ATTACHMENT E

PART I. LIVING RIVERS COUNCIL GROUNDS OF APPEAL:

GROUNDS OF APPEAL

The following outlines the basis of the appeal as contained in the Appeal dated August 29, 2016. For convenience, staff has numbered each issue and provided a summary, but recommends the Board review the actual Appeal for details.

<u>Appeal Ground No. LRC1:</u> Appellant contends that the EIR fails as an informational document with respect to increased stream sedimentation in the Napa River drainage and associated impacts on the aquatic ecosystem.

Staff Response: As discussed in Final EIR Response to Comments O21-096 and O21-097, the Napa River Watershed Sediment TMDL and Habitat Enhancement Plan specifically states that an "effective means of reducing sediment delivery from sheetwash erosion would be for all vineyards to meet the performance standards specified under the Napa County Conservation Regulations (Chapter 18.108)". The Walt Ranch Project² is designed to comply with Chapter 18.108 and the goals and policies of the Napa County General Plan, and is therefore compliant with the Napa River Sediment TMDL. The Walt Ranch EIR³ recognizes the existence of the Napa River Sediment TMDL and its implications for the Walt Ranch Project. As the EIR states: "Since the mainstem Napa River has been listed as sediment-impaired according to Section 303(d) of the CWA, no net increase in sediment yield from the project site is allowed to occur from development of the Proposed Project. As discussed in Impact 4.4-1, the erosion control measures that are incorporated into the project design would result in a 43.61 percent decrease in amount of erosion from vineyard blocks in the Milliken Reservoir watershed (which is a tributary to the Napa River)" (EIR, p. 4.6-41 [emphasis added].) Because the Walt Ranch Project is in compliance with Napa County Code Chapter 18.108 and the no-net-increase policies for sediment contained within the Napa County General Plan, and will result in decreased sediment loads in the Milliken Creek watershed, the project is in compliance with the TMDL requirements. This is also discussed further in response to Appeal Ground No. LRC24.

http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/napariversedimenttmdl.shtml.

¹ Napolitano, M., S. Potter, and D. Whyte, 2009. Napa River Sediment TMDL and Habitat Enhancement Plan. Report prepared by the California Regional Water Quality Control Board, San Francisco Bay Region, September 2009. 126 p. Available online at:

² Unless otherwise noted, "Walt Ranch Project" refers to the final ECP (209 net acres of vineyard) that was approved by the Director on August 1, 2016. "Proposed Project" refers to the originally project as analyzed in the Draft EIR (356 net acres of vineyard).

³ "EIR" refers to the Draft EIR, Final EIR, and all appendices unless otherwise noted.

<u>Appeal Ground No. LRC2:</u> Appellant claims the EIR fails as an Informational Document with respect to sediment impacts on special status fish species below Milliken Reservoir.

Staff Response: The County analyzed potential impacts to special status aquatic species, including steelhead and Chinook salmon, in Impact 4.2-15 (refer to response to Appeal Ground No. CBD17). These anadromous species cannot access the project site, but the waters on the project site are hydrologically connected to downstream habitat. Because salmonids are known to occur downstream of the project site within the Napa River watershed, the Draft EIR considered the connectivity of onstream waters to salmonid habitat and required mitigation measures to reduce sediment load that could affect spawning gravels, as discussed in Impact and Mitigation Measure 4.2-15. Therefore, Mitigation Measure 4.2-15 ensures that measures protective of water quality are implemented during project construction and operation. As discussed in the response to LRC1 above, the project will result in a decrease in sediment production from the property of up to 43.61 percent on the Milliken Creek portion of the property which flows to the Napa River. As such, there are no significant sediment impacts on special-status fish species in the Milliken Creek watershed, either above or below Milliken Reservoir.

Appeal Ground No. LRC3: Appellant claims the EIR fails as an Informational Document with respect to sediment impacts on aquatic ecosystems and fish above Milliken Reservoir.

Staff Response: Please note that the Walt Ranch property straddles two watersheds, the Milliken Creek and Capell Creek watersheds, and the EIR analyzed the potential for impacts to aquatic species in both watersheds, not just the Milliken Reservoir portion of the property as stated in this appeal. The project site is not accessible to anadromous fish due to two impassable barriers to salmonids that occur downstream on Capell Creek and Milliken Creek. In addition, as stated in Appendix M, "Milliken and Capell creeks are both too small and ephemeral to be considered suitable habitat." The project site is located at the headwaters to these two creeks, and is too rocky, steep, and ephemeral to support anadromous fisheries even if they were able to access the property as discussed in Impact 4.2-15. The implementation of the project would not affect these species. Consistent with the USFWS recommendations and CEQA *Guidelines* § 15126, no mitigation is required for a species that will not be impacted. The potential for the Walt Ranch Project to impact other highly aquatic species, such as special-status reptiles and amphibians, is discussed in more detail in the responses below.

<u>Appeal Ground No. LRC4:</u> Appellant asserts that the EIR fails as an informational document with respect to impacts on wetlands, amphibians and reptiles, including California red-legged frog (CRLF) and foothill yellow-legged frog (FYLF).

Staff Response: The EIR discusses the environmental setting and species' life histories within Section 4.2.4-3 for amphibians (CRLF, FYLF), and reptiles [western pond turtle (WPT)]. After general life histories were provided for each species, site-specific discussion was provided

regarding whether (or where) the species may occur on the Walt Ranch property. Locations of observed FYLF and WPT, as well as specific types of WPT habitat, were provided in the EIR in Figure 4.2-3. This is consistent with CEQA *Guidelines* § 15125(a) regarding the discussion of the environmental setting, which states that:

"An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives..."

The EIR analyzes potential impacts to CRLF and FYLF in Impact 4.2-11 and analyzes WPT in Impact 4.2-10. Mitigation measures are provided to address potential impacts to each of these species. In response to comments from the public, additional protective measures were added to the Mitigation Monitoring and Reporting Plan (MMRP) to protect special-status amphibians, which the County published with the Responses to Final EIR Comments document⁴ at the time the Notice of Decision was made. These protective measures include the development of an invasive species eradication plan to ensure that bullfrogs do not become established in proposed groundwater storage reservoirs, worker training for frog identification, daily review of the construction site to check for presence of CRLF beneath construction equipment, limitations on pile burning, and frog exclusionary fencing around grading and construction activities. In addition, potential impacts due to agrichemical use are minimized via Mitigation Measures 4.5-1, 4.5-2, 4.5-3, 4.5-4, and 4.2-10.

The impacts analysis was conducted consistent with CEQA *Guidelines* § 15126 and 15126.2, and considered "all phases of [the] project... planning, acquisition, development, and operation." As explained in Section 2.10 of the Responses to Final EIR Comments memo:

"While CRLF presence is assumed in the Capell Creek watershed portion of the property, this does not mean that CRLF are present everywhere within the watershed; CRLF have specific habitat requirements that restrict them to only using portions of the watershed immediately adjacent to drainages. The Final EIR analyzed these habitat requirements (see pages 4.2-58 through 60 of the Final EIR: Volume II) and determined that several aquatic features within the project site have the potential to support CRLF. These features include: Capell Creek and some of its tributaries, a reservoir in the northwestern

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⁴ Responses to Final EIR Comments Memorandum, dated July 2016 and published with the Walt Ranch Approval Package on August 1, 2016.

corner of the project site, two ponds (one near the main project site access road and the other east of Atlas Peak Road), two emergent wetlands, and a seasonal wetland. Based on the possibility for these areas to support CRLF, appropriate mitigation measures (Mitigation Measures 4.2-11 and the related Mitigation Measure 4.2-4) were proposed to reduce impacts to CRLF to less than significant. As the [Walt Ranch Project] has been designed to avoid impacts to waters of the U.S. and take of CRLF, no ITP is required at this time. Additionally, Mitigation 4.2-4 requires a U.S. Army Corps of Engineers nationwide permit (Section 404 permit) be obtained prior to the discharge of any dredged or fill material within jurisdictional wetlands and other waters of the U.S. This permit will require consultation with the U.S. Fish and Wildlife Service (USFWS) for all potentially occurring special-status species, including CRLF. The USFWS may require additional measures for the protection of the species during that consultation; however, the Proposed Project has "avoid[ed] or *substantially lessen[ed]*" the project's significant impacts to CRLF (Pub. Resources Code, § 21002.)."

The environmental baseline for WPT and FYLF is discussed in more detail in the response to Appeal Ground No. CBD8, below.

Appeal Ground No. LRC5: Appellant claims the EIR fails as an informational document with respect to impacts on groundwater resources. The EIR fails to analyze the Project's use of groundwater in the environmental setting where this use will impact groundwater resources.

Staff Response: The EIR describes in detail the proposed groundwater uses for the project, the hydrogeologic conditions at the project site, estimates of the available groundwater at the property, and estimates of potential offsite impacts to neighboring groundwater users. Substantial analysis and consideration of groundwater resources was provided through the EIR; refer to Impact 4.6-4 (Final EIR: Volume II), the 2013 RCS 96-Hour Pumping Test, the 2015 RCS Response to Draft EIR Comments Memorandum, and the 2016 RCS Response to Final EIR Comments Memorandum.⁵ The pumping test was performed in 2009, which was a drought year according to DWR. The drawdown created while pumping is not affected by the initial water level in the well or the time of year in which the test is conducted. Hence, the water level drawdown while pumping Well WR-3 would be approximately 26.9 feet, whether or not the static water level at the beginning of the pumping test was 300 feet, 350 feet, or 370 feet, etc.

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⁵ RCS, 2013. Updated Report on the Results and Analysis of 96-Hour Constant Rate Pumping Test, Irrigation-Supply Well No. 3 for Walt Ranch in Napa County, California. Prepared for Hall Wines, LLC. February 2013. Included as Appendix D to the Draft EIR.

RCS, 2015. Technical Memorandum RE: Response to Comments on the Walt Ranch Draft EIR. August 13, 2015. Included as Appendix Q to the Final EIR.

RCS, 2016. Technical Memorandum RE: Response to Comments on the Walt Ranch Final EIR. June 10, 2016. Included as Attachment C to the Responses to Final EIR Comments Memorandum.

Therefore, the results of the 2009 pumping test are still valid and applicable to the groundwater analysis. Substantial analysis was conducted in accordance with CEQA *Guidelines* §15126.2, and Impact 4.6-4 of the EIR found this to be a potentially significant impact. As such, Mitigation Measure 4.6-4 required preparation and adoption of a Groundwater Monitoring and Mitigation Plan (GWMMP) to minimize the potential impacts to offsite wells.

As discussed in the response to Appeal Ground No. CBD31, the approved 209-acre project would require a groundwater demand of 144.5 af per year and the Sonoma Volcanics on the Walt Ranch property recharge a minimum of 161 af per year. As such, there is no risk of long-term overdraft of the Sonoma Volcanics. However, groundwater pumping could still impact neighboring wells and cause drawdown, as discussed in Impact 4.6-4. Therefore, Mitigation Measure 4.6-4 requires the development of a groundwater monitoring and mitigation plan, which has been developed and presented to the County for review and approval. The GWMMP provides methodology for the ongoing monitoring of designated wells (both on- and off-site) and trigger points, as well as a range of mitigation options if impacts to offsite wells occur. These mitigation options include:

- a) reducing the instantaneous pumping rate in all or in selected project wells (the specific wells will be determined by the RCS geologist after determining which project wells may be causing the impact);
- b) reducing the volume of groundwater pumped in each irrigation season by all or by selected project wells (the specific wells will be determined by the Geologist after determining which project wells may be causing the impact;
- c) shifting of the rates and/or volumes of groundwater extraction by existing project wells to different portions of the subject property;
- d) ceasing production from certain onsite wells and replacing that lost production by constructing new onsite wells at the project property;
- e) lowering the pump, if possible, in an offsite well that has been shown to have been impacted;
- f) constructing a new water well to replace an offsite well that has been shown to have been impacted; and/or
- g) providing an alternative source of water to the owner of the impacted well in order to allow the owner to maintain the quantity and quality of the groundwater that has been otherwise lost by the impacts.

Appeal Ground No. LRC6: Appellant claims the EIR fails as an Informational Document with respect to project impacts on oak woodlands.

Staff Response: Napa County General Plan policies relating to oak woodlands are cited on page 4.2-75 and the state Oak Woodlands Conservation Act is discussed on page 4.2-70 of the EIR. The EIR analyzed the Walt Ranch Project for inconsistency with those policies in Impacts 4.2-2

and 4.2-16. As discussed throughout the EIR, General Plan Policy CON-24 requires that oak woodland habitat be maintained and improved to provide for slope stabilization, soil protection, species diversity, and wildlife habitat through appropriate measures, particularly through providing replacement of lost oak woodlands or preservation of like habitat at a 2:1 ratio when retention of existing vegetation is found to be infeasible.

With the incorporation of mitigation provided in the EIR, the Walt Ranch Project is in compliance with General Plan Policy CON-24. Specifically, potential impacts to oak woodlands are discussed in Impact and Mitigation Measure 4.2-2, which addresses impacts to sensitive habitats and biotic communities of limited distribution. As discussed in Impact 4.2-2, the following woodlands are considered oak woodlands: Black Oak Alliance, Blue Oak Alliance, Coast Live Oak (Foothill Pine) Alliance, Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association, and Mixed Oak (Foothill Pine/Ponderosa Pine) Alliance. The Final EIR was revised to include additional acreage of tree species that are included within the definition of "oak woodlands." In doing so, the Final EIR characterized additional habitat types as "oak woodlands" that were not identified as such in the Draft EIR. Based on the inclusion of additional tree species, the EIR mitigation acreage was increased to require the permanent protection (by way of a permanent conservation easement) of a total of 524.8 acres of oak woodlands on the property as outlined in Table 4-1 from the Final EIR (Volume I), excerpt below:

TABLE 4-1 OF THE FINAL EIR (VOLUME I)
OAK WOODLAND IMPACT AND MITIGATION ACREAGE

Habitat Type	Impacted Acreage (After Avoidance)	Acreage for Preservation (2:1)
Black Oak Alliance	35.7	71.4
Blue Oak Alliance	2.6	5.2
Coast Live Oak (Foothill Pine) Alliance	20.1	40.2
Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association	100.2	200.4
Mixed Oak (Foothill Pine/Ponderosa Pine) Alliance	103.8	207.6
Total	262.4	524.8

Further, the project after mitigation, including avoidance of oak woodlands, will leave approximately 1,984 acres (greater than 86 percent) of the total property in open space, resulting in the requisite avoidance required by General Plan Policy CON-24.

The Applicant has submitted several analyses regarding infeasibility; the earliest was Comment Letter I116 on the Draft EIR sent to Napa County dated November 21, 2014. This comment letter contains seven pages discussing the economic feasibility of further avoidance, including the following statement: "It is important to note that we remain concerned that additional reductions in acreage will have the net effect of driving vineyard entitlement costs further

beyond the current value of vineyards in the area and make further avoidance of sensitive species potentially infeasible." At that time, the Mitigated Project was approximately 278 net acres of vineyard; the final project that was adopted on August 1, 2016 was reduced to 209 net acres of vineyard. The November 21, 2014 feasibility analysis acknowledged that "to the extent these fixed costs [of implementing the ECP and the mitigation measures] are spread over a smaller number of vineyard acres, the project becomes incrementally less feasible." Given even further reductions in acreage from 278- to 209-net acres, the project has become even less economically viable. Furthermore, PPI Engineering also submitted Comment Letter I103 on the Draft EIR on November 20, 2014, detailing where in PPI's opinion, biological mitigations had reduced the farmability of some blocks to the point where the portions of the blocks that remained could not be developed. Additional evidence of infeasibility has also been submitted to the County by the Applicant on November 7, 2016. (See Attachment H.)

<u>Appeal Ground No. LRC7:</u> Appellant contends that the EIR Fails as an Informational Document with respect to cumulative impacts. The EIR fails to disclose relevant information regarding the environmental setting regarding and fails to use the best available information to assess the Project's cumulative impacts on biological resources.

Staff Response: This was addressed in General Response 21 in the Final EIR, which explains that a two-step process was used in preparing the cumulative impact analysis in the Draft EIR, consistent with CEQA *Guidelines* § 15130. First, for each impact area, the impacts of the Proposed Project, in combination with those from other past, present, or reasonably foreseeable projects, were analyzed to assess whether they are cumulatively significant. Then, the effect of the Proposed Project was assessed to determine if it was a considerable contribution to that impact. It should be noted that the EIR found that there were cumulative impacts to certain environmental areas, specifically greenhouse gases, and mitigation measures were provided to reduce impacts to less-than-significant levels.

The Appellant incorrectly states that the EIR does not consider cumulative impacts to wildlife species as a result of continued agricultural operation of vineyards on the Walt Ranch property. The EIR's cumulative impact analysis on wildlife is comprehensive and complies with CEQA. As one example, Section 6.1.4-2 of the EIR acknowledges that in the larger cumulative environment, habitat loss could be a significant impact to bird species. Therefore, Table 6-4 of the EIR analyzed the potential for cumulative projects to significantly impact the foraging habitat of various birds of prey to determine if the Walt Ranch Project would have a considerable contribution to that cumulative impact. While minor changes in quality of foraging habitat may occur as a result of the Walt Ranch Project, mitigation measures for foraging habitat are not required under CEQA or by the California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code § 3511(a)(1). As disclosed in Section 6.1.4-2 of the Draft EIR, "of all grassland foraging birds with potential to occur on the project site, white tailed kite would likely be unaffected by landscape changes to foraging habitat because they can forage in

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woodland habitat, including vineyards." In addition, the baseline condition includes patches of grassland on the property but no large expanses of grassland, and therefore species that require large expanses of grassland to forage would not be present on the property today and would not be impacted by proposed vineyard development.

To cite another example mentioned by the Appellant, the analysis of cumulative traffic impacts assessed the potential cumulative impact of the construction and ongoing agricultural operation separately. Section 6.1.4-7 of the EIR states that "[c]onstruction of the Proposed Project in combination with other past, present, and reasonably foreseeable future projects may result in a significant cumulative impact to local roadways and traffic conditions, specifically State Route 121." The EIR then presents an analysis of construction-related traffic trips in the cumulative environment by adding the project-related trips to the existing number of trips on local roadways to determine whether or not the capacities of those roadways would be exceeded. The EIR concludes that this "one-time trip generation will not be a considerable contribution cumulatively significant to traffic in the area. There are no reasonably foreseeable future vineyard or development projects that will require access via Circle Oaks Drive, and therefore there is no significant impact to Circle Oaks Drive in the cumulative condition." In order to analyze ongoing agricultural operations in the cumulative environment, the EIR uses similar methodology to determine that, although additional vineyard projects in the cumulative environment would create similar volumes of traffic as the Proposed Project, "the incremental contribution of the Proposed Project would be less than cumulatively considerable." This analysis complies with CEQA and the CEQA Guidelines.

Appeal Ground No. LRC8: Appellant contends the EIR Fails as an Informational Document with respect to cumulative impacts. The EIR's analysis of cumulative impacts fails to disclose all closely related past, present and reasonably foreseeable future projects.

Staff Response: The projects identified in the cumulative environment discussed in Table 6-1 of the EIR meet the definition of cumulative as defined in CEQA *Guidelines* § 15355, which states that the incremental impact of the project should be added to "other closely related past, present, and reasonably foreseeable probable future projects." The cumulative analysis included all future "closely related" projects within the Milliken Reservoir and Capell Creek watersheds for each impact area. Where appropriate, the cumulative environment was expanded to include additional potential impacts; for example, the entire SFBAAB was included in the cumulative analysis for air quality.

Appeal Ground No. LRC9: Appellant argues that the EIR fails to provide an adequate description of the environmental setting. The EIR mischaracterizes the rate of groundwater recharge on the Project site.

Staff Response: Lead agencies have discretion to decide, in the first instance, exactly how the existing physical conditions without the project can most realistically be measured, subject to

review, as with all CEQA factual determinations, for support by substantial evidence. (*Communities for a Better Env't v South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 336.) The County reasonably determined the appropriate baseline for groundwater resources. The estimates of groundwater recharge as a percentage of rainfall presented in Appendix D and Impact 4.6-4 of the EIR are reasonable and are supported by many evidentiary sources. As discussed therein, the analysis very conservatively assumed a deep percolation percentage of 7 percent, even though a 9 percent value would be supportable (page 48 of Appendix D). In doing so, the EIR would have overstated any impacts from the project, if they existed.

Estimates of deep percolation of 7 to 9 percent for the Milliken Creek watershed are derived, in part, on review of United States Geological Survey (USGS) Water Resources Investigation Reports WRI 77-82 and WRI 03-4229 (USGS 1977 and USGS 2003, respectively) and from RCS experience in preparing numerous hydrogeologic assessments throughout Napa and Sonoma counties for properties underlain by the Sonoma Volcanics. Notably, a relatively recent groundwater study prepared by another consultant as a part of the Napa Pipe Project Environmental Impact Report estimated that 10.5 percent rainfall recharge occurred within the Sonoma Volcanics. Project areas not underlain by the Sonoma Volcanics were not included in the recharge calculations.

The EIR presented two appropriate recharge rates based on best available science, and analyzed the proposed groundwater pumping against the lower recharge rate to present a more conservative analysis. Therefore, utilization of the more conservative recharge rate is an appropriate environmental baseline in accordance with CEQA *Guidelines* § 15125.

<u>Appeal Ground No. LRC10:</u> Appellant argues that the EIR fails to provide an adequate description of the environmental setting. The EIR mischaracterizes the hydraulic connection between groundwater to be pumped for the Project and groundwater in the MST Groundwater Deficient Area.

Staff Response: This was addressed in Draft EIR Section 4.6.1-3, Final EIR General Response 12, and the RCS 96-Hour Pumping Test Report.⁷ The County-defined Milliken-Sarco-Tulocay (MST) groundwater deficient area is not a groundwater basin, as discussed on page 18 of the RCS 2015 Report.⁸ As discussed in Final EIR General Response 12:

⁶ BHFS (Brownstein Hyatt Farber Shrek). Water Supply Assessment For The Napa Pipe Project, Napa County, California. August 25, 2011.

⁷ RCS, 2013. Updated Report on the Results and Analysis of 96-Hour Constant Rate Pumping Test, Irrigation-Supply Well No. 3 for Walt Ranch in Napa County, California. Prepared for Hall Wines, LLC. February 2013. Included as Appendix D to the Draft EIR.

⁸ RCS, 2015. Response to Comments Walt Ranch Draft Environmental Impact Report (DEIR) Memorandum. August 13, 2015. Included as Appendix Q to the Final EIR.

"Several commenters use the terms "groundwater basin," "drainage basin," and "MST Study Area" interchangeably. To clarify, the MST area is not a groundwater basin as defined by the Department of Water Resources (DWR), and is not included as part of Basin 2-2.01 the "Napa –Sonoma Valley Groundwater Basin", except for a small portion of the water-bearing alluvium associated with Tulucay Creek (DWR, 2003). In the report Updated Hydrogeologic Conceptualization and Characterization of Conditions, the MST is referred to as the "MST subarea" (LSCE&MBK 2013), not a groundwater basin. Farrar and Metzger refer to the area as a "study area," which was clearly defined on Figure 1 therein; Figure 4.6-3 of the Draft EIR was adapted from Figure 1 of that study (USGS, 2003). Figure 4.6-3 also defines the "Milliken Creek Drainage Basin". A "drainage basin" is a watershed; surface water within a drainage basin collects in streams and creeks, and flows to a single point where the surface water exits the drainage basin. A drainage basin is not a groundwater basin. As shown on Figure 4.6-3, the "MST study area" does not include the entire Milliken Creek watershed and does not include any portion of the Walt Ranch property; it does include other portions of adjoining watersheds (USGS, 2003)."

Walt Ranch is located at the northernmost portion of the Milliken Creek watershed, approximately 2.8 miles north-northeast of the MST area, as noted in Section 4.6.1-3 of the Draft EIR. Farrar and Metzger reference the volume of inflow (2,100 af per year) that was estimated by Johnson to move into the MST groundwater deficient area from the volcanic rocks east of the study area. That USGS study estimated other sources of inflow into the MST area including 5,400 af per year from streamflow infiltration and 250 af per year from direct infiltration of precipitation. RCS adapted a figure from the USGS (2003) study to show that only 30 percent of the MST area shares a boundary with the Milliken Creek drainage basin. Hence, of the approximately 2,100 af per year of groundwater estimated to flow into the MST area in the subsurface, assuming the flow across the study area boundary is evenly distributed across the boundary, then only ± 630 af per year of groundwater underflow is estimated to be derived from the Milliken Creek watershed.

The average rainfall for the Milliken Creek watershed was calculated using the PRISM rainfall dataset and GIS software, because that dataset is spatially gridded. An approximate estimate of groundwater recharge within the portion of the Milliken Creek watershed that lies outside of the MST area is approximately 2,688 af per year, which is substantially larger than the 630 af per year that is estimated to actually enter the MST area from the Milliken Creek watershed. In light of this conclusion, it is the expert opinion of the project groundwater hydrologist that, given the assumptions listed above, pumping from the Walt Ranch wells will not affect the groundwater

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⁹ USGS, 2003. *Ground-water resources in the Lower Milliken-Sarco-Tulucay Creeks area, southeastern Napa County, California, 2000-2002*. USGS. Water-Resources Investigations Report 03-4229. Farrar, C.D. and L. F. Metzger.

underflow into the MST area. Because the underflow to the MST area is approximately one-fourth of the total recharge to the Milliken Creek watershed, then it is reasonable that underflow to the MST area is derived from the southern portion of the Milliken Creek watershed closest to the underflow boundary. Water that recharges in the vicinity of Walt Ranch is not likely the source of underflow from the Milliken Creek watershed to the MST area.

<u>Appeal Ground No. LRC11:</u> Appellant argues that the EIR fails to provide an adequate description of the environmental setting. The EIR mischaracterizes the direction of groundwater flow between the Project site and the MST Groundwater Deficient Area.

Staff Response: A thorough analysis of groundwater flow direction in the vicinity of the Walt Ranch property has been provided in the 2013 RCS Report (page 9), the 2015 RCS Report (page 20 and 21), and the 2016 RCS Responses Memo (pages 7 and 8). The analysis utilized site-specific studies as well as larger peer-reviewed scientific studies; as discussed in the 2016 RCS Responses Memo, "page 16 of the Johnson report stated that groundwater flow is generally to the west across the MST study area.¹⁰ Farrar and Metzger show similar results on Figure 15,¹¹ and in fact their results show very steep groundwater gradients on the southeast and east of the study area, with an arrow showing groundwater flow across the study area boundary on the east side of the study area from the Sarco Creek watershed, and not the Milliken Creek watershed. Hence, available groundwater flow data from other reports also suggest a lack of connection between the Walt Ranch property and the MST study area."

Appeal Ground No. LRC12: Appellant argues that the EIR fails to provide an adequate description of the environmental setting. The EIR fails to include reliable surveys to determine the presence, absence, and location of threatened and sensitive wildlife species and their habitat, including CRLF, FYLF, and WPT (Ex 2, pp. 18-29.) The 2007 and 2008 surveys expired before the NOP issued for this EIR (See Ex 2, p. 20; Ex 14, p. 2), and the RTC admits the 2012 surveys were not to "protocol." The 2012 surveys are also now expired due the passage of time.

Staff Response: Refer to the responses to Appeal Ground No. LRC4 and Appeal Ground No. CBD4 regarding the environmental setting presented in the EIR for these species.

The validity of the CRLF surveys was addressed in Final EIR Response to Comments O21-004 through O21-007 and again in Section 2.10 of the Responses to Final EIR Comments memorandum. As explained further in Final EIR Response to Comment O21-004, critical habitat for CRLF occurs within 0.5 mile of the project site and the nearest documented occurrence of CRLF is three miles northeast of the Walt Ranch Project.

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¹⁰ USGS, 1977. Ground-water hydrology of the Lower Milliken-Sarco-Tulucay Creeks Area, Napa County, California. Johnson, M.J. USGS Water-Resources Investigations 77-82.

¹¹ USGS, 2013. USGS Circular 1376. Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow.

Contrary to some claims, CRLF presence has never been assumed on the Milliken Creek watershed portion of the property. As clearly stated on pages 4.2-37, 4.2-60, 4.2-80, and 4.2-120 of the Final EIR, CRLF presence was assumed on the Capell Creek portion of the property because it is within the potential dispersal range of adult CRLF, provides habitat for CRLF, and is located within 0.5 mile of CRLF critical habitat. The Milliken Creek portion of the watershed did not share these same characteristics for CRLF habitat so the EIR did not assume the presence of CRLF and the CRLF surveys were limited to that area.

The surveys of the Milliken Creek portion of the watershed, which are outlined in the CRLF Habitat Assessment, concluded that CRLF was not present within the area based on three years of studies (2007, 2008, and 2012). The CRLF surveyors were well qualified (as noted in Appendix A of the CRLF Survey Report (Appendix K of the Draft EIR), and their analysis met the established thresholds in the USFWS CRLF Guidance. (See Final EIR Response to Comment O22-095). In addition, preconstruction surveys will be conducted prior to any earthmoving activity.

The EIR appropriately limited the impacts analysis and mitigation for CRLF to the Capell Creek portion of the property where the species actually could occur.

<u>Appeal Ground No. LRC13:</u> Appellant contends that the EIR fails to assess the significance of impacts of all aspects of the Project description by ignoring specific mechanisms of impacts raised in comments on the Draft EIR. The EIR fails to analyze the significance of pumping more groundwater than is recharged on-site on local groundwater supplies.

Staff Response: The significance threshold used in the EIR for Impact 4.6-4 (potential impacts to groundwater resources) stated that a significant impact would occur if the project would "[s]ubstantially deplete groundwater supplies, or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table." This qualitative significance threshold is consistent with CEQA *Guidelines* Appendix G and the Napa County Local Procedures for Implementing CEQA.¹²

A conservative rainfall estimate of 35 inches per year was used to calculate the recharge rate of 161 acre-feet per year (af per year) on the Sonoma Volcanics portion of the Walt Ranch property, in addition to a very conservative assumption that only 7 percent of that rainfall infiltrates into the Sonoma Volcanics. Data presented in the EIR provided a detailed discussion of rainfall totals for the Walt Ranch property, and showed "that an annual average rainfall estimate of 35 inches is a conservative estimate for the Walt Ranch area." In addition, numerous references were provided that support a 7 to 9 percent estimate of rainfall recharge as being

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¹² Napa County, 2015. Napa County's Local Procedures for Implementing the: California Environmental Quality Act. Revised February 2015.

conservative. These various sources are also summarized in Table B of Appendix Q (Final EIR),¹³ wherein the calculated groundwater recharge volume for volcanic rock at the Walt Ranch property is shown to range from a low of 161.3 af per year to a high of 276.5 af per year, depending on the rainfall dataset used and on the estimate of deep percolation of rainfall. As such, using the most conservative of all factors to calculate the 161 af per year recharge rate likely understates the recharge potential of the property.

Because the final acreage of vineyard is now 209 acres, the groundwater demand is now:

(209 acres of vines) * (0.5 af per year irrigation) + (40 af per year frost protection) = **144.5 af per year**

As shown, even using conservative recharge assumptions, the final ECP would not exceed the capability of the Sonoma Volcanics to recharge each year. The EIR did not ignore potentially significant impacts due to groundwater pumping. Impact 4.6-4 of the EIR clearly states that the "effects to groundwater levels could cause drawdown in offsite wells, and if this drawdown interference were to be substantial, the existing pump in the impacted well might become less efficient; if this were to occur, the existing pump might not be able to maintain its normal operational pumping rate. *This would be a significant impact*" (EIR at p. 4.6-43; emphasis added). As such, Mitigation Measure 4.6-4 was required to protect offsite wells from significant impacts due to project-related groundwater pumping. Furthermore, a new Condition of Approval No. 15 is recommended for the project to limit the annual groundwater extraction to no more than 145 af per year in order to ensure the Applicant operates the vineyards in compliance with the groundwater estimates presented above.

<u>Appeal Ground No. LRC14:</u> Appellant contends that the EIR fails to assess the significance of impacts of all aspects of the Project description by ignoring specific mechanisms of impacts raised in comments on the Draft EIR. The EIR fails to analyze the significance of increased channel erosion and sediment production caused by increases in peak runoff caused by installing engineered drainage structures.

Staff Response: See response to Appeal Ground No. LRC24.

Appeal Ground No. LRC15: Appellant contends that the EIR fails to assess the significance of impacts of all aspects of the Project description by ignoring specific mechanisms of impacts raised in comments on the Draft EIR. The EIR fails to analyze the significance of herbicide/pesticide drift on threatened and sensitive wildlife species and their habitat, including CRLF, FYLF, and WPT. The Draft EIR relies on "compliance with all USEPA, CDPR, and

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¹³ RCS, 2015. Response to Comments Walt Ranch Draft Environmental Impact Report (DEIR) Memorandum. August 13, 2015. Included as Appendix Q to the Final EIR.

Napa County regulations" governing the use of herbicides/pesticides to reduce impacts to less-than-significant. This is improper under CEQA.

Staff Response: The pesticide and herbicide wind-drift analysis was located within the Hazardous Materials Section of the EIR (not in the Air Quality or Biological Resources sections); the Final EIR and the Responses to Final EIR Comments memorandum pointed reviewers to its location. CEQA allows some flexibility in the organization of the EIR, provided that all of the contents required by CEQA *Guidelines* §§ 15120 through 15132 are included. As explained in the response to Appeal Ground No. CBD47, all required contents of the EIR were present in the Walt Ranch EIR.

In regards to the potential for wind-borne pesticides or herbicides to impact amphibians and reptiles, a detailed discussion of the analysis of pesticide use and potential for wind drift was provided in Impact 4.5-3 of the EIR and again in Section 2.8 of the Responses to Final EIR Comments memorandum. As discussed therein, airborne drift is analyzed as a potentially significant impact in Impact 4.5-3 of the Draft EIR and the mitigation measures provided therein protect amphibian and reptile species. Numerous protective measures are in place to ensure that wind drift does not significantly impact human or wildlife health. These protections include CCR Title 3, Section 6614 for the protection of persons, animals, and property; the USEPA evaluation of chemical toxicity, for which the Integrated Pest Management (IPM) Plan commits to only using chemicals with low potential for wind drift; and the existing enforcement mechanism of the Napa County Agricultural Commissioner's Office.

The IPM Plan was provided within Appendix N to the Draft EIR; although the Applicant has not provided a full list of potential pesticides and fertilizers that may be used on the project site, as there are hundreds of legal and low-toxicity agrichemicals, the IPM Plan limits the chemical use onsite to those classified by the USEPA as Class 3 or Class 4 (Low Toxicity or Very Low Toxicity, respectively). Mitigation measures provided in the EIR to minimize risk of hazardous material drift into the environment include the following:

- Mitigation Measure 4.2-4: Maintain appropriate stream and wetland buffers
- Mitigation Measure 4.5-1: Create and follow a Hazardous Materials Business Plan (HMBP)
- Mitigation Measure 4.5-2: Follow all Standard Operating Procedures (SOPs) for vineyard equipment
- Mitigation Measure 4.5-3: Restrictions on chemical mixing and mix water
- Mitigation Measure 4.5-4: Restrictions on application of agrichemicals
- Mitigation Measure 4.5-5: Restrictions on use and storage of oils

In addition to the agrichemical mitigation measures listed above, protective measures for WPT, CRLF, and FYLF include the development of an invasive species eradication plan to ensure that bullfrogs do not become established in proposed groundwater storage reservoirs, worker training

for frog identification, daily review of the construction site to check for presence of CRLF beneath construction equipment, limitations on pile burning, and frog exclusionary fencing around grading and construction activities (refer to response to Appeal Ground No. LRC4 for additional discussion).

Appeal Ground No. LRC16: Appellant claims that the EIR unlawfully defers the development of mitigation measures until after Project approval. The EIR asserts that the Project's Integrated Pest Management Strategy will reduce potentially significant impacts on CRLF, FYLF, and WPT.

Staff Response: As discussed in response to Appeal Ground Nos. LRC4 and LRC15 above, the EIR contains numerous measures to protect WPT, CRLF, and FYLF. The IPM Plan provides protection to these species from agrichemicals, but it is not the only or even primary method for reducing impacts to less-than-significant levels. The IPM Plan is required via Mitigation Measure 4.2-10 and has been incorporated into the Updated MMRP adopted with the project, which is a legally binding and enforceable plan. Compliance with the IPM Plan is compelled by the MMRP, consistent with other vineyard projects in the County and with CEQA *Guidelines* § 15126.4(a)(2). This is discussed in Impacts 4.2-10 and 4.2-11 of the EIR, as well as Section 2.8 and 2.10 of the Responses to Final EIR Comments memorandum.

Appeal Ground No. LRC17: Appellant claims that the lead agency's response to comments fails to provide legally adequate responses to comments. With respect to Oak Woodlands, the Draft EIR found impacts to be less-than-significant based on small reductions in the areas to the cleared. The Final EIR changed the rationale for the less-than-significant finding to referencing the acres of oak woodlands to be permanently preserved. Appellant claims this triggers a recirculation of the Draft EIR (Laurel Heights Improvement Assn. v. Regents of University of California (1993) 6 Cal.4th 1112, 1130.) Appellant states that preserving areas not slated for destruction, even in perpetuity, is not appropriate mitigation. The EIR's finding that the unmitigated impact is significant is based on the loss of oak woodlands in the areas to be converted to vineyard; it is not based on the possibility that oak woodlands not slated for destruction might be destroyed in the future. Therefore, preventing their destruction in the future does not reduce the significant impact identified in the EIR.

Staff Response: Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. (CEQA *Guidelines* Section 15088.5(b).) By codifying the "significant new information" language the Legislature did not intend to promote endless rounds of revision and recirculation of EIRs. Recirculation was intended to be an exception, rather than the general rule. "[R]ules regulating the protection of the environment must not be subverted into an instrument for the oppression and delay of social, economic, or recreational development and advancement." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 576.)

