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By Mail and Email to: kelli.cahill@countyofnapa.org

Ms Kelli Cahill, Project Planner
County of Napa
Planning, Building and Environmental Services Department
Engineering and Conservation Division
1195 Third Street, Suite 210
Napa, CA 94599-3092

Re: Draft EIR for Walt Ranch Erosion Control Plan Application No. P11-00205-ECPA

Dear Ms. Cahill:

This office represents Living Rivers Council (“LRC”) with respect to the Draft EIR for the Walt Ranch Erosion Control Plan Application No. P11-00205-ECPA. LRC objects to County approval of the Project for the reasons described in this letter, my letter dated November 10, 2014, and the attached letters from Greg Kamman (Exhibit 7), Patrick Higgins (Exhibit 8), Gretchen E. Padgett-Flor (Exhibit 9), and Joe Szewczak, (Exhibit 10), which are incorporated herein by reference.

I am submitting with this letter, in both hard copy and electronically on CD, a total of twenty-one exhibits, and thirty-eight reference documents cited in the November 20, 2014, letter from Dr. Gretchen Padgett-Flor, both of which are identified at the end of this letter.

1. The DEIR Fails as an Informational Document with Respect to Increased Stream Sedimentation in the Napa River Drainage and Associated Impacts on the Aquatic Ecosystem.

Over the last 10 years, environmental organizations¹ in Napa County have repeatedly demonstrated, to Napa County in comments on previous vineyard conversions projects, and in comments to the San Francisco Bay Area Regional Water Quality Control Board on the Napa River Sediment Total Maximum Daily Load (TMDL), that implementing projects in compliance with the Conservation Regulations may cause significant, adverse sediment impacts on the Napa River watershed. The principal mechanism causing this harm is the installation of engineered drainage facilities to reduce surface erosion. These facilities have the unintended consequence of routing rainfall off the site more efficiently, thereby increasing the amount of downstream runoff. The increased runoff, in turn, causes downcutting of the stream beds (also known as channel incision) which both directly moves more sediment downstream, and causes stream banks to collapse and add

¹The Sierra Club and Earth Defense for the Environment Now (“EDEN”).

their sediments to the stream flow as well.

These organizations retained the services of experts in the field, including Dr. Robert Curry,² to comment on a number of vineyard conversion projects in the Napa River watershed and the Erosion Control Plans (“ECPs”) prepared by vineyard owners pursuant to the Napa County Conservation Regulations. These experts consistently found that the ECPs do not accurately evaluate or adequately mitigate impacts associated with increases in runoff from the changes in land use attendant to vineyard conversions. Again, the problem is that the focus of the ECPs used in the Napa County program is to reduce surface erosion, and the methods used to do so, including cross-slope ditches, drop inlets and underground pipes, concentrate and rout rainfall off of the property as quickly as possible before it can erode the surface. The result is to *increase* the rate of runoff and peak discharge to tributary streams, causing channel incision, which causes destabilization of stream and river banks which then collapse and contribute additional sediment to the streams system. This in turn lowers stream and river beds, separating the channels from their natural flood plain, which has many diverse and well-documented negative impacts on the riparian environment. (Exhibit 4, pp 9-10 [AR 710-711].)

As explained by Dr. Curry in his review of the Conservation Regulations in 2000:

The approach of the Napa County ordinances is fundamentally incorrect and cannot protect either public health and safety or long-term land productivity. The existing ordinances seem to assume that by attempting to capture sediments from upland vineyard conversion areas, downstream cumulative effects are reduced to insignificance. This is not correct. Increased upland sediment yields, while important, are less hazardous to Napa Valley than are the changes in runoff timing, volumes, and rates. Increased runoff does have cumulative downstream effects through changes in rates of runoff and frequency of runoff events of a given magnitude. These changes are likely to be a significant factor in changing sediment loads in the main Napa River through changes in stability of its side tributaries.

(Exhibit 1, p. 2 [AR 8930].)

As explained by Dr. Curry in his comments on the Napa River Sediment TMDL, erosion control measures approved by the County and implemented in compliance with its Conservation Regulations have not been able to reduce surface erosion without simultaneously causing peak flow increases that lead to sedimentation caused by channel incision:

[M]y prior extensive reports and analyses of specific conversion projects in Napa County have all demonstrated that you cannot simultaneously reduce sediment yield with engineering structures and flow routing while maintaining or reducing peak flow runoff. [...] In my opinion, it may be possible to implement the TMDL and meet its

²Dr. Curry’s credentials are set forth in Exhibit 3.

goals with local control, but that has not been demonstrated to date and the bulk of the evidence suggests that in the specific case of Napa County, there is an entire land-use engineering industry that has not been able to deal with impacts of peak flow increases associated with land conversions.

The source-area erosion control technology promoted by the consultant community in Napa County is good and seems to be improving through time. But the engineering solutions for headwater source-area sediment yield reduction and/or local capture of sediments almost invariably result in greater off-site, downstream, concentration of runoff that then leads to bank and streambed erosion to balance sediment load with the increased stream power. It seems that recommendations for more and larger-capacity on-site runoff detention are largely ignored in favor of reduced sediment concentration in that runoff.

