasons NMFS believes the Landowner may have violated them, and the remedy NMFS proposes to impose to correct or compensate for the alleged violation. The Landowner will then have sixty (60) days, or such longer time as may be mutually acceptable, to respond. If any issues cannot be resolved within thirty (30) days, or such longer time as may be mutually acceptable, after the Landowner's response is due, the Parties will consider non-binding mediation and other alternative dispute resolution processes. The Parties reserve the right, at any time without completing the dispute resolution procedures set forth in this section, to use whatever enforcement powers and remedies are available by law or regulation, including but not limited to, in the case of NMFS, suspension or revocation of the ESP.

22. TRANSFER OF LAND OR WATER UNDER THE AGREEMENT

- 22.1. **Transfer of ESP.** The transfer of the ESP will be governed by any applicable federal regulations, currently at 50 C.F.R. §222.305.
- 22.2. **Transfer of All or a Portion of the Enrolled Property.** Landowner will notify NMFS within 45 days of any transfer of ownership of all or a portion of the Enrolled Property.
- 22.3. **Transfer of a Portion of the Enrolled Property.**
- i. If a portion of the Enrolled Property is transferred and NMFS determines that, based on the action or omission of a Party Transferee, it is no longer reasonable to expect a net conservation benefit, the Party Transferee and NMFS will hold a coordination meeting regarding: (1) the negotiation of a new baseline to the Party Transferee's portion of the Enrolled Property, (2) the adoption of suitable management activities to ensure that the Agreement still provides a net conservation benefit, and/or (3) the

disposition of the Covered Species on the Party Transferee's portion of the Enrolled Property if the Agreement is to be terminated with regard to all Parties.

- ii. If NMFS determines that, based on the action or omission of another entity with an interest in the Enrolled Property (*e.g.*, the Party Transferee voluntarily withdraws, the transferee does not become a party to the Agreement), it is no longer reasonable to expect a net conservation benefit, the original Landowner and NMFS will hold a coordination meeting regarding: (1) the negotiation of a new baseline on the original Landowner's portion of the Enrolled Property, (2) the adoption of sufficient management activities that still provide a net conservation benefit, and/or (3) the disposition of the Covered Species on the original Landowner's portion of the Enrolled Property if the Agreement is to be terminated with regard to all Parties. If NMFS decides to terminate the Agreement with the original Landowner, it may use the following protocol:
 - a. NMFS will mail the original Landowner its intent to terminate the Agreement. The original Landowner's Agreement will terminate 60 days from NMFS mailing of its intent to terminate or on another date if agreed to by NMFS and the original Landowner ("Original Landowner Termination Date").
 - b. After receiving the notice of intent but prior to the Original Landowner Termination Date:
 1. The original Landowner may take Covered Species by altering or modifying its portion of the Enrolled Property to such an extent that it is returned to the Baseline Condition described in Section 7 if such a return would not be likely to result in jeopardy to a Covered Species or adversely modify or destroy their designated critical habitat.
 2. The original Landowner may cease any Management Activities described in Section 9 on the Original Landowner Termination Date.
 3. In all of the circumstances described above, the original Landowner will fulfill its responsibilities under subsection 8.2.viii of this Agreement,
 - c. Within 30 days of the cessation of permitted activities or the Original Landowner Termination Date, whichever occurs first, the original Landowner shall send the ESP to NMFS via certified or overnight mail.

23. MISCELLANEOUS PROVISIONS

- 23.1. **Entire Agreement.** This Agreement, together with the ESP, constitutes the entire agreement among the Parties. The terms contained in this Agreement supersede any and all other agreements, either oral or in writing, among the Parties with respect to the subject matter hereof and contains all of the covenants and agreements among them with respect to said matters, and each Party acknowledges that no representation, inducement, promise or agreement, oral or otherwise, has been made by any other Party or anyone acting on behalf of any other Party that is not embodied herein.