During environmental review and processing of the project, certain portions of the Draft EIR were modified and new information was added in the Final EIR and Appendices. This information amplified and clarified the information and conclusions already contained within the Draft EIR. While the information may appear voluminous, none of it rises to the level of triggering recirculation under CEQA *Guidelines* § 15088.5. There are no substantial changes in the Walt Ranch Project or the circumstances under which the project is being undertaken that necessitate revisions of the Draft EIR, nor has significant new information become available. The expanded definition of "oak woodlands" mentioned by the Appellant resulted in more woodland acreage being placed into permanent preservation to ensure the impact remained less-than-significant, which does not trigger recirculation pursuant to CEQA *Guidelines* § 15088.5(2), as mitigation measures were "adopted that reduce the impact to a level of insignificance" for this previously identified impact. Refer to the response to Appeal Ground No. CBD38 regarding the validity of mitigation measures requiring permanent preservation.

Appeal Ground No. LRC18: Appellant claims that the EIR provides inadequate assessment and mitigation of groundwater drawdown impacts. The EIR finds that the project will cause a significant groundwater drawdown impacts unless mitigation is adopted. But the EIR defers analysis of the degree of this significant groundwater drawdown impact and defers the development of specific measures to reduce such impacts until after project approval. Deferring the impact analysis is not allowed under CEQA. Deferring the development of mitigation measures is not allowed under CEQA unless it is impracticable to develop mitigation measures during the CEQA process, there is evidence that future mitigation is feasible, and the project is required to meet specific performance standards. (*CBE v. Richmond* (2010) 184 Cal.App.4th 70, 92-96.)

Staff Response: CEQA *Guidelines* § 15126.4 (a) (1) (B) states that mitigation measures should not be deferred indefinitely:

Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.

An EIR may rely on a resource management plan as an element of mitigation as long as the agency has committed to reducing impacts to less-than-significant levels. In accordance with CEQA *Guidelines*, significant impact determinations and formulation of mitigation measures must occur before project approval. The details of exactly how mitigation will be achieved under the GWMMP can properly be determined at a later date within the confines of the plan. In *Friends of Oroville v. City of Oroville* (Sept. 18, 2013) 219 Cal.App.4th 832, the courts found that an "EIR may defer the formulation of mitigation details when the lead agency commits itself to mitigation and the measures include specific performance standards or criteria that must be met for the project to proceed." The mitigation measures for potential impacts to neighboring

wells (Mitigation Measure 4.6-4) identified in the EIR are directly analogous to those that have been upheld by the courts.

As discussed in the response to Appeal Ground No. LRC13 above, the EIR utilizes the qualitative significance threshold provided in CEQA *Guidelines* Appendix G relating to groundwater resources, ¹⁴ requires the development of a GWMMP which requires specific quantitative thresholds or trigger points, and provides numerous potential mitigation options in the event that impacts do occur to offsite wells. As such, the Lead Agency has not improperly deferred any mitigation as defined by CEQA *Guidelines* § 15126.4.

Appeal Ground No. LRC19: Appellant states that Mitigation Measure 4.6-4 does not specify performance standards for the project. With respect to standards, Mitigation Measure 4.6-4 provides: the Director of Environmental Management shall be authorized to require additional reasonable conditions on the Applicant, or revocation of this permit, as necessary to meet the requirements of the Napa County Groundwater Ordinance and protect public health, safety and welfare." (Final EIR, 4.6-51-52.) The Final EIR fails, however, to explain whether the Napa County Groundwater Ordinance even applies to this project, given the exemption for agriculture at County Code § 13.15.040. Further, this GWMMP standard only measures impacts on neighboring land uses, not on the groundwater resource as a whole. Finally, as noted above, the Updated Mitigation Monitoring and Reporting Plan, in the column for "Performance Criteria" merely refers to "County standards." What these putative County standards might be is unknown.

Staff Response: Refer to response to Appeal Ground No. CBD33 regarding the GWMMP. As discussed therein, mitigation measures should not be deferred indefinitely (CEQA *Guidelines* § 15126.4 (a) (1) (B)). However, an EIR may rely on a resource management plan as an element of mitigation as long as the agency has committed to reducing impacts to less-than-significant levels. In *Friends of Oroville v. City of Oroville* (Sept. 18, 2013) 219 Cal.App.4th 832, the courts found that an "EIR may defer the formulation of mitigation details when the lead agency commits itself to mitigation and the measures include specific performance standards or criteria that must be met for the project to proceed." In keeping with this principle, courts uphold mitigation measures that require preservation or restoration of sensitive habitat at specified ratios as adequate mitigation under CEQA. (See, e.g., *Save Panoche Valley v. San Benito County* (2013) 217 Cal.App.4th 503, 526 [mitigation for impacts to special status species upheld]; *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233 [upholding mitigation requiring preservation and restoration of sensitive habitat at identified ratios]; *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477 [upholding mitigation for impacts to sensitive species requiring restoration and enhancement of

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¹⁴ A significant impact would occur if the project would "[s]ubstantially deplete groundwater supplies, or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table."

habitat at specified ratios].) The mitigation measures identified in the EIR are directly analogous to those that have been upheld by the courts.

Although the project may be exempt from the groundwater permit requirement contained in the County's Groundwater Ordinance (see Napa County Code 13.15.040) due to its agricultural nature, it is not exempt from the Napa County Water Availability Analysis requirements nor is it exempt from mitigation measures adopted as part of the MMRP. The reference to the County Groundwater Ordinance is for the purposes of ensuring that any proposed action by the County conducted pursuant to Mitigation Measure 4.6-4, GWMMP, or the adopted MMRP will be done consistent with the purpose of the ordinance which states:

Purpose. This chapter is intended to regulate, to the maximum extent possible, the extraction and use of groundwater resources in Napa County and to prohibit extraction for wasteful, unreasonable or non-beneficial purposes in order to promote groundwater conservation and the use of Best Management Practices and maximize the long-term beneficial use of the county's groundwater resources, thus serving to enhance environmental quality and protect the public health, safety and welfare of the citizens of Napa County. (Napa County Code Section 13.15.010.)

The EIR language on page 4.6-31 states that Napa County relies on the CEQA *Guidelines* Appendix G checklist for its hydrology and water quality significance thresholds, as discussed in the Napa County Local Procedures (2015). The Napa County Groundwater Ordinance is discussed on page 4.6-22 of the Draft EIR, and although the project is exempt from the requirement for a groundwater permit, the purpose of the ordinance is achieved through the implementation of Mitigation Measure 4.6-4. Napa County adopted its updated WAA on May 13, 2015. The development of specific trigger points after monitoring and the incorporation of specific mitigation strategies within the GWMMP ensures that the Lead Agency has not improperly deferred any mitigation as defined by CEQA *Guidelines* § 15126.4. These standards are clearly laid out within the GWMMP, which is referenced within Mitigation Measure 4.6-4 and incorporated by reference into the Updated MMRP.

Appeal Ground No. LRC20: Appellant argues that the EIR analysis related to increases in precipitation runoff is based on informational deficiencies: it fails to include the project's many engineered drainage facilities in its estimate of project-induced increases in runoff and it assumes that deep ripping the soil causes a permanent increase in soil moisture permeability. As a result of the informational deficiencies, the EIR's assessment of the significance of project-caused increases in runoff, and of the many adverse environmental impacts associated with increased runoff, including stream sedimentation, degraded fish habitat, flooding, and landsliding does not comply with CEQA. (See *CBE v. City of Richmond* (2010) 184 Cal.App.4th 70, 82 ["the existence of substantial evidence supporting the agency's ultimate decision ... is not relevant when one is assessing a violation of [CEQA's] information disclosure provisions"]; accord, *Joy*

Road Area Forest and Watershed Ass'n v. California Dept. of Forestry & Fire Protection (2006) 142 Cal.App.4th 656, 684.)

Staff Response: Refer to response to Appeal Ground No. LRC23 regarding the effects of deep ripping and response to Appeal Ground No. LRC24 regarding the inclusion of engineered drainage facilities in the hydrologic analysis.

Appeal Ground No. LRC21: Appellant claims that the EIR impermissibly defers the design of berms and detention basins to capture runoff in active landslides areas. The EIR makes no attempt to design these structures to ensure they have adequate design capacity. Instead this work is deferred until after project approval. This violates CEQA because there is no showing that it is impracticable to design these structures during the CEQA process and the project is not required to meet specific performance standards. (*CBE v. Richmond* (2010) 184 Cal.App.4th 70, 92-96.) Indeed, the Updated MMRP merely refers vaguely to "County standards" without specifying what those standards are.

Staff Response: CEQA *Guidelines* § 15126.4 (a) (1) (B) states that mitigation measures should not be deferred indefinitely:

Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.

In accordance with CEQA *Guidelines*, significant impact determinations and formulation of mitigation measures must occur before project approval. In *Friends of Oroville v. City of Oroville* (Sept. 18, 2013) 219 Cal.App.4th 832, the courts found that an "EIR may defer the formulation of mitigation details when the lead agency commits itself to mitigation and the measures include specific performance standards or criteria that must be met for the project to proceed." The mitigation measures identified in the EIR are directly analogous to those that have been upheld by the courts. Specifically, the mitigation measure that the Appellant claims is deferred (Mitigation Measure 4.6-1) requires the installation of very specific measures to avoid runoff increases and sedimentation, such as gravel berms, small detention structures, or rock checks; in addition to identifying which types of structures, it also identifies exact locations by block where they are required. The "vague County standards" are listed in Section 4.6.2 of the EIR and include Napa County General Plan Policy CON-50, which requires a no-net-increase in peak runoff for 2-, 10-, 50-, and 100-year storm events. As such, the Lead Agency has not improperly deferred any mitigation as defined by CEQA *Guidelines* § 15126.4.

In addition, as a result of mitigations and voluntary reductions by the Applicant, blocks requiring detention structures have been eliminated and the design details for the gravel berms were finalized and included with the final Erosion Control Plan submitted to Napa County.

Appeal Ground No. LRC22: Appellant claims the EIR utterly fails to assess the potentially significant landsliding impacts the berms and detention basins could cause by allowing runoff to escape through overtopping or infiltration through the soil. (Guidelines, §15126.4(a)(1)(D).)

Staff Response: This is addressed in the response to Appeal Ground No. LRC25, below.

EXHIBIT 1: AUGUST 26, 2016 LETTER FROM KAMMAN

Appeal Ground No. LRC23: Appellant claims that the increase in infiltration associated with deep ripping is short-lived and infiltration rates will revert back towards original pre-tillage values. Thus, the estimated project runoff rates will occur only immediately after vineyard construction and the EIR fails to accurately assess/quantify the long-term changes in runoff rates and the associated erosion potential.

Staff Response: Hydrologic soil group (HSG) is a parameter used to define a soil's ability to infiltrate surface water. HSG is a soil property dictated by the water transmitting soil layer with the lowest saturated hydraulic conductivity and depth to the impermeable layer or depth to water table (whether that be clay barrier, rock layer, etc.). The Natural Resources Conservation Service (NRCS), which is the authority on HSG subject matter, states in the National Engineering Handbook (NEH), Part 630 Chapter 7, that infiltration rates can increase in soils where there is an increase in soil depth to an impermeable layer. This is also described in subsection 4.6.1-2 of the EIR, which states that "[s]oil infiltration beneath this layer is largely a function of the underlying bedrock, particularly for the shallow soils..." (page 4.6-7).

This is relevant to the Walt Ranch Project, and in fact many vineyard projects in Napa County, as the modification of HSG has been used by numerous engineers throughout Napa County for many years during preparation of hydrologic modeling of proposed vineyard developments. This procedure involves the reclassification of certain soil types from HSG "D" to HSG "C" as a result of vineyard development practices. Previous NRCS guidance provided in 2008 and 2014 has supported the notion that, as a result of the vineyard development process, deep ripping will fracture and remove portions of shallow bedrock and therefore will increase the soil depth to the impermeable layer. Fractured rock remaining in the developed soil matrix will not reconsolidate and the increase of soil depth is permanent. As such, the HSG or infiltration changes are due to the breaking up of a rock barrier, not the tilling or ripping of the surface soil.

Concerns have been raised that any reduction in HSG due to deep ripping will be short-lived because soils will reconsolidate after multiple wetting and drying cycles. The concern is that, while infiltration rates following deep ripping may increase over the short term, there will be no increase in infiltration rates over the long term. If this concern is correct, then modeling should not assume that the HSG categorization should change as a result of deep ripping in rocky soil types. However, infiltration rate alone is not the only factor used to assign HSG. In this instance, the specific soils where credit for HSG reduction takes place are stony loam soils such

as Hambright-Rock Outcrop complex. In these soils, the designation of HSG "D" is based solely on the shallow depth to bedrock, which causes moderate to rapid runoff rates. The soil constituent of this complex (Hambright) by itself contains infiltration properties that would place it in HSG "C" or HSG "B", which indicate more infiltration potential and lower runoff rates. Ripping and fracturing of the shallow bedrock layer will only add additional coarse aggregate to the existing Hambright part of the soil complex and is not expected to further reduce the inherent permeability of the Hambright portion in and of itself.

It is important to note that the EIR's hydrologic analysis only takes into account increased infiltration rates for ripping in rocky soil complexes where shallow bedrock barriers exist. The fracturing of monolithic bedrock by ripping will increase the depth class of the soils and therefore increase infiltration. This increase in infiltration will occur over both the short and long term, as the bedrock will not recompact the way a fine-grained soil would. This is explained in Impact 4.6-1 of the Draft EIR:

[W]ith certain soils onsite, such as the Hambright soil type, ripping the consolidated bedrock to create the vineyards will convert the hydrologic soil group from a "D" to a "C."...In Capell Creek watersheds, no credit can be taken for the ripping practice since these areas do not exhibit rocky soils, except in subwatershed 10 where 3.7 acres of rocky soils do occur.

In an effort to provide scientific data that supports the claim of HSG modification, a site investigation was performed on October 20, 2016 at Walt Ranch on an existing vineyard block that was developed in 2006. A complete technical report detailing the results of this testing has been provided to County staff.¹⁵ As a part of this onsite investigation, a total of nine test pits were excavated and evaluated by Mr. Ken Oster of NRCS, who also provided the attached report to Napa County staff.¹⁶ The test pits were excavated both inside the vineyard block and in adjacent areas that had not been affected by construction activities.

Excavation of the test pits confirmed that the depth to a water-impermeable layer inside of the developed vineyard block had permanently increased when compared to pits that were dug outside of the development area. The changes in depth were a direct result of construction activities and place the HSG in a different category based on the criteria given in the NEH. Data from the infiltration testing were analyzed to calculate the field saturated hydraulic conductivity, which is the other parameter for HSG classification. Results concluded that the soil within the developed vineyard block contained saturated hydraulic conductivity values that, together with

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¹⁵ Field Testing for Determination of Hydrologic Soil Group on Developed Vineyard at the Walt Ranch, October 28, 2016, prepared by PPI Engineering.

¹⁶ Soils Report of Hydrologic Soil Groups at Walt Ranch, October 21, 2016, from Mr. Ken Oster, NRCS, to Mr. Nate Galambos, Napa County PBES.

the increased depth, place the soil in a different HSG when compared to the pre-development condition. The findings from this investigation support the use of modified HSG for hydrologic modeling purposes. Please note that Mr. Oster categorizes the soil within the 10-year-old vineyard as Hydrologic Soil Group "B". Modeling for the Walt Ranch project used a modified HSG of "C", which is a more conservative value.

In summary, a site-specific investigation of the disturbed soil condition has occurred in accordance with the revised NRCS guidance, and has conclusively demonstrated that the vineyard development process permanently modifies HSG in the rocky soils present on portions of the Walt Ranch. In fact, the hydrologic modeling prepared for the Walt Ranch Project used a conservative HSG modification from "D" to "C" within these soil types. No further investigation or mitigation is warranted at this time.

Appeal Ground No. LRC24: Appellant claims that a determination of the changes in runoff from vineyard blocks based solely on a qualitative analysis of runoff curve number can lead to incorrect conclusions and unmitigated impacts. This also calls into question the suitability of the EIR in identifying and evaluating the potential adverse impacts associated with project erosion control measures/structures. Appellant states that the project vineyard drainage elements were not included in the modeled post-project stormwater runoff estimates.

Staff Response: Regarding the inclusion of drainage elements, calculations for increase in peak runoff are based upon the time of concentration (T_c), as explained in the "Hydrology Analysis Methodology" subsection of the EIR (page 4.6-2). In addition to being disclosed in the body of the EIR (Impact 4.6-1) and the Hydrologic Analysis (Appendix G of the Draft EIR), a supplemental memo was prepared by RiverSmith Engineering (May 25, 2016) and included as Attachment D to the Responses to Final EIR Comments memo.¹⁷ Further clarification provided in the Responses to Final EIR Comments memo stated that "only project drainage modifications that were along the longest hydrologic path were considered in the computation of time of concentration. Modifications to drainage paths that are off the longest path will not change the time of concentration and therefore are not considered in the computation.

In the cases where there is an improved drain off the longest hydrologic path, there can be a change in the shape of the hydrograph by bringing in some of the runoff sooner than in the preproject condition, but it will not increase the peak runoff; this only occurs when the entire watershed is contributing from the most hydraulically distant point. An improved drainage in itself does not create more water, and if it is off the longest hydrologic path, it cannot increase the peak flow."

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¹⁷ Riversmith, 2016, Memorandum RE: Discussion of Walt Ranch Hydrology Comments by Kamman Hydrology and Engineering – dated April 2, 2016.

Small increases in peak runoff were modeled on the Capell Creek portion of the property, as discussed in Impact 4.6-1. Mitigation Measure 4.6-1 of the EIR required numerous measures which were incorporated into the final ECP to mitigate the peak runoff increases and reduce the potential impact to less-than-significant levels. An additional analysis included in Appendix F of the Hydrologic Analysis identifies potential runoff increases from each proposed vineyard block based on parameters related to changes in land cover and hydrologic soil group (see Grounds for Appeal No. LRC23). The curve number (CN) is a value derived from these parameters and indicates the potential runoff from a given site. In general, an increase in CN relates to less infiltration and by extension more runoff. The effect of engineered drainage structures potentially conveying storm runoff faster than natural drainages is typically obscured by changes in CN when analyzing relatively small watershed areas.

The Appellant provided a sample analysis of Block 21B and claimed that including the drainage infrastructure resulted in large increases in peak flow. RiverSmith Engineering attempted to replicate these results for Block 21B in an additional supplemental memo (November 3, 2016) using the same assumptions stated in the Appellant's letter. The Appellant's model estimated a runoff rate of 20 cubic feet per second (cfs) peak flow for the 100-year storm event from a 2-acre site, which is greater than 10 cfs per acre. A more realistic flow rate in Napa County agricultural watersheds is typically 1 to 2 cfs per acre for the 100-year storm. Although the results of RiverSmith's analysis show that the Appellant's data does not appear to be valid, the exercise did provide further validation of the qualitative method used in the Walt Ranch hydrologic analysis. The sample block chosen by the Appellant "showed a small reduction in peak flow post-project rather than the large increases reported in [Kamman's] letter. [RiverSmith's] computations demonstrated a slight reduction from 4.2 cubic feet per second (cfs) to 4.1 cfs for the 100-year event, which corresponds with the slight decrease in composite curve number." 18

RiverSmith concludes, "A qualitative approach to mitigate potential increases within small watersheds (less than 5 acres) based on predicted increases in curve number are appropriate given the short overall travel times and minor changes to peak flow."

The results of supplemental hydrologic modeling for the final 209-acre vineyard were submitted to the County with the final ECP. The attached RiverSmith Engineering memo (November 3, 2016) also concludes the "revised hydrologic modeling incorporates all mitigations and the results now fully meet the no-net-increase requirement." Therefore, there is no potential for increased sediment production caused by increases in peak runoff because there are no increases in peak runoff, in compliance with Napa County General Plan Policy CON-50.

<u>Appeal Ground No. LRC25:</u> Appellant claims that a number of vineyard blocks discharge runoff from vineyard blocks directly onto mapped landslides and that project activities may

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¹⁸ Memorandum from Riversmith Engineering to Brian Bordona, November 3, 2016.

increase the potential to reactivate these slides. Appellant also states that the March 2016 landslide damage to State Route (SR) 121 is indicative of land instability issues in the area.

Staff Response: The potential for the Walt Ranch Project to impact slope stability (including landslide potential) was thoroughly reviewed by Gilpin Geosciences Inc. for the larger Proposed Project. This analysis, included as Appendix F of the Draft EIR, provided several recommended measures to ensure slope stability which were incorporated into the EIR and MMRP as Mitigation Measure 4.4-3. These measures included, but were not limited to, limiting ripping depths in specific blocks, requiring keyways for rock repository areas, constructing subdrains to reduce saturated conditions, and increasing setbacks from active landslides. The Gilpin Geosciences Inc. report (2013) concludes that proposed development of vineyard blocks on dormant or ancient landslides will improve the slope stability of the underlying or downslope deposits by controlling the surface runoff to outlet on erosion resistant or controlled surfaces. Such surface runoff controls proposed include wattles, rolling dips, rock and pipe level spreaders, diversion ditches and rock energy dissipaters. These surface erosion improvements combined with the presence of inactive, dormant or ancient, deep-seated (greater than 20 feet in depth) landslides combine to reduce the chance of future slope instability.

As required by Mitigation Measure 4.4-3, the final ECP submitted to the County on July 11, 2016 included those measures to avoid potential slope stability issues. Another geological review was conducted of the final 209-acre vineyard development plan and was submitted to the County with the final ECP. Per Gilpin, the "document is in substantial conformance with our recommendations and that it incorporates all geological and geotechnical mitigations and requirements presented in our "Engineering Geological Evaluation", dated 6 March 2013 as well as revisions in response to various comments to the draft EIR."¹⁹

The Appellant contends that having erosion control measures discharging near dormant landslides is inappropriate in blocks 31A, 40B, 50, 52, 54, 57 and 61. It should be noted that blocks 40, 52, and 57 were all specifically called out in Mitigation Measure 4.4-3 as requiring additional protective measures, which were incorporated into the final ECP. As a result of the Appellant's assertions, the engineering geologist provided another technical review of each of these vineyard blocks.²⁰ While each listed block was reviewed, only Block 54 remains in the project following mitigation. The detailed analysis for this block from the Gilpin memo is included below:

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¹⁹ Engineering Geological and Geotechnical Evaluation, Walt Ranch ECP/EIR. July 5, 2016, from Lou Gilpin of Langan Treadwell Rollo.

²⁰ Gilpin Geosciences, Inc. Technical Memorandum RE: Response to Comments from Kamman Hydrology and Engineering, Inc., September 27, 2016.

"Block 54 is located on the nose of a prominent upland ridgeline above Capell Creek. It is not located on any identified landslide deposit. Dormant landslides are mapped downslope of the proposed vineyard to the north and southeast. A steep slope with a drainage at lower elevations lies to the northeast of the block. The Erosion Control Plan shows a rock energy dissipater proposed for the northwest edge of the vineyard block located above a drainage channel that flows across the dormant landslide that lies north of the block. A minimum two foot high gravel berm is proposed for the northeast downslope edge of the block above the steep slope and drainage.

It is our opinion that the proposed construction of the Block 54 vineyard will reduce the sheetflow energy an improvement over the existing condition, and will not adversely impact the stability of the dormant landslides. The landslides mapped in the vicinity of Block 54 are characterized as dormant slump or slump-flow type deposits with an estimated depth of 5 to 15 feet. The proposed storm water control improvements for Block 54 will reduce the potential for surface runoff to impact the existing dormant landslides. At present the largest part of the proposed Block 54 drainage area is directed at the northeast edge with the steep slope and drainage channel downslope. The newest revisions show an additional set back from the top of this slope, and placement of a proposed gravel berm to reduce the surface sheet flow velocities. Likewise, the rock energy dissipater at the northwest edge of the vineyard will reduce the erosion power of the drainage channel through the downslope dormant landslide."²¹

As indicated in the Gilpin memo detailing the results of additional in-depth geologic review of the blocks listed by the Appellant, there are no significant impacts that were not assessed within the EIR, and all relevant mitigations were incorporated into the final ECP. Although no significant stability impacts have been identified, only one of the blocks listed by the Appellant remain in the final ECP after the inclusion of avoidance mitigation measures.

In addition, Gilpin Geosciences, Inc. provided an assessment of the recent SR 121 failure that occurred on March 13, 2016 to determine whether this event is relevant to the potential for unstable slopes in the Walt Ranch vicinity. Gilpin visited the site and concluded that the road failure was a result of several factors, including vulnerable road alignment caused by cut slopes up to 35 feet in height, underdesigned culverts, and lack of attention to ongoing road failure as evidenced by 4 to 5 feet of accumulated asphalt on the downslope road edge. Gilpin concluded

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²¹ Gilpin Geosciences, Inc. Technical Memorandum RE: Response to Comments from Kamman Hydrology and Engineering, Inc., September 27, 2016.

that the vineyard development at the Walt Ranch does not incorporate any of the aforementioned factors that led to the slide at SR 121.²²

<u>Appeal Ground No. LRC26:</u> Appellant argues that the project Water Quality Monitoring Program should include the measurement of sediment yields entering and exiting the project site as a necessary approach at monitoring erosion from the site and potential impacts to aquatic and riparian resources in Milliken Creek downstream of the Project.

Staff Response: Turbidity monitoring is required within the Water Quality Monitoring Plan. As explained in greater depth in response to Appeal Ground No. COCWD5, numerous mitigation measures throughout the EIR are designed to be protective of water quality in order to ensure the Walt Ranch Project does not result in increases in sediment, temperature, or nutrient loading (Milliken Creek watershed) or metals/metalloid loading (Capell Creek watershed). These measures include maintenance of appropriate stream and wetland buffers, ensuring no-net-increase in runoff and erosion, development and enforcement of a HMBP, following SOPs, restrictions on agrichemical mixing and application, restrictions on use and storage of oil, and upgrading rocked water crossings prior to use. Substantial evidence provided within the record details how each of these mitigation measures "avoid or *substantially lessen*" the project's significant impacts (Pub. Resources Code, § 21002).

Furthermore, in addition to these protective measures for water quality, the Applicant has been working with the City of Napa to voluntarily develop a surface water monitoring plan to address the City's concerns regarding potential water quality impacts. A Condition of Approval requiring the implementation of the Water Quality Monitoring Plan was added to the Updated MMRP.

This Water Quality Monitoring Plan is a voluntary effort between the City of Napa and the Applicant and was not required to reduce an impact to less-than-significant levels, and as such is not subject to regulation by Napa County with this Appeal. However, in order to acknowledge the Appellant's concerns, it should be noted that turbidity monitoring is required within this Plan at each of the nine locations shown therein.

<u>Appeal Ground No. LRC27:</u> Appellant states that the recharge rate presented in the groundwater analysis is artificially high because it is a composite recharge rate derived from watershed areas that, in addition to Sonoma Volcanics, include large areas of alluvium and other rock types.

Staff Response: As discussed in the response to Appeal Ground No. LRC9, the estimates of groundwater recharge as a percentage of rainfall presented in the EIR are reasonable and are

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²² Gilpin Geosciences, Inc, Memorandum RE: Highway 121 Failure 13 March 2016, from Lou Gilpin to Brian Bordona, October 26, 2016.

supported by many sources. As discussed therein, the analysis assumed a conservative deep percolation percentage of 7 percent of the average annual rainfall, although a value of 9 percent value would be supportable (page 48 of Appendix D).

The Appellant's statement that the "volcanic bedrock" aquifers in the San Juan Islands area of Washington are better suited for comparison to the Sonoma Volcanics than data derived from USGS Water Resources Investigation Reports WRI 77-82²³ and WRI 03-4229,²⁴ or derived from the report titled "Updated Hydrogeologic Conceptualization and Characterization of Conditions, Prepared for Napa County",²⁵ is misleading and scientifically unsound. The three studies listed above analyze data derived from the Milliken Creek watershed in Napa County, the same watershed in which a vast majority of the volcanic rock portion of the Walt Ranch property lies.

Further, the Appellant's assertion that the referenced USGS study by Orr, Bauer and Wayenberg (2002)²⁶ addresses aquifers comprised of rock types similar to the Sonoma Volcanics is misleading and inaccurate. The Sonoma Volcanics are relatively young, of Plio-Pleistocene geologic age (i.e., less than ±2.6 million years). In the area of western Washington State that is the focus of the USGS study (Water Resources Investigations Report 02-4114), the "volcanic" rocks are very old (of Triassic to Devonian age, i.e., roughly 200 million to 416 million years) and are actually described as "metavolcanics rocks" on a geologic map of the area.²⁷ A metavolcanic rock is a type of volcanic rock that underwent metamorphosis after its original disposition, i.e., it was subjected to elevated temperatures and pressures which caused varying degrees of recrystallization of the original volcanic material rock. Thus, this geologically much older variety of volcanic rock is harder and much more competent, and therefore, much less fractured, than the geologically much younger and well fractured, and clearly not metamorphosed, Sonoma Volcanics that underlie the Walt Ranch property.

The EIR presented a range of supportable groundwater recharge estimates based on best available science and based on peer-reviewed data sources specific to the watershed in question. No consideration should be given to the misleading information provided by the Appellant

²³ USGS, 1977. Ground-water hydrology of the Lower Milliken-Sarco- Tulucay Creeks Area, Napa County, California. Johnson, M.J. USGS Water-Resources Investigations 77-82.

²⁴ USGS, 2013. USGS Circular 1376. *Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow.*

²⁵ Luhdorff & Scalmanini Consulting Engineers and MBK Engineers (LSCE&MBK), 2013. *Updated Hydrogeologic Conceptualization and Characterization of Conditions*. January 2013. Prepared for Napa County

²⁶ Orr, L.A., Bauer, H.H., and J.A. Wayenberg, 2002. *Estimates of groundwater recharge from precipitation to glacial-deposit and bedrock aquifers on Lopez, San Juan, Orcas, and Shaw Islands, San Juan County, Washington*. USGS Water-Resources Investigations Report 02-4114, 122p.

²⁷ Logan, R.L., 2003, Geologic Map of the Washington Portion of the Roche Harbor 1:100,000 quadrangle: Washington Division of Geology and Earth Resources, Open File Report 2003-17, scale 1:100,000

related to the USGS 2002 study focused in Washington State, as it is not applicable to the project site.

EXHIBIT 2: AUGUST 25, 2016 LETTER FROM PADGETT-FLOHR

Appeal Ground No. LRC28: Appellant claims that the responses to comments provided on the Draft EIR and Final EIR were never adequately addressed.

Staff Response: The County has made a good faith effort to adequately respond to all comments as evidenced by the Final EIR, Response to Final EIR Comments memo, and the staff reports provided to the Board. Responses to comments need not be exhaustive; they only need to demonstrate a good faith, reasoned analysis. (CEQA *Guidelines* §15088(c).; *Towards Responsibility in Planning v. City Council* (1988) 200 Cal.App.3d 671.) A general response to a general comment is sufficient. (*Paulek v. Department of Water Resources* (2014) 231 Cal.App.4th 35.)

The contents of the Final EIR match CEQA *Guidelines* § 15132, which states that a "Final EIR shall consist of:

- (a) The draft EIR or a revision of the draft.
- (b) Comments and recommendations received on the draft EIR either verbatim or in summary.
- (c) A list of persons, organizations, and public agencies commenting on the draft EIR.
- (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- (e) Any other information added by the Lead Agency."

Although general or master responses were provided to the topics that were mentioned most frequently, each comment was responded to individually. Where appropriate, the commenter was directed to the general response or another individual response that addressed the same concern. This kept the Final EIR from becoming too lengthy and repetitive. This is supported by CEQA *Guidelines*, which requires that the Lead Agency respond to significant environmental points but do not require repeating the same comment each time it is received. CEQA does not require written responses to comment letters received on a Final EIR; however, Napa County prepared a "Responses to Final EIR Comments Memorandum" that was circulated with Director Morrison's August 1, 2016 decision packet.

Appeal Ground No. LRC29: Appellant argues that the Updated MMRP which requires that a qualified biologist be involved during bullfrog eradication efforts for eggs, larvae, and sub-adult bullfrogs is inadequate. Appellant states that Mitigation Measure 4.2-11 should not allow persons knowledgeable in the identification of the species (i.e. a worker who has been trained by a

qualified biologist and has obtained the appropriate fishing license) to capture and remove adult bullfrogs.

Staff Response: Final EIR Response to Comment A7-13 explains that bullfrogs are a non-native species that are predators to many native species of concern, including FYLF and CRLF. Therefore, the establishment of bullfrogs in the proposed groundwater storage reservoirs may have a significant impact on special status amphibians. Mitigation Measure 4.2-11 was expanded to include invasive species management at the request of California Department of Fish and Wildlife (CDFW). The invasive species removal techniques are mentioned in the CDFW comment letter and have been utilized in other vineyard projects in northern California without causing detrimental impacts to native species.

Based on comments provided by the Appellant to the Final EIR, the language of Mitigation Measure 4.2-11 was updated for the final MMRP to provide a more conservative approach and to minimize the potential for accidental disruption to the eggs or tadpoles of other frog species. The previous version of the language was vague on which bullfrog life stage the knowledgeable person could remove. Due to the Appellant's concerns that younger life stages (i.e. eggs, larvae, and sub-adults) are more difficult to differentiate, Mitigation Measure 4.2-11 now limits the direct removal efforts to adult specimens only. Controlling or eliminating non-native species / predators (including bullfrogs) is recommended by the USFWS's *Recovery Plan for the California Red-Legged Frog*.²⁸

<u>Appeal Ground No. LRC30:</u> Appellant claims that surveys for biological resources were completely inadequate and do not provide sufficient nor comprehensive data that support the conclusions in the Draft EIR and Final EIR.

<u>Staff Response:</u> This appeal ground is not specific enough to determine what, if any, inadequacies are being asserted. The surveyor's qualifications have been discussed in depth in the EIR [refer to Final EIR Response to Comment O22-083 through Response to Comment O22-095] and the Response to Final EIR Comments memo. As stated therein, "the surveyors' qualifications were presented in Appendix A of the CRLF Survey Report (Appendix K of the Draft EIR), and they meet the established thresholds in the USFWS CRLF Guidance" (Final EIR Response to Comment O22-095). The USFWS does not require that a surveyor hold a CRLF permit: "the site assessment and survey methods recommended in this Guidance do NOT require the surveyor to have a permit." As stated below, the surveyor must be otherwise qualified to

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²⁸ USFWS, 2002. *Recovery Plan for the California Red-legged Frog.* Available online at: https://www.fws.gov/carlsbad/SpeciesStatusList/RP/20020528_RP_CRLF.pdf

conduct the surveys."²⁹ In regards to timing of the surveys, Final EIR Response to Comments O22-085 and O22-086 state:

"Although breeding season surveys were not conducted between January 1 and February 28 during the 2012 surveys, the survey timing and methodology are acceptable under the USFWS CRLF Guidance (USFWS, 2005):

'Surveys may begin anytime during January and should be completed by the end of September. Multiple survey visits conducted throughout the survey-year (January through September) increases the likelihood of detecting the various life stages of the CRLF. For example, adult frogs are most likely to be detected at night between January 1 and June 30, somewhere in the vicinity of a breeding location, whereas, sub-adults are most easily detected during the day from July 1 through September 30. Due to the geographic and yearly variation in egg laying dates, it is not possible to specify a range of dates that is appropriate for egg surveys throughout the range of the CRLF.'

The Guidance does recommend that the best period for detecting CRLF egg masses in Northern California along the coast and interior to the Coast Range (north of Santa Cruz County) is between January 1 and February 28. However, this does not invalidate the surveys, as they were conducted following the recommendations of the protocol and within the timing to locate adult CRLF."

Refer to response to Appeal Ground No. LRC4 regarding the environmental baseline for CRLF that was presented in the EIR.

Appeal Ground No. LRC31: Appellant claims that the Draft EIR and Final EIR did not identify and address all potential impacts to special-status species and their habitats.

Staff Response: See responses to Appeal Ground No. CBD6 (CRLF), CBD8 (WPT and FYLF), CBD9 (VELB), CBD10 (peregrine falcons and white-tailed kite), CBD13 (Contra Costa goldfields), and CBD17 (various listed species).

Appeal Ground No. LRC32: Appellant states that the mitigation measures are inadequate to mitigate the impacts identified, and argues that CRLF and FYLF are not mentioned in the MMRP.

Staff Response: Mitigation Measure 4.2-11 provides numerous measures to avoid or substantially lessen impacts to CRLF and FYLF in accordance with Pub. Resources Code, §21002. Refer to the response to Appeal Ground Nos. LRC4 and CBD6.

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²⁹ USFWS, 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. Available online at: http://www.fws.gov/sacramento/es/documents/crf_survey_guidance_aug2005.pdf.

<u>Appeal Ground No. LRC33:</u> Appellant argues that the Draft EIR and Final EIR do not represent good faith efforts, do not use the best available science, and in general, make conclusory statements that are not supported by the peer-reviewed literature or in fact, even the small amount of data they did collect.

Staff Response: This appeal ground provides no specific examples of how the EIR fails to represent a good faith effort, make use of best available science, or use conclusory statements. Based on the voluminous record supporting the conclusions of the EIR as reflected in the Draft EIR, Final EIR, and the responses provided herein, the conclusions of the EIR are supported by substantial evidence based on best available science and establish that a good faith effort has been made to evaluate and mitigate the project's environmental impacts. See responses to Appeal Ground No. CBD47 and LRC34 below.

<u>Appeal Ground No. LRC34:</u> Appellant argues that the written responses did not offer additional factual information or analyses to support the response, and the major environmental issues raised were not addressed in detail nor were reasons articulated as to why specific comments and suggestions were rejected.

Staff Response: The County has made a good faith effort to adequately respond to all comments as evidenced by the Final EIR, Response to Final EIR Comments memo, and the staff reports provided to the Board. Responses to comments need not be exhaustive; they only need to demonstrate a good faith, reasoned analysis. (CEQA *Guidelines* §15088(c).; *Towards Responsibility in Planning v. City Council* (1988) 200 Cal.App.3d 671.) A general response to a general comment is sufficient. (*Paulek v. Department of Water Resources* (2014) 231 Cal.App.4th 35.)