(Exhibit 2, p. 1.)

As explained by Dr. Curry, the contribution of increased runoff from installation of engineered drainage facilities designed to bring new vineyards into compliance with the Napa County Conservation Regulations is cumulatively significant:

The recommended structural drainage facilities such as culverts, lined ditches, and drainage facilities such as culverts, lined ditches, and drainage channels as applied over large areas of Napa Valley will reduce sediment input from uplands but will exacerbate off-site channel and stream-bed erosion through increased yield of runoff. The public and the fish in the Napa River are directly impacted by the cumulative downstream impacts of increased frequency and duration of flood flows in the main river and its primary tributaries.

(Exhibit 2, p. 3 [AR 9565].)

The Regional Board concurred with Dr. Curry that increased runoff from vineyard development is causing significant increases in sediment supply to the Napa River, stating:

We concur that increased runoff from vineyard development is causing significant increases in sediment supply to the mainstem Napa River through enlargement of headwater channels, gully formation, and associated shallow landslides.

(Exhibit 5, p. 55-56 [AR 515-516].)

Indeed, a Regional Water Board staff memorandum acknowledges that erosion control measures on hillslope vineyards cause stream channel erosion:

Where engineered drainage systems are used on hillslope sites to capture sheetflow and discharge it through subsurface drainage pipes, and where these same vineyards are developed on soft sedimentary bedrock and/or were forested prior to

development, we often found that storm runoff from vineyards was concentrated in time and/or space, appearing to contribute to active bed and bank erosion in headwaters channels at or near the point(s) of discharge from the vineyard.

(Exhibit 6 [emphasis added].)

The Regional Water Board final Staff Report for the TMDL also discusses channel incision, stating:

We hypothesize that the current episode of channel down-cutting (channel incision) is in response to the following disturbances including: a) a suite of direct alterations to the river channel and/or its floodplain (e.g., levee building, channel straightening, filling of side channels, removal of debris jams, historical gravel mining, and dredging); b) construction of four large tributary dams between 1939 and 1959 that capture runoff and coarse sediment delivered from approximately 20 percent of the land area in the watershed; and c) land-cover changes that have increased peak flows in the river (e.g., vineyards, rural residences, commercial buildings, and roads). Each of the above actions may contribute to down-cutting either through increasing the capacity of the river to transport sediment or by decreasing its supply of coarse sediment (e.g., tributary dam construction).

(Exhibit 4, p. 39 [AR 740].)

Similarly, the Regional Board Staff Report identifies historical factors; “watershed development” in general, and direct channel alterations as the causes of channel incision, stating:

As the watershed was developed, upslope disturbances of vegetation and soil likely increased runoff rates and sediment input to channels. These historical and recent impacts, in combination with direct alterations of channels and adjacent flood basins, have destabilized channels where they traverse alluvial fan and valley deposits. This has led to active and rapid channel down-cutting and accompanying bank erosion that is widespread along Napa River and lower reaches of many of its tributaries today.

(Exhibit 4, p. 17 [AR 1718])

The Regional Board Environmental Document for the Napa River Sediment TMDL further states:

“[a] suite of management actions have likely caused or contributed to channel incision, including (but not necessarily limited to): levee building, large tributary dams, straightening of some mainstem channel reaches, filling of side channels, historical gravel mining, dredging to reduce flood risk, and intensive removal of large

woody debris.”³

(Exhibit 4, p. 91 [AR 792].)

a. The DEIR Fails as an Informational Document with Respect to Sediment Impacts on Special Status Fish Species Below Milliken Reservoir.

The DEIR recognizes that anadromous salmonid species listed as threatened or endangered are found in Milliken Creek and the Napa River below Milliken Reservoir. Nevertheless, the DEIR does not assess the Project’s impacts on these species, apparently because they “do not have suitable habitat or occur onsite” and they cannot migrate above Milliken dam, stating:

Special-status species were targeted based on records obtained from the CNDDDB, CNPS, and USFWS, and by verbal communication with CDFW personnel. Special-status surveys targeted species that were identified as having the potential to occur, that have been recorded within a 5-mile radius, or that are known from specific habitat types on the project site. The original Biological Resources Assessment (WRA, Inc., 2007a) is included in Appendix M. Queries were updated in July 2013 and are included in Appendix I. The target species summary list is shown in Table 4.2-3. Species that do not have suitable habitat onsite were dismissed from consideration. Locations of special-status species mapped within the project site are provided in Figure 4.2-3.

Two federally listed critical habitats – critical habitat for Central Valley spring-run chinook and critical habitat for the Central Valley fall/late fall-run chinook – were also dismissed from the list, as they do not occur onsite. Drainages on the project site do not provide habitat for listed fish species such as steelhead and Chinook salmon, therefore focused surveys for fish were not conducted. Capell Creek drains north to Lake Berryessa. Milliken Creek flows southeast and into Milliken Reservoir, a water source for the City of Napa. The dams for Lake Berryessa and Milliken Reservoir present barriers to upstream migration of anadromous fish.

(DEIR p. 3.2-27 [pdf 152].)