- 23.2. **Availability of Funds.** Implementation of this Agreement by NMFS is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury. The Parties acknowledge that NMFS will not be required under this Agreement to expend any federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.
- 23.3. **Duplicate Originals.** This Agreement may be executed in any number of duplicate originals. A complete original of this Agreement shall be maintained in the official records of each of the parties hereto.
- 23.4. **No Third-Party Beneficiaries.** Without limiting the applicability of rights granted to the public pursuant to the ESA or other federal law, this Agreement shall not create any right or interest in the public, or any member thereof, as a third-party beneficiary hereof, nor shall it authorize anyone not a party to this Agreement to maintain a suit for personal injuries or damages pursuant to the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third-parties shall remain as imposed under existing law.
- 23.5. **Relationship to the ESA and Other Authorities.**
- i. The terms of this Agreement shall be governed by and construed in accordance with the ESA and applicable federal law and regulations. In particular, nothing in this Agreement is intended to limit the authority of NMFS or the United States Government to seek civil or criminal penalties or otherwise fulfill its responsibilities under the ESA. Moreover, nothing in this Agreement is intended to limit or diminish the legal obligations and responsibilities of NMFS as an agency of the federal government.
 - ii. Nothing in this agreement will limit the right or obligation of any federal agency to engage in consultation required under Section 7 of the ESA or other federal law.
- 23.6. **References to Regulations.** Except as otherwise provided in this Agreement, any reference in this Agreement or the ESP to any regulation or rule of NMFS shall be deemed to be a reference to such regulation or rule in existence at the time an action is taken.
- 23.7. **Applicable Laws.** All activities undertaken pursuant to this Agreement or the ESP must be in compliance with all applicable state and federal laws and regulations.
- 23.8. **Successors, Assigns, and Transfers.**
- i. **Successors.** This Agreement shall be binding on and shall inure to the benefit of the Parties (including officers, directors, employees, lessees and agents thereof) and their respective successors and transferees, in accordance with applicable regulations (50 C.F.R. § 222.305(a)). The rights and obligations under this Agreement shall run with the ownership of the Enrolled Property and are transferable to subsequent non-federal property owners pursuant to 50 C.F.R. 222.305(a)(3).

- ii. **Transfers.** Pursuant to the Policy, and as further explained in Section 22 of this Agreement and 50 C.F.R. §222.305, the rights and obligations under this Agreement may, within the duration of the ESP, be transferred to subsequent non-federal property owners. To become a party to this Agreement, a Party Transferee must meet, to the satisfaction of NMFS, the criteria explained in 50 C.F.R. §222.305(a)(3).

23.9. **Severability.** If any provision of this Agreement is found invalid or unenforceable, such provision shall be enforced to the extent it is not found invalid or unenforceable and the other provisions shall remain in effect to the extent they can be reasonably applied in the absence of such invalid or unenforceable provisions.

24. SIGNATURES

24.1. IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Safe Harbor Agreement to be in effect as of the date that NMFS issues the ESP.

Alecia Van Atta
Assistant Regional Administrator
California Coastal Office
National Marine Fisheries Service

Jim Collins
Vice President of Premium Winegrowing
E. & J. Gallo Winery

25. REFERENCES

FR Notices Cited

60 FR 38011 - Endangered and Threatened Species; Proposed Threatened Status for three contiguous ESUs of coho salmon ranging from Oregon through central California

61 FR 56138 - Endangered and threatened species: threatened status for central California coho salmon evolutionarily significant unit (ESU)

62 FR 24588 - Endangered and threatened species; threatened status for Southern Oregon/Northern California Coast Evolutionarily Significant Unit (ESU) of coho salmon.

62 FR 43937 – Endangered and threatened species: listing of several Evolutionarily Significant Units (ESUs) of West Coast Steelhead.

64 FR 32706 – Safe Harbor Agreements and Candidate Conservation Agreements with Assurances.

64 FR 32717 – Announcement of Final Safe Harbor Policy.

64 FR 50394 - Endangered and threatened species; threatened status for two Chinook salmon Evolutionarily Significant Units (ESUs) in California

70 FR 37160 - Endangered and threatened species: final listing determinations for 16 ESUs of West Coast Salmon, and Final 4(d) Protective Regulations for Threatened salmonid ESUs.

71 FR 834 - Endangered and threatened species: Final listing determinations for 10 distinct population segments of West Coast steelhead.

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