As it relates to specific concerns raised by the Appellant, it is unclear how the responses to comments were dismissive or not in-depth. In the Final EIR, 11 pages were devoted to respond to Comments O22-083 through O22-122 and updates were made to the EIR text where necessary as a result of specific concerns brought up by the Appellant. In the Response to Final EIR Comments memo, 7 pages were used to clarify or elaborate on issues raised by the Appellant. As discussed in response to Appeal Ground No. LRC29, Mitigation Measure 4.2-11 was revised in direct response to the Appellant's concerns. Numerous peer-reviewed articles and government publications were reviewed and cited in order to provide detailed responses using best available science, including information from the Bio-Integral Research Center, the Biological Conservation journal, Cornell University, the Journal of Herpetology, CDFW and USFWS. It is unclear how this has been dismissive or shows a lack of detail.

PART II. CIRCLE OAKS HOMES ASSOCIATION/CIRCLE OAKS COUNTY WATER DISTRICT GROUNDS OF APPEAL:

GROUNDS OF APPEAL

The following outlines the basis of the appeal as contained in the Appeal dated September 1, 2016. For convenience, staff has numbered each issue and provided a summary, but recommends the Board review the actual Appeal for details.

Appeal Ground No. COCWD1: Appellant asserts that the EIR fails to adequately describe the environmental setting regarding groundwater resources. Appellant claims that the EIR failed to incorporate any data or analysis concerning Circle Oaks County Water District's (COCWD) demand or the potential impacts to the residents served by the COCWD should the Project's massive water demand drawdown the aquifer and affect the wells served by the COCWD.

Staff Response: Consideration of COCWD groundwater demands and infrastructure was addressed in Impact 4.6-4 (Final EIR: Volume II), Final EIR General Response 14, Final EIR Response to Comment O2-1, and throughout the supporting documents prepared by RCS.³⁰ Consideration of COCWD infrastructure was addressed in Response to Comment O2-1 in the Final EIR. The RCS aquifer (pumping) test analysis included theoretical monitoring points that coincided with the estimated locations of the COCWD wells and springs to estimate impacts to COCWD. In addition, wells on the Circle S Ranch property were monitored as part of the aquifer test. Once COCWD provided its actual well data to RCS, it was incorporated into the modeling by updating the theoretical or assumed locations to the actual well locations.

Cumulative groundwater demands have been addressed throughout the EIR process, specifically in: the Draft EIR (Impact 4.6-4 and Section 6.1.4-6), Final EIR (Appendix Q pages 8 through 10),³¹ and Final EIR General Response 14. As discussed therein, groundwater extractions for the COCWD and the permitted future (but undeveloped) Circle S Ranch project are considered in conjunction with the groundwater demand for the proposed Walt Ranch project.

³⁰ RCS, 2013. Updated Report on the Results and Analysis of 96-Hour Constant Rate Pumping Test, Irrigation-Supply Well No. 3 for Walt Ranch in Napa County, California. Prepared for Hall Wines, LLC. February 2013. Included as Appendix D to the Draft EIR.

RCS, 2015. Technical Memorandum RE: Response to Comments on the Walt Ranch Draft EIR. August 13, 2015. Included as Appendix Q to the Final EIR.

Richard C. Slade and Associates (RCS), 2016. Technical Memorandum RE: Response to Comments on the Walt Ranch Final EIR. June 10, 2016. Included as Attachment C to the Responses to Final EIR Comments Memorandum.

³¹ RCS, 2015. Technical Memorandum RE: Response to Comments on the Walt Ranch Draft EIR. August 13, 2015. Included as Appendix Q to the Final EIR.

The Final EIR General Response 14 outlines the cumulative groundwater pumping demand for these three main water users and demonstrates that there would be more average annual recharge than groundwater extraction from the three main water users from the Sonoma Volcanics underlying the Walt Ranch and Circle S properties. Please note that the Final EIR excerpt below uses the Mitigated Project groundwater demand of 187 af per year, which has been reduced to 144.5 af per year with the final 209-acre project. The analysis from General Response 14 is as follows:

"...the total combined groundwater demand for all groundwater users drawing from this portion of the Sonoma Volcanics (Circle S, mitigated Walt Ranch, and Circle Oaks horizontal well) combined, are as follows:

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(Walt Ranch 187 af per year) + (COCWD Horizontal Well 16.2 af per year) + (Circle S 189.9 af per year) = 393.1 af per year
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Conservative estimate of average annual recharge (assuming recharge occurs only on the Walt Ranch property and the Circle S property):

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(Walt Ranch 161 af per year) + (Circle S 325 af per year) = 486 af per year
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Therefore, the average annual recharge calculated above (486 af per year) exceeds the combined total sum of the groundwater demands (393.1 af per year) for both properties and the COCWD Horizontal Well."

The EIR also presents an analysis of the three known water users and a fourth user, the COCWD Well No. 1 which likely does not derive its water from the Sonoma Volcanics. However, even with inclusion of this fourth water extraction point, the demand does not exceed recharge:

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"(Walt Ranch 187 af per year) + (COCWD Horizontal Well 16.2 af per year) + (COCWD Well No. 1 - 40.5 af per year) + (Circle S 189.9 af per year) = 433.6 af per year"
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When considering the above analysis with the smaller groundwater demand of the final project, the revised numbers shown an even lesser demand in the cumulative environment. The demand in the cumulative environment when considering the smaller Walt Ranch Project would be 391.1 af per year. The recharge potential would still be the same at 486 af per year, resulting in an even smaller potential groundwater impact in the cumulative environment.

Appeal Ground No. COCWD2: Appellant asserts that the EIR mischaracterizes the rate of groundwater recharge on the Project site.

Staff Response: Refer to responses to Appeal Ground No. LRC9.

Appeal Ground No. COCWD3: Appellant asserts that the EIR mischaracterizes the hydraulic connection between groundwater to be pumped for the Project and groundwater in the Milliken

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Sarco Tulocay ("MST") Groundwater Deficient Area. Appellant claims that the EIR improperly locates the Project outside the MST and thus inadequately analyzes groundwater supply and recharge rates. The EIR claims there is no hydraulic connection between the Project site and the MST study area, but USGS studies show that at least the southwest third of the project site is in the MST basin and the four proposed wells are located in the MST basin. Therefore, the conclusions in the EIR relating to groundwater supply are not based on the correct assumptions.

Staff Response: Refer to response to Appeal Ground No. LRC10 regarding the lack of connection between the Sonoma Volcanics on the project site to the MST groundwater deficient area. The southwest third of the Walt Ranch property is located within the Milliken Creek watershed (surface water drainage area), not the MST groundwater area.

Appeal Ground No. COCWD4: Appellant contends that the EIR mischaracterizes the direction of groundwater flow.

<u>Staff Response:</u> Refer to response to Appeal Ground No. LRC11.

Appeal Ground No. COCWD5: Appellant contends that the EIR fails to adequately analyze and account for impacts to increased stream sedimentation in the Napa River drainage or provide for adequate mitigation. Appellant claims the EIR fails to adequately consider the potential for stormwater runoff to contribute pesticides, nutrients and trace metals (boron and mercury) during operation of the Project. There is no substantiation of the claim that the mitigation measures would filter sediments, agricultural chemicals, and nutrients to a less-than-significant level.

Staff Response: Baseline water quality is discussed in Section 4.6.1-2 (page 4.6-8 through 4.6-11) of the EIR, which provides a detailed description of the following water quality constituents relevant to the Walt Ranch property and downstream watersheds:

- Sediment Loading. The Napa River watershed is listed for sediment loading and a Total Maximum Daily Load (TMDL) has been developed by the San Francisco Bay Regional Water Quality Control Board (RWQCB). The Capell Creek watershed is not listed for sediment loading;
- **Temperature.** The Napa River watershed is listed for temperature constraints because it provides habitat for cold-water listed fishes. The Capell Creek watershed is not listed for temperature;
- **Nutrients.** The Napa River watershed is listed for nutrient pollution such as phosphorus and nitrogen. However, given improving water quality in the non-tidal portions of the Napa River, the San Francisco Bay RWQCB adopted Resolution No. R2-2014-0006 on February 12, 2014 to delist the non-tidal Napa River for nutrients. The Capell Creek watershed is not listed for nutrients;
- **Pathogens.** The Napa River watershed is listed for pathogens and a TMDL has been developed by the RWQCB. Onsite waters have a low potential for increased levels of

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- pathogens due to the halting of livestock grazing on the property. The Capell Creek watershed is not listed for pathogens; and
- Metals/Metalloids. The Putah Creek and Lake Berryessa watersheds are listed for metals/metalloids, specifically mercury and boron. The Milliken Creek/Napa River watershed are not listed for metals.

Numerous mitigation measures throughout the EIR are designed to be protective of water quality in order to ensure the Walt Ranch Project does not result in increases in sediment, temperature, or nutrient loading (Milliken Creek watershed) or metals/metalloid loading (Capell Creek watershed). As clarified in the Final EIR, the following mitigation measures will be protective of water quality:

- Mitigation Measure 4.2-4: Maintain appropriate stream and wetland buffers
- Mitigation Measure 4.4-1: No net increase in sedimentation
- Mitigation Measure 4.5-1: Create and follow a Hazardous Materials Business Plan (HMBP)
- Mitigation Measure 4.5-2: Follow all Standard Operating Procedures (SOPs) for vineyard equipment
- Mitigation Measure 4.5-3: Restrictions on chemical mixing and mix water
- Mitigation Measure 4.5-4: Restrictions on application of agrichemicals
- Mitigation Measure 4.5-5: Restrictions on use and storage of oils
- Mitigation Measure 4.6-2: Upgrade rocked water crossings prior to use

Furthermore, in addition to these protective measures for water quality that mitigate potential impacts to less than significant levels, the Applicant has been working with the City of Napa, independently of the EIR process, to voluntarily develop a surface water monitoring plan to address the City's concerns regarding potential water quality impacts. A Condition of Approval requiring the implementation of the Water Quality Monitoring Plan was added to the Updated MMRP and as Condition of Approval No. 10.

Appeal Ground No. COCWD6: Appellant asserts that the EIR fails to analyze the significance of increased channel erosion and sediment production caused by increases in peak runoff caused by installing engineered drainage structures. Appellant argues that the EIR inadequately analyzes the runoff rates caused by the drainage elements incorporated into the Erosion Control Plan. The surface drains, subdrains and utility corridors proposed by the Project will intentionally and unintentionally concentrate and accelerate runoff off and through proposed vineyard blocks. The potential future impacts from changes in stormwater runoff have not been fully evaluated and presented in the EIR.

Staff Response: Refer to response to Appeal Ground No. LRC24.

Appeal Ground No. COCWD7: Appellant argues that the EIR fails to adequately analyze and provide mitigation for impacts related to groundwater resources.

Staff Response: Refer to response to Appeal Ground No. LRC5 and LRC18.

Appeal Ground No. COCWD8: Appellant argues that the EIR fails to analyze the significance of pumping more groundwater than is recharged on-site on local groundwater supplies.

Staff Response: Refer to response to Appeal Ground No. LRC13.

Appeal Ground No. COCWD9: Appellant claims the Mitigation Measure 4.6-4 concerning impacts to groundwater resources is vague and unenforceable and unlawfully defers the analysis and development of further mitigation measures until after Project approval. Relative to the impact analysis concerning the Circle Oaks wells, the sufficiency of the annual water supply is not determinative, rather the issue concerns whether there is sufficient availability of water for Walt Ranch, together with the adjacent well use, during the months when Walt Ranch proposes its heaviest demand. Appellant claims the analysis conducted for the drawdown of COCWD wells was not conducted over a long enough period to accurately determine the total effect, given the slow rate of water transfer in the existing cracked volcanic rock, and testing was not conducted to determine the effects vineyard ground seepage and/or runoff would have on the water COCWD receives from the horizontal piping.

Staff Response: As discussed in response to Appeal Ground No. COCWD1 above, theoretical monitoring points that coincided with the estimated locations of the COCWD vertical and horizontal wells were included in the pumping test analysis. The inclusion of these monitoring points by RCS was specifically to address a lack of response from COCWD to RCS inquiries in advance of the pumping tests. Further, once the actual locations of the COCWD wells were provided to RCS, the theoretical modeling was revised as described on page 29 of the 2015 RCS Report.³² Refer to response to Appeal Ground No. LRC18 regarding the GWMMP.

<u>Appeal Ground No. COCWD10:</u> Appellant argues that the EIR improperly used the mitigation as a device to avoid disclosing impacts (*Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 195-196.)

Staff Response: As discussed further in the response to Appeal Ground No. LRC13, the EIR did not attempt to ignore potentially significant impacts due to groundwater pumping. Impact 4.6-4 of the EIR clearly states that the "effects to groundwater levels could cause drawdown in offsite wells, and if this drawdown interference were to be substantial, the existing pump in the impacted well might become less efficient; if this were to occur, the existing pump might not be

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³² RCS, 2015. Technical Memorandum RE: Response to Comments on the Walt Ranch Draft EIR. August 13, 2015. Included as Appendix Q to the Final EIR.

able to maintain its normal operational pumping rate. This would be a significant impact" (EIR at p. 4.6-43; emphasis added). As such, Mitigation Measure 4.6-4 was required to protect offsite wells from significant impacts due to project-related groundwater pumping. The GWMMP that was developed in accordance with Mitigation Measure 4.6-4 is discussed in more detail in response to Appeal Ground No. LRC5.

Appeal Ground No. COCWD11: Appellant asserts that the EIR fails to adequately analyze and provide mitigation for impacts to roads, including road failure, due to Walt Ranch operations. Mitigation Measure 4.7-4 provides for repaying and damage to sub-surface infrastructure during the construction phase only, it does not address mitigation for road damage to continuing operations of the Project.

Staff Response: The EIR analyzes impacts to roads in Impact 4.7-4 and Response to Comment O21-091. As discussed therein, the construction period represents the most intensive period of heavy equipment entering and exiting the project site, which is what exacerbates road wear-andtear. There are significantly fewer large trucks that will be required during the ongoing operations of the Walt Ranch Project when compared to the construction period. Further, the project will not require the same type of heavy equipment deliveries as during the construction phase. The ongoing operation of the project is an agricultural land use that is allowable under the property's AW zoning designation and is in keeping with the rural nature of the area. The use of the County-maintained roads for agricultural transport is consistent with the goals and policies of the Napa County General Plan, and is not significantly different from the existing vineyards in the area. The property owner will pay a fair-share payment for any future wear-and-tear of roads from this typical and expected agricultural use via the ongoing payment of property taxes.

Appeal Ground No. COCWD12: Appellant argues that the EIR fails to include review of alternative access ways to the Project; given that the Project may seriously impact the roadway and the water and sewer systems of the Circle Oaks community, the EIR must consider ways to avoid or substantially lessen these impacts.

Staff Response: To address Circle Oaks residents' concerns, the project added a condition of approval to require that construction equipment be delivered via an alternative access point. Condition of Approval No. 2 was imposed upon the project additional traffic restrictions requiring that all construction equipment be routed away from Circle Oaks Drive and through the northernmost access driveway directly off of State Route 121. Specifically, all extra-legal loads (defined as anything greater than 80,000 pounds that requires special Caltrans permits per Mitigation Measure 4.7-4) and construction equipment deliveries (defined as any construction equipment listed in Table 3-5 of the EIR, including: excavators, graders, rubber tired dozer, tractors, loaders, and backhoes) shall utilize Gate 1. This additional Condition of Approval significantly minimizes any potential traffic disruption to the Circle Oaks community or damage to infrastructure.

The Final EIR correctly identified that developing a new access point may cause new environmental impacts not previously disclosed (see Final EIR General Response 17 at page 4-32); fortunately, use of the existing access road would not require significant improvements or cause safety hazards. The Applicant would use an existing access road directly off of SR 121 for the delivery of construction equipment; this road may also be utilized for materials deliveries. This existing driveway is the northern-most driveway located on the eastern property boundary, directly adjacent to SR 121 and approximately 1.5 miles southwest of the intersection of SR 121 and SR 128. The existing road network would then be utilized to provide access to the remainder of the Walt Ranch property. The EIR already reviewed the existing and proposed road network and provided mitigation measures to substantially lessen impacts caused by the use of roads on the Walt Ranch property.

As discussed in the Walt Ranch Alternative Access Proposed by Applicant memorandum,³³ the alternative access route would be upgraded consistent with the Long-Term Road Management Plan provided in Appendix C of the Draft EIR. Commenters pointed out that the EIR was vague in its discussion of why this access point was eliminated; this is because cultural resources locations are not allowed to be disclosed in public CEQA documentation in accordance with Section 304 of the National Historic Preservation Act (16 USC 470w-3) and the Archaeological Resources Protection Act (16 U.S.C. Section 470h). However, the County is able to acknowledge that the resources present in the vicinity of that existing access point would be protected by mitigation measures that are already in place within the EIR (see Mitigation Measures 4.2-1, 4.2-2, 4.2-9, 4.2-10, 4.3-1, and 4.6-2). As such, there are no new significant environmental impacts that would require revision or recirculation of the Draft EIR consistent with CEQA *Guidelines* § 15088.5. Conditions of approval requiring the use of this alternative access for construction equipment delivery and the specific recommendations discussed in Table 2 of the Updated MMRP.

Appeal Ground No. COCWD13: Appellant contends that the EIR fails to consider the potential impacts due to landslide. Appellant argues that the EIR inadequately considered the impacts of drainage discharge onto mapped landslides. The drainage discharge will increase the local infiltration and soil water content of the receiving landslide areas over existing levels.

Staff Response: See response to Appeal Ground No. LRC25.

<u>Appeal Ground No. COCWD14:</u> Appellant claims the EIR does not adequately apply significance criteria for noise impacts. Appellant contends the EIR failed to compare construction and project-generated noise with existing ambient noise levels. The EIR discussed construction noise only in terms of absolute noise levels. The projected 74 dBA is 40 decibels

³³ AES, 2016. Memorandum RE: Walt Ranch Alternative Access Proposed by Applicant. July 7, 2016. Included as Attachment B to the Responses to Final EIR Comments Memorandum.

louder than the measured ambient level. The EIR also incorrectly compares project-generated noise to the highway noise, rather than the noise measured at or near neighboring residences, which are significantly shielded from highway noise.

Staff Response: Similar to other environmental resource areas, a noise analysis must first determine the existing ambient noise level, estimate the project's potential impacts, and then assess whether that would exceed an established criteria or significance threshold. In the case of a noise analysis, the level of significance of an impact is typically measured at the nearest "sensitive receptor", or in this case the closest residence that would hear project-related noise.

The noise analysis presented in the EIR utilized the Napa County Baseline Data Report (BDR) noise data provided in the Napa County General Plan to determine the existing noise level in the project vicinity in accordance with CEQA *Guidelines* § 15150. The Napa County BDR is a document used to guide County planning efforts; the existing setting of each environmental resource area noted in the BDR was determined using a rigorous scientific approach. Construction of the Walt Ranch Project is temporary in nature, occurring during the dry season over four years. Therefore, the discussion of construction noise impacts presented in Section 4.8 of the EIR is a discussion of the temporary or periodic increase in ambient noise levels in the project vicinity.

CEQA *Guidelines* § 15064.7 states that "[e]ach public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects...Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule, or regulation." Use of the Napa County Construction Noise Ordinance 75 dBA noise limit for construction across a residential property line as a significance threshold is appropriate under CEQA *Guidelines*.

As discussed in Section 4.8 of the EIR, construction noise associated with the construction of the Walt Ranch Project would generate noise at 30 feet (the distance to the nearest sensitive receptor) in excess of the Napa County threshold of 75 dBA and is a potentially significant impact. As a result, the project required implementation of Mitigation Measure 4.8-1 to reduce this impact to a less than significant level. However, it is important to note that this distance is based on the original Proposed Project and not the adoption of the final 209 net acre project. Based on the reduction in clearing limits resulting from mitigation measures and the adoption of the Reduced Intensity Alternative, the nearest sensitive receptors are approximately 475 feet from the nearest vineyard blocks (Blocks 27 and 37). At 475 feet distance, the loudest construction equipment would generate noise of approximately 65 dBA, Leq. Not only is this noise level 10 dBA less than the County's significance threshold, it is only 10 dBA more than the estimated ambient noise level of the neighborhood. Because noise attenuates (lessens) farther from the source, other residents would experience even less disruption.

Furthermore, as discussed in the response to Appeal Ground No. COCWD12 above, the County has adopted a condition of approval requiring that all heavy equipment deliveries be routed away from the Circle Oaks neighborhood and enter the Walt Ranch property from the northern-most access point off SR 121. Accordingly, there would be no large trucks driving up Circle Oaks Drive to deliver equipment, which was another source of noise accounted for in the original EIR analysis.

As such, the noise analysis presented in Impact 4.8-1 of the EIR significantly overstates the potential for noise impacts due to the project, and therefore presents a conservative analysis. In spite of this, Mitigation Measure 4.8-1 is still required to minimize noise impacts, and includes limiting construction times and providing sound barriers in accordance with Napa County regulations. Additional noise reducing measures provided in Mitigation Measure 4.8-1 include the use of sound walls, measures to reduce vehicle and equipment generated noise, and siting of stationary sources as far as practical from sensitive receptors. The courts have upheld mitigation measures to address construction noise that are comparable to those set forth in Mitigation Measure 4.8-1. (See *Sierra Club v. Tahoe Regional Planning Agency* (2013) 916 F.Supp.2d 1098.)

Although construction of the Proposed Project would generate noise typical of any construction project, with mitigation, construction of the Proposed Project would not expose persons to noise in excess of standards established in the County General Plan or County Ordinance.

Appeal Ground No. COCWD15: Appellant claims the EIR used the incorrect baseline to judge noise impacts. The EIR utilized estimates based on modeling rather than actual data gathered near the project site. Based on four days of noise measurements conducted by Eric Yee, the daytime noise levels in the Circle Oaks residential community were between 32 dBA and 53 dBA, compared to the EIR's estimate of 57 dBA. Appellant claims the EIR does not accurately represent the existing noise levels on the Project site. The EIR does not include actual noise measurements around the project site.

Staff Response: The EIR utilized the Napa County BDR noise data provided in the Napa County General Plan to determine the existing noise level in the project vicinity in accordance with CEQA *Guidelines* § 15150. The Napa County BDR is a document used to guide County planning efforts; the existing setting of each environmental resource area was determined using a rigorous scientific approach. The noise measurements from the Napa County BDR that were used in the Draft EIR were determined through the following methodology:

"Noise levels produced by traffic on state highways and county roads with more than 3,000 vehicles per day were calculated using the [Federal Highway Administration] FHWA Traffic Noise Prediction Model. Noise from construction, agricultural, commercial, and industrial facilities was also quantified, based on information from short and long-term noise monitoring locations. The County, in consultation with consulting

experts, identified all short- and long-term monitoring locations. The noise metric used is day-night noise level (Ldn) and equivalent sound level (Leq).

Contours for existing noise conditions were mapped based on results from the monitoring study described above, as well as on noise modeling and information from previous studies."

No substantial change to land use, such as new residential or roadway construction, has occurred that would significantly alter ambient noise levels in comparison to levels stated in the EIR. Although several commenters requested that site-specific noise monitoring be conducted at Circle Oaks to provide the environmental baseline, the existing noise setting was determined using best available scientific information adopted by the County, as discussed above. The conditions in the project site and vicinity have not substantially changed since the adoption of the Napa County BDR, and as such the use of the analysis presented therein was reasonable and supported by available science.

The Appellant provides site-specific noise measurements in the Circle Oaks community that range from 32 dBA to 53 dBA, although it is unclear where or when those measurements were taken. In order to utilize site-specific noise measurements, the exact locations of where noise measurements were taken, when the measurements were taken, and how the data was analyzed should have been provided. Without being able to verify the methodology used to obtain that data, it is more appropriate to utilize the best available scientific information provided in the Napa County BDR. It should be noted that the Appellant's measured daytime noise level apparently ranged up to 53 dBA, and the EIR assumed the ambient noise level was 57 dBA. As stated on page 4.8-4 of the EIR, "it is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA." A change in level of 5 dBA is a perceptible increase. The difference between the 53 dBA measured by the Appellant and the 57 dBA assumed by the EIR may or may not be a perceptible difference to the healthy human ear.

In accordance with CEQA *Guidelines* § 15143, noise impacts were discussed with emphasis in proportion to their severity and probability of occurrence. Given that noise impacts of the Walt Ranch Project are temporary and that all impacts are reduced to less-than-significant levels with mitigation, the Draft EIR presented an appropriate level of scientific detail in accordance with CEQA *Guidelines*. Ambient noise levels provided in the Napa County General Plan are appropriate to provide decision makers with information to enable them to make an intelligent decision that takes into account all environmental consequences, per CEQA *Guidelines* § 15151.

<u>Appeal Ground No. COCWD16:</u> Appellant claims the EIR fails to address noise impacts due to truck traffic, rock demolition and removal, and vibration.

Staff Response: This is incorrect. The EIR did address noise impacts due to truck traffic, rock demolition and removal, and vibration. The EIR determined the vibration noise levels for the

construction of the Walt Ranch Project using the Caltrans Transportation- and Construction-Induced Vibration Guidance Manual's (Manual) guidelines and estimates for standard construction equipment.

The EIR's vibration analysis was consistent with the Manual's adopted methodology for assessing construction related vibration impacts. It compared the vibration noise levels to the Caltrans vibration significance thresholds as stated in the Manual. Under those thresholds, an impact is considered potentially significant if construction or operation of the Walt Ranch Project would result in an increase of 0.5 peak particle velocity (PPV) at the nearest non-residential structure, or 0.1 PPV at the nearest residence, consistent with State and local guidance.

Impact 4.8-1 provides an analysis of the increase in noise during construction and operation of the Walt Ranch Project, while Impact 4.8-2 provides an analysis of the increase in groundborne vibration during the construction and operational phases. Traffic noise impacts were not evaluated separately from other noise attributed to the Walt Ranch Project in these impact analyses. Mitigation Measure 4.8-1 and 4.8-2 will reduce the impacts due to noise and groundborne vibration, respectively, to less-than-significant levels.

Furthermore, as discussed in the response to Appeal Ground No. COCWD14 above, the County has adopted a condition of approval requiring that all heavy equipment deliveries be routed away from the Circle Oaks neighborhood and enter the Walt Ranch property from the northern-most access point off SR 121. Accordingly, there would be no large trucks driving up Circle Oaks Drive to deliver equipment, which was another source of noise and vibration accounted for in the original EIR analysis, which results in a more conservative analysis.

Impact 4.8-2 of the EIR finds that 775 feet is the safe distance for blasting. As discussed on page 4.8-13 of the Draft EIR:

"At 775 feet from a residential sensitive receptor, blasting would generate 0.1 PPV groundborne vibration, which does not exceed the Caltrans threshold of 0.1 PPV for residences. Therefore, blasting that occurs greater than 775 feet from an existing residence requires no additional mitigation.

The only rock formation that may require blasting is the Sonoma Volcanics formation. Blocks 15, 16, and 68 are the only blocks within 775 feet of the Circle Oaks neighborhood that are underlain by Sonoma Volcanics. The ECP was revised to include a condition prohibiting blasting in these blocks. In addition, this limitation is required in Mitigation Measure 4.8-2:

Mitigation Measure 4.8-2: Blasting within 775 feet of a residence exceeds Caltrans significance thresholds for vibration. Therefore, no blasting shall occur within vineyard blocks 15, 16, and 68."

It should be noted that Block 68 has been removed from the Project through adoption of the Reduced Intensity Alternative.

Refer to the response to Appeal Ground No. SC19 regarding rock crushing operations.

Appeal Ground No. COCWD17: Appellant claims the EIR overestimates the degree of mitigation provided by the proposed sound barriers; noise impacts remain significant. The EIR concludes that a noise barrier will reduce noise a minimum of 15 dBA, resulting in a reduction to 74 dBA. Appellant claims that the most a noise barrier can practically reduce noise is by 15 dBA, but is more likely to provide only 6 to 8 decibels of shielding, depending on the height of the source noise in relation to the height of the receiver and the height and location of the barrier.

Staff Response: As discussed in Final EIR Response to Comment O9-52, noise barriers that block line-of-sight between a noise source and noise receiver typically provide a 5 dBA reduction. Sound walls taller than noise sources may be necessary. However, Mitigation Measure 4.8-1 only requires these sound walls for construction that occurs within 150 feet of a sensitive receptor, as that is the distance the EIR found would cause a significant noise impact. As discussed in the response to Appeal Ground No. COCWD14 above, the distance between the closest vineyard block in the final 209-acre project and the nearest sensitive receptor has increased to 475 feet. At 475 feet distance, the loudest construction equipment would generate noise of approximately 65 dBA, Leq. Therefore, sound walls will not be required during construction of the Walt Ranch Project as currently approved because no sensitive receptors are within 150 feet of project construction activities.

Appeal Ground No. COCWD18: Appellant contends the Final EIR fails to adequately respond to comments regarding road access, noise impacts, and potential road failure.

Staff Response: The County has made a good faith effort to adequately respond to all comments as evidenced by the Final EIR, Response to Final EIR Comments memo, and the staff reports provided to the Board. Responses to comments need not be exhaustive; they only need to demonstrate a good faith, reasoned analysis. (CEQA *Guidelines* §15088(c).; *Towards Responsibility in Planning v. City Council* (1988) 200 Cal.App.3d 671.) A general response to a general comment is sufficient. (*Paulek v. Department of Water Resources* (2014) 231 Cal.App.4th 35.) Please refer to Final EIR General Response 19 and Responses to Comments O9-9, O9-51, O9-58, O11-7, O11-8, and O11-9 regarding impacts to roads and noise.

Appeal Ground No. COCWD19: Appellant claims that the alternatives analysis failed to provide sufficient data to enable the comparison of the alternatives' water demand,

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sedimentation, and runoff, to that of the Project, therefore it is impossible to compare the alternatives to the Project on these issues. (Guideline §15126.6(d); *Laurel Heights Improvement Association v. UC Regents* (Laurel Heights I) (1988) 47 Cal.3d 376, 404.)

Staff Response: As addressed in General Response 20 in the Final EIR, CEQA *Guidelines* § 15126.6 requires that an EIR "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The Lead Agency determined a reasonable range of alternatives to be evaluated in an EIR and, consistent with CEQA, considered these alternatives within the context of achieving project objectives. Additionally, CEQA Guidelines § 15126.6 (b) requires consideration of alternatives that could reduce to a less-than-significant level or eliminate any significant adverse environmental effects of a proposed project, including alternatives that may be more costly or could otherwise impede the proposed project's objectives. The range of alternatives evaluated in an EIR is governed by a "rule of reason," which requires the evaluation of alternatives "necessary to permit a reasoned choice." Alternatives considered must include those that offer substantial environmental advantages over the proposed project and may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors. An EIR does not need to consider every possible alternative, but must consider alternatives that will foster informed decision-making and public participation.

Section 5.0 of the EIR presents three different alternatives to the Proposed Project: the No Project Alternative, Reduced Intensity Alternative, and the Multiple Resource Protection Alternative. Two additional alternatives, the Full Development Alternative and the Off-Site Alternative, were eliminated from further consideration because they either did not reduce significant environmental effects of the Proposed Project or were not considered feasible, consistent with CEOA *Guidelines* § 15126.6.

The EIR appropriately considered a reasonable range of alternatives that were determined with a consideration for each alternative's ability to meet the purpose and need while also reducing environmental impacts. The discussion in Section 5.3 of the EIR provides the reasoning as to why some alternatives were not further considered in accordance with CEQA *Guidelines* § 15126.6(b), which states that "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project." The only reasonable alternatives to the Proposed Project are to take no action, develop less vineyard acreage than the Mitigated Project in order to avoid a majority of sensitive natural plant communities, wildlife corridors, springs, streams, seeps, and wetland, or develop less vineyard acreage than the Proposed Project in order to avoid areas where two or more resources overlap and can be avoided in order to provide the most environmental benefits per acre of vineyard removed.

CEQA Guidelines § 15126.6 requires that a Draft EIR contain only "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." A full quantitative analysis for each environmental impact area for each proposed alternative is not required under CEQA or the CEQA Guidelines. A "matrix displaying the major characteristics and significant environmental effects of each alternative" is presented in Table 5-3 of the Draft EIR, pursuant to CEQA Guidelines § 15126.6. The comparative analysis that compares the levels of impact of each alternative with the Proposed Project provided in the EIR is sufficient under CEQA to allow "informed decision making and public participation."

Although some habitat fragmentation is inevitable should vineyards be constructed on the property, concentrating all vineyard development in one section of the project site is infeasible. Proposed vineyard blocks have been chosen based on multiple factors, including soils, topography, and farmability. Areas that are suitable for vineyards are not located in one particular area; rather, such areas are located at various sites across the property. The application focuses on those areas that are considered suitable vineyard areas. Additionally, the vineyard blocks as proposed are located in areas that can be developed with minimal environmental effects, including impacts to sensitive biological resources, erosion, and slope stability. Mitigation measures and development alternatives presented in the EIR will further reduce these environmental impacts in accordance with CEQA. While consolidating vineyard development in one section of the project site may increase the size of wildlife corridors, an impact that was already reduced to less-than-significant levels through incorporation of Mitigation Measure 4.2-6, it would likely increase other environmental impacts due to placement of vineyard blocks in sensitive plant habitat or unstable slopes. Although some habitat fragmentation may occur, it has been reduced to less-than-significant levels in accordance with CEQA and the CEQA Guidelines through the implementation of measures to maintain wildlife corridors and protect sensitive habitats and woodlands.

Appeal Ground No. COCWD20: Appellant argues that the EIR fails to adequately analyze the potential impact of the Project on COCWD's infrastructure underneath Circle Oaks Drive. These face potential disruption from prolonged traffic by heavy vehicles and by land slippage exacerbated by the massive vegetation changes proposed by this project.

Staff Response: See response to Appeal Ground No. COCWD11 and SC30 regarding potential impacts to COCWD infrastructure. Regarding vegetation changes as they relate to stability, the EIR's Geologic Investigation discussed the potential impact of tree removal on deep-seated landslide stability. Based on the latest research, up to an approximately 20 percent reduction of tree canopy cover of any given watershed has no observable effect on the groundwater volume. Therefore, 20 percent is a conservative threshold for predicting significant changes to the groundwater volume and therefore the reduction in slope stability of deep-seated slides.

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Since most of the watersheds extend beyond the site boundaries, the percentage of tree coverage area lost within the property boundaries is a conservative estimate when compared to the total watershed. The sub-watersheds that have the greatest tree coverage removed are those on Sonoma Volcanic bedrock within the Milliken Reservoir watershed area. Removal of trees over the stable Sonoma Volcanic bedrock would range from a 22 to 33 percent reduction in tree canopy. These volcanic upland areas of the site tend to have less dense tree cover and are more stable than the Franciscan Complex bedrock areas, which is what underlies Circle Oaks. More importantly, they are located in areas that do not pose a threat to Circle Oaks.

The tree cover removal on the largest areas of the site, primarily within the Capell Creek watershed and underlain by Franciscan Complex sandstones and shales, range from 0 to 10 percent. Therefore, the removal of trees on the Franciscan Complex geologic units, which also underlie Circle Oaks, is not anticipated to have a significant effect on slope stability.

Appeal Ground No. COCWD21: Appellant claims that the EIR fails to adequately evaluate the impacts of the Project groundwater pumping in combination with a prolonged drought. The EIR only considered an "average" drought year, not a severe drought scenario with extended periods of below average rainfall.

Staff Response: Possible effects of "prolonged drought" were discussed in the Final EIR Response to Comment O9-13, and as stated therein, "there is no universal definition of when a drought begins or ends, nor is there a state statutory process for defining or declaring drought." Hence, historic drought periods were determined for the Walt Ranch analyses using data published by Department of Water Resource (DWR), which included five droughts going back as far as 1928. Contrary to the Appellant's claims, an analysis was conducted of a "prolonged drought period," which was conservatively defined as six years, the longest drought period on record according to the DWR.

The analysis then reviewed the hypothetical pumping scenario for six years of irrigation demand of the Walt Ranch vineyard in combination with the groundwater demands of COCWD Well No.

1. The analysis found that the cumulative pumping during a prolonged drought "may cause groundwater levels to lower slightly, but removal of such a small percentage of groundwater from storage over an assumed six-year drought period of time is not expected to significantly affect groundwater levels beneath the subject property. In periods of above-average rainfall, the excess groundwater that might have been removed from storage over the assumed six-year drought period would be recharged." Further, the GWMMP requires ongoing monitoring and reporting of groundwater levels that insure that any impacts attributable to the project will be adequately mitigated, regardless of the impact of drought conditions.

Appeal Ground No. COCWD22: Appellant contends that the EIR used the wrong estimate for average rainfall, which should be consistent with the analyses in other projects, such as Napa

State Hospital. The EIR should be revised to use 35 inches of annual rainfall as a maximum, with the average rainfall of 24.78 inches presented in the Napa State Hospital EIR.

Staff Response: Data from the Napa State Hospital raingage were presented in the report from RCS because of the long period of record available from that gage, and to "help define trends in rainfall" by using those long-term data. However, as stated on page 8 in that RCS report, "Because this rainfall gage is located at a much lower elevation than the subject property, RCS also reviewed an isohyetal map of the County."³⁴ Rainfall varies with elevation in Napa County. For reference, the Napa State Hospital Gage is at an elevation of 58 ft above mean sea level (amsl). The elevations of the portion of the Walt Ranch property underlain by volcanic rocks range from 1,400 ft to 2,000 ft amsl.

The Appellant requests that groundwater recharge calculations for the Walt Ranch property should use the Napa State Hospital Raingage data, and not the isohyetal data. Due to the elevation differences between that gage and the Walt Ranch property, the use of such data would not be a realistic representation of the average rainfall that occurs at the Walt Ranch property, and would present a scientifically unsound analysis.