The DEIR’s logic for excluding Chinook salmon and steelhead from its impact assessment is flawed. As discussed above, the Project will cause increased sediment loading of the stream system in the Milliken Creek watershed and from there to Milliken Reservoir as a result of

³ See also Exhibit 4, p 51 [AR 752] (“Almost all incision is found to be anthropogenic based on the very high estimated rate [of incision], and initiation during historical period, which is coincident with a period of intensive levee building and dam construction, filling of flood basins adjacent to channels, navigational dredging, intensive removal of debris jams, and historical gravel mining and channel straightening.”).

concentrating and discharging increased runoff to upland stream channels. The DEIR recognizes that Milliken Reservoir traps coarse sediments, but that fine sediments pass through, stating:

Dams that trap coarse sediment in the area have not significantly reduced the degree to which finer sediments are being delivered to the mainstem Napa River and its tributaries. As a result of this fine sedimentation, habitats for steelhead, Chinook salmon, and California freshwater shrimp, which rely on more gravel substrate in the river, have been negatively affected from reduced gravel permeability. (Stillwater Sciences and W. Dietrich, 2002). The San Francisco Bay Regional Water Quality Control Board (RWQCB) has released a technical report that proposes a total maximum daily load (TMDL) for the Napa River that calls for substantial reductions in the amount of fine sediment deposits into the watershed to improve water quality and maintain beneficial uses of the river, including spawning and rearing habitat for salmonid species.

(DEIR 4.6-8 [pdf 341].)

The Regional Water Board's final Staff Report for the TMDL describes the impacts of fine sediment loading, stating:

The limiting factors study documented two adverse impacts of sediment pollution on steelhead and salmon habitat. The first impact is due to a high concentration of fine sediment deposited in the streambed, which adversely affects spawning and rearing habitat for both species. The second impact is due to channel incision, which occurs primarily in the mainstem and lower tributaries and affects Chinook salmon to a much greater extent (because most steelhead spawn further upstream in the tributaries). These sediment-related impacts are discussed below:

- Documentation of low permeability values at potential spawning sites for salmon indicates a high concentration of fine sediment in the streambed. Successful salmon and steelhead reproduction depends on adequate water flow through gravel in order for eggs to hatch and larvae to grow. If fine sediment clogs the gravels, flow is very slow, egg mortality can be very high, and few young fish (fry) may emerge from the streambed. Low gravel permeability is predicted to cause high rates of mortality between spawning and emergence at potential spawning sites in Napa River and its tributaries.
- High concentration of fine sediment in the streambed also can cause significant decreases in growth and survival of juvenile salmonids during freshwater rearing by reducing availability of vulnerable prey species and increasing activity level, aggressive behavior, and attacks between juvenile salmonids (Suttle et al., 2004).
- Juvenile steelhead use open spaces between clusters of large cobbles and/or boulders as winter refuges from predators and high flows (Hartman, 1965; Chapman

and Bjorn, 1969; and Meyer and Griffith, 1997). As the concentration of fine sediment in streambeds increases, quality of winter rearing habitat is significantly diminished with consequent adverse impacts to survival.

- Scour of spawning gravel during commonly occurring peak flows (e.g., bankfull) can be a significant source of mortality to incubating eggs and larvae of salmon and trout species (McNeil, 1966; Montgomery et al., 1996). Human actions that increase rate of sediment supply, and/or cause it to become finer, will cause the streambed to become finer, facilitating an increase in mean depth and/or spatial extent of scour (Carling, 1987).

- Active and rapid channel incision in mainstem Napa River and lower reaches of its major tributaries has greatly reduced quantity of gravel bars, riffles, side channels, and sloughs, and has greatly decreased frequency of inundation of adjacent flood plains. These features and processes provide essential spawning and juvenile rearing habitat for Chinook salmon, which reside primarily in the mainstem Napa River. Therefore, channel incision appears to be a key factor limiting Chinook salmon run size. Channel incision, and associated bank erosion in areas underlain by thick alluvial deposits, also appears to be a significant source of sediment delivery to Napa River. Shallow groundwater stored in the valley floor adjacent to incised channel reaches is more rapidly depleted during the spring and summer, causing spring and summer baseflow persistence to be reduced, and the quantity and quality of cold pools (e.g., those fed by groundwater inputs) to be diminished.

(Exhibit 4, pp. 8-9.)

In his analysis of runoff impacts, Mr. Kamman concludes:

The project proposes a number of surface drains, subdrains and utility corridors that will intentionally and unintentionally concentrate and accelerate runoff off through proposed vineyard blocks. A primary runoff treatment strategy recommended in the RiverSmith Engineering hydrology study is to “detain water” onsite as a means to reduce peak flows. However, this is contrary to intent of the project drainage plan, which will effectively concentrate and accelerated storm water runoff. The hydrology storm runoff analysis does not incorporate these drainage elements into the storm water runoff calculations, where applicable. Both the likely reduction in infiltration capacity of ripped soil areas and project drainage elements will lead to significant increases in the estimated runoff rates, both on- and off-site. Thus, the peak flow rates for project conditions are underestimated, which means the potential impacts associated with high storm flows have not been accurately identified and evaluated.

(Exhibit 7, pp. 11-12.)