Several additional sources of rainfall data were reviewed in the Final EIR to corroborate the fact that the average rainfall that occurs at the Walt Ranch property is much higher than the long-term average rainfall recorded at the Napa State Hospital Gage, and that the average rainfall value used in the analyses was a conservative estimate for the Walt Ranch property. Specific raingage data include: 1) Atlas Peak Raingage; 2) PRISM Data Set; and 3) Walt Ranch Onsite Raingage(s). After reviewing the aforementioned data sources, it was determined that the data presented in the EIR and associated technical studies represented the most accurate and appropriate baseline data. The use of these data is consistent with the groundwater analyses conducted for other projects in the vicinity, including the neighboring Circle S Ranch.

Appeal Ground No. COCWD23: Appellant contends that the EIR does not consider the water demand of neighboring wells during a "worst case scenario." The EIR only considers four wells, with the closest more than 4,000 feet away.

Staff Response: It appears that the Appellant assumes the EIR only considers four wells because four wells were monitored during the pumping test. As explained in the Final EIR General Response 13 regarding the groundwater pumping test methodology, four wells were monitored during the 96-hour pump test of the onsite well WR-3. These four wells were the closest wells that were available for monitoring, and it should be noted that no water level drawdown was observed in those wells during the testing. This "real-world" data was then used

³⁴ RCS, 2014. Second Updated Report on the Results and Analysis of 96-Hour Constant Rate Pumping Test, Irrigation-Supply Well No. 3 for Walt Ranch in Napa County, California. Prepared for Hall Wines, LLC. April 2014.

to create a model of the local aquifer and calibrate the groundwater software. The values generated by this software were used to analyze potential impacts to other groundwater wells at varying distances, including the COCWD wells. As explained in the response to Appeal Ground No. COCWD1 above, assumed locations were used for the COCWD wells. As discussed in the Final EIR Response to Comment O2-1, COCWD was unresponsive to attempted contact from RCS in advance of the pumping test. However, as discussed in response to Appeal Ground No. COCWD1 above, COCWD eventually provided data to RCS on its wells and these wells were ultimately included within the analysis.

Appeal Ground No. COCWD24: Appellant contends that the EIR does not identify the source of water to be used for construction activities, including fugitive dust suppression.

Staff Response: As stated on page 3-30 in the Draft EIR, "The Proposed Project's water supply and infrastructure have been designed to utilize groundwater..." As addressed in Final EIR Response to Comment O9-17, any land grading generates dust. However, not all of these landclearing activities associated with the Walt Ranch Project would occur at one time. Rather, landclearing is expected to span a period of approximately four years, as stated in Section 3.4.6 of the Draft EIR. Mitigation Measure 4.1-1 requires the project applicant to implement a fugitive dust abatement program during construction. This program involves a variety of methods to reduce fugitive dust emissions including covering haul trucks and limiting traffic speeds, but none of the measures involves the use of water for dust suppression. While water may be used for dust suppression during construction, any assumption that significant quantities of water will be used for dust suppression during construction is incorrect.

The project will occur over multiple phases so including water use for dust suppression in the estimate of overall groundwater demand would be inappropriate. Water demand is estimated based on full installation of vineyards. This water demand is estimated at 145 af per year, which encompasses water use for irrigation and frost control as discussed in Section 4.6.1-4 of the EIR. If water is used for dust control, it would not occur at the same time as water use for irrigation or frost control. Rather, water use for dust control would occur during construction; in subsequent years, after a vineyard block is planted, water use will occur for irrigation and frost control. Adding these numbers together assumes that all these water demands (dust suppression, irrigation, and frost control) will occur during the same calendar year for a given vineyard block. That assumption is incorrect.

Water use for dust control would be a fraction of the water used for irrigation and frost control. As noted above, water use for irrigation and frost control is estimated at 145 af per year for 209 acres of vineyards at build-out of the full Walt Ranch Project. Thus, irrigation and frost control demand is approximately 0.69 af per year per acre. Water use for dust suppression and vineyard construction is estimated at 0.04 af per year for each acre of disturbed area.³⁵ Therefore, water use for dust suppression that may occur during construction would be less than that required by the vineyard on the same acreage. Therefore, the analysis of water use in the EIR that uses peak vineyard demand is conservative for the years in which construction will occur.

Appeal Ground No. COCWD25: Appellant argues that the estimates of groundwater use for operation of the vineyard are inconsistent with estimates in similar vineyard projects. The EIR estimates water demand at a rate of 68 gallons per vine per year, compared to the estimates used for the Upper Range Vineyard Project, which ranged from 104 gallons per vine per year to over 260 gallons per vine per year. The estimates used in this project are unreasonably low.

Staff Response: This was specifically addressed in Final EIR Response to Comment O9-18. Section 3.4.3 and 4.6.1-4 of the Draft EIR calculate the water demand of the Walt Ranch Project at 213.5 af per year, based on 347 acres of vineyard, a vine density of 2,420 vines per acre, and an irrigation rate of 68 gallons per vine. The estimated water demand for the Walt Ranch Project is consistent with the Water Availability Analysis (WAA) – Guidance Document approved by the County on May 12, 2015. Appendix B to the WAA provides estimated water demand for various land uses. The estimated water demand for vineyards is:

Irrigation Only 0.2 to 0.5 acre-feet per acre per year

Heat Protection 0.25 acre-feet per acre per year

Frost Protection 0.25 acre-feet per acre per year

(WAA, Appendix B, p. 19.)

The estimated water demand uses the high end of the range for irrigation -0.5 af per year. By assuming the high end of the range for irrigation water, the estimate is conservative and may overestimate actual irrigation demand. The estimated water demand also assumes 0.25 af per acre per year for frost protection for a limited number of acres, which is consistent with the WAA. The project does not propose to use water for heat protection.

The estimated irrigation demand is consistent with data concerning irrigation demand for the Circle S property, which is immediately adjacent to the Walt Ranch property. The Final EIR for the Circle S project states: "[T]he property currently uses 13.5 acre-feet (af) of water to irrigate 27 acres of vineyard. For the irrigation of an additional 378 net acres, the project proposed to increase water use to a total of approximately 205.6 af per year for the first three years (approximately 0.5 af per acre) and decrease water use to about 130 af per year after the third year as the vines mature (approximately 0.3 af per acre)." (Circle S, Final EIR, p. 4-22.) The

³⁵ Berndt Ackerstrom, North Counties Development, personal communication 4/16/15.

Circle S property is located adjacent to Walt Ranch, and is therefore considered a reasonable comparable vineyard for purposes of estimating water demand.

The Appellant states that estimated water demand is lower than the estimated water demand provided for other vineyard projects, and states water should be estimated on a per-vine basis. The estimate provided in the EIR is consistent with the WAA, provides a reliable basis for estimating demand, and is consistent with other projects in the vicinity. It is possible that other vineyard projects have used different metrics, and arrived at different estimates of irrigation demand. There may be reasons why differing metrics or estimates have been used at other times. These reasons may include irrigation methods, site constraints with respect to groundwater, viticultural philosophy with respect to irrigation, or evolving practices with respect to conserving groundwater. The issue here is not whether other approaches might be used, but whether the estimate provided in the EIR is considered reasonable.

The County published the Draft EIR for the Upper Range project over ten years ago in December 2006. The Upper Range EIR estimated water demand at 122 af per year for 175 net acres of vineyards, which translates to approximately 0.69 af per year of demand. This estimate is somewhat lower than, and generally comparable to, the 0.75 af per year (0.5 af per year for irrigation and 0.25 af per year for partial frost protection) total estimate for the Walt Ranch Project. Thus, the comment that estimated consumption at the Upper Range project was much higher than the estimate at Walt Ranch is incorrect.

Appeal Ground No. COCWD26: Appellant claims that the EIR does not adequately identify or mitigate the impacts of earth-disturbing activities on the water quality of the Napa River, Capell Creek, Putah Creek, and Lake Berryessa. The mitigation measures included in the EIR do not adequately address sediment that will be generated during construction that may be subject to erosion via stormwater runoff. The EIR fails to fully acknowledge the applicability of the California Construction General Permit, determining that the Permit does not apply to the project because it is agricultural in nature. Appellant claims that road construction and blasting operations make the Permit applicable.

<u>Staff Response:</u> See response to Appeal Ground No. COCWD5 regarding water quality in the Napa River watershed (Milliken Creek subwatershed) and Putah Creek/Lake Berryessa watershed (Capell Creek subwatershed).

Earth-disturbing activities may result in erosion during construction of the Walt Ranch Project, as acknowledged throughout the EIR and ECP. However, the project includes erosion control measures to provide for stormwater management requirements to ensure there are no significant impacts to erosion, sedimentation, or peak runoff increases (refer to Section 4.4 and 4.6 of the EIR, respectively). Temporary erosion control measures used during construction can include waterbars, straw wattles, straw mulching, and other practices as needed. The measures would be maintained in a functional condition throughout the rainy season. Waterbars would be

constructed such that they direct surface flow off vineyard avenues into drop inlets or vegetated vineyard areas. Additionally, construction will not occur during the rainy season.

As discussed in Section 4.6.2-2 of the EIR and Response to Comment A2-01, agricultural projects, including the construction of the Walt Ranch Project, are exempt from the Construction Stormwater General Permit mentioned in this comment. As discussed in Section 3.4 of the EIR, the Walt Ranch Project will require the maintenance and improvements of some roads on the project site. These roads are an integral part of this agricultural project and the applicant could not access or operate the proposed vineyards without these roads. More importantly, the sole purpose and use of these roads is for agriculture. As a result, the construction and maintenance of these roads are not subject to the Construction Stormwater General Permit.

Appeal Ground No. COCWD27: Appellant argues that the EIR improperly overestimates the groundwater storage capacity of the Sonoma Volcanics underlying the site, which results in an inadequate analysis of the impacts of the Project on groundwater availability. Appellant claims that calculated values of aquifer transmissivity and storage coefficients by various models are discarded and inexplicably replaced with empirically derived values. Cited values for hydraulic parameters in text don't agree with values in existing tables in the EIR and thus, do not provide realistic insight into the potential impacts of groundwater pumping.

Staff Response: Section 4.6.1-4 of the EIR defines the specific yield as the volume of groundwater that can potentially be extracted from the saturated portion of the fractured volcanic rocks beneath the subject property. Specific yield of the Sonoma Volcanics can vary greatly depending on many factors, including the degree of the fracturing, the size of the fracture openings, and the interconnection of the fractures within the rocks. A conservative estimate by Kunkel and Upson for the specific yield of the Sonoma Volcanics ranges from 3 percent to 5 percent. ³⁶ Based on studies prepared by RCS for other nearby properties underlain by Sonoma Volcanics, an estimate for specific yield of 2 percent was used, providing an even more conservative estimate than the 3 to 5 percent figure estimated by Kunkel and Upson.

By using a specific yield of 2 percent to estimate the volume of groundwater in storage beneath the property, the investigation errs on the side of understating specific yield, and therefore reflects a conservative analysis.

<u>Appeal Ground No. COCWD28:</u> Appellant claims the EIR inadequately analyzed the availability of groundwater storage, using a "conservative" estimate of total groundwater storage that is very large. The EIR assumes that all of the water stored in the area can be accessed, but in reality, only 10 percent of the Sonoma Volcanic groundwater storage capacity is useable. The

³⁶ USGS, 1960. Geology and groundwater in Napa and Sonoma Valleys, Napa and Sonoma Counties California. Kunkel, F. and J.E. Upson. 1960. USGS Water Supply Paper 149.

current well spacing, presence of fault segregated aquifers, and non-uniform distribution of groundwater in the Sonoma Volcanics make it difficult, if not impossible, to dewater the saturated material. Thus, the conclusion that the overdraft on the Project site would have a less than significant effect on the groundwater storage is not properly analyzed in the EIR.

Staff Response: The assumptions presented by the Appellant are based on an incorrect interpretation of Johnson's 1977 study of groundwater conditions in the MST.³⁷ Therein, Johnson estimated that only 10 percent of the Sonoma Volcanic groundwater storage capacity is useable (accessible) storage, but the entire passage makes clear that Johnson is referring to the groundwater storage units in the MST area as listed in Table 3 therein, and not the overall ability of the Sonoma Volcanics to store groundwater. The Walt Ranch property is not located within the MST groundwater deficient area, as explained response to Appeal Ground No. LRC10.

Refer to response to Appeal Ground No. COCWD27 above regarding the estimate of groundwater in storage presented in the EIR.

Appeal Ground No. COCWD29: Appellant contends that the EIR inadequately assessed the impacts of water use by overestimating the recharge rates. The EIR assumes that 7 percent to 9 percent of annual rainfall goes to deep percolation. The problem with applying the 9 percent recharge rate is that the rate reflects a watershed-wide average, incorporating the high stream and volcanic tuff infiltration rates in the lower elevations of the eastern hills with much lower infiltration rates representative of the higher elevation volcanic terrain. The proper analysis would show a recharge rate that is less than half of the estimated annual project groundwater demand.

Staff Response: The Appellant states that the tuffaceous member of the Sonoma Volcanics in the southern portion of the Milliken Creek watershed is the principal water-bearing member of the Sonoma Volcanics, with higher infiltration rates than the volcanic flow-type rocks. As stated in the 2015 RCS Response to Comments Memorandum, "in the last 32+ years of providing hydrogeologic services in Napa and Sonoma counties, and monitoring the drilling, design, construction and testing of a large number of water wells in the Sonoma Volcanics, RCS has observed very high flow rates from wells constructed into the volcanic flow rocks, scoria, and welded ash deposits (not the tuffaceous members) of the Sonoma Volcanics. Further, as described above, the Walt Ranch wells are constructed into the flow rocks and not the tuffaceous strata of the Sonoma Volcanics. As shown on Table 3A of the RCS 2014 report, each of the Walt Ranch wells was capable of producing at rates ranging from 50 gpm to 300 gpm (RCS 2014). Well WR-3 was pumped at a rate of 300 gpm and displayed a specific capacity of 3.6

³⁷ USGS, 1977. Ground-water hydrology of the Lower Milliken-Sarco- Tulucay Creeks Area, Napa County, California. Johnson, M.J. USGS Water-Resources Investigations 77-82.

gallons per minute per foot of drawdown (Table 3A, Appendix Q, RCS 2014)."³⁸ See response to Appeal Ground No. LRC9 regarding the appropriate use of 7 to 9 percent as the deep percolation rate.

Appeal Ground No. COCWD30: Appellant claims that the EIR's conclusions on site-specific and cumulative impacts of groundwater withdrawals are not substantiated by evidence. The EIR admits that there is no regional impact analysis on ground water supply and that it is infeasible to predict long-term impacts associated with groundwater extractions. The lack of analysis or inability to complete an impact assessment does not constitute the conclusion of "no potential impact." The impact should be considered potentially significant until demonstrated otherwise.

Staff Response: As discussed in response to Appeal Ground No. COCWD9, the site-specific groundwater pumping test utilized theoretical monitoring points that coincided with the estimated locations of the COCWD vertical and horizontal wells. Refer to response to Appeal Ground No. COCWD1 regarding the regional groundwater demand from the Walt Ranch Project, Circle S Ranch, and COCWD. Substantial analysis was conducted in accordance with CEQA *Guidelines* §15126.2, and Impact 4.6-4 of the EIR found this to be a potentially significant impact. As such, Mitigation Measure 4.6-4 required preparation and adoption of a GWMMP to minimize the potential impacts to offsite wells. Refer to response to Appeal Ground No. CBD33 regarding the GWMMP.

Appeal Ground No. COCWD31: Appellant contends that the EIR proposes invalid mitigation measures associated with potential impacts of groundwater pumping. The EIR proposes a monitoring program, but monitoring itself is not mitigation. The EIR fails to identify triggers and corresponding management/operational changes should the groundwater pumping exceed the trigger amount.

Staff Response: Appeal Ground No. COCWD31 raises very similar issues to those raised by Provencher & Flatt, LLP, in their April 4, 2016 letter that included comments on the Final EIR. Responses to these comments are included on pages 11 through 13 of the 2016 RCS Memo.³⁹ Specific mitigation measures that include mitigations for loss of water are listed on page 13 of the GWMMP. A description of the process needed to develop an appropriate trigger point by the County is described on page 12 of the GWMMP and discussed further in response to Appeal Ground No. LRC19. Further, the trigger point is to be based on the significance threshold used in the Draft EIR and incorporated into the GWMMP as the performance criteria for establishing the trigger point based on well specific information.

³⁸ RCS, 2015. Technical Memorandum RE: Response to Comments on the Walt Ranch Draft EIR. August 13, 2015. Included as Appendix O to the Final EIR.

³⁹ RCS, 2016. Technical Memorandum RE: Response to Comments on the Walt Ranch Final EIR. June 10, 2016. Included as Attachment C to the Responses to Final EIR Comments Memorandum.

As discussed in the response to Appeal Ground No. LRC13 above, the EIR utilizes the qualitative significance threshold provided in CEQA *Guidelines* Appendix G relating to groundwater resources, 40 requires the development of a GWMMP which requires specific quantitative thresholds or trigger points, and provides eight different potential mitigation options in the event that impacts do occur to offsite wells. This mitigation measure, in addition to being in compliance with CEQA *Guidelines* § 15126.4, is also consistent with and similar to other groundwater mitigation measures for nearby vineyard projects in the vicinity, including the neighboring Circle S Ranch.

Appeal Ground No. COCWD32: Applicant claims the EIR does not provide adequate assessment of the potential project-induced changes in the volume and timing of water supplies to wetlands, riparian corridors, and the associated biological habitats. There is no comprehensive monthly or seasonal water budget to fully quantify runoff or groundwater recharge throughout the year. The seasonal distribution and duration of surface water flow rates are an integral variable in the support of existing wetland and riparian vegetation and wildlife.

Staff Response: This was addressed in Final EIR Response to Comment A7-10. The Walt Ranch property is not located within a groundwater basin as defined by DWR and is not included as part of Basin 2-2.01, the "Napa –Sonoma Valley Groundwater Basin" by DWR.⁴¹

The proposed groundwater pumping will not affect surface water flows in Milliken Creek, as this system of fractured volcanic rocks is disconnected from the surface flow. In general, larger creeks or streams are more likely to have alluvial deposits, subsurface channels, and connections to groundwater. However, the main stem of Milliken Creek on the property does not include those features due to its location at the headwaters of the watershed, which is why it is highly unlikely that any of the small tributaries or swales feeding it would have those groundwater-dependent features. Due to the fact that the project would not interrupt any significant connections between the groundwater and surface water features, there would be no significant impacts to salmonids as a result of groundwater pumping.

As discussed in the Final EIR Response to Comment A7-10, the United States Geological Survey (USGS) Circular 1376 generally discusses how groundwater pumping may affect surface water flows (e.g., when groundwater pumping occurs in an aquifer with a direct hydraulic connection to a stream).⁴² USGS Circular 1376 is a document that describes a number of varied

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⁴⁰ A significant impact would occur if the project would "[s]ubstantially deplete groundwater supplies, or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table."

⁴¹ Department of Water Resources (DWR), 2003. San Francisco Bay Hydrologic Region. *California's Groundwater Update 2003*. Bulletin 118. California Department of Water Resources.

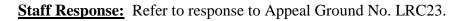
⁴² USGS, 2013. USGS Circular 1376. Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow.

geologic conditions in which groundwater and surface water interaction occurs (a situation in which the water table is in direct contact with the surface water in a stream or river). In the document, USGS finds that "connected systems" occur in alluvial-type aquifers. Specifically, a connected system requires two components, "first, that the stream and underlying aquifer remain hydraulically connected by a continuous saturated zone, and second, that the stream does not become dry." Milliken Creek traverses a small portion of the southern part of the Walt Ranch property. The portion of the creek that traverses the property is ephemeral, meaning that the creek does not flow year round, and is dry for a significant portion of each year.

Furthermore, Walt Ranch Well WR-5 is located approximately 1,000 feet northeast of the closest channel of Milliken Creek. RCS reviewed the water level elevation within the well and within Milliken Creek for the Final EIR (refer to Response to Comment A7-9) and found that the elevation of the water surface measured in Well WR-5 is higher than the bottom elevation of Milliken Creek. RCS did not observe flow in the creek when the elevation of the water surface in Well WR-5 was higher than the bottom of the creek. This fact demonstrates that Milliken Creek is not connected to the groundwater table by a continuous saturated zone in the vicinity of Well WR-5. Because the elevation of the water surface in the well is higher than the elevation of the bottom of the creek, if there were such a connection, then water would have been observed in Milliken Creek. Since Milliken Creek does not exist in an alluvial aquifer in the vicinity of Walt Ranch, groundwater pumping will not impact surface water flows.

Hydrologic modeling was performed using accepted methodology and the results indicated no further analysis was required. The seasonality of precipitation is described in various sections of the Draft EIR, including at pages 4.2-4 and 4.6-1. Wetlands or other surface water features are described in detail in Section 4.2. Surface and groundwater impacts are described in Section 4.6. Given the disconnected nature of the Sonoma Volcanics from the surface features on the property, further monthly or seasonal water budgets would not provide any additional substantive information that would affect the significance of impacts which were determined in compliance with CEQA *Guidelines* § 15126.

Appeal Ground No. COCWD33: Appellant contends that the EIR includes an inaccurate analysis of long-term changes in surface water runoff. The EIR's conclusion that the development activities, including deep soil-ripping, will reduce runoff rates is based on an incorrect analysis of the long-term effects of soil-ripping on infiltration rates. In fact, any increased infiltration from soil-ripping is short-lived and soil will recompact over a relatively short period, resulting in soil with infiltration rates similar to or lower than the pre-project conditions.



⁴³ Ibid.

Part II – Circle Oaks Homes Association/Circle Oaks County Water District November 10, 2016 Appeal Ground No. COCWD34: Appellant claims that the EIR does not properly consider the cumulative impacts of sedimentation and erosion on localized "hot spots" within the project site. The EIR conclusions regarding project-induced changes in erosion potential is based on summing vineyard block subtotals within the Milliken and Capell Creek watersheds and presenting the total (net) change for each watershed. However, this type of lumping of results masks localized impacts, which when considered alone, could be considered a significant impact. A more thorough review of changes in soil loss results indicates localized increases in erosion potential from multiple vineyard blocks that contribute drainage and sediment to onsite Corps designated waters and wetlands, which host potentially sensitive biological resources.

Staff Response: As discussed in the response to Appeal Ground No. SC21, pre- and post-project sedimentation calculations have been performed for each proposed vineyard block, and then organized by watershed. Table 4.4-2 shows that the total soil loss within the Milliken Reservoir watershed portion of the property will decrease from 615.87 tons per year under current conditions to 347.82 tons per year, a decrease of approximately 43.61 percent. This information appears at the top of page 4.4-20 of the EIR, and represents a summary of the block-by-block soil loss calculations set forth in Appendix O to the EIR. These calculations have been verified by the Napa County Engineering Division staff through field inspection of existing conditions and statistical analysis of original calculations.

Although the method of analysis utilizes larger watershed-based compliance (consistent with Napa County Code Chapter 18.108), the EIR does not ignore localized "hot spots" within the property. Page 4.2-117 of the EIR specifically analyzes the potential for localized increases to impact waters of the U.S. and important aquatic habitats for listed wildlife species:

"In addition, as discussed in Section 4.4 Geology and Soils, there will be some localized increase in soil erosion from certain blocks (please see Table 4.4-2). Although the overall sedimentation from the project site is decreased in post-project conditions in both watersheds, these localized increases could have an impact on wildlife that utilize aquatic habitat in the vicinity of those vineyard blocks. This would be a significant impact. However, riparian buffers have been shown to intercept and trap as much as 75 to 100 percent of sediment in runoff."

Furthermore, as stated in Final EIR Response to Comment O9-44, the erosion prediction calculations are based on the Universal Soil Loss Equation (USLE) which is a method of predicting soil particle displacement. This approach provides a conservative estimate in this case because the USLE does not address sediment delivery; rather, the analysis assumes that 100

⁴⁴ Grismer, M.E., A.T. O'Geen, D. Lewis, 2006. Vegetative Filter Strips for Nonpoint Source Pollution Control in Agriculture. Division of Agriculture and Natural Resources, University of California Publication 8195. Available online at: anreatalog.ucdavis.edu/pdf/8195.pdf

percent of the estimated soil loss will be delivered to receiving waters and wetlands. The project incorporates buffers of 50' or more between proposed vineyard areas and all Waters of the U.S. and wetlands. These buffers will result in reduced sediment delivery to streams or wetlands located on or adjacent to the site. The USLE calculations do not take into account reduced sediment delivery associated with these buffers.

As stated in Section 4.6.3-1 of the Draft EIR, the Natural Resources Conservation Service and the University of California, Division of Agricultural and Natural Resources recommend 50-foot wide vegetated buffers for stream and wetland protection because under most conditions, this buffer width is generally adequate to provide enough vegetation to entrap sediments and soils, and filter chemicals adequately by facilitating degradation within buffer soils and vegetation.⁴⁵ However, buffers may be larger than 50' based on Napa County stream setback requirements.

In addition, as a result of mitigation measures contained in the Draft EIR and the final ECP design, receiving waters and wetlands will have increased buffers as follows:

Vineyard Block	Increased Buffer
Block 16B1	Greater than 100'
Block 16B2	Greater than 70'
Block 37D	Eliminated from project
Block 37E	Eliminated from project
Block 38	Greater than 150'
Block 53	Greater than 80'
Block 19B	Greater than 80'
Block 18A2	Greater than 80' (wetlands)
Block 29A2	Eliminated from project
Block 29B2	Eliminated from project

Furthermore, as discussed in Final EIR Response to Comment O9-44, the Applicant agreed to implement the following additional measures to further protect individual Waters and Wetlands, which have been incorporated into the final ECP:

Vineyard Block	Additional Measures
Block 16C1	Installation of straw wattles every year in areas
	where the buffer is less than 70 feet
Blocks 17A, 17B	Installation of straw wattles every year in areas
	where the buffer is less than 70 feet. Increase
	vineyard cover crop percentage to 80 percent
Block 17C	Eliminated from project
Blocks 34A3 & 34C	Eliminated from project

⁴⁵ USDA, 2000. Conservation Buffers to Reduce Pesticide Losses. March 2000.

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Block 49	Eliminated from project
Blocks 36A & 36B	Relocate drainage outlet to level spreader in Block 37 F. Increase size of level spreader.
Block 19A4	Reduce block size in order to increase buffer to
Blocks 18A1 – 18A4	70 feet Reduce block size in order to increase buffer to
	70 feet in some areas. Installation of straw wattles every year in areas where the buffer is
	less than 70 feet
Blocks 31A and 31B	Eliminated from project.
Block 29A1	Reduce block size in order to increase buffer to 70 feet

These increased buffers and additional BMPs will further reduce the possibility of potential impacts to a less than significant level.

Appeal Ground No. COCWD35: Appellant claims that many proposed erosion control measures are poorly suited for the project site or will result in increased downslope erosion from collection of runoff in drainage systems. Many of the erosion control elements are located on steep slopes and water draining through them can become re-concentrated a short distance downslope. Also, the pipe level spreader erosion control measure seems poorly suited to the project site, as they are designed to be installed on very flat slopes.

Staff Response: The ECP was designed by licensed civil engineers, was reviewed for technical adequacy by Napa County RCD and Napa County engineers, and was analyzed for stability issues by a licensed engineering geologist. Several commenters on the Draft EIR brought up perceived issues with the use of the pipe level spreader (a common vineyard erosion control feature in Napa County) because of a Caltrans report that evaluated pipe level spreaders as temporary construction BMPs for roadway projects, which is a much different use than what is proposed in the Walt Ranch ECP. In addition, this report was based only on a literature review, as Caltrans was unable to field test any installations. At least one source cited in the Caltrans report listed acceptable slopes for installation at 5:1 (H:V), which equates to a 20 percent slope. As stated in the 2002 Caltrans report:

This report summarizes a study . . . Caltrans conducted to assess the feasibility and effectiveness of the level spreader as a temporary construction best management practice (BMP). The evaluation consisted of a literature review and an assessment of 42 Caltrans construction sites to determine which, if any, were suitable for implementation of a level spreader BMP. Based on the results of literature and site reviews, the study team has

concluded that the level spreader BMP is not suitable for use as a temporary construction site BMP...⁴⁶

Although Caltrans determined that level spreaders were not appropriate for use in their particular circumstances, the type of level spreader specified in the Walt Ranch ECP is a variation on a design first put forth by engineers at the Natural Resources Conservation Service, Napa Field Office, approximately 20 years ago. This design has been modified over the years based on the results of actual field installations and utilized on projects designed by multiple engineering firms. They are permanent structures for runoff control and have been successfully installed and evaluated on over 15 vineyard projects in Napa County.⁴⁷

The installation locations chosen for level spreaders were evaluated in the field during project design and deemed appropriate by qualified professional engineers. The design was reviewed and approved by the County's technical consultant, Napa County RCD.

<u>Appeal Ground No. COCWD36:</u> Appellant argues that the EIR fails to establish a minimum safe distance for blasting. The EIR fails to state exactly how close blasting may occur to the residences.

Staff Response: Refer to the response to Appeal Ground No. COCWD16. As discussed further therein, Impact 4.8-2 of the EIR finds that 775 feet is the safe distance for blasting and Mitigation Measure 4.8-2 ensures that blasting does not occur within blocks that are within 775 feet of residences.

<u>Appeal Ground No. COCWD37:</u> Appellant contends that the EIR did not adequately analyze growth-inducing impacts of the Project. The EIR did not analyze the potential development of the Project's parcels into individual vineyard sites.

Staff Response: It may be helpful to first define "growth inducement" as it relates to CEQA. CEQA *Guidelines* § 15126.2 (d) defines a growth inducing impact as something that "could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)."

As stated in Section 3.3 of the Draft EIR, the objective of the Walt Ranch Project is to develop vineyard on the Walt Ranch property. The entire project site is zoned Agricultural Watershed

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⁴⁶ Caltrans, 2002. CTSW-RT-02-020 Final Report: Level Spreader Effectiveness Evaluation. May 2002. Available online at: http://www.dot.ca.gov/hq/env/stormwater/pdf/CTSW-RT-02-020.pdf. Accessed August 18, 2002.

⁴⁷ Dave Steiner, former Senior Soil Conservationist for NCRCD, personal communication 4/18/15; PPI Engineering project records, 2015

(AW). Land uses allowed in an AW zone without a use permit include agriculture, one single family dwelling per each legal lot, small residential care facilities, and other uses as discussed in Section 3.1 of the Draft EIR. The proposed development of vineyards on the property is an agricultural use and does not require a use permit, but rather requires the approval of an Erosion Control Plan. As stated above, the purpose of the Walt Ranch Project is to develop vineyards on the Walt Ranch; the EIR does not analyze the development of homes on the parcels because that is not proposed by the project applicant and not a reasonable foreseeable future development. No other reasonably foreseeable future development would occur on the project site beyond what is described in the EIR. Furthermore, the planting of vineyards on the property would not induce growth, as it is not removing an obstacle to population growth or rezoning the property to allow higher-density residential land uses.

In accordance with CEQA Guidelines § 15126.2, the potential for growth inducement attributable to the Walt Ranch Project is discussed in Section 6.2 of the Draft EIR. As discussed in Section 3.4.1-6 of the Draft EIR, there is a 21-mile existing road network on the property that provides access to all 35 legal parcels. The Walt Ranch Project would realign and upgrade some of the roads in accordance with a Long-Term Road Management Plan, included as Appendix C of the Draft EIR. However, the Walt Ranch Project would not provide new access to any parcels that would constitute the removal of an "obstacle to population growth" as defined by CEQA Guidelines § 15126.2 (d). Further, the vineyard road improvements have not been designed to meet the County Road and Street Standards for residential uses, but rather the roads will be upgraded to provide agricultural access. Some of these agricultural roads would be graveled to reduce erosion, but none would be paved roadways as stated by the Appellant.

The Walt Ranch Project includes infrastructure to facilitate the development of vineyards as listed at pages 3-7 and 3-8 of the Draft EIR. These improvements include the development of a water supply in order to serve the vineyard's need for water for irrigation and frost protection. The proposed water supply is designed to provide the water needed for development of the property as vineyards; the water supply is not designed to serve another purpose, such as water supply for residential uses. In this respect, the project does not remove an obstacle to growth. Further, pursuant to the County Groundwater Conservation Ordinance, a discretionary permit would be required to modify the proposed water supply system to provide any water for residential use to more than one contiguous parcel. (See County Code Section 13.15.030(A)(1)(b).)

The Walt Ranch Project will provide employment for seasonal and permanent workers. The number of anticipated jobs is described in Section 3.4.5 of the Draft EIR. It is estimated that there will be approximately 80 workers on site during the harvest season. As explained in Section 6.2 of the EIR, this number of workers is not expected to result in significant growth inducement because these workers will be seasonal, and the workers are expected to come from the existing reservoir of available workers in the area. In particular, this incremental increase in the number of seasonal jobs in the region will not create a significant demand for additional housing. Many of these workers already work for the Applicant on other vineyards in the area, and some of them would be the same workers who come to the site to work on the existing vineyards on the Walt Ranch property that were planted in 2006 on areas having natural slopes of less than 5 percent..

The vineyard blocks have been designed based on their suitability to provide high-quality wine grapes, to be "farmable" in terms of access, and to avoid steep slopes, riparian corridors, and sensitive habitat. The vineyard blocks have not been designed to provide locations for possible future home sites. In this respect, the project is not like other instances in which the courts have held that an initial application was clearly designed for some future phase of development, and thus was expected to induce growth. For example, in one case, the applicant proposed to develop a stand-alone golf course, but the locations of future homes around the golf course could readily be identified; under those circumstances, the county had to analyze the potential development that the golf course might induce (Stanislaus Audubon Society, Inc. v. County of Stanislaus (1995) 33 Cal. App. 4th 144). In this case, there is no evidence that development of a vineyard in this location will induce residential development around the vineyard blocks, nor is there evidence that the vineyard blocks have been designed with that possibility in mind.

One single family residence is an authorized use on land zoned "Agriculture / Watershed" (AW) (Napa County Code, § 18.20.020(a)). The fact that a single-family residence is a permitted use under the County's zoning ordinance does not mean that such a unit is part of the Walt Ranch Project for CEQA purposes. In Save Round Valley Alliance v. County of Inyo (2007) 157 Cal.App.4th 1437, the county prepared an EIR for a 27-lot subdivision. Under the County's zoning ordinance, each lot owner could apply for a permit to construct a second unit. The petitioners argued that the county should have anticipated these second units and, accordingly, analyzed a 54-unit project, rather than a 27-unit project, on theory that these second units were a foreseeable consequence of approving the subdivision. The Court disagreed, concluding that "the possibility that future lot owners will or will not build a second unit is extremely uncertain, and any impact of such second units is highly speculative." (157 Cal.App.4th at p. 1450.)

The same conclusion is appropriate here. The Applicant seeks County approval of an erosion control plan in order to develop vineyards on the site. The Applicant has not asked the County to issue a building permit for one or more single-family residences. There is no evidence that the Applicant has designed the project to facilitate residential development. There is no evidence that, elsewhere in the region, vineyard projects are being proposed as a catalyst for future residential development.

Appeal Ground No. COCWD38: Appellant argues the EIR failed to adequately study the geotechnical conditions of Circle Oaks Drive for use by heavy construction equipment and traffic.

Staff Response: The EIR sufficiently analyzed any potential impacts to Circle Oaks Drive due to heavy equipment and increased traffic due to the project. Construction traffic and subsequent operational traffic due to the Walt Ranch Project could increase the rate of road wear on SR-121 and Circle Oaks Drive, as analyzed in Section 4.7 of the Draft EIR. Roads in the vicinity, such as SR-121, were constructed to accommodate a mix of vehicle types, including heavy trucks. Trucks utilized during construction and operation of the Proposed Project must comply with the California Vehicle Code (CVC), per Mitigation Measure 4.7-4. The CVC regulates legal weight and width limits of loaded trucks in order to minimize adverse impacts to roadways. Any extra legal loads needed for specialized deliveries shall be subject to special permit requirements from Napa County. These regulations are intended to minimize adverse impacts to roadways.

The County designated Circle Oaks Drive as a local road, which is generally not built with the pavement thickness that would withstand substantial or continuous traffic. However, the amount of project-related truck and equipment trips anticipated on Circle Oaks Drive is not considered substantial and would not create a significant impact on the wear-and-tear of this roadway.

Though project related truck and equipment trips are not anticipated to create a significant impact on the wear-and-tear of Circle Oaks Drive, the County continued to hear concerns that damage may still occur. In response, the project must comply with Mitigation Measure 4.7-4, which requires a third party consultant to assess Circle Oaks Drive prior to the start of construction and following the completion of construction. Under the measure, if any deterioration has occurred to the roadway or subsurface infrastructure due to construction traffic, the applicant must pay to resurface the roadway to restore the pavement to at least preconstruction condition (unless the resurfacing is already expected to occur within a year or sooner in conjunction with other planned or proposed roadway improvements). While the traffic analysis indicated that the project does not require this mitigation measure in order to avoid or substantially lessen an impact that is less than significant, the County imposed this mitigation measure to provide further assurances to Circle Oaks residents that the project will not permanently damage Circle Oaks Drive.

Furthermore, Condition of Approval No. 2 imposed upon the project additional traffic restrictions requiring that all construction equipment be routed away from Circle Oaks Drive and through the northernmost access driveway directly off of State Route 121. Specifically, all extralegal loads (defined as anything greater than 80,000 pounds that requires special Caltrans permits per Mitigation Measure 4.7-4) and construction equipment deliveries (defined as any construction equipment listed in Table 3-5 of the EIR, including: excavators, graders, rubber tired dozer, tractors, loaders, and backhoes) shall utilize Gate 1.

PART III. CENTER FOR BIOLOGICAL DIVERSITY GROUNDS OF APPEAL:

GROUNDS OF APPEAL

The following outlines the basis of the appeal as contained in the Appeal dated August 23, 2016. For convenience, staff has numbered each issue and provided a summary, but recommends the Board review the actual Appeal for details.