Milliken Creek below Milliken Reservoir provides important habitat for Chinook salmon and

steelhead (see Exhibits 8 and 11) that will be degraded by increased fine sediment generated by the Project (see Exhibit 8 [Higgins].) A 2003 report found high densities of steelhead in lower Milliken Creek below the dam. (See Exhibits 8, 19, 20.)

In sum, the Draft EIR fails as an informational document with respect to sediment impacts on special status fish species below Milliken Reservoir.

b. The DEIR Fails as an Informational Document with Respect to Sediment Impacts on Aquatic Ecosystems and Fish above Milliken Reservoir.

The DEIR concludes that impact on fish and the aquatic ecosystems above Milliken dam are less than significant. This conclusion is unsupported for the reasons discussed by Patrick Higgins (Exhibit 8) and in section 3.a below. Significantly, Milliken Creek above the dam supports a resident population of steelhead (i.e., rainbow) trout (see Exhibits 8, 20) that is important because:

Today many San Francisco Bay tributaries have very limited habitat and salmon and steelhead populations (Leidy et al. 2003). Therefore, there is no source of colonists to re-start the Napa River steelhead population in the event that the local population is lost, which makes protection of Milliken Creek's lower and upper watershed steelhead populations even more important. Conversely, genes from native Napa River steelhead could be used to restore other SF Bay tributaries if they recover in the future.

(Exhibit 8, p. 15.)

2. The DEIR Fails as an Informational Document with Respect Impacts on Wetlands, Amphibians and Reptiles.

As noted above, this letter incorporates the attached letters from Mr. Kamman, Mr. Higgins and Dr. Padgett-Flor.

a. Wetlands.

The DEIR's discussion of the Project's impacts on wetlands and "waters of the U.S." is confusing and unintelligible. The DEIR states:

The Proposed Project was designed to avoid all wetlands, with the exception of one isolated wetland approximately 0.02 acres in size that is proposed to be filled in Block 31. The Proposed Project was designed to avoid all waters of the U.S., except for short stretches in 24 locations as shown in Table 4.2-6. Vineyard blocks were designed to facilitate as few stream crossings as possible, and stream crossings are only proposed when necessary for vineyard block access. A total of approximately 0.02 acres of wetlands and 0.25 acres of jurisdictional "other waters" were identified and mapped within the clearing areas of the project site.

Activities associated with roads and stream crossings would result in direct impacts to waters of the U.S. and will require permits from the USACE and CDFW. Figure 3-11 illustrates the network of roads and stream crossings.

There are two sensitive locations, one in Block 5A3 and the other in Block 8, that should receive additional protection beyond that proposed in the ECP. This is discussed in Mitigation Measure 4.2-4 below. With the incorporation of the mitigation measures listed below and standard BMPs, direct impacts to wetlands and waters of the U.S. would be considered less than significant.

Mitigation Measure 4.2-4: Project site plans will avoid or mitigate for direct impacts to jurisdictional waters of the U.S., as described below.

A Department of the Army nationwide permit (Section 404 permit) shall be obtained from the USACE prior to the discharge of any dredged or fill material within jurisdictional wetlands and other waters of the U.S. If needed, a Streambed Alteration Agreement (SAA) shall be obtained from CDFW prior to construction activities that impact riparian zones. Unavoidable impacts to waters of the U.S. shall be mitigated by creating or restoring waters of the U.S. onsite. Compensatory mitigation shall occur at a minimum of 1:1 ratio and shall be approved by the USACE prior to any discharge into jurisdictional features.

(DEIR pp. 4.2-92 - 4.2-94 [pdf pp. 217-219].)

The first problem is that the DEIR is unclear as to which locations will suffer impacts that are “significant.” The twenty-three (23) locations listed in Table 4.2-6 include the twenty-one (21) stream crossing mapped in Figure 3-11 and listed in Table 3-4. In addition, Table 4.2-6 includes two additional locations: Blocks 31 and 52. The above quoted text adds two more locations that require protection: Blocks 5A3 and 8.

One could read the above quoted text as saying that only the locations in Block 5A3 and Block 8 will suffer significant impacts, or alternatively, that all of these locations will suffer significant impacts. The former interpretation is suggested because the above quoted text indicates that only Blocks 5A3 and Block 8 require “additional protection” and this “additional protection” is implied to be creation or restoration of wetlands on-site at a 1:1 ratio.

But Table 2-1 supports the latter interpretation because it states “Development of the Proposed Project could result in impacts to wetlands or waters of the U.S.”; it characterizes this impact as “potentially significant” before mitigation and “less than significant” after mitigation; and it lists a host of mitigation measures, not just creation or restoration of wetlands on-site at a 1:1 ratio, that are required to reduce these impacts to less than significant. (DEIR pp. 2-13 - 2-15 [pdf pp. 37-39].)

In short, the reader must spend an inordinate amount of time just to understand that the

DEIR's assessment of the significance of impacts to wetlands is incoherent.

The second problem is the DEIR's discussion of the mitigation measures stating "Unavoidable impacts to waters of the U.S. shall be mitigated by creating or restoring waters of the U.S. onsite" is fatally vague and ambiguous.

First, it is not clear where it applies. The text at DEIR pp. 4.2-92 - 4.2-94 suggests that this measure only applies to Blocks 5A3 and 8, but the text can also be interpreted to mean that this measure applies to all of the locations listed in table 4.2-6. But Table 2-1 suggests a third possibility, that it only applies to Block 31.

Second, the DEIR's use of the word "unavoidable" makes it impossible to know where this measure will be required, for several reasons. As discussed above, the locations where impacts are considered significant, and therefore subject to mitigation, is unknown. Also, even if all of these impacts are "significant" before mitigation, the DEIR does not inform the reader which impacts are "unavoidable." In addition, under CEQA, the term "unavoidable" describes impacts that remain significant even after the adoption of all feasible mitigation measures that would substantially reduce the impact. (CEQA Guidelines 15092(b)(2); *City of Marina v. Board of Trustees of the California State University* (2006) 39 Cal.4th 341, 349, 364). But this finding occurs when the County decides whether to approve the Project, after it certifies the EIR. In short, the DEIR fails to inform the reader which impacts on waters of the U.S. will be subject to this mitigation measure.

Third, this mitigation measure is also fatally vague because the DEIR does not: (1) identify any locations on the site where functional wetlands or waters of the U.S. can feasibly be "created or restored," (2) present any information suggesting that there are suitable locations where functional wetlands or waters of the U.S. can feasibly be "created or restored," or (3) identify the means that will be used to create or restore wetlands or waters of the U.S. The absence of this information precludes the County and the public from judging or commenting on the likely success of this mitigation measure, and therefore, on whether these impacts will remain significant or not.

b. California Red-Legged Frog and Foothill Yellow-Legged Frog.

With respect to California Red-Legged Frog and Foothill Yellow-Legged Frog, the DEIR states:.

Other than the small stretches of stream that would be modified for stream crossings, which is mitigated in Mitigation Measure 4.2-4, the Proposed Project would not modify the physical conditions of any streams or virtually any wetlands on the project site. The Proposed Project includes the maintenance of stream and wetland setbacks (thereby directly protecting habitat and indirectly protecting habitat through added sediment filtration benefits), the restriction of earthmoving activities to the dry season (April 1 through September 1 or October 1), and the installation of straw wattles, seeding and mulching of disturbed areas, and other erosion control measures and BMPs as discussed in Section 3.0 (thereby indirectly protecting habitat). The full

compliance with the ECP will ensure that the Proposed Project would not significantly increase runoff or degrade water quality (discussed in Section 4.6 Hydrology and Water Quality) and would not significantly increase soil erosion or sedimentation (discussed in Section 4.4 Geology and Soils). This overall protection of the stream courses and wetlands onsite by avoidance and buffers will provide significant protection for the habitats of the two special status amphibians that may occur onsite.

(DEIR 4.2-119.)

The DEIR's reliance on Mitigation Measure 4.2-4 to reduce impacts on these species to less-than-significant is misplaced for the reasons described in section 3.a. above.

Also, as discussed by Dr. Padgett-Flor, this measure appears to involve the installation of rock water crossings at all twenty-one (21) stream crossing listed in Table 4.2-6 and "As FYLF attach their eggs to the lee sides of cobbles and rocks, this could be a potentially significant impact as vehicles crossing the rock structures can crush eggs or larvae that secrete themselves in the interstices of rock piles." Therefore, the DEIR must be revised and recirculated to assess the mitigation measure's potential adverse impacts on FYLF.

Further, as Dr. Padgett-Flor points out, the DEIR's conclusion that CRLF are not present in the Milliken Creek watershed portion of the project site is clearly unsupported. Indeed, the DEIR's contention that "protocol level" surveys were conducted is contradicted by its own data with respect to the years for which the DEIR provides data on the survey methods employed (i.e., 2007 and 2012). For the other year in which the DEIR claims protocol level surveys were conducted, i.e., 2008, the DEIR provides no specific data regarding survey methods employed. Given the number of mistakes Dr. Padgett-Flor describes, she concludes the individuals who conducted the field reconnaissance were not qualified to survey for CRLF. Therefore, the Biological Assessment on which the DEIR relies for its conclusion that impacts on CRLF will be less-than-significant is "clearly inadequate or unsupported." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 409.)

The DEIR presumes CRLF are present in the Capell Creek watershed portion of the project site, but without conducting protocol level surveys. This renders the DEIR deficient as an informational document. A site-specific, fact-based assessment of CRLF presence is necessary to inform the selection of mitigation measures.⁴

⁴*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 663 ["a mitigation measure cannot be used as a device to avoid disclosing project impacts"]; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1123 ["The final EIR acknowledges that impacts from fugitive dust will be significant and unavoidable, even with mitigation measures. However, this acknowledgment is inadequate. ... As previously stated, Guidelines [section 15126](#) requires a more detailed account of the impacts. In this case, a more

The DEIR supports its assumption that CRLF are present in the Capel Creek watershed portion of the Project site by stating: “CRLF presence is assumed on the Capell Creek watershed portion of the property because it is within the potential dispersal distance of adult frogs.” One unanswered, but crucial, question is: “potential dispersal distance of adult frogs” from where?