Appeal Ground No. CBD1: Appellant asserts that the County provided an incomplete, unstable project description. Vineyard acreage was reduced from 356 acres in the Draft EIR to 294 acres in the Final EIR, and finally 209 acres in the final approval. It is unclear where these land use changes will occur. The County also states it will revise its deer fencing requirements, but provides no additional description of what will change. (County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 193; (San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645, 655.)

Staff Response: An EIR is an informational document that is meant "to provide public agencies and the public in general with detailed information about the effect a proposed project is likely to have on the environment; to list ways the significant effects of such a project might be minimized; and to indicate alternatives to such a project" [Public Resources Code (PRC) § 21061]. An adequate project description is important in that it ensures that CEQA's goals of providing information about a project's environmental impacts to government agencies and the public to allow consideration of mitigation measures and alternatives will not be rendered useless. (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192–193, 197–198, 203.) In this way, a project description that is "accurate, stable and finite . . . is the *sine qua non* of an informative and legally sufficient EIR." (*Id.* at p. 193.)

The CEQA *Guidelines* provide that "[t]he description of the project [in the EIR] shall contain the following information but should not supply extensive detail beyond that needed for evaluation and review of the environmental impact. (a) The precise location and boundaries of the proposed project shall be shown on a detailed map, preferably topographic. The location of the project shall also appear on a regional map. (b) A statement of the objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project. (c) A general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals, if any, and supporting public service facilities. (d) A statement briefly describing the intended uses of the EIR. (1) This statement shall include, to the extent that the information is known to the lead agency: (A) A list of the agencies that are expected to use the EIR in their decision-making, and (B) A list of permits and other approvals required to implement the project. (C) A list of

related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies. To the fullest extent possible, the lead agency should integrate CEOA review with these related environmental review and consultation requirements. (2) If a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed, preferably in the order in which they will occur. On request, the Office of Planning and Research will provide assistance in identifying state permits for a project." (CEQA *Guidelines* § 15124.)

The project analyzed in the Walt Ranch EIR was sufficiently detailed to adequately convey the extent and components of the project as well as provide for adequate review and assessment of potential impacts of the project. All of the items required by CEOA Guidelines § 15125 are contained in the Draft EIR. In addition, the EIR evaluated three alternatives to the project: the No Project Alternative, the Reduced Intensity Alternative, and the Multiple Resources Protection Alternative. In addition to the project description contained in the EIR, the Erosion Control Plan (ECP) that provides the technical engineering-level detail for the design of the project's infrastructure, was included in its entirety as an attachment to the EIR.

The reduction in acreage cited by the Appellant was the result of both mitigation measures and voluntary project modifications made by the Applicant reducing the size of the originallyproposed vineyard blocks. The size of the project was reduced to address impacts identified in the Draft EIR and comments received during the public review process. In short, the CEQA process worked as intended. The original proposed project was evaluated for environmental impacts and feasible mitigation measures to reduce those impacts, and as a result portions of the proposed vineyard blocks were removed to avoid certain impacts identified in the EIR. Kings County Farm Bureau v. City of Hanford (5th Dist. 1990) 21 Cal. App. 3d 736-737 (stating that CEQA is not intended to freeze the ultimate proposal in the precise mold of the initial project but allows for the analysis to result in revisions to the original proposal.) The reduction in vineyards resulting from the EIR mitigation measures and Applicant proposals are described in Mitigation Measure 4.2-1 (native grasslands), Mitigation Measure 4.2-2 (sensitive biotic communities), Mitigation Measure 4.2-4 (wetland and waters buffers), Mitigation Measure 4.2-5 (black walnut habitat), Mitigation Measure 4.2-7 (holly-leaved ceanothus), Mitigation Measure 4.2-8 (narrowanthered brodiaea), Mitigation Measure 4.2-9 (other sensitive plant species), Mitigation Measure 4.2-10 (western pond turtle), Mitigation Measure 4.2-16 (specimen trees), and voluntary reductions for increased water quality buffers (Final EIR Response to Comment O9-44).

Regarding deer fencing requirements, Mitigation Measure 4.2-6 as reflected in the MMRP requires that, prior to the approval of the ECP, the deer fencing plan shall be modified to reflect the specific biological impact avoidance measures such that the final approved vineyard blocks are fenced individually or in small clusters with "corridors of no less than 100 feet in width." The revised deer fencing plan was provided with the approved ECP and maintains deer fencing

in compliance with Mitigation Measure 4.2-6. Refer to response to Appeal Ground No. CBD19 for additional discussion of deer fencing.

Appeal Ground No. CBD2: Appellant asserts that the Biological Resources section of the EIR provides an inadequate discussion of the environmental setting, or "baseline" impacts, and mitigation for many species.

Staff Response: The County, as lead agency, has discretion to decide how to measure the existing baseline conditions without the project, subject to review for support by substantial evidence. (*Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 336.) The County reasonably determined the appropriate biological resource baseline conditions based on substantial evidence. Numerous biological studies were completed in order to accurately measure and describe the biological resources on the Walt Ranch property. As listed in Table 4.2-1 of the EIR, these studies include 25 separate site-specific reports, and numerous site visits associated with each report, for the investigation of: botanical resources and special-status plants; waters of the U.S. and wetlands; biological resources and habitat assessments; special-status bryophytes; tree surveys; special-status wildlife, including amphibians, reptiles, and beetles; native grasslands; and mitigation replanting locations.

Appeal Ground No. CBD3: Appellant argues that the County's discussion of the environmental setting, impacts analysis, and proposed mitigation is inadequate to protect California red-legged frog (CRLF), foothill yellow-legged frog (FYLF), and western pond turtle (WPT) populations. (CEQA *Guidelines* § § 15125, 15126, 15126.4.) The EIR does not contain a discussion of impacts from "take" of ESA-listed species. (16 U.S.C. § 1538(a)(1); CEQA *Guidelines* §§ 15126; 15382; see, e.g., 40 C.F.R. § 1508.27.)

Staff Response: Refer to response to Appeal Ground No. LRC4 regarding the validity of the discussion presented for each of these three species.

Appeal Ground No. CBD4: Appellant asserts that the County erroneously lumps impacts and mitigation analysis of several aquatic species together, although these are distinct species with differing life cycles and conservation needs (e.g., differing use of upland habitat). (CEQA *Guidelines* § § 15121; 15126, 15126.4.)

Staff Response: A separate species' life history, general biological discussion, geographic distribution, and potential for occurrence within the Walt Ranch property was provided in Section 4.2.4-3 for CRLF, FYLF, and WPT. Locations of observed FYLF and WPT, as well as specific types of WPT habitat, were provided in the EIR in Figure 4.2-3. A graphic depiction of CRLF occurrence was not provided as none were directly observed on the property, but the following potential CRLF habitat was described on page 4.2-60 of the EIR: "Capell Creek and some of its tributaries, a reservoir in the northwestern corner of the project site, two ponds (one

near the main project site access road and the other east of Atlas Peak Road), two emergent wetlands, and a seasonal wetland."

The EIR identified two separate impacts for these species, which were organized by potential impacts to reptiles (WPT) and amphibians (CRLF and FYLF). However, CEQA permits the consideration of two similar species within the same impact section. The use of differing upland habitat by all three species is extensively discussed in the EIR, as well as the preservation of those areas and other protection measures for those species. Please refer to response to Appeal Ground No. LRC4 regarding the environmental baseline presented for these species.

Appeal Ground No. CBD5: Appellant contends that the EIR fails to set an accurate baseline for CRLF, including failing to recognize its presumed presence within both the Milliken and Capell Creek watersheds and misstating its environmental needs. (CEQA *Guidelines* §§ 15121; 15125.)

Staff Response: Refer to response to Appeal Ground No. LRC4 regarding the environmental baseline presented for CRLF and response to Appeal Ground No. LRC12 regarding the CRLF surveys. Contrary to Appellant's claims, CRLF presence has never been assumed on the Milliken Creek watershed portion of the property. As clearly stated on pages 4.2-37, 4.2-60, 4.2-80, and 4.2-120 of the Final EIR, CRLF presence was assumed on the Capell Creek portion of the property because it is within the potential dispersal range of adult CRLF, provides habitat for CRLF, and is located within 0.5 mile of CRLF critical habitat. The Milliken Creek portion of the watershed did not share these same characteristics for CRLF habitat so the EIR did not assume the presence of CRLF and the CRLF surveys were limited to that area.

Appeal Ground No. CBD6: Appellant asserts that the County erroneously concludes that 20- to 55-foot setbacks will be sufficient to mitigate impacts to CRLF. This mitigation measure was not specifically designed to protect CRLF, and will not reduce impacts to CRLF to less than significant. (CEQA *Guidelines* §15126.4.)

Staff Response: The Appellant misstates the required setbacks for the project. Further, the setbacks do not provide the only (let alone, the primary) mitigation for potential impacts to CRLF. An extensive discussion of stream setbacks as they relate to amphibian and reptile species was presented in the EIR and in the Responses to Final EIR Comments memo (Section 2.10). The setbacks required by Mitigation Measure 4.2-4 protect a minimum setback of 55 feet on all CRLF aquatic stream habitat, which means that a minimum of 55 feet of CRLF upland foraging habitat is protected on either side of the streams. This results in protected upland corridors surrounding CRLF stream habitat of at least 110 feet. Many other streams have larger

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⁴⁸ Responses to Final EIR Comments Memorandum, dated July 2016 and published with the Walt Ranch Approval Package on August 1, 2016.

setbacks up to 150 feet, resulting in up to 300 foot setbacks from aquatic drainages that would provide protection for potential CRLF upland habitat. It should be noted that not all aquatic drainages provide CRLF habitat, as they require a particular set of low-gradient freshwater bodies with dense shoreline vegetation, but the setbacks are provided regardless of whether or not the drainage may support CRLF.

Final EIR Response to Comment A7-15 states that drainages that do not meet the Napa County definition of a stream are ephemeral drainages that only hold water for short periods of time. These ephemeral drainages do not support aquatic habitat or aquatic organisms, and only hold water immediately after precipitation events. As the ephemeral drainages on the property do not support aquatic organisms, these drainages by definition cannot be considered habitat for CRLF or FYLF. As a result, all potential amphibian habitat is protected, at a minimum, by a 55-foot setback (but in most cases, a much larger setback). The minimum 55-foot setbacks, combined with the restriction of work to the dry season, will significantly reduce potential impacts to amphibians. However, Mitigation Measure 4.2-11 was expanded with additional protective measures to even further reduce potential impacts. These expanded measures include environmental awareness training for construction workers, limiting pile burning to no closer than 300 feet from suitable habitat, and installing frog exclusionary fencing around all construction activities within or bordering CRLF habitat. These measures are consistent with, and in some cases surpass, the recommendations within the USFWS Take Avoidance Scenarios for Timber Harvest Plans (THP), Take Avoidance Scenario IV;⁴⁹ although this guidance is not directly applicable to the Walt Ranch Project since it does not involve removal of timberland and therefore does not include a THP, there are many consistent elements that bear relevance. The USFWS Take Avoidance Scenario IV includes the following measures: avoiding suitable habitat by a 30-foot buffer; not using herbicides for stump removal within 300 feet of suitable habitat; not burning piles within 300 feet of suitable habitat; not building new logging roads within 300 feet of suitable habitat; and limiting water drafting from suitable habitat to screened hoses. To the extent that these measures are applicable to the Walt Ranch Project (e.g. habitat avoidance and pile burning), they were added to Mitigation Measure 4.2-11. The stream setbacks mentioned by the Appellant, in addition to being smaller than what is proposed with the project, are not the only (or even primary) method of avoidance and mitigation for this species.

Appeal Ground No. CBD7: Appellant contends that the EIR does not adequately discuss the need to obtain either an Endangered Species Act incidental take permit (ITP) or to conduct Section 7 consultation for the take of CRLF individuals. (16U.S.C. §§ 1536(a)(2); 1539(a).)

⁴⁹ USFWS, 2008. Information Needs and Guidelines for Timber Harvest Plans (THPs) for US Fish and Wildlife Service Technical Assistance Analysis California Red-legged Frogs (CRF). Published March 25, 2008. Available online: http://calfire.ca.gov/resource_mgt/downloads/USFWS_Revised_CRLF_InfoNeeds&TakeAvoidance Scenarios_032508.pdf

Staff Response: This was adequately addressed in Section 2.10 of the Responses to Final EIR Comments memorandum. As explained further therein, since the Walt Ranch Project was designed to avoid impacts to waters of the U.S. and take of CRLF, no ITP is required at this time. Additionally, Mitigation Measure 4.2-4 requires the Applicant to obtain a U.S. Army Corps of Engineers nationwide permit (Section 404 permit) prior to the discharge of any dredged or fill material within jurisdictional wetlands and other waters of the U.S. This permit will require consultation with the USFWS regarding all potentially occurring special-status species, including CRLF. The USFWS may require additional measures for the protection of the species during that consultation. However, the Walt Ranch Project has "avoid[ed] or *substantially lessen[ed]*" the project's significant impacts to CRLF to less than significant. (Pub. Resources Code, § 21002.).

Appeal Ground No. CBD8: Appellant contends that the County failed to set a sufficient baseline for the FYLF and WPT. The EIR fails to account for these species' environmental needs (e.g., extensive use of upland habitat) and life histories, and incorrectly labelling these species "strictly aquatic". (CEQA *Guidelines* § 15125.) Mitigation and impacts for the WPT and FYLF were designed around this faulty baseline. Because of this, the EIR does not accurately describe the impacts to these species and the proposed mitigation will not reduce impacts to less than significant. (CEQA *Guidelines* §§15126, 15126.4.)

Staff Response: The EIR discusses the environmental setting and species' life histories within Section 4.2.4-3 for CRLF, FYLF, and WPT. After general life histories were provided for each species, site-specific discussion was provided to say whether (or where) the species may occur on the Walt Ranch property. Locations of observed FYLF and WPT, as well as specific types of WPT habitat, were provided in the EIR in Figure 4.2-3. This is consistent with CEQA *Guidelines* § 15125(a) regarding the discussion of the environmental setting, which states that:

"An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives."

The EIR describes FYLF as requiring "shallow, flowing water and appears to prefer small- to moderate-sized streams that have at least some cobble-sized substrate... Unlike the CRLF, the foothill yellow-legged frog is rarely found far from permanent water. It spends most of its time in or near streams year-round. Tadpoles require water for at least three or four months before developing into terrestrial frogs" (page 4.2-60 of the EIR). The EIR states that FYLF occurs

within a small subset of CRLF habitat because it is highly dependent on aquatic resources. Protective measures for FYLF in Mitigation Measure 4.2-11 include bullfrog management techniques, limitations on pile burning, and frog exclusionary fencing along construction boundaries.

The EIR describes the WPT as requiring "permanent or nearly permanent water body or stream with suitable refuges, basking sites, and nesting sites. Refuge sites can be submerged logs or rocks or mats of floating vegetation. Basking sites can be partially submerged rocks or logs, as well as shallow-sloping banks with little or no cover. This species constructs nests in sandy banks if present, or in soil up to 100 meters away from aquatic habitat that is at least ten centimeters deep" (page 4.2-61 of the EIR). The EIR states that WPT were observed within the project site near areas of permanent water or streams, and the nesting and overwintering (upland) habitat were delineated in Figure 4.2-3 of the EIR. Site-specific surveys and analyses were conducted to identify the potential WPT nesting and upland habitat that was shown on Figure 4.2-3. Onsite field surveys were conducted on February 11 and March 2, 2009 to appropriately assess onsite drainages, and data such as approximate drainage width, depth, cover, and upland habitat, slope, and soil, was recorded at representative locations along the drainages. Then this data, in conjunction with the wetland delineation prepared by WRA, was used to determine which drainages required nesting and overwintering buffers to protect WPT upland habitat.

The EIR never claims that WPT is "strictly aquatic" and in fact provides detailed mapping of over 530 acres of upland habitat that occurs on the Walt Ranch property. This is composed of approximately 20.7 acres of prime nesting habitat and approximately 509.8 acres of upland habitat. A combination of avoidance and preservation of existing habitat (both upland and aquatic), preconstruction surveys, agrichemical limitations, and exclusionary fencing was proposed in Mitigation Measure 4.2-10 to protect this species.

Appeal Ground No. CBD9: Appellant asserts that the EIR provides an inaccurate baseline for valley elderberry longhorn beetle presence within Walt Ranch. (CEQA *Guidelines* § 15125.) Because of this, the County failed to provide an accurate discussion of impacts or to require adequate mitigation. (CEQA *Guidelines* §§15126; 15126.4.) The EIR is silent on the need to either obtain an incidental take permit or to conduct Section 7 consultation for this species. (16 U.S.C. §§1536(a)(2); 1539(a).)

Staff Response: Valley elderberry longhorn beetle (VELB) was addressed in Final EIR Response to Comment O21-018 and O21-022 and within the Draft EIR in Section 4.2.4-5 and Impact 4.2-12. Focused entomological surveys conducted by Arnold (2012) did not result in

⁵⁰ Western Pond Turtle Habitat on Walt Ranch prepared by AES, April 2009.

⁵¹ WRA, Inc. 2007. Draft Delineation of Potential Jurisdictional Wetlands and "Other Waters of the U.S." Under Section 404 of the Clean Water Act. Walt Ranch, Napa County, California

detection of VELB within the project area.⁵² Arnold concluded that the California longhorn elderberry beetle (CELB), and not VELB, occurs within the project site. Arnold observed 11 CELB adults and no VELB adults during surveys conducted during the period when VELB and CELB adults were active. Because VELB does not occur on the property, there is no impact to this species and no ITP or Section 7 consultation is required for this species.

Appeal Ground No. CBD10: Appellant asserts that the County does not accurately describe white-tailed kite and peregrine falcon presence within and near the project. (CEQA *Guidelines* § 15125.) The EIR fails to provide for adequate avoidance, as required by the Fully Protected Species laws. (California Fish & Game Code § 3511.)

Staff Response: Peregrine falcons and white tailed kites were addressed throughout the EIR and the Response to Final EIR Comments memo. As discussed in Section 2.13 of the Response to Final EIR Comments memo, peregrine falcons can occur in many open habitat types, but breeding sites must occur in proximity to water with nearby vertical structures such as niches in cliffs, steep banks, and ledges.⁵³ They may occur in coastal areas (nesting in cliffs), urban settings (nesting on tall buildings or bridges), or in the Sierra Nevada (nesting on granitic outcroppings). In northern California, breeding occurs from May to September. Peregrine falcon was addressed in the Biological Resources Assessment (BRA; Appendix M of the Draft EIR) and was determined to be unlikely to occur on the project site due to lack of suitable habitat, specifically a lack of vertical cliffs or vertical outcrops. Therefore, this species was not discussed in detail in the EIR. For special status species with no potential to occur onsite, the EIR appropriately concluded that the Walt Ranch Project would not significantly impact the species. A complete list of special status species that occurs within Napa County or the quads of the project site is found in Appendix I of the Draft EIR. Although peregrine falcon does not occur on the property, it would be protected via the migratory and special status bird mitigation measure requiring pre-construction nesting bird surveys (Mitigation Measure 4.2-13).

The white-tailed kite was observed by biologists on the property, as stated on page 4.2-34 of the EIR. White-tailed kite requires a combination of suitable foraging habitat and adjacent suitable nesting habitat, which is lacking from the proposed vineyard blocks. This habitat is available elsewhere on the property, as stated on page 4.2-64. Mitigation Measure 4.2-13 provides mitigation to prevent direct take of white-tailed kite nests and all nesting bird species protected under the Migratory Bird Treaty Act and California Fish and Game Code 3503. Mitigation Measure 4.2-13 requires pre-construction surveys for nesting birds by a qualified biologist and the establishment of adequate buffer zones around active nest sites. As discussed in Impact 4.2-

⁵² Arnold, R.A., 2012. Report on the threatened valley elderberry longhorn beetle on the Walt Ranch in Napa County. Entomological Consulting Services, Ltd.

⁵³ Responses to Final EIR Comments Memorandum, dated July 2016 and published with the Walt Ranch Approval Package on August 1, 2016.

13, over 1,793 acres (78 percent) of the property will remain in open space and under the approved final ECP over 1,984 acres (86 percent) will remain in open space.⁵⁴ These open space areas would remain viable foraging habitat for migratory birds and raptors, and as such the project-level impacts were determined to be less than significant.

California Fish and Game Code 3511(a)(1) states that "a fully protected bird may not be taken or possessed at any time." Given the protective measures required by Mitigation Measure 4.2-13 and the habitat avoidance incorporated into the project design, no fully protected bird species will be impacted by the project.

Appeal Ground No. CBD11: Appellant asserts that the County does not provide an adequate baseline and impacts discussion regarding mountain lions, which have a high possibility of being present on site. (CEQA *Guidelines* §§15125, 151 26; Fish & Game Code § 4800.) Furthermore, the EIR does not mitigate impacts to mountain lions to less than significant. (CEQA *Guidelines* § 15126.4.)

Staff Response: Mountain lion presence, at least periodically, is assumed within the project site and vicinity. As addressed in Final EIR Response to Comment O21-058, "mountain lion use of the property for dispersal was considered in the wildlife corridor discussion (Section 4.2.2-10 of the Draft EIR). Although mountain lions are a "specially protected species," CDFW states that:

Mountain lions are not threatened nor endangered in California. In fact, the lion population is relatively high in California and their numbers appear to be stable. Mountain lions are legally classified as "specially protected species." This has nothing to do with their relative abundance and does not imply that they are rare (CDFW, 2007)."

Pursuant to California Fish and Game Code 4800(b) (1), it is "unlawful to take, injure, possess, transport, import, or sell a mountain lion or a product of a mountain lion, except as specifically provided in this chapter or in Chapter 2 (commencing with Section 2116) of Division 3." Final EIR Responses to Comment O21-059 provides a discussion of several potential impacts to mountain lions that were specifically mentioned by the Appellant in comments to the Draft EIR, including: accidental poisoning due to rodenticide (which would not be used on the proposed vineyard), habitat impacts (negligible impacts due to the large home range of mountain lions), and potential road strikes (no increase in risk during vineyard construction or operation due to speed limits required by mitigation). The only potential impact to mountain lions is due to a restriction in movement, which has been addressed via Impact and Mitigation Measure 4.2-6. The wildlife corridors maintained via project design and protected via Mitigation Measure 4.2-6 ensure that mountain lions will not be harmed on the Walt Ranch property. Mountain lions do

⁵⁴ This figure from the Draft EIR was based on the larger Proposed Project (507 gross acres of disturbance), which would retain 1,793 acres (78 percent) of the property in open space. The final ECP (316 gross acres) would retain 1,984 acres (86 percent) of the property as open space.

not meet the definition of an endangered, rare, or threatened species under CEQA *Guidelines* § 15380, and therefore the EIR appropriately considered impacts to biological resources in accordance with CEQA and the CEQA *Guidelines*. Through the maintenance and protection of wildlife corridors (Mitigation Measure 4.2-6), the Walt Ranch Project will not harm mountain lions.

Appeal Ground No. CBD12: Appellant asserts that County fails to adequately avoid and mitigate impacts to on-site oak trees, in violation of Napa Policy CON-24 and California Public Resource Code § 21083.4(b). (CEQA *Guidelines* § 15126.4.)

Staff Response: As discussed further in the response to Appeal Ground No. LRC6, the EIR analyzed the potential for the project to impact oak woodlands in Impact 4.2-2 (oak woodlands as a habitat type) and Impact 4.2-16 (specimen trees and notable oak stands).

The Conversion of Oak Woodlands requirement mandated by PRC § 21083.4 provides specific exemptions for agricultural projects. PRC § 21083.4(d)(3) provides an exemption to the above Conversion of Oak Woodlands requirement for agricultural projects, saying that "[c]onversion of oak woodlands on agricultural land that includes land that is used to produce or process plant and animal products for commercial purposes" is exempt from these requirements.

However, the Napa County General Plan policies are still relevant to the Walt Ranch Project, which includes avoidance and preservation of oak woodlands at a 2:1 ratio in compliance with General Plan Policy CON-24. Although the PRC § 21083.4 is not applicable to the project, the EIR mitigation measures ensure compliance with Napa County General Plan Policy CON-24 and impacts to oak woodlands are avoided or substantially lessened in accordance with CEQA.

Appeal Ground No. CBD13: Appellant asserts that the EIR sets an improper baseline for Contra Costa goldfields. (CEQA *Guidelines* §15125.) This impermissibly skews the impacts analysis and mitigation for this species. (CEQA *Guidelines* § 15126, 15126.4.) The County fails to acknowledge the significant impacts arising from the destruction of this endangered species' critical habitat, or the resulting edge effects caused by vineyard development cutting into this critical habitat.

Staff Response: This was addressed in Final EIR Response to Comment O21-065 and Section 2.13 of the Responses to Final EIR Comments memo. The EIR did address potential impacts to the federally endangered Contra Costa goldfields. As stated in Table 4.2-3, page 4.2-47, and Appendix M, numerous botanical surveys were conducted within the evident and identifiable bloom period for Contra Costa goldfields and this species was not observed onsite. Although page 4.2-48 acknowledges that there is critical habitat for Contra Costa goldfields within the Milliken Reservoir watershed portion of the property, there will still be no impacts to this species as it does not occur onsite. Although a portion of the Walt Ranch Project is within critical habitat for Contra Costa goldfields, the nearest occurrence is approximately three miles southeast

of the project site. Therefore, there are no impacts to Contra Costa goldfields. The Contra Costa goldfield is a small plant with yellow flowers that has extremely specific habitat requirements; it must occur in mesic areas (moist or wet areas) of cismontane woodland, alkaline playas, valley and foothill grassland, or vernal pools. Many of the wetlands on the property have been avoided via project design or through Mitigation Measure 4.2-4. As such, even though no Contra Costa goldfields exist on the property, its mesic habitat would be preserved.

A species' critical habitat is designated by the USFWS at the time of listing, and they are often large areas. The USFWS specifically states that not all areas within the mapped boundaries are considered critical habitat. "In some cases, precisely mapping critical habitat boundaries is impractical or impossible, because the required descriptions for these precise boundaries would be unwieldy" (USFWS, 2015). While USFWS designated Contra Costa goldfields critical habitat on a small portion of the Walt Ranch property, there are no actual habitat areas (alkaline vernal pools) that would support this plant species. The USFWS states that a "critical habitat designation does not necessarily restrict further development. It is a reminder to Federal agencies of their responsibility to protect the important characteristics of these areas" (USFWS, 2015).

The area of critical habitat in question is a 1.62 square-mile area (of which only 0.08 square mile overlaps with the Walt Ranch property) that encompasses parts of Milliken Reservoir, Atlas Peak Road, and several developed structures, and is mapped as containing chamise chaparral, oak woodlands, and grasslands. Although there may be small alkaline wetlands within this 1.62 square-mile area, it is apparent that the entire area is not and cannot be wetland habitat for the Contra Costa goldfield. Furthermore, there is only one wetland that has been mapped within the 0.08 square mile (51 acre) portion of critical habitat that overlaps with the Walt Ranch property. The nearest vineyard block (Block 2A2) has been set back from this wetland by appropriate buffers, and there would be no impact to this wetland feature.

As acknowledged by the USFWS, these large-scale mapping units are designed to focus attention on the potential for habitat to exist, and are not decreeing that there is suitable habitat in the entire area. Given that no Contra Costa goldfields were identified on the project site and no habitat for them exists, there is no impact to this species.

Appeal Ground No. CBD14: Appellant asserts that County admits the project will impact goldfields' designated critical habitat, but erroneously concludes this impact is less than significant and does not require mitigation. (CEQA Guidelines § 15126, 15126.4.) Contrary to the County's conclusion, impacts to dozens of acres of critical habitat are significant and require avoidance or mitigation. (See, e.g., 40 C.F.R. § 1508.27.) The EIR fails to acknowledge the need to either obtain an incidental take permit or to conduct Section 7 consultation for this species. (16 U.S.C. §§ 1 536(a)(2); 1539(a).)

Staff Response: This was addressed in Final EIR Response to Comment O21-065 and Section 2.13 of the Responses to Final EIR Comments, as well as in the above response to Appeal Ground No. CBD13. While the presence of critical habitat is relevant in evaluating a project's potential environmental impacts under CEQA, neither such federal designation nor the cited Code of Federal Regulation section impose any legal mandate or requirement regarding impact conclusions on a state or local agency. Therefore, the Appellant's citation to the Code of Federal Regulation has no legal import beyond providing evidence of a possible impact to be investigated in the EIR. Such analysis and investigation was conducted as discussed in the response to Appeal Ground No. CBD13. It is clear from site specific studies that neither Contra Costa goldfields nor appropriate habitat exist on the project site.

<u>Appeal Ground No. CBD15:</u> Appellant asserts that the EIR provides inadequate mitigation for impacts to a particularly important community of narrow-anthered California brodiaea. (CEQA *Guidelines* § 15126.4.)

Staff Response: Impacts to narrow-anthered California brodiaea were addressed in Impact 4.2-8, Final EIR Response to Comment O21-068, and within the Biological Resources Management Plan (BRMP) prepared for the Walt Ranch Project. The narrow-anthered California brodiaea (Brodiaea leptandra) is listed by the California Native Plant Society as a rare plant rank 1B.2, meaning that it is afforded protection under CEQA but is not listed as threatened or endangered by the State or federal government. The narrow-anthered California brodiaea habitat on the Walt Ranch property is located in the Milliken Reservoir watershed portion of the project site, which has the best conditions to cultivate high-quality wine grapes. CEQA recognizes that it is impossible to completely eliminate some environmental impacts, and therefore CEQA focuses on the need to "avoid or substantially lessen" a project's significant impacts (Pub. Resources Code, § 21002.). In this instance, Mitigation Measure 4.2-8 has required the avoidance of 17.8 acres of narrow-anthered brodiaea, the preservation of 33.2 acres in perpetuity (or preservation of approximately 80 percent of the population occurring on the property), and mitigation replanting of 8.63 acres of brodiaea that would be directly impacted. In fact, Mr. Jake Ruygt of the California Native Plant Society called this level of habitat preservation "commendable" (refer to Comment O7-7).

Specific mitigation replanting areas were identified in the BRMP; using the BRMP to mitigate significant impacts to biological resources to less-than-significant levels is in compliance with CEQA *Guidelines* § 15126.4. This has been determined to meet CEQA's requirements of avoiding or substantially lessening the Proposed Project's impacts.

Appeal Ground No. CBD16: Appellant asserts that the County impermissibly allows the destruction of hundreds of acres of native grasslands by severely limiting what qualifies as a native grassland, in violation of Napa Policy CON-17. The County does not adopt all feasible

avoidance and mitigation, such as prohibiting on-site herbicide use. (CEQA *Guidelines* § 15126.4.)

Staff Response: The definition for what qualifies as a "native grassland" comes from the highly qualified biologists at the CDFW, not from Napa County. In a communication cited in a peer-reviewed article (Keeley, 1992), Keeler-Wolf stated that CDFW considers grasslands with greater than ten percent cover of native grasses to be "significant" and worthy of conservation. Some local governments within California have incorporated this numeric limit into regulatory frameworks (e.g., Santa Barbara County Environment Thresholds and Guidelines Manual, General Plan, January 1995). Therefore, the EIR considers native grasslands containing 10 percent native grass species or higher to be a sensitive biotic community pursuant to Napa County General Plan Policy CON-17.

As stated in the Napa County BDR, "species composition of the annual grassland is highly diverse and includes many other native and nonnative forbs." Although some native species may be present within the annual grassland at a low density, this does not qualify it as a native grassland pursuant to CDFW recommendation.

The Napa County BDR discusses native grasslands separately from the California Annual Grassland Alliance, stating that:

Native grasslands dominated by a mixture of annual and perennial grasses, such as small fescue (*Vulpia microstachys*), purple needlegrass (*Nasella pulchra*), and nodding needlegrass (*Nasella cernua*), likely occurred in the County in most areas currently occupied by annual grassland (Heady 1988, Wester 1981). Although once extensive in the greater Bay Area and Central Valley, invasion by exotic annual grasses and improper livestock grazing has led to the decline of this land cover type.

General Plan Policy CON-17 requires the County to "preserve and protect *native* grasslands" (emphasis added). No special protection is afforded to California annual grasslands, which are dominated by invasive or exotic species. Therefore, Mitigation Measure 4.2-1 appropriately required avoidance, restoration, and replacement of native grasslands in accordance with General Plan Policy CON-17. With the exception of the 9.8 acres of native grasslands (defined by CDFW as 10 percent or greater coverage of native forbs as discussed in the Draft EIR), the 166.8 acres of California Annual Grassland Alliance on the property are dominated by invasive annual grasses and are not native grasslands requiring protection under General Plan Policy CON-17. As discussed above, approximately 9.8 acres of sensitive native grasslands have been mapped on the property. Of this native grassland area, the original Proposed Project would have impacted 4.45 acres (45.4 percent). The Draft EIR determined this level of impact to be significant and determined that additional avoidance was feasible, and therefore required avoidance of an additional 3.3 acres. This results in the preservation of approximately 8.65 acres (88.3 percent) of native grasslands mapped on the property. Therefore, after avoidance, the Walt Ranch Project

will impact only 1.15 acres of native grasslands. These impacted areas are required to be mitigated at a 2:1 ratio including both preservation of existing native grasslands and enhancement of existing grasslands.

Finally, chemical applications will follow the rules and regulations of California and U.S. laws outlined by California Department of Pesticide Regulation and U.S. Environmental Protection Agency (EPA), in addition to mitigation measures included in the EIR, as discussed in Final EIR Response to Comment O21-015. Therefore, pesticide and herbicide drift will not significantly impact native grasslands.

Appeal Ground No. CBD17: Appellant asserts that the EIR does not provide information on the presence of several other species known to occur within or near the project site, including the conservancy fairy shrimp, California freshwater shrimp, California tiger salamander, winter-run chinook salmon, Sebastopol meadowfoam, northern spotted owl, western snowy plover, California brown pelican, peregrine falcon, and California least term. (CEQA *Guidelines* § 15125.) Nor does it provide an adequate impacts discussion or mitigation for these species. (CEQA *Guidelines* §§ 15126, 15126.4.)

Staff Response: There is no evidence that the species mentioned in this appeal ground are known to occur "within or near the project site," as documented in the EIR (Final EIR Response to Comment O21-031) and the Responses to Final EIR Comments memo.⁵⁵

The species mentioned in this appeal were addressed in the BRA and were determined to be either not present, unlikely to occur, or would not be affected by the Walt Ranch Project. The potential for conservancy fairy shrimp, California freshwater shrimp, and California tiger salamander to occur on the project site was assessed in Appendix B of the BRA, which found that there was no potential for these species to occur on the project site due to a lack of any suitable habitat. Winter-run Chinook salmon will not occur on the property due to downstream barriers on Milliken Creek (Milliken Reservoir Dam) and Capell Creek (Lake Berryessa), as well as a lack of any suitable habitat within the streams and tributaries on the project site. This was mentioned on page 4.2-27 of the Draft EIR. Sebastopol meadowfoam does not occur on the project site; this species blooms from May to July, and numerous botanical surveys of the project site during the evident and identifiable bloom period failed to locate it onsite. Northern spotted owl was determined to be unlikely to occur due to a lack of suitable habitat.

Although shown on the USFWS list as having the potential to occur or be affected by projects within Napa County, western snowy plover, California brown pelican, and California least tern do not occur within the project site, nor is suitable habitat present within the project site to

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⁵⁵ Responses to Final EIR Comments Memorandum, dated July 2016 and published with the Walt Ranch Approval Package on August 1, 2016.

support these species. These species are all coastal bird species, and Walt Ranch is located well outside of the geographic distribution for each of these species. Therefore, these species were not discussed in detail in the EIR because they will not be impacted by the Walt Ranch Project.

Appeal Ground No. CBD18: Appellant asserts that the County's limited discussion of other species is inadequate, such as its discussion of Keck's checker-mallow and the Central Valley spring and fall-run chinook. (CEQA *Guidelines* §§ 15125, 15126, 15126.4.)

Staff Response: Keck's checker mallow (referred to as Keck's checkerbloom in the Draft EIR) was not observed within the project site during biological and botanical surveys conducted within the appropriate bloom period for this species. Qualified biologists and botanists have conducted surveys for listed species, including Keck's checker-mallow, over a period of 15 years on the Walt Ranch property as listed in Table 4.2-1 of the EIR. None of these surveys have identified this plant species within the proposed clearing limits. There is no evidence before the County that this species occurs on the project site or would be impacted by the Walt Ranch Project. Consistent with the USFWS recommendations and CEQA *Guidelines* § 15126, no mitigation is required for a species that will not be impacted.

The County analyzed potential impacts to special status aquatic species, including steelhead and Chinook salmon, in Impact 4.2-15 (refer to response to Appeal Ground No. CBD17). These anadromous species cannot access the project site, but the waters on the project site are hydrologically connected to downstream habitat. Therefore, Mitigation Measure 4.2-15 ensures that measures protective of water quality are implemented during project construction and operation.

Appeal Ground No. CBD19: Appellant asserts that County will permit construction of exclusionary fencing surrounding vineyards, which will decrease wildlife movement and decrease the project's effectiveness as a wildlife corridor, in violation of General Plan policies CON-5 and CON-18. The EIR does not adequately discuss the impacts arising from this fencing, and provides inadequate mitigation to counterbalance these impacts. (CEQA *Guidelines* §§ 15126, 15126.4.)

Staff Response: Impact 4.2-6 of the Draft EIR states that:

The project design has placed the deer fencing as close to the vineyard blocks as possible. In addition, the project design ensures that there are spaces for animal passage between fenced clusters, reducing the impacts to wildlife movement corridors.