With respect to both CRLF and FYLF, Dr. Padgett-Flor points out that the DEIR fails to assess the potential impacts to these species from the Project’s use of agricultural chemicals, and that the buffer and setbacks distances upon which the mitigation strategy is based are not large enough to be effective. (Exhibit 16, pp. 9-13.)

3. The DEIR Fails as an Informational Document with Respect to Impacts on Groundwater Resources.

a. The DEIR fails to analyze the Project’s use of groundwater in the environmental setting where this use will impact groundwater resources.

The DEIR claims that “The County has not adopted formal significance thresholds for hydrology and water quality.” (DEIR p. 4.6-31.) This is incorrect.

The County has a Groundwater Ordinance which requires this Project applicant to obtain the County’s approval of a groundwater permit for this Project. While the DEIR notes the existence of this ordinance, it does not disclose the fact that the Project will require a groundwater permit.

The Groundwater Ordinance requires that the application:

In the form of a Water Availability Analysis-Phase I, as outlined in the Department of Public Works Water Availability Policy Report, as it may be amended from time to time, provide sufficient information and supporting documentation to enable the director of public works to determine whether it is likely the new water system, improvement or addition might significantly affect the impacted groundwater basin within Napa County, whether or not the proposed improvement or new system may be reasonably expected to adversely affect reasonable and beneficial uses of groundwater, interfere with surface water flows, or cause other adverse changes to the physical environment adversely affecting the impacted groundwater basin.

detailed analysis of how adverse the impact will be is required”]; *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 831 [“The conclusion that one of the unavoidable adverse impacts of the project will be the ‘[i]ncreased demand upon water available from the Santiago County Water District’ is only stating the obvious. What is needed is some information about how adverse the adverse impact will be. ‘An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences.’ (Guidelines, § 15150)’ ”].

(County Code § 13.15.060.D.)

The Ordinance also provides:

The director of public works shall submit its comments in the form of a written appraisal of the application to the director. That appraisal shall assess the potential for significant negative impacts on the affected groundwater table, and assess potential adverse effects on reasonable and beneficial uses of groundwater, interference with surface water flows, or other adverse changes to the physical environment.

The director shall only approve a groundwater permit after making any necessary environmental determination and concluding, based on substantial evidence in the record, that the new water system, improvement or addition would not significantly affect the impacted groundwater basin in Napa County. In making this determination, the director shall consider, but is not limited to, the following factors: impact on the affected groundwater table; adverse effects on the reasonable and beneficial uses of groundwater; implementation of Best Management Practices; or other adverse changes to the physical environment.

(County Code § 13.15.070.B, C.).

To implement this ordinance, the County has adopted so-called “fair use” thresholds. If a new water use is below the applicable threshold, the County assumes the use will not have a significant adverse effect on the aquifer. These “fair use” thresholds are described in the County Planning Department’s *Water Availability Analysis: Policy Report* dated August 2007 (Exhibit 10) and in the current “Groundwater Permit Application” available on the County’s web site (Exhibit 13).

The “fair use” threshold for the “Groundwater Deficient Area” in the “Milliken Sarco Tulocay” region is 0.3 acre feet per acre per year. (Exhibit 10, pp. 3, 8; Exhibit 13, pp. 4, 6.) This threshold “was determined using data from the 1977 USGS report on the Hydrology of the Milliken Sarco Tulocay region. The value is calculated by dividing the “safe annual yield” (as determined by the USGS study of 1977) by the total acreage of the affected area (10,000 acres).” (Exhibit 10, p. 8.) According to the County “It is assumed that if all consumers within the MST basin were to limit their consumption to 0.3 acre-feet per acre per year there will be sufficient groundwater for all properties within that area.” (Exhibit 10, p. 3.)

The Planning Department’s August 2007 *Water Availability Analysis: Policy Report* explains that:

The threshold for the Valley Floor Area was determined in 1991 in the form of a Staff Report to the Board of Supervisors. The value of 1.0 AF/A/Year was established as the expected demand an average vineyard would have. It was noted

that the Valley Floor threshold would have relatively little effect on neighboring wells.

The threshold for the Mountain Area [i.e., Hillsides] was established due to the uncertainty of the geology, and the increasingly fractured aquifer in the mountainous and non Napa Valley areas.

(Exhibit 10, p. 8) In other words, the threshold for the Hillsides area is based on nothing.⁵

Here, the DEIR fails to discuss the application of these numerical thresholds of significance. It should be revised and recirculated to do so.

The Project applicant is apparently positioning itself to claim “fair use” entitlement, under the “Hillsides” threshold of 0.5 acre feet per acre per year because the DEIR claims the Project is outside the MST area, and the Project water demand is 213.5 acre feet per year, which is less than the 256 acre feet per year that would be allowed by applying the “Hillsides” threshold to the 512 acres of the applicant’s land that is in the MST drainage area.

Table 1

Project Groundwater Demand/Projected Use	213.5 acre feet per year
Ownership Acres in MST Basin (per Greg Kamman)	512 acres
Groundwater use per acre per year	0.41 acre feet per acre per year
County Fair Use Thresholds	Applied to 512 acres
MST - 0.3 acre feet per acre per year	154 acre feet per year
Hillsides - 0.5 acre feet per acre per year	256 acre feet per year

Assuming, arguendo, that the County’s fair use threshold for the MST has any validity, Mr. Kamman has shown that the MST threshold, rather than the Hillside threshold, should be applied to this Project. (Exhibit 7, pp. 2-7.) This is especially true since the Hillside threshold is not based

⁵It is also worth noting that the threshold for the Valley Floor Area (i.e., 1 acre-foot per acre per year) is not based on the reliable, available supply of groundwater, it is based on the expected demand an average vineyard would have. The 1991 staff report to the Board of Supervisors notes that no “extensive groundwater studies” have been conducted in many areas of the County. (Exhibit 11, p. 2.) The 1991 staff report summarizes the findings in the January 1991 Water Resources Study for the Napa County Region (Napa County Flood Control and Water Conservation District) (Exhibit 12).

on any actual data relating to the availability or use of groundwater in the area.

Also, the County's "fair use" thresholds, including the MST threshold, are not valid because they do not take into account the fact that many previous owners may be using more than their threshold amount. Thus, the County's assumption that "all consumers within the MST basin [are] to limit their consumption to 0.3 acre-feet per acre per year" (Exhibit 10, p. 3) is unsupported. As a result, later owners may not be able to use their "threshold" amount, or any amount of groundwater, without causing or exacerbating existing significant effects. In other words, if the purported "safe yield" of the MST aquifer is used up by allocating the entire purported "safe yield" to every acre in the MST at the rate of 0.3 acre feet year, the County's application of this allocation only to new uses of groundwater in the area cannot ensure that groundwater use does not exceed the purported "safe yield."

Further, the MST groundwater supply is in overdraft. The 2003 USGS analysis concludes:

Long-term hydrographs for wells in the study area indicate that the greatest rate of decline occurred after the early 1970s and coincides with an increase in the number of wells drilled in the study area. Declining ground-water levels evident over a large part of the Milliken, Sarco, and Tulocay Creeks area is an indication that current (2000–2002) ground-water use exceeds average ground-water replenishment.

(Exhibit 15, p. 60.) Therefore, the idea that there is, or could be, a "safe yield" from this groundwater source that can safely supply future groundwater uses is untenable.

Finally, as pointed out by Matt Hagemann in his review of the DEIR's assessment of groundwater impacts, in order to provide an accurate description of the current environmental setting and a complete assessment of the Project's impacts on groundwater resources, the DEIR must analyze groundwater supply and demand under conditions of severe, prolonged drought.

In sum, the "thresholds" are not based on any empirical analysis of actual groundwater supply and demand, and cannot be substituted for the reasoned, fact-based analysis required by CEQA.

4. The DEIR Fails as an Informational Document with Respect to Bats.

The DEIR fails to recognize that the Townsend's Big-eared Bat became a "candidate" species under the California Endangered Species Act (CESA) in November of 2013, well before the July 2014 publication of the Draft EIR. (See Exhibit 18.) As a result, it is entitled to all the protections that CESA provides to species listed as threatened or endangered.

With respect to the Townsend's Big-eared Bat and the other bats species described at DEIR pp. 4.2-66-4.2-68, the DEIR's evidentiary basis for reaching any conclusion about the Project's impacts on bats is unreliable, as explained by bat biologist Joe Szewczak. (See Exhibit 17.) Therefore, because the DEIR is uninformed regarding the presence, location and status of bats on the Project site, the adoption of Mitigation Measure 4.2-14 (DEIR p. 4.2-121) represents a shot in

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the dark for purposes of mitigating impacts on these species.⁶

Thank you for your attention to this.

Very Truly Yours,



Thomas N. Lippe

List of Exhibits

1. Napa Valley Hillside Vineyards: Cumulative Effects of Conversion of Upland Woodlands and Chaparral to Vineyards; Robert Curry Ph.D.; December 24, 2000. [AR 8829-8940; pdf 8946-8957.]
2. Letter dated May 7, 2008, from Dr. Robert Curry Ph.D. to Thomas Lippe re Napa River Watershed Sediment TMDL and Habitat Enhancement Plan. [AR 9563-9565; pdf 9580-9582.]
3. Dr. Robert Curry, Curriculum Vitae. [AR 8871-8874; pdf 8888-8891.]
4. Napa River Sediment TMDL and Habitat Enhancement Plan, Final Staff Report, San Francisco Bay Area Regional Water Quality Control Board, September 16, 2009. [AR 1577-1737; pdf 1594-1754.]
5. Excerpts from Responses to Comments on Napa River Sediment TMDL and Habitat Enhancement Plan, San Francisco Bay Area Regional Water Quality Control Board, January 16, 2007. [AR 458, 515-516; pdf 476-533.]
6. Memo to File From Mike Napolitano, San Francisco Bay Water Quality Control Board Re Napa River Sediment TMDL, November 24, 2008.
7. Letter from Greg Kamman to Tom Lippe re Walt Ranch Vineyard EIR, November 20, 2014.
8. Letter and Report from Pat Higgins to Tom Lippe re Walt Ranch Vineyard EIR, November 20, 2014.
9. Milliken Creek Steelhead Habitat Modeling and Instream Flow Study, Napa County Resource Conservation District, December 2010.
10. *Water Availability Analysis: Policy Report*, County Planning Department, August 2007.