However, the County still determined that there would still be a significant impact to wildlife movement corridors. In compliance with CEQA *Guidelines* § 15126.4(a) which states that "the discussion of mitigation measure shall distinguish between the measures which are proposed by project proponents... and other measures proposed by the lead,

responsible, or trustee agency," the EIR appropriately analyzed both the Applicant's proposed deer fencing and provided additional mitigation. Specifically, Mitigation Measure 4.2-6 ensures that wildlife corridors of no less than 100 feet are maintained between the fencing around proposed vineyard blocks. This 100-foot movement corridor is based on best available science, as discussed in Section 4.2.2-10 of the Draft EIR. Scientific studies indicate that vegetated riparian corridors of widths greater than 30 meters (98 feet) are most likely to be used by wildlife (Hilty and Merenlender, 2002). Therefore, Napa County Code Section 18.108.025 requires stream setbacks that have a dual purpose of protecting water quality and protecting riparian habitat, as well as facilitating wildlife movement. Additionally, corridors between fenced vineyard blocks are a minimum of 100 feet wide and shall be maintained as existing habitat. Therefore these corridors would continue to function as movement and dispersal corridors.

The proposed deer fencing in this area has been revised during final re-design of the vineyard blocks in accordance with these mitigation measures, which will alleviate the concerns mentioned in this comment. General Plan Policy CON-18(e) requires that new development projects minimize impacts to wildlife corridors to the maximum extent feasible. After implementation of this mitigation, impacts would be reduced to less-than-significant levels in accordance with CEQA *Guidelines*.

Through a combination of undeveloped habitat along riparian corridors, wetland buffer zones, and preserved habitat between fenced vineyard blocks, the potential impacts from west to east (or east to west) and north to south (or south to north) impediments to wildlife passage would not be significant, as the corridors and open space would serve to facilitate wildlife movement through the project site. With mitigation, there is no conflict with the Napa County General Plan policies concerning wildlife corridors and there is a less-than-significant impact to wildlife movement in accordance with CEQA *Guidelines* Appendix G Environmental Checklist.

Appeal Ground No. CBD20: Appellant asserts that County does not discuss impacts to wildlife from the construction and rebuilding of over 20 miles of roads within Walt Ranch, and it does not provide adequate avoidance and mitigation for these impacts. (CEQA *Guidelines* §§ 15126, 15126.4.)

Staff Response: Section 3.4.1-6 of the EIR provides an extensive discussion of the use of existing roads, decommissioning of old roads, and upgrading of certain roads where needed. Although there is an extensive network of 21 miles of existing roads on the ranch, only 9.6 miles of Level I road (receiving rock aggregate and specific erosion control features) and 7.8 miles of Level II road (receiving erosion control features) are required for project-related access. The remaining length of road will be eliminated (decommissioned) or incorporated into proposed vineyard blocks, in accordance with specifications provided by the Napa County Resource Conservation District (RCD) and provided within Appendix C of the EIR. This description of

roads was clearly presented within the project description (Section 3 of the EIR), a specific Road Sedimentation and Erosion Potential Evaluation (Appendix C), and the ECP (Appendix B). As such, the use of roads was clearly presented within the project description and analyzed with the entirety of the vineyard development for each environmental impact area within Section 4 of the EIR. This was particularly true for where road lengths would have impacted special-status plant or animal habitat, which was assessed in each impact within Section 4.2 of the EIR and avoidance was required as necessary. Road work was therefore evaluated as part of the project construction activities and such work requires compliance with all applicable pre-construction, construction, and avoidance/mitigation requirements discussed in the EIR.

As discussed in the response to Appeal Grounds No. CBD1, the project analyzed in the Walt Ranch EIR was sufficiently detailed to adequately convey the extent and components of the project as well as provide for adequate review and assessment of potential impacts of the project. All of the items required by CEQA *Guidelines* § 15125 are contained in the EIR. Also see Staff Response to Appeal Ground No. CBD25 below.

Appeal Ground No. CBD21: Appellant asserts that the EIR fails to accurately discuss the traffic baseline and impacts. (CEQA *Guidelines* §§ 15125, 15126.) It fails to provide adequate mitigation for impacts during project construction and operation. (CEQA *Guidelines* § 15126.4.)

Staff Response: The traffic environmental baseline was updated and clarified in the Final EIR. Existing traffic levels on SR-121 were based on 2012 Caltrans traffic counts, and have since been updated to reflect the most recent 2014 traffic data. Existing traffic levels on Circle Oaks Drive were updated based on Napa County published traffic counts.

In accordance with CEQA *Guidelines* § 15143, traffic impacts were discussed with emphasis in proportion to their severity and probability of occurrence. Given that traffic impacts are reduced to less-than-significant levels with mitigation, the EIR presented an appropriate level of scientific detail in accordance with CEQA *Guidelines*. The use of existing traffic counts provided by Caltrans and Napa County are appropriate to provide decision makers with information to enable them to make an intelligent decision that takes into account all environmental consequences, per CEQA *Guidelines* § 15151.

The significance criteria presented in Section 4.7.3-1 of the EIR state that an impact to traffic would be significant if it would cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system. The analysis in the EIR conservatively assumes that half of construction and operation related trips would occur during the AM peak hour and half would occur during PM peak hour. This approach is conservative because it assumes that all traffic generated by the Project will occur during either the AM peak hour or the PM peak hour. In fact, traffic is likely to be distributed throughout the day, and is unlikely to be concentrated solely during the AM and PM peak hours. This approach ensures that the Walt Ranch Project's traffic impacts will not be inadvertently understated (although this approach also

means the project's traffic impacts may be overstated). In addition, traffic going to and from the project site will be counter-cyclical to the traffic in the Circle Oaks neighborhood. Therefore, although the total number of trips will increase, these trips are not anticipated to result in a disruption to the traffic flow or patterns of the area. Regardless of where the traffic is measured from within Circle Oaks, the counter-cyclical nature and the implementation of Mitigation Measures 4.7-1 and 4.7-2 will ensure there is not a significant increase in congestion or trips traveling in the same direction.

Furthermore, it should be noted that a Condition of Approval No. 2 adopted by the County imposes additional traffic restrictions on the project, requiring that all construction equipment be routed away from Circle Oaks Drive and through the northernmost access driveway directly off of State Route 121. Specifically, all extra-legal loads (defined as anything greater than 80,000 pounds that requires special Caltrans permits per Mitigation Measure 4.7-4) and construction equipment deliveries (defined as any construction equipment listed in Table 3-5 of the EIR, including: excavators, graders, rubber tired dozer, tractors, loaders, and backhoes) shall utilize Gate 1. This additional Condition of Approval significantly minimizes any potential traffic disruption to the Circle Oaks community.

Appeal Ground No. CBD22: Appellant asserts that County provided a faulty discussion of baseline and impacts to water quality and water supply in its EIR, and it did not require adequate mitigation for impacts.

Staff Response: The County, as lead agency, has discretion to decide how to measure the existing baseline conditions without the project, subject to review for support by substantial evidence. (*Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 336.) The County reasonably determined the appropriate hydrologic baseline conditions based on substantial evidence. Specific hydrologic and biologic investigations were conducted of on-site conditions for both surface water and groundwater conditions. Refer to responses to Appeal Ground Nos. CBD23 (surface water) and LRC9 (groundwater).

<u>Appeal Ground No. CBD23:</u> Appellant asserts that the EIR provides an inconsistent and inadequate baseline and impacts analysis regarding water quality. It provides flawed, conflicting information regarding runoff and sedimentation. This fails the informational purpose of CEQA. (CEQA *Guidelines* §§ 15121, 15125, 15126.)

Staff Response: Baseline water quality is discussed in Section 4.6.1-2 (page 4.6-8 through 4.6-11) of the EIR, which provides a detailed description of the following water quality constituents relevant to the Walt Ranch property and downstream watersheds:

• Sediment Loading. The Napa River watershed is listed for sediment loading and a Total Maximum Daily Load (TMDL) has been developed by the San Francisco Bay Regional

- Water Quality Control Board (RWQCB). The Capell Creek watershed is not listed for sediment loading;
- **Temperature.** The Napa River watershed is listed for temperature constraints because it provides habitat for cold-water listed fishes. The Capell Creek watershed is not listed for temperature;
- **Nutrients.** The Napa River watershed is listed for nutrient pollution such as phosphorus and nitrogen. However, given improving water quality in the non-tidal portions of the Napa River, the San Francisco Bay RWQCB adopted Resolution No. R2-2014-0006 on February 12, 2014 to delist the non-tidal Napa River for nutrients. The Capell Creek watershed is not listed for nutrients;
- Pathogens. The Napa River watershed is listed for pathogens and a TMDL has been developed by the RWQCB. Onsite waters have a low potential for increased levels of pathogens due to the halting of livestock grazing on the property. The Capell Creek watershed is not listed for pathogens; and
- Metals/Metalloids. The Putah Creek and Lake Berryessa watersheds are listed for metals/metalloids, specifically mercury and boron. The Milliken Creek/Napa River watershed are not listed for metals.

Numerous mitigation measures throughout the EIR are designed to be protective of water quality in order to ensure the Walt Ranch Project does not result in increases in sediment, temperature, or nutrient loading (Milliken Creek watershed) or metals/metalloid loading (Capell Creek watershed). As clarified in the Final EIR, the following mitigation measures will be protective of water quality:

- Mitigation Measure 4.2-4: Maintain appropriate stream and wetland buffers
- Mitigation Measure 4.4-1: No net increase in sedimentation
- Mitigation Measure 4.5-1: Create and follow a Hazardous Materials Business Plan (HMBP)
- Mitigation Measure 4.5-2: Follow all Standard Operating Procedures (SOPs) for vineyard equipment
- Mitigation Measure 4.5-3: Restrictions on chemical mixing and mix water
- Mitigation Measure 4.5-4: Restrictions on application of agrichemicals
- Mitigation Measure 4.5-5: Restrictions on use and storage of oils
- Mitigation Measure 4.6-2: Upgrade rocked water crossings prior to use

Furthermore, in addition to these protective measures for water quality that mitigate potential impacts to less than significant levels, the Applicant has been working with the City of Napa, independently of the EIR process, to voluntarily develop a surface water monitoring plan to address the City's concerns regarding potential water quality impacts. A Condition of Approval requiring the implementation of the Water Quality Monitoring Plan was added to the Updated MMRP.

Appeal Ground No. CBD24: Appellant asserts that County set an improper significance threshold and fails to demonstrate compliance with local Clean Water Act, Section 303(d), total maximum daily load standards, and, by proxy General Plan Policy CON-47. (33 U.S.C. § 131 3(d).) Thus, the County failed to adopt all necessary mitigation measures to avoid further impairing local surface waters. (CEQA *Guidelines* § 15126.4.)

Staff Response: Refer to response to Appeal Ground No. LRC1.

Appeal Ground No. CBD25: Appellant asserts that County failed to adequately address potential impacts to water quality and wildlife from each of the nearly 60 proposed stream crossings. The County provides no evidence that adding rocks to streams will significantly decrease sedimentation at 21 of the 58 proposed stream crossings, and it fails to adequately discuss impacts to other stream crossings where it proposes no mitigation. (CEQA *Guidelines* § 15126.4.)

Staff Response: As discussed in Final EIR Response to Comment O21-100, all road crossings will be treated as described in the Walt Ranch Road Sedimentation and Erosion Potential Evaluation prepared by the Napa County RCD, found in Appendix C of the Draft EIR. All roads are required to be upgraded per the ECP and Road Plan (Appendix C) prior to use. Upgrading stream crossings to rocked water crossings is a common best management practice (BMP) to minimize erosion and reduce sediment loads in rural landscapes. Improving ford crossings by adding coarse rock is recommended by the U.S. Forest Service⁵⁶ and Bureau of Land Management,⁵⁷ among others. As part of a peer-reviewed study, B.C. Morris et al studied water quality upstream and downstream of three types of stream crossings using rainfall simulations and measuring total suspended sediment (TSS). As the ford crossing improved from no BMPs or improvements to a rocked water crossing, there was a decrease in mean TSS concentration.⁵⁸ This study effectively proved that the common BMP of improving ford crossings to rocked water crossings has a measurable decline in erosion and sedimentation. As such, Napa County appropriately followed the recommendations of the Napa County RCD, which are consistent with best available science.

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⁵⁶ Chapter 5 – Low Water Crossing Types. From: *Low-Water Crossings: Geomorphic, Biological, and Engineering Design Considerations*. U.S. Forest Service. October 2006. Available online at: http://www.fs.fed.us/eng/pubs/pdf/LowWaterCrossings/LoWholeDoc.pdf.

⁵⁷ Keller, G. and J. Sherar. *Low-Volume Roads Engineering*. Chapter 9 – Fords and Low-Water Crossings. Bureau of Land Management. Available online at: http://www.blm.gov/bmp/low%20volume%20engineering/K_Ch9_Fords_&_Low-Water_Crossings.pdf

⁵⁸ Morris, B.C., M.C. Bolding, and W.M. Aust. *Effectiveness of Forestry BMPs for Stream Crossing Sediment Reduction Using Rainfall Simulation*. Available online at: http://www.srs.fs.usda.gov/pubs/gtr/gtr_srs203/gtr_srs203-014.pdf

The potential direct impacts to waters of the U.S. and wildlife habitat that could result from the stream crossing improvements were analyzed in the EIR and mitigated to less-than-significant levels via the implementation of Mitigation Measure 4.2-4 (waters of the U.S.), Mitigation Measure 4.2-10 (WPT), and Mitigation Measure 4.2-11 (CRLF and FYLF). Pursuant to Mitigation Measure 4.2-4, the Applicant will obtain a U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permit, a RWQCB Clean Water Act Section 401 Water Quality Certification, and a CDFW Streambed Alteration Agreement prior to any discharge of any dredge or fill materials (including rocks for stream crossing upgrades). Mitigation Measure 4.2-10 requires preconstruction surveys for WPT and turtle exclusionary fencing for any groundbreaking activities (including stream crossing upgrades) near WPT habitat, and Mitigation Measure 4.2-11 requires frog exclusionary fencing to be constructed around all grading and construction activities (including stream crossing upgrades) near CRLF and FYLF habitat. As such, all potential impacts due to the upgrade of the low-water crossings were appropriately "avoid[ed] or *substantially lessen[ed]*" in accordance with Pub. Resources Code, § 21002.

Appeal Ground No. CBD26: Appellant asserts that County failed to assess potential impacts to salmon traveling through waterways impacted by stream crossings. (CEQA *Guidelines* § 15126.)

Staff Response: As discussed in response to Appeal Ground No. LRC3, the project site is not accessible to anadromous salmon due to two impassable barriers to salmonids that occur downstream on Capell Creek and Milliken Creek. In addition, as stated in Appendix M, "Milliken and Capell creeks are both too small and ephemeral to be considered suitable habitat." The project site is located at the headwaters to these two creeks, and is too rocky, steep, and ephemeral to support anadromous fisheries even if they were able to access the property as discussed in Impact 4.2-15. Because salmonids are known to occur downstream of the project site within the Napa River watershed, the Draft EIR considered the connectivity of onstream waters to salmonid habitat and required mitigation measures to reduce sediment load that could affect spawning gravels, as discussed in Impact and Mitigation Measure 4.2-15. The implementation of the project would not affect these species. Consistent with the USFWS recommendations and CEQA *Guidelines* § 15126, no mitigation is required for a species that will not be impacted. See also Staff Response to Appeal Ground Nos. CBD17 and CBD18, above.

Appeal Ground No. CBD27: Appellant asserts that the EIR failed to provide sufficient detail regarding its hazardous materials business plan, including providing information on enforceable mitigation measures to ensure project-related hazardous materials would not enter into local waterways. (CEQA *Guidelines* § 15126.4.)

Staff Response: As discussed in General Response 15 of the Final EIR:

"Although the project design has attempted to minimize use and accidental discharge of hazardous materials, there is the inherent risk of hazardous materials incidents in all

vineyard development and operation practices found throughout Napa County, including the Proposed Project (refer to Impacts 4.5-1 through 4.5-5 of the Draft EIR). These impacts will be mitigated through the implementation of Mitigation Measures 4.5-1 through 4.5-5, which require the development and execution of a Hazardous Materials Business Plan (HMBP), standard operating procedures (SOPs) for filling and servicing construction equipment and vehicles, SOPs regarding the use and application of pesticides, and proper storage, use, and transportation of waste oil storage containers. Consistent with the Napa County PBES requirements, the HMBP will include at a minimum the following information: 1) an inventory of the type and quantity of hazardous materials stored onsite; 2) a site map indicating locations of material storage; 3) spill prevention methods; 4) spill response plan; 5) employee training; and 6) emergency contacts."

These aspects are incorporated into the project's MMRP, a legally binding and enforceable plan. The MMRP requires implementation of the Integrated Pest Management (IPM) Plan in Mitigation Measure 4.5-4 and Mitigation Measure 4.2-10, and requires preparation and execution of the HMBP in Mitigation Measure 4.5-1. Similar to other vineyard projects, the County will enforce the HMBP and IPM Plan in which compliance is compelled by the MMRP. These measures will ensure that project-related hazardous materials would not enter into local waterways. Therefore, there are legally binding and enforceable measures to ensure the Applicant will comply with the mitigation measures in the EIR, including the rules for safe pesticide and fertilizer application.

Appeal Ground No. CBD28: Appellant argues that the EIR failed to provide adequate support for its conclusion that decreased runoff would equate to decreased nutrient loading compared to pre-project conditions. Even assuming the project would decrease runoff, the project would likely add to the nutrient loads of local surface waters compared to pre-project conditions because it will add agricultural nutrients and other chemicals to any runoff originating from the project. (CEQA *Guidelines* § 15126.) Likewise, County did not request sufficient mitigation to reduce these impacts to less than significant. (CEQA *Guidelines* § 15126.4.)

Staff Response: The EIR analyzes potential impacts to water quality in several locations; refer to Impact 4.6-2, Impact 4.5-1, Impact 4.5-3, and Impact 4.5-4. Each of these was found to be a significant impact in accordance with CEQA *Guidelines* § 15126.2, and mitigation measures were required for each impact to "avoid or *substantially lessen*" the project's significant impacts (Pub. Resources Code, § 21002).

The EIR discusses potential impacts due to nutrient runoff under the heading "Chemical Loading" within Impact 4.6-2, and provides the following discussion:

"Use of fertilizers can result in runoff laden with excessive plant nutrients, which can lead to eutrophication and algal growth in receiving waters; pesticide use can result in

runoff contributing to toxic conditions in receiving waters. Napa County Department of Planning, Building & Environmental Services (PBES) promotes BMPs to reduce hazardous material contamination of surface and groundwater. The Proposed Project would be operated in a manner that is consistent with Napa County PBES requirements. Operation of the vineyard under the Proposed Project would utilize Integrated Pest Management (IPM) techniques (see Section 4.5.1-2 and Mitigation Measure 4.5-4). Fertilizers proposed for use at the project site include: nitrogen, phosphorus, potassium, micro-nutrients, and compost. The Napa River is being de-listed for nutrient pollution in accordance with San Francisco Bay RWQCB Resolution No. R2-2014-0006. Pesticides proposed for potential use at the project site include a variety of herbicides and fungicides (discussed in Section 4.5 Hazardous Materials). Establishment and maintenance of setbacks from onsite drainage features in conjunction with implementation of Mitigation Measures 4.5-1, 4.5-2, 4.5-3, and 4.5-4 in Section 4.5 Hazardous Materials would minimize the potential for fertilizers, pesticides, and agrichemicals to enter receiving waters on the project site. This is considered a less-than-significant impact."

The Draft EIR Section 4.6.3-1 discusses the effectiveness of stream setbacks in mitigating water quality impacts citing to supporting evidence including Natural Resource Conservation Service (NRCS), UC Davis and the U.S. EPA, as follows:

"The Natural Resources Conservation Service (USDA, 2000) and the University of California, Division of Agricultural and Natural Resources (2006) recommend 50-foot wide vegetated buffers for stream and wetland protection because under most conditions it is a generally adequate buffer width to provide enough vegetation to entrap sediments and soils, and filter chemicals adequately by facilitating degradation within buffer soils and vegetation. Additionally, the U.S. Environmental Protection Agency has indicated that buffer strips of three to 50 feet wide were effective in removing nitrogen, and grassland buffer strips of approximately 50 feet effectively removed approximately 50 percent of nitrogen in runoff (USEPA, 2005)." ⁵⁹

Contrary to the Appellant's assertion, the EIR provides a robust discussion of water quality impacts in accordance with CEQA *Guidelines* § 15126.2, and provides numerous mitigation measures to address potential water quality impacts.

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⁵⁹ U.S. Department of Agriculture (USDA), 2000. Conservation Buffers to Reduce Pesticide Losses. March, 2000. Natural Resources Conservation Service.

University of California – Division of Agricultural and Natural Resources, 2006. *Vegetative Filter Strips for Nonpoint Source Pollution Control in Agriculture*. Publication 8195.

U.S. Environmental Protection Agency (USEPA), 2005. Riparian Buffer Width, Vegetative Cover, and Nitrogen Removal Effectiveness. October 2005.

It is also important to note that, although the Napa River was previously listed for nutrient pollution, given improving water quality in the non-tidal portions of the Napa River, the San Francisco Bay RWQCB adopted Resolution No. R2-2014-0006 on February 12, 2014 to delist the non-tidal Napa River for nutrients. It is currently being processed by the USEPA.

In addition to these protective measures for water quality discussed above that mitigate any impacts to a level of less than significant, the Applicant has been working with the City of Napa to voluntarily develop a surface water monitoring plan to address the City's concerns regarding potential water quality impacts. A Condition of Approval requiring the implementation of the Water Quality Monitoring Plan was added to the Updated MMRP and as COA No. 10. The Water Quality Monitoring Plan requires sampling for several water quality constituents (including nutrients) on the Walt Ranch property. Also see response to Appeal Ground No. COCWD5.

Appeal Ground No. CBD29: Appellant asserts that the EIR does not provide an accurate baseline for groundwater resources because it fails to measure the actual recharge rate of the onsite groundwater basin, which may differ geologically from other nearby aquifers. (CEQA *Guidelines* § 15125.)

Staff Response: Refer to response to Appeal Ground No. LRC9.

Appeal Ground No. CBD30: Appellant asserts that County provides an inadequate discussion of the project's surface water-groundwater connectivity and connectivity between the project's and other groundwater basins. (CEQA *Guidelines* § 15125.) Due to this, the EIR does not adequately discuss the impacts to surface waters, wildlife, other local groundwater users, and other aquifers from the direct, indirect, or cumulative drawdown of the project's groundwater supplies, nor does it require sufficient mitigation. (CEQA *Guidelines* § 15126, 15126.4.)

Staff Response: Refer to response to Appeal Ground No. COCWD32.

Appeal Ground No. CBD31: Appellant asserts that the EIR applies an inappropriate significance threshold, which allows for the project to withdraw water at a faster rate than the aquifer would recharge and lead to the drawdown of other local wells. (CEQA *Guidelines* §§ 15126, 15382.)

Staff Response: Refer to response to Appeal Ground No. LRC13.

Appeal Ground No. CBD32: Appellant asserts that the EIR erroneously does not ensure an adequate water supply for the project, in violation of SB 610.

Staff Response: Senate Bill (SB) 610 does not apply to the Walt Ranch Project. SB 610 promulgates that projects defined by Water Code Section 10912 are subject to the bill.

A "project" as defined by Section 10912(a) means any of the following:

- (1) A proposed residential development of more than 500 dwelling units.
- (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- (4) A proposed hotel or motel, or both, having more than 500 rooms.
- (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- (6) A mixed-use project that includes one or more of the projects specified in this subdivision.
- (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Agricultural projects are not "projects" as defined by the Water Code and therefore are not governed by SB 610. That said, the definition of a "project" that is most applicable would be 10912(a)(7); however, the Walt Ranch Project as mitigated only requires 144.5 af per year, well below the requirement of a 500 dwelling unit project, which would be a minimum of 0.5 af per year. per unit or 250 af per year.

Appeal Ground No. CBD33: Appellant asserts that County's mitigation measures are inadequate to prevent overdraft of local groundwater resources, and, thus, ensure that impacts to groundwater resources remain less than significant. (CEQA *Guidelines* § 15126.4.) The County does not require the adoption of all feasible mitigation measures to ensure these impacts will be less than significant. In addition, County proposes deferred, unenforceable mitigation, in violation of CEQA. (CEQA *Guidelines* §15126.4.)

Staff Response: As discussed in the response to Appeal Ground No. LRC13, the approved 209-acre project would require a groundwater demand of 144.5 af per year and the Sonoma Volcanics on the Walt Ranch property recharge a minimum of 161 af per year. As such, there is no risk of long-term overdraft of the Sonoma Volcanics.

Groundwater pumping could still impact neighboring wells and cause drawdown, as discussed in Impact 4.6-4. However, Mitigation Measure 4.6-4 requires the development of a groundwater monitoring and mitigation plan (GWMMP), which has been developed and presented to the County for review and approval. The GWMMP provides methodology for the ongoing monitoring of designated wells (both on- and off-site) and trigger points, as well as a range of mitigation options if impacts to offsite wells occur. These mitigation options include:

- a) reducing the instantaneous pumping rate in all or in selected project wells (the specific wells will be determined by the RCS geologist after determining which project wells may be causing the impact);
- b) reducing the volume of groundwater pumped in each irrigation season by all or by selected project wells (the specific wells will be determined by the Geologist after determining which project wells may be causing the impact;
- c) shifting of the rates and/or volumes of groundwater extraction by existing project wells to different portions of the subject property;
- d) ceasing production from certain onsite wells and replacing that lost production by constructing new onsite wells at the project property;
- e) lowering the pump, if possible, in an offsite well that has been shown to have been impacted;
- f) constructing a new water well to replace an offsite well that has been shown to have been impacted; and/or
- g) providing an alternative source of water to the owner of the impacted well in order to allow the owner to maintain the quantity and quality of the groundwater that has been otherwise lost by the impacts.

CEQA *Guidelines* § 15126.4 (a) (1) (B) states that mitigation measures should not be deferred indefinitely:

Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.

An EIR may rely on a resource management plan as an element of mitigation as long as the agency has committed to reducing impacts to less-than-significant levels. In accordance with CEQA *Guidelines*, significant impact determinations and formulation of mitigation measures must occur before project approval. The details of exactly how mitigation will be achieved under the GWMMP can properly be determined at a later date within the confines of the plan. In *Friends of Oroville v. City of Oroville* (Sept. 18, 2013) 219 Cal.App.4th 832, the courts found that an "EIR may defer the formulation of mitigation details when the lead agency commits itself to mitigation and the measures include specific performance standards or criteria that must be met for the project to proceed." The mitigation measures for potential impacts to neighboring wells (Mitigation Measure 4.6-4) identified in the EIR are directly analogous to those that have been upheld by the courts.

The Lead Agency has not improperly deferred any mitigation as defined by CEQA *Guidelines* § 15126.4.

Appeal Ground No. CBD34: Appellant asserts that County provides an inadequate discussion of air quality, and it fails to supply an adequate baseline, accurately describe impacts, or to set

adequate mitigation for a variety of air quality impacts. For example, County erroneously ignores air quality impacts from important sources, such as pesticides. (CEQA *Guidelines* § 15126.) County's significance determination regarding air quality impacts is not supported by substantial evidence (Cal. Code Civ. Proc. §§1085; 1094.5.)

Staff Response: Per the methodology outlined in Section 4.1.3-1 of the Draft EIR, the analysis of Proposed Project emissions compares daily emissions with the Bay Area Air Quality Management District (BAAQMD) thresholds in accordance with the 2012 BAAQMD CEQA Guidelines. Per the BAAQMD Guidelines, CEQA *Guidelines* Appendix G, and Napa County Local Procedures for Implementing CEQA, the air quality analysis presented in Section 4.1 of the EIR focused on criteria air pollutants (CAPs), which include: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), sulfates (SO_X), lead (Pb), and hydrogen sulfide (H₂S). With implementation of mitigation measures presented in the EIR and compliance with required BAAQMD mitigation measures, implementation of the Walt Ranch Project would not result in a significant air quality impact. Therefore, the EIR appropriately concluded that the construction and operation emissions would be less than significant and provided substantial evidence as required by CEQA *Guidelines* § 15384.

In addition to the CAPs discussed in Section 4.1, the EIR presented a discussion of potential impacts due to wind drift of pesticides in Section 4.5 for hazardous materials. The mitigation measures provided in the EIR, as well as compliance with all USEPA, California Department of Pesticide Regulation (CDPR), and Napa County regulations, will ensure that pesticides are used appropriately and in accordance with all Best Management Practices and safety procedures to minimize wind drift. In addition, the owner shall apply for a private applicator certificate and a restricted materials permit from the Napa County Agricultural Commissioner pursuant to Mitigation Measure 4.5-4. Limitations on pesticide and fertilizer use will minimize the risk for wind drift occurrences. In addition, setbacks and buffers provided in Mitigation Measure 4.2-4 will act as a filter/barrier to reduce the potential for petroleum products, pesticides, or fertilizers to cause a significant impact.

Furthermore, pesticide applicators are restricted by California Code of Regulations (CCR), Title 3, Section 6614 called "Protection of Persons, Animals, and Property." This mandates that pesticide applicators must consider meteorological conditions (wind and precipitation events) and the potential risk to the environment and nearby persons prior to application. Section 6614 states that no pesticide application shall be made or continued when there is a "reasonable possibility of contamination of nontarget public or private property, including the creation of a health hazard, preventing normal use of such property. In determining a health hazard, the amount and toxicity of the pesticide, the type and uses of the property and related factors shall be considered."

The USEPA routinely evaluates the potential for drift as part of the pesticide risk assessments in order to estimate drift impacts on: communities living near fields where crops are grown; farmworkers; water sources; and the environment. The potential for pesticide drift is considered by the USEPA during the labeling of pesticides, and is a factor in the strength of the toxicity label applied to an agrichemical. The Walt Ranch IPM Plan (Appendix N of the Draft EIR) has already committed to only using chemicals classified by the USEPA as Class 3 or Class 4 (Low Toxicity or Very Low Toxicity, respectively). As such, there is negligible potential for impacts from wind drift for the chemicals that may be applied on the Walt Ranch property.

The Napa County Agricultural Commissioner's Office does random inspections of pesticide application to ensure that CCR Title 3, Section 6614 is being followed. The existing mitigation measures in place within the EIR, compliance with CDPR and Napa County Agricultural Commissioner's rules and regulations, and the Applicant's commitment to the IPM Plan (also required by Mitigation Measure 4.5-4), would adequately minimize any risk of pesticide drift.

The EIR analysis of pesticide use relied on a combination of site-specific analysis and conditions, compliance with applicable laws and regulations, and mitigation measures designed to ensure the proper and safe handling and application of agricultural chemicals. This type of analysis has been upheld by the courts in Ebbetts Pass Forest Watch v. CDF (2008) 43 Cal. 4th 936, where the Court considered whether a THP and the California Department of Forestry and Fire Protection's (CAL FIRE) responses to comments on herbicide use were deficient based on the statement that compliance with CDPR label restrictions would not necessarily have a significant effect on the environment. The Court found that "if the THP and [CAL FIRE's] response to public comments on the use of herbicides had relied entirely on the Department of Pesticide Regulation's regulatory program and had not themselves analyzed the significant environmental effects, mitigation measures, and alternatives to herbicide use on the harvested sites," then CAL FIRE would have failed in its duty to consider and disclose information relevant to its decision. However, since CAL FIRE's responses included more analysis at that point, including an extensive discussion of potential impacts, mitigation measures, and alternatives to herbicide use, CAL FIRE did not erroneously rely on CDPR's regulatory program and fail to conduct its own environmental impacts assessment. Similarly in the Walt Ranch EIR, extensive analysis of pesticide and herbicide use was provided in Section 4.5, and Mitigation Measures 4.5-1 through 4.5-4 were provided to reduce the risk to the environment.

Appeal Ground No. CBD35: Appellant asserts that County erroneously concludes that mobile source emissions are less than significant and requires insufficient mitigation for these impacts. (CEQA *Guidelines* §§ 15126, 15126.4.)

Staff Response: Per the methodology outlined in Section 4.1.3-1 of the EIR, the analysis of Proposed Project emissions compares daily emissions from all sources (including mobile emissions) with the BAAQMD thresholds in accordance with the 2012 BAAQMD CEQA

Guidelines and found no significant impact. This was addressed in Impact 4.1-2 and Impact 4.1-3 of the Draft EIR, and Final EIR Response to Comment O21-126, which explains that mobile trips are accounted for in the CalEEMod analysis. If the mobile source emissions combined with all other emissions sources did not exceed the BAAQMD significance thresholds, then no mitigation is required. Although this was a less-than-significant impact, the EIR adopted mitigation measures recommended by the BAAQMD to further reduce these impacts. With implementation of the mitigation measures presented in the EIR and compliance with required BAAQMD mitigation measures, implementation of the Walt Ranch Project would not result in a significant air quality impact. Therefore, the EIR appropriately concluded that the construction and operation emissions would be less than significant and provided substantial evidence as required by CEQA Guidelines § 15384.

Appeal Ground No. CBD36: Appellant asserts that County does not set an adequate preproject greenhouse gas (GHG) baseline, discussion of GHG-related impacts, or mitigation for these impacts. County uses an inappropriate baseline against which to compare project-related GHG impacts. (CEQA Guidelines § 15125.)

Staff Response: As noted in Final EIR Response to Comment O21-115, the baseline conditions on the project site are discussed frequently throughout the Draft EIR, and specific mentions of the baseline condition that affects GHG emissions are discussed in Sections 3.2, 4.1.1, 4.2.1, 4.2.2, and 6.1.4-1. As stated therein:

The property consists primarily of *undeveloped* oak woodland, chaparral, and grassland habitats occurring at elevations that range from approximately 850 to 2,150 feet (259 to 655 meters) above mean sea level (Draft EIR page 4.2-6; emphasis added).

Table 4.2-2 provides a breakdown of each habitat type over the 2,300-acre Walt Ranch property and within the 507-acre gross disturbance area, and shows that there are approximately 1,697 acres of woodland or forest habitats on the property. In numerous locations throughout the Draft EIR, the property is described as an undeveloped area. Given that there are no stationary sources of GHG emissions and no significant developments on the property, the baseline condition of current GHG emissions are conservatively estimated to be net zero for the analysis. The current woodland provides sequestration benefits greater than or equal to the GHG emissions emitted to the atmosphere on the property today, but the emissions were assumed to be net zero to provide a more conservative analysis.

The analysis of the GHG emissions of the construction and operational phases of the Walt Ranch Project was conducted in accordance with CEQA Guidelines § 15064.4 for determining the significance of impacts from GHG emissions. Because climate change and the quantification of GHG emissions are evolving sciences, the Walt Ranch climate change analysis has been updated several times to ensure compliance with relevant laws and guidance. The analysis first presented in the Draft EIR utilized the California Air Resources Board (CARB)-approved CalEEMod,

which is consistent with CEQA Guidelines § 15064.4(a)(1). The CalEEMod model output files for both construction and operational phases of the project were provided in Appendix H, and consolidated emissions information compared to appropriate significance thresholds is provided in Table 6-2 and Table 6-3 of the Draft EIR. These significance thresholds initially utilized the Solano County Climate Action Plan, which is discussed in more depth in the response to Appeal Ground No. CBD37 below.

In April 2015, after numerous comment letters were received on the Draft EIR, Napa County updated the climate change analysis. Specifically, Napa County reviewed the climate change analysis prepared for the adjacent Circle S project and compared it to the methodology and results of the Walt Ranch climate change analysis. The Circle S analysis attempted to quantify sources of biogenic emissions, calculated loss of sequestration due to vegetation removal, and also utilized the Urbemis air quality model (now obsolete). The Walt Ranch analysis calculated loss of sequestration due to vegetation removal and utilized the CARB-approved CalEEMod, but followed BAAQMD guidance which states to not quantify biogenic emissions. It should be noted that the 2015 comparison showed that, although the Walt Ranch analysis did not include biogenic emissions, the analysis still resulted in a larger GHG emissions estimate on a per-acre basis than the Circle S analysis, further demonstrating that the Walt Ranch analysis was an appropriate and even conservative estimation of GHG emissions.⁶⁰

In March 2016, Napa County updated the climate change analysis a third time as a result of the California Supreme Court's Newhall Ranch Decision. As discussed further in the response to Appeal Ground No. CBD 27 below, the analysis was updated to 1) utilize the Mitigated Project acreage; 2) include blocks voluntarily eliminated by the Applicant; and 3) incorporate the 524.8 acres of oak woodland preservation required by biological mitigations. In addition, the analysis used a numerical significance threshold rather than the Solano County Climate Action Plan, consistent with the Court's guidance from the Newhall Ranch Decision.⁶¹

The air quality and GHG analyses have evolved over time in accordance with the best available and most up-to-date analytical methodologies, including the air quality modeling software CalEEMod recommended by both CARB and BAAQMD. The analytical methodologies were valid and relied upon the most recent agency guidance and case law. Updating an analysis in this way has been upheld by the courts in a Napa County-based case (Napa Citizens for Honest Government v. Napa County Board of Supervisors (2001) 91 Cal.App.4th 342), which acknowledged that although the updating of a traffic analysis three times was difficult to follow, the environmental document still fulfilled its informational purpose because the drafters

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⁶⁰ AES, 2015. Technical Memorandum RE: Comparison of Circle S GHG Emissions Analysis to Walt Ranch GHG Emissions Analysis. April 22, 2015.

⁶¹ AES, 2016. Technical Memorandum RE: Revised Walt Ranch Greenhouse Gas Emissions Analysis per Newhall Ranch Decision. March 28, 2016.

"explained their theories, [and] supported them by calculations." Similarly here, the Walt Ranch GHG analysis has been updated as required by evolutions in science and regulation surrounding climate change, and each time Napa County has provided transparent discussions regarding how and why the analysis was revised.

CEQA *Guidelines* § 15064.4 (a) states that the "determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." Napa County has demonstrated a good-faith effort to keep the analysis updated in the face of changing science.