⁶See footnote 4 above.

11. Memorandum to Planning Commission from Jeffrey Redding, Planning Director, re Public Works Department Report on Water Availability Analysis, February 27, 1991.
12. Water Resources Study for the Napa County Region, Napa County Flood Control and Water Conservation District, January 1991.
13. Groundwater Permit Application, Napa County, 2014.
14. Groundwater Hydrology of the Lower Milliken–Sarco–Tulucay Creeks Area, Napa County, California, USGS, 1977.
15. Groundwater Resources in the Lower Milliken–Sarco–Tulucay Creeks Area, Southeastern Napa County, California, 2000–2002, USGS, 2003.
16. Letter from Gretchen E. Padgett-Flohr, Ph.D to Tom Lippe re Walt Ranch Vineyard EIR, November 20, 2014.
17. Letter from Joe Szewczak to Tom Lippe re Walt Ranch Vineyard EIR, November 13, 2014.
18. California Fish and Game Commission Notice of Findings, Townsend’s Big-eared Bat, November 14, 2013.
19. Dewberry, C. 2003. Development and Application of Anchor Habitat Approaches to Salmon Conservation: A synthesis of data and observations from the Napa watershed, California. Performed under contract to Ecotrust and the Friends of Napa River by Dr. Charles Dewberry, Florence, OR. 10 p.
20. Friends of Napa River. 2003. Map of reaches of high juvenile steelhead production in the Napa River. Prepared by Friends of Napa River in support of study by Dr. Charles Dewberry. Napa, CA 1 p.
21. Dewberry, C. 2004. Milliken Report 2002: Summary of the biological data collected in the Milliken basin. Performed under contract to Ecotrust and the Friends of Napa River by Dr. Charles Dewberry, Florence, OR. 16 p.

List of References to November 20, 2014, letter from Gretchen Padgett-Flor.

	Description	# pgs
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R002	Temporal Patterns and Sources of Atmospherically Deposited Pesticides in Alpine Lakes of the Sierra Nevada, California, U.S.A. Environ. Sci Techno. 44:4609-4614.	17

R003	Bridges, C.M. and R.D. Semlitsch. 2000. Variation in Pesticide Tolerance of Tadpoles among and Within Species of Ranidae and Patterns of Amphibian Decline. <i>Conservation Biology</i> , 14(5): 1490-1499.	11
R004	Bulger, J.B., N.J. Scott Jr., R.B. Seymour. 2003. Terrestrial activity and conservation of adult California red-legged frogs <i>Rana aurora draytonii</i> in coastal forests and grasslands. <i>Biological Conservation</i> , 110:85-95.	11
R005	California Department of Fish and Wildlife. 2014. Appendix I: CDFW's Conservation Measures for Biological Resources That May Be Affected by Program-level Actions.	17
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R008	Cordell, S. and T.P. Baker. 1998. Pesticide Drift. University of Arizona, College of Agriculture.	4
R009	Crain, B.J., White, J.W., and Steinberg, S. J. 2011. Geographic discrepancies between global and local rarity richness patterns and the implication for conservation.	12
R010	Davidson, C. and R.A. Knapp. 2007. Multiple stressors and amphibian declines: Dual impacts of pesticides and fish on yellow-legged frogs. <i>Ecological Applications</i> 17(2):587-597.	11
R011	Dimitrie, D.A. and D.W. Sparling. 2014. Joint Toxicity of Chlorpyrifos and Endosulfan to Pacific Treefrog (<i>Pseudacris regilla</i>) Tadpoles. <i>Archives of Environmental Contamination and Toxicology</i> , 67:444-452.	9
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R014	Fellers, G.M. and P.M. Kleeman. 2007. California Red-Legged Frog (<i>Rana draytonii</i>) Movement and Habitat Use: Implications for Conservation. <i>Journal of Herpetology</i> , 41(2):276-286.	11
R015	Grantham, T.E., A.M. Merenlender, and V.H. Resh. 2012. Climatic influences and anthropogenic stressors: an integrated framework for streamflow management in Mediterranean-climate California, U.S.A. <i>Freshwater Biology</i> , 55 (Supp. 1):188-204.	17
R016	Hayes, M.P. and M.R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (<i>Rana aurora draytonii</i>) and the foothill yellow-legged frog (<i>Rana boylei</i>): implications for management. Pages 144-158 In: R. C. Szaro, K. E. Severson, and D. R. Patton (technical coordinators). <i>Management of Amphibians, Reptiles, and Small Mammals in North America. Proceedings of the Symposium, July 19-21, 1988, Flagstaff, Arizona. U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado. General Technical Report (RM-166):1-458.</i>	15
R017	Hayes, M.P. and Miyamoto, M.M. 1984. Biochemical, Behavioral and Body Size Differences between <i>Rana aurora aurora</i> and <i>R. a. draytoni</i> .	6
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