Consistent with CEQA *Guidelines* §15126.4(c) which provides guidance for Lead Agencies in reducing GHG emissions, Mitigation Measure 6-1 of the Draft EIR provides for permanent preservation of 248 acres of woodland on the property as a means of sequestering greenhouse gases. Specifically, CEQA *Guidelines* §15126.4(c) states:

Consistent with Section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

- (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;
- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures, such as those described in Appendix F;
- (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions;
- (4) *Measures that sequester greenhouse gases...* (emphasis added).

Nothing in the CEQA statute or CEQA *Guidelines* suggests that carbon sequestration must occur offsite, or on woodlands otherwise proposed for imminent conversion to non-woodland uses, in order to constitute adequate mitigation. To the contrary, the CEQA *Guidelines*, and relevant case law demonstrate that permanent preservation of onsite woodlands is reasonable and adequate mitigation.

Appeal Ground No. CBD37: Appellant asserts that County's GHG analysis failed to use an adequate significance threshold. (*Center for Biological Diversity v. Dep't of Fish & Wildlife* (2015) 62 Cal.4th 204, 223; CEQA *Guidelines*, §15064.4.) Likewise, the County's significance determination is invalid.

Staff Response: The GHG analysis significance thresholds selected were consistent with the CEQA *Guidelines* § 15064.4. The County used the BAAQMD's adopted operational GHG significance thresholds in evaluating the operation of the Walt Ranch Project. This significance threshold was used since the Draft EIR was published in July 2014. The use of the adopted Solano County Climate Action Plan for the construction significance threshold was supported by substantial evidence (refer to AES April 22, 2015 memorandum), although it was eventually superseded by the 2016 analysis. The use of the Solano County Climate Action Plan was supported by the following rationale:

"The Solano County [Climate Action Plan] was chosen as the significance threshold for the Walt Ranch EIR because Napa County has not yet adopted its draft CAP. Solano County, located east to southeast of Napa County, also has an agricultural land base as does Napa County. The Solano County [Climate Action Plan] was approved by the Solano County Board of Supervisors on June 7, 2011. As stated in the Solano County [Climate Action Plan], implementation of the proposed [Climate Action Plan] measures and the statewide reductions would enable Solano County to achieve GHG emissions reductions of 26 percent below the 2005 baseline. This reduction is based on the AB 32 reduction goal. Therefore, if a project implements applicable Solano County CAP measures, then the project would be consistent with AB 32 reduction goal and have a less-than-significant impact on climate change. In addition, many of the Solano County [Climate Action Plan] measures are consistent with the Napa County draft [Climate Action Plan] reduction measures, further emphasizing that the Solano County [Climate Action Plan] is a comparable and appropriate significance threshold for use in the absence of an adopted Napa County [Climate Action Plan]." [Climate Action Plan].

On November 30, 2015, the California Supreme Court filed a decision in the case *Center for Biological Diversity v. California Department of Fish and Wildlife and the Newhall Land and Farming Company* (2015) (Newhall Ranch Decision). The Newhall Ranch Decision upheld the use of a "Business as Usual" (BAU) scenario as a significance threshold to analyze a project's GHG emissions. The Court also held, however, that the EIR in that instance did not contain substantial evidence supporting the application of that threshold to the project at issue. As discussed in the 2016 AES memorandum:

"The Newhall Ranch EIR determined whether the project would impede achievement of AB 32's goals by relying on CARB's Scoping Plan and comparing the project's emissions to a BAU projection as a measure of GHG emission reductions needed to meet the AB 32's 2020 goal (determined to be a reduction of 29 percent from BAU).

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⁶² AES, 2015. Technical Memorandum RE: Comparison of Circle S GHG Emissions Analysis to Walt Ranch GHG Emissions Analysis. April 22, 2015.

Although the Court determined that the EIR employed a legally permissible threshold of significance, it maintained that the EIR's finding that the project's emissions would not be significant under that threshold was "not supported by a reasoned explanation based on substantial evidence." The Court explained that the lead agency erred in assuming that because the Scoping Plan concluded that the State of California, as a whole, had to reduce its GHG emissions by 29 percent compared with the hypothetical BAU scenario, the project would not have significant GHG-related impacts if the project itself also reduced its own GHG emissions by 29 percent compared with what would have occurred under a BAU scenario (RMM, 2015). The Court held there was no substantial evidence to support that assumption. Therefore, the EIR's reliance on the project-specific reduction in GHG emissions compared to the BAU scenario was not sufficient to support the conclusion that GHG impacts would be less than significant." 63

In regards to the Walt Ranch EIR, the operational GHG analysis utilized an established GHG emissions significance threshold adopted by the BAAQMD. In the Newhall Ranch Decision, the Court stated that reliance on such a threshold was permissible. For this reason, no further analysis of operational GHG emissions was necessary as a result of the Newhall Ranch Decision.

Construction emissions were compared to the Solano County Climate Action Plan and relied on the Solano County BAU reduction of 26 percent. This approach is potentially implicated by the Newhall Ranch Decision. The 2016 AES memorandum therefore provided additional information on construction emissions, in light of the guidance provided by the Supreme Court. That analysis, which was made publicly available online and discussed at the April 4, 2016 public hearing, utilized both a BAU reduction with the Solano County Climate Action Plan and a nearby adopted significance threshold to provide two methodologies to determine the Walt Ranch Project's significance level in accordance with the Newhall Ranch Decision. As discussed in the 2016 AES memorandum:

"The nearest jurisdiction with an adopted GHG significance threshold for construction is Sacramento Metropolitan Air Quality Management District (SMAQMD), which covers the entirety of Sacramento County. The SMAQMD adopted the following GHG significance thresholds on October 23, 2014:

- Construction phase 1,100 MT/CO₂e per year
- Operational phase 1,100 MT/CO₂e per year
- Stationary source projects 10,000 MT/CO₂e per year

⁶³ AES, 2016. Technical Memorandum RE: Revised Walt Ranch Greenhouse Gas Emissions Analysis per Newhall Ranch Decision. March 28, 2016.

In order to use this significance threshold for the Proposed Project, the annual construction emissions were calculated by determining the greatest construction year emissions from CalEEMod, the loss of sequestration from tree removal, and carbon reductions produced by placing 524.8 acres of forest land into permanent preservation, as shown in Table 4. This value was then compared to the SMAQMD significance threshold of 1,100 MT of CO₂e per year. With the inclusion of the permanent preservation of 524.8 acres of woodland as required by biological mitigation measures in the Final EIR, the construction GHG emissions do not exceed the significance threshold "64"

Although the significance thresholds used in the Walt Ranch climate change analysis have been updated since the initial publication of the Draft EIR, these updates have been necessitated by advances in climate change science and new court decisions. CEQA *Guidelines* § 15064.4 (b) (2) states that a lead agency should consider, when assessing the significance of impacts from greenhouse gas emissions on the environment, "whether the project emissions exceed a threshold of significance that *the lead agency determines applies to the project*" (emphasis added). CEQA allows the lead agency to choose the appropriate significance threshold at its discretion, which Napa County did by considering air quality management district recommendations, climate action plans of the neighboring county, and finally the court's recommendations from the Newhall Ranch Decision.

Appeal Ground No. CBD38: Appellant asserts that the County did not adopt all feasible mitigation to ensure project-related GHG impacts will remain less than significant. (CEQA *Guidelines* § 15126.4.). The County fails to show how its proposed mitigation will reduce project-related impacts to less than significant. (CEQA *Guidelines* § 15126.4.)

Staff Response: This was addressed in Final EIR Response to Comment O10-15. Mitigation Measure 6-1 of the Draft EIR provides for permanent preservation of 248 acres of woodland on the property as a means of sequestering greenhouse gases. This is consistent with CEQA *Guidelines* §15126.4(c) which provides guidance for Lead Agencies in reducing GHG emissions:

Consistent with Section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

(1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;

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⁶⁴ AES, 2016. Technical Memorandum RE: Revised Walt Ranch Greenhouse Gas Emissions Analysis per Newhall Ranch Decision. March 28, 2016.

- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures, such as those described in Appendix F;
- (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions;
- (4) Measures that sequester greenhouse gases... (emphasis added).

Nothing in the CEQA statute or CEQA *Guidelines* suggests that carbon sequestration must occur offsite, or on woodlands otherwise proposed for imminent conversion to non-woodland uses, in order to constitute adequate mitigation. To the contrary, the CEQA *Guidelines*, and relevant case law demonstrate that permanent preservation of onsite woodlands is reasonable and adequate mitigation.

The CEQA Guidelines (CEQA Guidelines § 15370) define "mitigation" to include:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the impact and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- Compensating for the impact by replacing or providing substitute resources or environments.

Mitigation Measure 6-1 rectifies and compensates for the project's impact on climate change by ensuring that an estimated 27,628 metric tons of carbon dioxide equivalent (CO₂e) are sequestered (captured and stored) thereby off-setting 27,628 CO₂e generated by the project's construction. This sequestration will be accomplished through permanent protection of no less than 248 acres of woodland habitat onsite. This mitigation measure is not "illusory," as it will provide a measurable means of reducing the emissions due to project construction by 26 percent. Table 6-2 from the Draft EIR provides support that preserving 248 acres of woodlands on the property would provide carbon sequestration benefits. Furthermore, preservation of onsite oak woodlands is an effective mitigation even if all or some of the acreage was not proposed to be converted to vineyards as part of the project. If this acreage of woodland were not placed in permanent protection, then it is theoretically possible that the land could be developed in the future with the appropriate documentation and approvals under CEQA and County policies. Mitigation Measure 6-1 affirmatively requires the permanent conservation of no less than 248 acres of woodland habitat (and Mitigation Measure 4.4-2 requires the preservation of 524.8 acres of oak woodland). Accordingly, the final conservation easement language now proposes the permanent preservation of 524.8 acres of woodland, providing over twice as much woodland than what is required to offset project-related GHG emissions. These restrictions will run with

the land and bind any successor in interest, and would not be provided absent such mitigation. It should be noted that the ultimate conservation easement will include other natural habitats for the preservation of certain special-status plants, which will also have a carbon sequestration benefit. Only counting the 524.8 acres of woodland within the conservation easement therefore shows a conservative carbon sequestration benefit.

Given the relatively recent adoption of CEQA Guidelines § 15126.4, subdivision (c), there is no case law directly interpreting subdivision (c)(4) (measures that sequester greenhouse gases). However, case law addressing mitigation for biological and agricultural resources holds that a resource need not be created in order to constitute adequate mitigation. In Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal. App. 4th 477, for example, the city required a development project to preserve habitat onsite and offsite to address the project's impacts on coastal sage scrub habitat. (Id. at p. 495.) The court held that preservation of "undisturbed habitat," in particular, qualified as mitigation because it both reduced and compensated for the loss of onsite wildlife under CEQA Guidelines §15370. (Ibid.; see also, e.g., Masonite Corporation v. County of Mendocino (2013) 218 Cal. App. 4th 230 [agricultural easements may appropriately mitigate for the direct loss of farmland caused by a project, even though the easement does not replace the lost resources]; Save Panoche Valley v. San Benito County (2013) 218 Cal.App.4th 503, 529 [upholding conservation as mitigation and noting that "[t]he goal of mitigation measures is not to net out the impact of a proposed project, but to reduce the impact to insignificant levels"] see also Pub. Resources Code, § 21083.4, subd. (b)(1) [conservation easements identified as acceptable mitigation for the direct loss of oak woodlands].)

Similarly here, the permanent preservation of oak woodland for carbon sequestration both reduces and compensates for the project's impact on climate change. Mitigation Measure 6-1 is therefore adequate under CEQA.

Appeal Ground No. CBD39: Appellant asserts that the EIR does not adequately consider cumulative impacts and other projects' cumulative impacts to wildlife, traffic, water quality and supply, and air quality, and, instead, erroneously equates CEQA compliance with less than significant cumulative impacts. (CEQA Guidelines §15355(a).) The Draft EIR does not specifically discuss the cumulative effects the construction project and the continued agricultural operation of the vineyard will have on wildlife. (See Draft EIR at 6-20- 6-23.) Instead of providing an informative cumulative wildlife impacts discussion in its cumulative impacts analysis, the Draft EIR dismisses outright the possibility that the Proposed Project will have any cumulative impact on these species. (See Id. at 6-21.) The County simply concludes that "the special status habitats and species addressed in [the County's proposed] mitigation measures will reduce the impacts from the Proposed Project to less than significant, and since each of the other projects in the cumulative environment is held to the same CEQA standards . . . there will be no significant cumulative impacts to the sensitive species and habitats analyzed in the Draft EIR."(Id.)

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Staff Response: As discussed further in response to Appeal Ground No. LRC7, a two-step process was used in preparing the cumulative impact analysis in the Draft EIR, consistent with CEQA *Guidelines* § 15130. First, for each impact area, the impacts of the Proposed Project, in combination with those from other past, present, or reasonably foreseeable projects, were analyzed to assess whether they are cumulatively significant. Then, the effect of the Proposed Project was assessed to determine if it was a considerable contribution to that impact. It should be noted that the EIR found that there were cumulative impacts to certain environmental areas, specifically greenhouse gases, and mitigation measures were provided to reduce impacts to less-than-significant levels.

The Appellant incorrectly states that the EIR does not consider cumulative impacts to wildlife species as a result of continued agricultural operation of vineyards on the Walt Ranch property. The EIR's cumulative impact analysis on wildlife is comprehensive and complies with CEQA. As one example, Section 6.1.4-2 of the EIR acknowledges that in the larger cumulative environment, habitat loss could be a significant impact to bird species. Therefore, Table 6-4 of the EIR analyzed the potential for cumulative projects to significantly impact the foraging habitat of various birds of prey to determine if the Walt Ranch Project would have a considerable contribution to that cumulative impact. While minor changes in quality of foraging habitat may occur as a result of the Walt Ranch Project, mitigation measures for foraging habitat are not required under CEQA or the CDFW pursuant to California Fish and Game Code § 3511(a)(1). As disclosed in Section 6.1.4-2 of the Draft EIR, "of all grassland foraging birds with potential to occur on the project site, white tailed kite would likely be unaffected by landscape changes to foraging habitat because they can forage in woodland habitat, including vineyards." In addition, the baseline condition includes patches of grassland on the property but no large expanses of grassland, and therefore species that require large expanses of grassland to forage would not be present on the property today and would not be impacted by proposed vineyard development.

To cite another example mentioned by the Appellant, the analysis of cumulative traffic impacts assessed the potential cumulative impact of the construction and ongoing agricultural operation separately. Section 6.1.4-7 of the EIR states that "[c]onstruction of the Proposed Project in combination with other past, present, and reasonably foreseeable future projects may result in a significant cumulative impact to local roadways and traffic conditions, specifically State Route 121." The EIR then presents an analysis of construction-related traffic trips in the cumulative environment by adding the project-related trips to the existing number of trips on local roadways to determine whether or not the capacities of those roadways would be exceeded. The EIR concludes that this "one-time trip generation will not be a considerable contribution cumulatively significant to traffic in the area. There are no reasonably foreseeable future vineyard or development projects that will require access via Circle Oaks Drive, and therefore there is no significant impact to Circle Oaks Drive in the cumulative condition." In order to analyze ongoing agricultural operations in the cumulative environment, the EIR uses similar methodology to

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determine that, although additional vineyard projects in the cumulative environment would create similar volumes of traffic as the Proposed Project, "the incremental contribution of the Proposed Project would be less than cumulatively considerable." This analysis complies with CEQA and the CEQA *Guidelines*.

Appeal Ground No. CBD40: Appellant asserts that County's alternatives discussion fails to meet CEQA standards. The EIR does not discuss whether other, lower-intensity alternatives meet most or all of the project objectives. (CEQA *Guidelines* § 15126.6.) The EIR does not consider an alternative that would meet all project objectives, but would have a greatly decreased environmental impact, such as an alternative that would concentrate all vineyards in one location or that would greatly reduce fencing. (CEQA *Guidelines* §15126.6.)

Staff Response: Refer to response to Appeal Ground No. COCWD19.

Appeal Ground No. CBD41: Appellant asserts that no substantial evidence supports the County's findings that impacts to biological resources, water quality, water supply, air quality, traffic, and climate change will be directly, indirectly, and cumulatively less than significant (Cal. Code Civ. Proc. §§1085; 1094.5).

Staff Response: Substantial evidence was provided in the EIR to support the County's findings on biological resources (refer to responses to Appeal Ground No. CBD3 through CBD20), water quality (refer to responses to Appeal Ground No. CBD31 through CBD35), water supply (refer to responses to Appeal Ground No. CBD31 through CBD33), air quality (refer to responses to Appeal Ground No. CBD34 and CBD35), traffic (refer to response to Appeal Ground No. CBD36 through CBD38).

<u>Appeal Ground No. CBD42:</u> Appellant asserts that no substantial evidence supports the County's findings that greenhouse gas-related impacts will be less than significant. (Cal. Code Civ. Proc. §§ 1085; 1094.5).

<u>Staff Response:</u> Substantial evidence was provided in the EIR to support the County's findings on greenhouse gas-related impacts (refer to responses to Appeal Ground No. CBD36 through CBD38).

Appeal Ground No. CBD43: Appellant asserts that no substantial evidence supports the County's findings that no additional feasible alternatives or mitigation measures exist to eliminate or reduce the project's significant adverse environmental impacts. (Cal. Code Civ. Proc. §§ 1085; 1094.5).

<u>Staff Response:</u> Substantial evidence was provided in the EIR to support the County's findings on alternatives (refer to response to Appeal Ground No. COCWD19).

Appeal Ground No. CBD44: Appellant asserts that County's conclusion that all alternatives would have similar impacts is not supported by substantial evidence. (CEQA *Guidelines* § 15126.6; Cal. Code Civ. Proc. §§ 1085; 1094.5.)

Staff Response: The EIR does not claim that all alternatives have similar impacts. The EIR specifically analyzes and compares each alternative to the Mitigated Project for each environmental impact area. The EIR states that the Multiple Resource Protection Alternative would result in slightly lesser impacts to biological resources as compared to those of the Mitigated Project because it has a smaller footprint and specifically avoids overlapping biological resources. The EIR also acknowledges that "[o]verall, the Multiple Resource Protection Alterative would likely result in lesser direct impacts to the environment than the Proposed Project, but it would have greater impacts to biological resources than the Reduced Intensity Alternative." The EIR also discusses that the Reduced Intensity Alternative would have lesser impacts to biological resources, as additional habitats would be protected on the property (see Draft EIR page 5-12 through 5-14).

As discussed in response to Appeal Ground No. COCWD19, CEQA *Guidelines* § 15126.6 requires that a Draft EIR contain only "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." A full quantitative analysis for each environmental impact area for each proposed alternative is not required under CEQA or the CEQA *Guidelines*. A "matrix displaying the major characteristics and significant environmental effects of each alternative" is presented in Table 5-3 of the Draft EIR, pursuant to CEQA *Guidelines* § 15126.6. The comparative analysis that compares the levels of impact of each alternative with the Proposed Project provided in the Draft EIR is sufficient under CEQA to allow "informed decision making and public participation." In addition, Table 15 of the BRMP (Appendix P to the Final EIR and copied in on the following page) included a detailed comparison of potential impacts of the Mitigated Project, Reduced Intensity Alternative, and the Multiple Resources Protection Alternative for each of the biological resources (habitats and plants) addressed within the BRMP. Staff has also attached a Project Evolution Comparison Table showing the size of the project, tree removal, groundwater use and GHG emissions resulting from the original project the alternatives and the approved ECP. (See Attachment J.)

<u>Appeal Ground No. CBD45:</u> Appellant asserts that County's statement of overriding considerations is not supported by substantial evidence. (Cal. Code Civ. Proc. §§ 1085; 1094.5).

Staff Response: No statement of overriding considerations was issued for the project because no impacts are significant and unavoidable. Pursuant to CEQA *Guidelines* § 15093, a lead agency must prepare a statement of overriding considerations when "the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened." As stated in the EIR (see Response to Comment O21-076), "there are no significant and unavoidable impacts associated with the

Mitigated Project. All impacts would be reduced to less-than-significant levels with the implementation of the mitigation measures outlined in Section 4.0 of the Draft EIR. The Mitigated Project demonstrates the feasibility of avoiding significant impacts to biological resources, meets all project objectives, and is consistent with Napa County General Plan policies and regulations."

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TABLE 15 OF THE BRMP (UPDATED WITH FINAL ECP) IMPACT COMPARISON BETWEEN THE MITIGATED PROJECT AND ALTERNATIVES

		Final ECP (209 net acres)			Mitigated Project			Reduced Intensity Alternative			Multiple Resource Protection		
	Acres Onsite	Acres Avoided in Final ECP 7-5-16	Acres Proposed for Removal in Final ECP 7-5- 16	Mitigation Acreage Required for Final ECP 7-5- 16	Acres Avoided	Acres Proposed for Removal (Mitigated Project)	Mitigation Acreage Required (Mitigated Project)	Acres Avoided	Acres Proposed for Removal (RIA)	Mitigation Acreage Required (RIA)	Acres Avoided	Acres Proposed for Removal (MRP)	Mitigation Acreage Required (MRP)
Habitats	I												
Native Grassland	9.8	8.9	0.9	1.9	8.7	1.1	2.2	8.9	0.9	1.8	9	0.8	1.6
Black Oak Alliance	317.5	301.1	16.4	32.8	281.7	35.7	71.4	298.7	18.8	37.6	282.5	34.9	69.8
Blue Oak Alliance	18.5	16.3	2.2	4.3	15.9	2.6	5.2	15.9	2.6	5.2	15.9	2.6	5.2
Coast Live Oak (Foothill Pine) Alliance	129.3	110.4	18.9	37.8	109.2	20.1	40.2	109.4	19.9	39.8	109.2	20.1	40.2
Coast Live Oak-Blue Oak- (Foothill Pine) NFD Association	728.7	671.5	57.2	114.3	628.5	100.2	200.4	629.3	99.4	198.8	628.6	100.2	200.4
Mixed Oak (Foothill Pine/Ponderosa Pine) Alliance	461.9	397.8	64.1	128.2	358.1	103.8	207.6	359.9	102.1	204.2	358.5	103.4	206.8
Valley Oak Riparian Forest NFD Association	30.8	30.8	0	NR	30.8	0	NR	30.8	0	NR	30.8	0	NR
Woodland (Non-Oak)													
Canopy Cover	10.6	10.2	0.4	0	10.1	0.5		10.4	0.2		10.4	0.2	
Plants Narrow-anthered	Ι												
California brodiaea	41.8	33.9	7.8	7.8	33.2	8.6	8.6	33.9	7.8	7.8	35.6	6.2	6.2
Holly-leaved ceanothus	68.4	58.1	10.3	10.3	55.2	13.3	13.3	56.6	11.8	11.8	56.7	11.7	11.7
Green monardella	4.5	3.8	0.7	0.7	2.5	2.1	2.1	3.7	0.9	0.9	2.7	1.9	1.9
Gairdner's yampah	9	7.7	1.3	1.3	7	2	2	7.3	1.7	1.7	7.1	2	2
Narrow-leaved daisy	6 populations	5 populations	1 population	1 population	5 populations	1 population	1 population	5 populations	1 population	1 population	5 populations	1 population	1 population
Northern California black walnut	10 individuals	9 individuals	1 individual	0	8 individuals	2 individuals	5.2 acres	8 individuals	2 individuals	5.2 acres	8 individuals	2 individuals	5.2 acres
Specimen Trees	108 trees	90 trees	18 trees	90 trees	74 trees	34 trees	170 trees	85 trees	23 trees	115 trees	84 trees	24 trees	120 trees

Appeal Ground No. CBD46: Appellant asserts that County's failure to amend and recirculate the EIR is not supported by substantial evidence and represents a failure to proceed in the manner required by law. (Cal. Code Civ. Proc.§§ 1085; 1094.5).

Staff Response: CEQA *Guidelines* Section 15088.5 requires recirculation of an EIR prior to certification when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review but before certification. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. (CEQA *Guidelines* Section 15088.5(b).) By codifying the "significant new information" language the Legislature did not intend to promote endless rounds of revision and recirculation of EIRs. Recirculation was intended to be an exception, rather than the general rule. "[R]ules regulating the protection of the environment must not be subverted into an instrument for the oppression and delay of social, economic, or recreational development and advancement." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 576.)

During environmental review and processing of the project, certain portions of the Draft EIR were modified and new information was added in the Final EIR and Appendices. This information amplified and clarified the information and conclusions already contained within the Draft EIR. While the information may appear voluminous, none of it rises to the level of triggering recirculation under CEQA *Guidelines* Section 15088.5. There are no substantial changes in the Walt Ranch Project or the circumstances under which the project is being undertaken that necessitate revisions of the Draft EIR, nor has significant new information become available.

Appeal Ground No. CBD47: Appellant asserts that the EIR is invalid and County must revoke its approvals of the project, revise its EIR to ensure its environmental analysis complies with all applicable environmental laws, and recirculate the revised EIR for public comment.

Staff Response: The Draft EIR and the Final EIR were prepared in accordance with CEQA (California Public Resources Code § 21000-21178) and the CEQA *Guidelines* (California Code of Regulations [CCR], Title 14) to provide the Lead Agency (County of Napa) with an informational document to be used in the planning and decision-making process, as stated in Section 1.1 of the Draft EIR.

In accordance with CEQA Guidelines § 15082, a Notice of Preparation (NOP) was circulated to the public, local, State, and federal agencies, and other known interested parties for a 30-day public and agency review period which began on October 22, 2012 (included as Appendix B of the Draft EIR). In accordance with CEQA Guidelines § 15063, the Initial Study (Appendix B of the Draft EIR), in conjunction with comments received during scoping (Appendix B of the Draft EIR), was used to focus the scope and content of the EIR. The environmental resources determined during scoping to have the potential to be significantly affected by the Proposed Project, which were therefore addressed in detail in the Draft EIR, include: Air Quality, Biological Resources, Cultural and Paleontological Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, and Transportation and Traffic. The baseline environmental setting for each resource along with the relevant federal, State, and local regulatory laws, codes, ordinances, and standards are described in Section 4.0 of the Draft EIR, as well as mitigation measures where appropriate to reduce impacts to less-than-significant levels, as required by CEQA Guidelines § 15126.4. A range of reasonable alternative projects that could feasibly attain most of the objectives of the Proposed Project and comparative merits of the alternatives are presented in Section 5.0 of the Draft EIR, pursuant to CEQA Guidelines § 15126.6. Pursuant to CEQA Guidelines § 15126.2, discussions regarding cumulative impacts; secondary impacts, including potential impacts resulting from growth inducement; and significant irreversible changes to the environment are included in Section 6.0 of the Draft EIR. A list of preparers is provided in Section 7.0 of the Draft EIR, pursuant to CEQA Guidelines § 15129.

The Draft EIR was submitted to the State Clearinghouse and other interested parties on July 11, 2014 (SCH# 2012102046), initiating a 45-day public comment period. This comment period was extended by the Lead Agency through November 21, 2014, for a total review period of 133 days.

The contents of the Final EIR match CEQA *Guidelines* § 15132, which states that a "Final EIR shall consist of:

- (f) The draft EIR or a revision of the draft.
- (g) Comments and recommendations received on the draft EIR either verbatim or in summary.

- (h) A list of persons, organizations, and public agencies commenting on the draft EIR.
- (i) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- (j) Any other information added by the Lead Agency."

Although general or master responses were provided to the topics that were mentioned most frequently, each comment was responded to individually. Where appropriate, the commenter was directed to the general response or another individual response that addressed the same concern. This kept the Final EIR from becoming too lengthy and repetitive. This is supported by CEQA *Guidelines*, which requires that the Lead Agency respond to significant environmental points but do not require repeating the same comment each time it is received.

PART IV. SIERRA CLUB, NAPA GROUP GROUNDS OF APPEAL:

GROUNDS OF APPEAL

The following outlines the basis of the appeal as contained in the Appeal dated August 25, 2016. For convenience, staff has numbered each issue and provided a summary, but recommends the Board review the actual Appeal for details.

NOVEMBER 21, 2014 LETTER FROM WOLFE:

Appeal Ground No. SC1: Appellant asserts that the Draft EIR focuses its air quality impact analysis solely on daily emissions, while failing to analyze and disclose the Project's annual emissions of reactive organic gasses (ROG), oxcides of nitrogen (NOx), PM₁₀ and PM_{2.5}. Without such additional information, the Draft EIR's regional emissions analysis is incomplete, and its conclusion that Project construction would not cause a significant air quality impact is not supported by substantial evidence.

Staff Response: As discussed in Final EIR Response to Comment O10-4, the analysis of Walt Ranch Project construction emissions compares daily emissions with the BAAQMD thresholds in accordance with the 2012 BAAOMD CEOA Guidelines⁶⁵ (stated in Draft EIR, Section 4.1.3-1). The Walt Ranch Project's annual emissions of criteria air pollutants (CAPs) are disclosed in Appendix H of the Draft EIR. However, the BAAQMD provides significance thresholds for annual emissions for the operational phase of a project, not construction. Construction emission thresholds are based on pounds-per-day. Therefore, it is not appropriate to compare construction significance thresholds of pounds-per-day to the ongoing operational tons-per-year significance threshold. Regardless, as shown in Appendix H, annual project-related CAP emissions for both the construction phase and the operational phase are far less than the BAAQMD threshold of 15 tons per year of PM₁₀ (project emissions would be 6.15 tons per year) and 10 tons per year of NOx, ROG, and PM_{2.5} (project emissions would be 6.9, 0.8, and 1.3 tons per year respectively). Therefore, the Draft EIR appropriately concluded that both the construction and operation emissions would be less than significant and provided substantial evidence to support this conclusion as required by CEQA Guidelines § 15384. Despite this, the Draft EIR included basic construction mitigation measures as recommended by the BAAQMD to further reduce this lessthan-significant impact (see Mitigation Measure 4.1-2 and Impact 4.1-3).

Appeal Ground No. SC2: Appellant asserts that the failure to consider annual emissions likewise negates the Draft EIR's conclusion that because the Project would not individually

⁶⁵ BAAQMD, 2012. California Environmental Quality Act: Air Quality Guidelines. Prepared by the Bay Area Air Quality Management District. Available online at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/baaqmd-ceqa-guidelines_final_may-2012.pdf?la=en. May 2012. Accessed June 6, 2016.

exceed daily regional emissions operational thresholds, the Project would not have a significant cumulative impact relating to consistency with the Clean Air Plan. The Draft EIR contains insufficient information concerning the Project's annual emissions of criteria air pollutants to support this overarching conclusion that the Project's contribution to regional emissions is less than significant. Therefore, the Draft EIR's finding that the Project is consistent with the 2010 Clean Air Plan is correspondingly not supported by substantial evidence.

Staff Response: This was addressed in Final EIR Response to Comment O10-5, which states that "annual emissions were provided in Appendix H of the Draft EIR and analyzed against the operational BAAQMD thresholds in Impact 4.1-3. Therefore, annual emissions were analyzed and the operational emissions thresholds were not exceeded, and the Draft EIR appropriately concluded in light of substantial evidence that the Walt Ranch Project will have less-thansignificant impacts to air quality. This is consistent with the San Francisco Bay Area Air Basin (SFBAAB)'s Clean Air Plan. The Draft EIR contains sufficient information concerning the Walt Ranch Project's annual emissions and therefore supports the findings with substantial evidence. Annual emissions were modeled and found to be far less than the BAAQMD's operational thresholds." Because the BAAQMD significance thresholds use pounds per day units, it is appropriate to compare a project's operational emissions using the "pounds per day" units to provide a scientifically sound and reasonable analysis. As shown in the following table (excerpt from the EIR Impact 4.1-3), the project's operational emissions are far below the BAAQMD significance thresholds. Please note that the emissions numbers shown below are for the originally Proposed Project (507 gross acres), which has been reduced to only 316 gross acres via the adoption of mitigation measures and the Reduced Intensity Alternative.

TABLE 4.1-6 OF THE FINAL EIR (VOLUME II)
OPERATIONAL INCREASE IN EMISSIONS FROM VINEYARD OPERATIONS

Source	ROG	NOx	PM_{10}	$PM_{2.5}$					
Source	Pounds per Day								
Area	0.00529	0.0005	0.0002	0.0002					
Off Road	1.9580	20.1644	1.2583	1.1576					
Mobile	2.3512	2.0945	1.0126	0.2896					
Total Operational Emissions	4.3145	22.2594	2.2711	1.4474					
BAAQMD Significance Thresholds	54	54	82	54					
Threshold Exceeded	No	No	No	No					

Sources: CalEEMod, 2010 (Appendix H)

As such, the numbers above provide a conservative estimate of the Walt Ranch Project's potential CAP emissions.

<u>Appeal Ground No. SC3:</u> Appellant argues that the Draft EIR fails to Address Potential Health Effects to Nearby Sensitive Receptors from Emissions of Diesel Particulate Matter ("DPM") During Project Construction and Operation. The Draft EIR is entirely silent on the potential

cumulative health effects to nearby residents resulting from exposure to toxic air contaminants ("TACs"), namely diesel exhaust from diesel-fueled construction equipment, over the multi-year schedule for earthmoving and other construction-related activities, as well as from any diesel-fueled equipment used during Project operations over time. This is a material omission.

Staff Response: This was addressed in Impact 4.1-5 and Final EIR Response to Comment O10-6. Impact 4.1-5 of the Draft EIR discusses emissions that may cause distress to sensitive receptors. Some receptors are considered more sensitive than others to air pollutants as discussed in Section 4.1.1-1. Although there are no schools, hospitals, or convalescent homes located close enough to the project site that would result in them being affected by construction or operational emissions from the Walt Ranch Project, the closest sensitive receptors are residences within the Circle Oaks neighborhood. As discussed in the response to Appeal Ground No. COCWD14, the distance between the nearest sensitive receptor and vineyard block has increased to 475 feet due to the reduction in clearing limits associated with the 209-acre project.

The EIR acknowledges that DPM emissions could cause health issues to sensitive receptors and others residing near the project site during the four year construction period. Therefore, Mitigation Measure 4.1-2 of the Draft EIR requires the use of DPM filters on all heavy equipment with greater than 50 horsepower rating, which will reduce DPM emissions by 85 to 90 percent. DPM concentrations decrease exponentially with distance from the source such that within the first 100 meters (325 feet) the risk is cut in half and within 150 meters (490 feet) the risk is reduced by 68 percent. Therefore, given the increased distance to the nearest sensitive receptor and the requirement to use DPM filters, there will be negligible risk to residents of Circle Oaks.

The BAAQMD provides guidance to lead agencies for the assessment of risk and health hazards that could be caused by projects known to generate DPM or other TACs. The 2012 BAAQMD CEQA Guidelines acknowledge that this "Risk and Hazard Screening Analysis" is typically utilized for common sources of TACs such as gasoline stations, dry cleaners, and diesel backup generators, usually found within urban or industrial areas. Using the BAAQMD Risk and Hazard Screening Analysis for the Circle Oaks neighborhood results in zero existing emission sources. This is because the nearest existing source of TACs (the Napa/Berryessa Resort Improvement District) is located approximately 15,000 feet or about 2.8 miles away), SR 121 is the nearest highway but has extremely low traffic when compared to typical Bay Area freeways,

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⁶⁶ U.S. Environmental Protection Agency (USEPA), 2010. Technical Bulletin: Diesel Particulate Filter General Information. May 2010. EPA-420-F-10-029. Available online at: http://www.epa.gov/cleandiesel/documents/420f10029.pdf. Accessed May 11, 2015.

⁶⁷ South Coast Air Quality Management District (SCAQMD), 2005. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. May 6, 2005. Available online at: http://www.aqmd.gov/home/library/documents-support-material/planning-guidance/guidance-document. Accessed January 20, 2016.

and there are no roadways (including SR 121) in the vicinity that have at least 10,000 average annual daily traffic trips.⁶⁸

There are no sensitive receptors that would be located within 325 feet or 490 feet of both the Walt Ranch project and the Circle S project, the only two projects in the cumulative environment that may be built at the same time. Thus, there are no significant cumulative impacts associated with DPM, as discussed in the EIR.

Appeal Ground No. SC4: Appellant asserts that the Draft EIR should be revised and recirculated to provide an assessment of the incremental health risk to sensitive receptors in the Circle Oaks residential subdivision from exposure to DPM/TACs emitted during the four-year construction period for the Project. The assessment should examine not only the Project's individual impacts to the health of nearby sensitive receptors, but should consider the cumulative impact, i.e., whether its TAC emissions combined with those from other past, present, and foreseeable future sources in the same area would result in a significant health risk. If the results show exceedances of applicable significance criteria, then mitigation will be required.

Staff Response: Please refer to response to Appeal Ground No. SC3, above.

Appeal Ground No. SC5: Appellant contends that the Draft EIR provides no evidence or information whatsoever showing that avoidance of all the potentially affected grassland areas is in fact truly infeasible. In order to ensure consistency with governing mandatory policies of the General Plan, i.e., to allow for any loss of such habitat, whether mitigated or not, the County must first make an affirmative finding that avoidance is infeasible. Under CEQA, that a finding must be based on substantial evidence, which in turn requires meaningful disclosure of facts and analysis in an EIR.

Staff Response: This was addressed in Final EIR Response to Comment O10-9 and O10-10. General Plan Policy CON-17 clearly states that the County requires "no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible." Therefore, 3.30 acres of native grasslands were removed from the vineyard footprint to result in 88.3 percent avoidance of this habitat on the property, and restoration and enhancement is required by Mitigation Measure 4.2-1 to ensure no net loss of native grasslands. This is consistent with the guidelines set forth in Policy CON-17.

In determining level of significance, Napa County considered all scientific and legal information in the administrative record consistent with CEQA *Guidelines* § 15064 (b) which states that: "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on

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⁶⁸ BAAQMD Risk and Hazard Screening Analysis Tools available online at: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools.

scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting" (emphasis added). The CEQA Guidelines provides some flexibility in determining a significant effect based on the setting.

All native grasslands on the property are shown in Figure 4.2-4 of the EIR, which also delineates which grasslands will be avoided by Mitigation Measure 4.2-1 and which will be developed into vineyard. The areas that will be avoided are on the edges of vineyard blocks and are part of larger native grassland complexes, which will provide a more continuous and healthy native grassland population. The 1.15 acres of native grassland that will be converted to vineyard are small, isolated populations located in the center of proposed vineyard blocks that would be completely surrounded by vineyards even if avoided. These grasslands would likely decline in health and would not provide the same wildlife benefits as those native grasslands that are part of the larger grassland complexes, and therefore make avoidance infeasible.

Based on the information discussed above, the County determined that the impacts to native grasslands were avoided to the extent feasible as provided for in General Plan Policy CON-17. Consistent with the language of this policy (which expressly states that it is to be implemented at the discretion of the County) and case law, the General Plan allows the County to exercise a fair amount of discretion in interpreting General Plan policies. Specifically, "introductory statements in the General Plan stress the flexibility of the policies described and the ability of decision-makers to balance competing policies when necessary." (Napa County General Plan, p. 4.) The courts' review of a County's interpretation of its general plan policies is highly deferential because "policies in a general plan reflect a range of competing interests" which it "must be allowed to weigh and balance the plan's policies when apply them, and it has broad discretion to construe its policies in light of the plan's purpose." *Friends of Lagoon Valley v. City of Vacaville* (2007) 154 Cal. App. 4th 807, 816. The County has determined, after reviewing the evidence in the record, that impacts to native grasslands have been mitigated consistent with General Plan Policy CON-17.

Appeal Ground No. SC6: Appellant asserts that the Draft EIR cites no authority for the proposition that preserving oak habitat on-site, even at a 2:1 ratio, constitutes adequate mitigation for the permanent loss of the acreage identified. If any of the on-site "mitigation" habitat is currently incapable of being developed for any reason, whether due to legal/regulatory constraints, or physical constraints such as slope, topography, water supply/drainage, etc., then "preservation" of such habitat via conservation easement or otherwise cannot count as actual mitigation.

Staff Response: This was addressed in Final EIR Response to Comment O10-11, which explains that the combination of avoidance, preservation, and enhancement of habitat onsite as required by the EIR is an adequate mitigation measure pursuant to the CEQA *Guidelines* §15370. As stated therein:

Mitigation includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

Consistent with General Plan Policy CON-24, Mitigation Measure 4.2-2 permanently preserves oak woodland habitat at a 2:1 ratio by means of a conservation easement. Further, Valley Oak Riparian habitat is 100 percent avoided, impacted specimen trees are replaced at a 5:1 ratio, and non-oak woodlands are preserved at a 1:1 ratio. The easement will prohibit future development of this land for any purpose, including vineyards. The easement will therefore ensure that the designated land will be protected from disturbance in perpetuity, therefore compensating and reducing the impact through preservation. Between the mitigation measures described herein, 524.8 acres of woodlands will be permanently protected and more than 221,429 trees or more than 94 percent of the existing trees will remain on the property after development of the final 209-acre ECP. Additional acreage is required to be included to the overall conservation easement area to permanently protect sensitive grassland and other special status plants (see MMRP).

The land designated for such permanent protection is based on its value as habitat in relation to the impact, which in this case is loss of non-oak woodlands, specimen trees, native grasslands, sensitive plant species, and oak woodlands as determined in the BRMP. The assertion that CEQA limits mitigation to lands that are under current threat of development is incorrect. Napa County has discretion to adopt mitigation measures requiring the preservation of habitat at ratios it determines appropriate and on lands that contain the necessary habitat to provide the requisite mitigation. The ratios used in the EIR and BRMP are those required by General Plan Policy CON-24 and are consistent with current County policy. For CEQA purposes it is not necessary that the land to be protected must be under the imminent threat of development in order to qualify as mitigation. (See Citizens for Open Government v. City of Lodi (2012) 205 Cal.App.4th 296, 322-324 [upholding city's exercise of discretion to require 1:1 conservation easements to compensate for loss of agricultural land, and finding that further mitigation at greater ratio was infeasible].) In fact, under CEQA the lead agency has discretion to reject conservation easements as infeasible, where substantial evidence supports that finding. (See Environmental Council of Sacramento v. City of Sacramento (2006) 142 Cal. App. 4th 1018, 1038-1041 [upholding measure requiring preservation at 0.5:1 ratio, and rejecting claim that mitigation had to be provided at 1:1

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ratio]. In this case, the issue is not focused on feasibility but rather whether the County should impose restrictions on what land can be used for mitigation based on criteria unrelated to the resource being impacted and mitigated. There is also no evidence to support imposing restrictions on mitigation based on the absence of an imminent threat of development that would not allow the use of land with appropriate habitat values to mitigate for the project's impacts. Such a policy would be short-sighted given that the mitigation provides for preservation in perpetuity pursuant to a conservation easement and therefore protects the land from development under both existing and future land use policies, which could allow for more intense development than current policies. Conservation easements also ensure that other land uses occurring within the easement areas are limited to those consistent with the habitat preservation purposes of the easement, thus adding additional benefits such as: limiting grazing, prohibitions on tree cutting, and recreational off road vehicle use that could occur on these lands even if no development was to occur in the future. It should also be noted that current land use policy allows for vineyard development on land with up to 50 percent slopes, while the Walt Ranch Project is limited to vineyard development on slopes with no greater than 30 percent slope, so lands between 30 percent and up to 50 percent slopes are subject to potential vineyard development in the future under existing policies, but pursuant to the proposed mitigation would be protected.

Therefore, the mitigation presented in the EIR meets all five standards for mitigation measures required by CEQA.

Appeal Ground No. SC7: Appellant contends that County has failed to provide an explanation, based on facts and reasoned analysis, of why complete avoidance of native grasslands, Black Oak Alliance and Blue Oak Alliance habitat is infeasible economically. The explanation should include financial information sufficient to show the Project would not and could not possibly be profitable if the losses to these habitat areas identified in the Draft EIR were avoided.

Staff Response: General Plan Policy CON-17 requires the preservation and protection of native grasslands, serpentine grasslands, mixed serpentine chaparral, and other sensitive biotic communities and habitats of limited distribution, which include Black Oak Alliance and Blue Oak Alliance. The policy states in part that:

"The County, in its discretion, shall require mitigation that results in the following standards:

e) Require no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible. Where avoidance, restoration, or replacement is not feasible, preserve like habitat at a 2:1 ratio or greater within Napa County to avoid significant cumulative loss of valuable habitats."

The Draft EIR discusses impacts to native grasslands, Black Oak Alliance, and Blue Oak Alliance in Section 4.2. The EIR requires avoidance of 3.3 acres of native grassland resulting in total avoidance of 88.3 percent of the habitat type mapped on the property. The remaining 1.15 acres of native grassland that will be impacted is required to be replace at a 2:1 ratio onsite. The project avoids 88.7 percent of the Black Oak Alliance and 88.1 percent of the Blue Oak Alliance, also requiring the impacted acres to be mitigated via protection at a 2:1 ratio onsite.

Based on the information discussed above, the County determined that the impacts to native grasslands were avoided to the extent feasible as provided for in General Plan Policy CON-17. Further, per the language of Policy CON-17, the County has discretion regarding its implementation and interpretation. Consistent with case law the General Plan specifically allows the County to exercise a fair amount of discretion in interpreting its General Plan policies. Specifically, "introductory statements in the General Plan stress the flexibility of the policies described and the ability of decision-makers to balance competing policies when necessary." (Napa County General Plan, p. 4.) The courts' review of a County's interpretation of its general plan policies is highly deferential because "policies in a general plan reflect a range of competing interests" which it "must be allowed to weigh and balance the plan's policies when apply them, and it has broad discretion to construe its policies in light of the plan's purpose." *Friends of Lagoon Valley v. City of Vacaville* (2007) 154 Cal. App. 4th 807, 816. Accordingly, the County after reviewing the evidence in the record has determined that impacts to native grasslands have been mitigated consistent with General Plan Policy CON-17.

Please refer to response to Appeal Ground No. LRC6 regarding the infeasibility of further avoidance.

Appeal Ground No. SC8: Appellant contends that County has failed to provide an explanation of the legal, regulatory, or factual basis for the Draft EIR's statement that "[g]iven the extent of [Black Oak Alliance] habitat type on the property (317.51 acres), it does not require full avoidance." Draft EIR p. 4.2-88.

Staff Response: Please refer to response to Appeal Ground No. SC7 above.

Appeal Ground No. SC9: Appellant contends that County has failed to provide a factual and legal showing that the on-site acreage of Black Oak Alliance, Blue Oak Alliance, and native grasslands that the Draft EIR identifies for preservation as mitigation for associated habitat losses constitutes actual, adequate mitigation under CEQA. This showing should provide facts and evidence showing, at a minimum, that all of the preserved acreage could be feasibly developed in the future, both from a legal/regulatory standpoint as well as a topography/resource constraint standpoint.

<u>Staff Response:</u> Please refer to response to Appeal Ground No. SC6 above.

<u>Appeal Ground No. SC10:</u> Appellant asserts that the Draft EIR is deficient in its analysis and its proposed mitigation of the Project's climate change impacts. By choosing to place the discussion of climate change impacts in the chapter on cumulative impacts, the Draft EIR preparers have nominally avoided evaluating these impacts with the appropriate level of detail.

Staff Response: A full analysis of the greenhouse gas (GHG) emissions of the construction and operational phases of the Walt Ranch Project was conducted in Section 6.1.4-1 of the EIR, contrary to the Appellant's assertions that the EIR avoided a full discussion of the climate change analysis required by CEQA and the CEQA *Guidelines*. The Lead Agency evaluated these impacts; as stated in Section 4.1 (page 4.1-10):

This analysis considers whether project emissions are individually or cumulatively significant. Based on the Proposed Project's GHG emissions (refer to Section 6.0), it was determined that specific climate change impacts could not be attributed to the proposed development. As such, project impacts are most appropriately addressed in terms of the incremental contribution to a global cumulative impact.

The analysis present in Section 6.1.4-1 of the Draft EIR was conducted in accordance with CEQA *Guidelines* § 15064.4 for determining the significance of impacts from GHG emissions. The Draft EIR modeled the projected increases in GHG emissions from construction and operation of the Walt Ranch Project using the CARB-approved CalEEMod, which is consistent with CEQA *Guidelines* § 15064.4(a)(1). The CalEEMod model output files are provided in Appendix H and consolidated emissions information compared to appropriate significance thresholds is provided in Table 6-2 and Table 6-3 of the Draft EIR. These significance thresholds were determined by the County in accordance with § 15064.4(b)(2). In addition, it should be noted that the commenter incorrectly states that there was an "unsubstantiated finding that the Project would have no significant climate change impacts." Impact 6-1 found that construction of the Walt Ranch Project would have potentially significant impacts due to GHG emissions, and provided Mitigation Measure 6-1 to reduce these impacts to less-than-significant levels.

Appeal Ground No. SC11: Appellant asserts that on-site conservation easements are not acceptable as full mitigation, since they only serve to limit the amount of damage done by the Project, not mitigate that damage. Any claimed sequestration benefit from preserving 248 acres of woodland on the property is illusory, since under current baseline conditions that same degree of sequestration is already occurring and would continue to occur, with or without the Project.

Staff Response: Please refer to the responses to Appeal Grounds No. CBD38 and SC6 above.

Appeal Ground No. SC12: Appellant asserts that there is insufficient information in the Draft EIR from which to assess the claim that the 248 acres of "preserved" woodland would truly be at risk from development. Even after accounting for the referenced tree canopy retention and steep

slope development restriction policies (Draft EIR p. 6-18), it is highly probable, if not virtually certain, that existing watershed protection polices, water system and utility constraints, and growth control measures render these 248 acres functionally undevelopable. As a result, there is no substantial evidence in the Draft EIR to support the claim that preserving 248 acres of woodland on the property constitutes valid mitigation for the Project's carbon-sequestration impacts.

Staff Response: Refer to the responses to Appeal Grounds No. CBD38 and SC6 above.

Appeal Ground No. SC13: Appellant asserts that the Draft EIR contains no analysis of the CO₂e emissions that will result if the downed trees are burned, left to decompose, or disposed of by some other means. The quantity of emissions may vary considerably depending on the disposal method used. The Draft EIR reports simply that the Project would "minimize the burning of trees and wood removed for vineyard development, and conduct any burning within BAAQMD guidelines." Draft EIR p. 6-20. The Draft EIR should be updated to include an estimate of emissions from downed trees based on the anticipated method of disposal.

Staff Response: The GHG analysis used the BAAQMD- and CARB-approved CalEEMod to estimate emissions of air pollutants and GHGs. The 2012 BAAQMD CEQA Guidelines specifically state that "biogenic CO₂ emissions should not be included in the quantification of GHG emissions for a project." The combustion or natural decomposition of those trees (which would be the biogenic emissions) are a one-time emission; in contrast, the methodology presented for the Walt Ranch Project analyzed the future loss of sequestration of those same trees over the next 100 years. The long-term loss of sequestration is a projection of the amount of future sequestration that will be unavailable once trees are harvested due to project-related activities. This ensures that the long-term consequences of tree removal are incorporated into the model and mitigated through viable, long-term solutions. Biogenic emissions encompass a huge range of types of materials and processes, and as such the estimate of biogenic emissions are not accurate enough or reliable enough to accurately model; furthermore, they are often only a small portion of overall emissions.

As discussed in more depth in the response to Appeal Ground No. CBD36, Napa County reviewed the climate change analysis prepared for the adjacent Circle S project and compared it to the methodology and results of the Walt Ranch climate change analysis in April 2015. Although the Walt Ranch analysis followed BAAQMD guidance (which states that biogenic emissions should not be quantified), the Walt Ranch analysis still resulted in a larger GHG

emissions estimate on a per-acre basis than the Circle S analysis, further demonstrating that the Walt Ranch analysis was an appropriate and even conservative estimation of GHG emissions.⁶⁹

As discussed in the EIR, components of the project description are entered into CalEEMod, including: total amount of land to be graded; acres of forest that will be removed; number and types of construction equipment; duration (hours) of construction equipment use; number of worker trips generated by the project; and season and duration of construction. The CalEEMod outputs provide GHG emissions in CO₂e, which provides a common measurement of all GHGs such as methane, nitrous oxide, and carbon dioxide, using the global warming potential (GWP) of each molecule. The use of CO₂e is specifically required in the 2012 BAAQMD Guidelines (see page 4-4).

As discussed in Final EIR Response to Comment I33-2, "CO₂e is a method by which GHGs other than CO₂ are converted to a CO₂-like emission value based on the global warming potential. CO₂ is used as the base and is given a value of one. Methane (CH₄) has the ability to capture 21 times more heat than CO₂; therefore, CH₄ is given a CO₂e value of 21." Refer to the CalEEMod output files (Appendix H to the Draft EIR and the 2016 GHG Technical Memorandum⁷⁰) for the CO₂e calculations.

As discussed on page 6-12 through 6-20 of the Final EIR (Volume II) and within the 2016 GHG Technical Memorandum, direct GHG emissions were quantified through the CalEEMod air quality model and the loss of sequestration caused by tree removal was quantified through emissions factors provided by the USEPA. The USEPA emissions factors for carbon sequestered in one acre of forest for one year was multiplied by the number of forest acres removed over 100 years, the average life expectancy of typical trees within that forest⁷¹, ⁷². The potential carbon offset of the forests that would be placed in permanent conservation was similarly estimated using the USEPA emissions factor multiplied by the acreage that would be preserved. These emissions factors were determined by the USEPA after rigorous study of long-term forest and carbon scientific studies.

⁶⁹ AES, 2015. Technical Memorandum RE: Comparison of Circle S GHG Emissions Analysis to Walt Ranch GHG Emissions Analysis. April 22, 2015.

⁷⁰ AES, 2016. Technical Memorandum RE: Revised Walt Ranch Greenhouse Gas Emissions Analysis per Newhall Ranch Decision. Match 28, 2016.

⁷¹ U.S. Environmental Protection Agency, 2016 (USEPA, 2016). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2010. U.S. Environmental Protection Agency, Washington DC. U.S. EPA #430-R-12-001. Available online at: https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references. Accessed June 5, 2016.

⁷² AES, 2016. Technical Memorandum RE: Revised Walt Ranch Greenhouse Gas Emissions Analysis per Newhall Ranch Decision. Match 28, 2016.

The long-term loss of sequestration is a projection of the amount of future sequestration that will be unavailable once trees are harvested due to project-related activities. The combustion or natural decomposition of those trees (which would be the biogenic emissions) are a one-time emission; in contrast, the methodology presented for the Walt Ranch Project analyzed the future loss of sequestration of those same trees over the next 100 years. This ensures that the long-term consequences of tree removal are incorporated into the model and mitigated through viable, long-term solutions (discussed further below).

As stated above, the 2012 BAAQMD CEQA Guidelines specifically state not to include biogenic CO₂ emissions in the quantification of GHG emissions for a project.⁷³ Because the BAAQMD is the regulatory authority for air quality in the SFBAAB, of which Napa County is a part, the County has chosen to utilize the BAAQMD CEQA Guidelines for this project-level analysis. After receipt of comments on the EIR stating that the BAAQMD CEQA Guidelines are inappropriate, Napa County reached out to one of the principal contributors to the Guidelines and a Senior Environmental Planner at the BAAQMD. The BAAQMD's approach in developing its guidance was to both address the gap between the State's goals and legislation and existing GHG conditions, and to provide the most up-to-date and accurate tools within a constantly moving legislative and scientific field.⁷⁴ Biogenic emissions encompass a huge range of types of materials and processes, and as such the estimate of biogenic emissions are not accurate enough or reliable enough to recommend their inclusion; furthermore, they are often only a small portion of overall emissions.

Each agency has discretion in whether or not to adopt the BAAQMD Guidelines. Although biogenic emissions are not included in the BAAQMD's guidance, this is not sufficient reason to discount the thorough scientific approach taken by the BAAQMD in developing its CEQA Guidelines. Napa County assessed guidance provided by other nearby jurisdictions, including Solano County and SMAQMD. The SMAQMD, the nearest jurisdiction with an adopted methodology for quantification of GHGs, does not state that biogenics should be included in the quantification of GHG emissions, and in fact only requires the quantification of "tail-pipe" emissions that are calculated by CalEEMod.⁷⁵ Therefore, the analysis conducted for the Walt Ranch project is in compliance with CEQA *Guidelines* § 15064.4 which requires "a careful judgment by the lead agency" in determining significance of GHG emissions, and a "good-faith

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⁷³ BAAQMD, 2012. California Environmental Quality Act: Air Quality Guidelines. Prepared by the Bay Area Air Quality Management District. Available online at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/baaqmd-ceqa-guidelines_final_may-2012.pdf?la=en. May 2012. Accessed June 6, 2016.

⁷⁴ Kirk, A., 2016. Personal Communication with Alison Kirk, Senior Environmental Planner, Bay Area Air Quality Management District. April 26, 2016. Phone Conversation.

⁷⁵ Sacramento Metropolitan AQMD, 2016. Guide to Air Quality Assessment in Sacramento County. Chapter 6: Greenhouse Gas Emissions. December 2009, Revised March 2016. Available online at: http://www.airquality.org/ceqa/ceqaguideupdate.shtml. Accessed June 5, 2016.

effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." The County has made a good-faith effort and has complied with CEQA.

Appeal Ground No. SC14: Appellant asserts that there is insufficient evidence in the Draft EIR to assess the quantitative extent of the carbon sequestration loss resulting from the Project. The Draft EIR's assumption that every acre of trees on this Project's site will sequester 111 MT of CO2e per year regardless of species mix, tree age, wood density, etc., is simply not supported by substantial evidence. Accordingly, the County should provide, in a revised Draft EIR, a reasonable inventory of the species mix, tree count, tree age, etc., for both the 248 acres of woodland proposed for "preservation" on the site, together with appropriate, correlated carbon sequestration capacity information.

Staff Response: The emissions factor of 111 metric tons (MT) of CO₂e emissions used for tree removal and the emissions factor of 0.0367 MT of CO₂ per tree over 100 years is provided by and supported by the BAAQMD and CARB-approved CalEEMod. These emissions factors provided in CalEEMod are supported by detailed science and the methodologies used are described in Appendix A: Calculation Details for CalEEMod.⁷⁶ The EIR relied upon BAAQMD-and CARB-approved guidance and emissions factors which are supported by substantial evidence, and as such, no revision or recirculation of the EIR is needed pursuant to CEQA *Guidelines* § 15088.5.

Appeal Ground No. SC15: Appellant asserts that the Draft EIR's overall approach to evaluating the Project's cumulative impacts to be legally incorrect. This is mainly due to the fact that the Draft EIR concludes, for many impact categories, that simply because the Project's individual impacts are (allegedly) less than significant, its cumulative impacts must therefore be as well. This approach is inconsistent with the CEQA-prescribed methodology for evaluating a project's cumulative impacts.

Staff Response: Refer to the response to Appeal Ground No. CBD39.

Appeal Ground No. SC16: Appellant asserts that the County impermissibly allows the destruction of hundreds of acres of native grasslands by severely limiting what qualifies as a native grassland, in violation of Napa Policy CON-17. The County does not adopt all feasible avoidance and mitigation, such as prohibiting on-site herbicide use. (CEQA *Guidelines* § 15126.4.)

Staff Response: Refer to the response to Appeal Ground No. CBD16.

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⁷⁶ CAPCOA, 2013. Appendix A: Calculation Details for CalEEMod. Revised July 2013. Available online at: http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2. Accessed May 11, 2015.

Appeal Ground No. SC17: Appellant asserts that the Draft EIR's analyses of cumulative impacts on biological resources, water supply and hydrology, and climate change all conclude, in essence, that because the Project would not have a significant individual impact in these areas, it ipso facto will not have a significant cumulative impact. The Draft EIR reached this conclusion without adhering to the two-step methodology required under CEQA. On the contrary, the Draft EIR articulated the step-two conclusion (the Project's contribution would not be cumulatively considerable) without first performing step-one of the analysis (determining whether there the Project will contribute to existing cumulatively significant problem).

Staff Response: Refer to the response to Appeal Ground No. CBD39.

Appeal Ground No. SC18: Appellant asserts that the Draft EIR Improperly Ignores the Project's Potential Growth-Inducing Impacts. Given that the property comprises 35 discrete, pre-existing parcels, and that the Project involves the improvement and maintenance of 21 miles of existing roads plus the construction/realignment of 5.6 miles of new roads, it is foreseeable that the Project could induce future population growth from the sale of individual parcels and associated vineyard blocks for "vineyard estate"-type residential development. The Draft EIR should therefore disclose and evaluate the potential individual and cumulative impacts of potential future population growth resulting from residential development induced by the road construction component of the Project in tandem with the existence of 35 pre-existing parcels. In particular, the Draft EIR should examine the potential impacts to traffic, water supply, biological resources, and public services.

Staff Response: Refer to response to Appeal Ground No. COCWD37.

NOVEMBER 21, 2014 LETTER FROM TAMARISK (ATTACHED TO SIERRA CLUB APPEAL):

Appeal Ground No. SC19: Appellant asserts that the Draft EIR fails to assess particulate matter air and asbestos particle air produced by rock crushing operations on the site.

Staff Response: This was addressed in Final EIR Response to Comment O11-4 and O11-5. Serpentinite, a rock type that is known to contain naturally-occurring asbestos, occurs in the vicinity of the project site and is mapped outside of the project site just north and south of the property (Appendix F of the Draft EIR). As shown in Table 4.2-2 of the Draft EIR, there is one habitat mapped onsite with serpentine soils, the White Leaf Manzanita – Leather Oak – (Chamise – Ceanothus spp.) Xeric Serpentine NFD Super Alliance. However, there are no proposed vineyard blocks within this habitat type and no project activities, including rock crushing, will occur on potentially serpentine soil. Regardless of whether the rocks contain serpentinite or asbestos, rock crushing will produce particulate matter that may be hazardous to sensitive receptors. Particulate matter emissions from fugitive dust would be minimized with the

implementation of Mitigation Measure 4.1-1 during all project construction activities, including rock crushing operations.

Rock crushing activities would occur periodically during the normal operating hours and approved operating season for project construction, but the rock crusher would not operate on a continual basis. The rock crushing equipment would be set up in a stationary location and rock would be transported to the rock crusher and resulting gravel and smaller rock would be hauled to needed locations throughout the project site. The rock crusher would be installed in a central location at least 1,000 feet from sensitive receptors, and is not proposed to be set up on the ridgetop above the Circle Oaks community. Although the exact location will be determined by on-the-ground conditions at the time of construction, the project applicant has indicated that likely locations for the rock crusher include Blocks 5A1, 5A3, 6, 7, 8, 9A1, 9A2, or 9A4. Due to the periodic and intermittent use of rock crushing equipment, the distance to residential sensitive receptors, and Mitigation Measure 4.1-1, there would be less-than-significant impacts to air quality or airborne particulate pollution from crushing rock with the inclusion of mitigation measures found in the EIR.

<u>Appeal Ground No. SC20:</u> Appellant asserts the Draft EIR fails to analyze the cumulative impact of noise from the 4-year construction phase of this project. Significant noise from the project includes blasting, grading, soil ripping, cutting down trees, and rock crushing. In Circle Oaks, it also includes heavy vehicle traffic on the steep grades of Circle Oaks Drive.

Staff Response: This was addressed in Final EIR Response to Comment O11-9. Although noise impacts will occur from project-related construction activities and traffic, noise impacts from the Walt Ranch Project are not anticipated to occur in conjunction with noise impacts from other development projects in the vicinity of the Walt Ranch Project during the four year construction period. Construction activities will occur between the hours of 7 AM and 7 PM over the four year construction period and are temporary and short-term in nature. As discussed in Section 6.1.3 and Section 6.1.4-8 of the EIR, significant development in Napa County in the reasonably foreseeable future is not anticipated to occur in the vicinity of the Walt Ranch Project because the area is rural and surrounding County-designated land uses include rural residences, vineyards, and agriculture. The only nearby project that may be under construction at the same time as Walt Ranch is the Circle S project. As discussed in Impact 4.8-1 of the Draft EIR, construction occurring greater than 150 feet from sensitive receptors would not exceed the County's noise thresholds established in Napa County Code 8.16.080. As discussed in the response to Appeal Ground No. SC3 above, there are no sensitive receptors that would be located within 490 feet of both Circle S and Walt Ranch. This far exceeds the 150-foot distance for noise impacts, and as such there are no significant cumulative noise impacts.

Appeal Ground No. SC21: Appellant asserts the Draft EIR is in error in its calculations which purport to show decrease in soil loss when the land is converted to vineyard. In estimating soil

loss, the Draft EIR has over-estimated the degree of ground cover that can realistically be achieved. The Hall Brambletree proposal should recalculate the Universal Soil Loss Equation (USLE) cover factor in the Final EIR to no more than 75 percent for most of the vineyard acreage. If this runs soil loss predictions above the "T+2" level, erosion control and runoff management systems will need to be re-assessed to determine if the project can indeed achieve less than significant impacts on soil erosion and sediment-laden runoff, (water quality).

Staff Response: The calculations of sediment discharge, performed by the Napa County RCD and found in Appendix O of the Draft EIR, show that there is a net reduction of soil erosion between current (pre-project) and post-project conditions within the Milliken Reservoir watershed as result of the Walt Ranch Project (Table 4.4-2 on pages 4.4-16 through 4.4-20 of the Draft EIR). As Table 4.4-2 shows, these calculations have been performed for each proposed vineyard block, and then organized by watershed. Table 4.4-2 shows that the total soil loss within the Milliken Reservoir watershed portion of the property will decrease from 615.87 tons per year under current conditions to 347.82 tons per year, a decrease of approximately 43.61 percent. This information appears at the top of page 4.4-20, and represents a summary of the block-by-block soil loss calculations set forth in Appendix O. These calculations have been verified by the Napa County Engineering Division staff through field inspection of existing conditions and statistical analysis of original calculations.

The Appellant assumes that the spray strip beneath the vine has a zero cover factor in reaching the conclusion that 80 percent cover is unattainable. The ECP specifies contact herbicides only to allow growth of cover-providing plants under the vine row itself. The herbicide is used after the plant sprouts in order to kill the plant, yet leave plant and its roots in place on the ground as ground cover. Furthermore, the ECP specifies that herbicides will not be sprayed prior to February 15 so that this plant residue will persist throughout the remainder of the rainy season and provide erosion protection even though the plants are no longer living. Therefore, the assumption that there will be zero cover in the spray strips is not correct. Using a 1.5-foot spray strip in a 7-foot row spacing will result in an average 81 percent cover, with the assumption of 90 percent cover in the middle of the rows and a 60 percent cover in the spray strip due to the nature of herbicide used.

Appeal Ground No. SC22: Appellant asserts the curve numbers (CN) are mostly rated as too low for the vineyards that are to be developed, and in many cases too high for most of the project, on the land use cover types that are being supplanted by the vineyard development.

The proposed vineyards to be developed on Hydrologic Soil Group (HSG) type "B" should be rated at 72, rather than 61 (a 15 percent reduction in the CN). HSG type "C" should be corrected to 80, rather than 75 (a 6 percent reduction in CN).

Other examples of incorrectly-assigned CN's include the following:

Land Use	HSG	DEIR CN	Correct CN	Net Result
Chamise Alliance	D	86	73	15% increase
Coast live oak-blue oak	D	88	77	12% increase
Coast live oak alliance	D	88	77	12% increase
Mixed oak alliance	D	89	77	15% increase
Sclerophyllous shrubland formation	D	86	77	12% increase

Staff Response: This was addressed in Final EIR Response to Comment O11-15. As discussed in Appendix G to the Draft EIR, vegetative cover is incorporated into the runoff calculation through the selection of the appropriate runoff curve number (CN). Each CN is based on soil characteristics, vegetative cover type (land use), and vegetative cover condition. Table 9-1 of the National Engineering Handbook, Part 630 Hydrology, Chapter 9 (USDA-NRCS) provides the basis for the CNs used and explains how condition is defined for various land use types. Professional judgment was used to modify CN values when necessary as dictated by site-specific conditions.

Higher curve numbers indicate that there is a higher runoff potential; conversely, a lower curve number indicates additional infiltration into the soil. The "fair condition" rating was determined based on the amount of grass cover and the density of the grassland stand. Field verifications were performed to confirm grass cover and density.

The Appellant suggests that proposed vineyards to be developed in hydrologic soil group B should be rated at 72 and in hydrologic soil group D should be rated at 80, without any indication of how the Appellant determined the referenced values. The CN of 61 used in the analysis was selected upon recommendations from Exhibit 2.1-3 of the Technical Release-55 (TR-55) user manual which states:

Vineyards – Land planted to grapes... This cover may be annual grass or perennial grass cover crops with or without legumes, occasionally legumes alone. Use curve numbers that apply to the land use or the kind and condition of cover during the storm periods; for example, Annual grass curve numbers for annual grass or grass legume cover...

Following these guidelines, the CN for annual grass in good condition was selected. Similarly, the same method was used to determine the proposed vineyard curve number in hydrologic soil group D (annual grass in good condition – CN 75).

Chamise Alliance and Sclerophyllous Shrubland Formation were assigned a CN of 86 in subwatershed 1 using the same methodology that was implemented for California Annual Grassland Alliance. The 50 percent rock to soil ratio was applied and an average CN was calculated using 98 (rock outcrop CN) and 73 (brush, hydrologic soil group D, good condition CN).

Similarly, Coast Live Oak - Blue Oak Alliance and Oak Alliance were designated a CN of 88 in sub-watershed 1. The 50 percent rock to soil ratio was applied and an average CN was calculated using 98 (rock outcrop CN) and 77 (woods, hydrologic soil group D, good condition CN). Mixed Oak Alliance was assigned a CN of 89 in sub-watershed 1 as the average calculated using 98 (rock outcrop CN) and 79 (woods, hydrologic soil group D, fair condition CN).

This approach is consistent with the National Engineering Handbook Hydrology methods (USDA-NRCS). Professional judgment was used during field review to determine the appropriate CNs from Table 9-1 of the National Engineering Handbook, Part 630, Chapter 9.

Appeal Ground No. SC23: Appellant asserts that reduction of the HSG rating of soils has been applied more liberally in the Draft EIR than recommended in the Ken Oster memo that is cited to in the Draft EIR. The Draft EIR incorrectly states that in watershed 1, the Rock Outcrop, (175 map unit) can be credited with a reduction in HSG from type "D" to type "C". The Final EIR should correct vineyards mapped in 175 mapping designations to- remain as -HSG type "D".

Staff Response: This was addressed in Final EIR Response to Comment O11-18. Additional responses to Kamman's August 26, 2016 letter are provided in response to Appeal Ground No. LRC23.

Appeal Ground No. SC24: Appellant asserts that Watersheds 5, 6 and 8 are mostly mapped as 113 or 114 Bressa-Dibble map units. The Draft EIR also incorrectly allows a ripping credit for these vineyards. Although it is not specifically clear, it appears that the Draft EIR may well assign HSG rating reductions to even more of the vineyard blocks proposed. The Final EIR should be specific and clear in noting in detail how any re-assignment of HSG has been applied.

Staff Response: As explained in Final EIR Response to Comment O11-19, sub-watersheds 5, 6, and 8 are primarily mapped as Bressa-Dibble complex, which is assigned hydrologic soil group C by the NRCS. No credit was taken for modifying hydrologic soil group in any of these watersheds. The only soil complexes that received ripping credit were Hambright-Rock Outcrop, Maymen-Milsholm-Lodo, and Rock Outcrop, which is consistent with Oster's 2014 memo.⁷⁷ Refer to the response to Appeal Ground No. LRC23 for more details regarding the onsite soil testing that was completed on the Walt Ranch property.

<u>Appeal Ground No. SC25:</u> Appellant asserts that based on the soil map, only vineyard blocks 22B, 22C, 22D, 22E, 47al, 47a2, 47b, 12, 13, 14, 15, and 16 should be considered for reassignment of a lower runoff-generating HSG, D to C. All other map units should retain the Napa County Soil Survey-assigned hydrologic soil groupings.

Oster, 2014. Letter RE: Effect of Ripping on Hydrologic Soil Group, Updated. Ken Oster, Soil Scientist. U.S. Department of Agriculture-Natural Resource Conservation Science (USDA-NRCS). Napa, CA. February 28, 2014.

Staff Response: As explained in Final EIR Response to Comment O11-19, the referenced vineyard blocks are located in sub-watersheds 5, 6, and 8, which are primarily mapped as Bressa-Dibble complex assigned hydrologic soil group C by the NRCS. No credit was taken for modifying hydrologic soil group in any of these sub-watersheds. The only soil complexes that received ripping credit were Hambright-Rock Outcrop, Maymen-Milsholm-Lodo, and Rock Outcrop, which is consistent with Oster's 2014 memo. Refer to the response to Appeal Ground No. LRC23 for more details regarding the onsite soil testing that was completed on the Walt Ranch property.

<u>Appeal Ground No. SC26:</u> Appellant asserts that the Draft EIR fails to evaluate the potential impacts of land slippage on the adjacent community of Circle Oaks. Vineyards in blocks 37 and 68, for example lie directly above steep ridges flanking Circle Oaks homes. Therefore, if slope failure occurs, contrary to the conclusion of the Draft EIR, it could expose people or structures to severe risk involving landslides.

Staff Response: This was addressed in Final EIR Response to Comment O11-22. Please note that vineyard blocks 27B2, 37A, 68A and 68B have been removed from the project due to voluntary project revisions by the Applicant, biological mitigations, or the Reduced Intensity Alternative. Therefore, the Walt Ranch Project with inclusion of mitigation measures, adoption of the Reduced Intensity Alternative, and voluntary avoidance will not result in a significant increased risk involving landslides.

Regardless, geological and geotechnical recommendations for the proposed vineyard development include avoiding active landslides and improving the control of surface runoff on steep slopes to mitigate any slope stability issues. In several cases, the project geologist Gilpin Geosciences, Inc. (GGI) addressed existing erosion and slope stability issues with the goal of improving slope stability adjacent to the Circle Oaks community. As discussed in Impact 4.4-2, blasting would be a significant impact if it were to occur on the unstable geologic units of the sandstone ridges. Therefore, Mitigation Measure 4.4-2 ensures that blasting shall only occur in areas of volcanic rock that have high stability.

The proposed project included vineyard blocks 27B2, 37A, 68A, and 68B that were located upslope from Circle Oaks development. As stated above these blocks have been removed from the project, however their potential impacts on Circle Oaks were evaluated in the Draft EIR. Drainage improvements that are proposed in the final Project to the existing ranch road at Block 27B1 divert runoff that has historically been directed by the road toward Circle Oaks back to its natural runoff location. In addition, Block 27B2 has been voluntarily removed from the Project by the Applicant. Block 37A lies on a dormant landslide that is constrained within a tributary drainage that does not extend off of the site, and therefore did not pose a direct threat to the Circle Oaks neighborhood, but was nevertheless removed from the Project as a part of biological mitigations. Blocks 68A and 68B lay on volcanic bedrock with flow bedding that dips into the

slope, which is a stable configuration. No slides are mapped between these vineyard blocks and Circle Oaks development downslope, and in fact both blocks have been removed from the Project as part of the Reduced Intensity Alternative. Therefore, the EIR included detailed analysis of potential slope stability issues and presented a good faith effort.

Appeal Ground No. SC27: Appellant asserts that a comprehensive investigation and analysis needs to be completed to determine the baseline risk of a large or catastrophic landslide originating from the vicinity of Walt Ranch, or smaller landslide events that might impact the Circle Oaks residential community, other residences in the area, and Highway 121. A determination then needs to be made of the extent to which that risk may be increased by reviewing the comprehensive aggregate impact of this project, including clear cutting of 28,000 trees, and constructing -reservoirs and roads, and any other activities, and then the impact of operating heavy vehicles and other activity involved in operating and maintaining vineyards on the slopes in the Project area.

Staff Response: As discussed in more detail in response to Appeal Ground No. LRC25, the project geologist GGI mapped many active and dormant landslides on the Walt Ranch property during its investigation. The goal of this investigation, reflected in GGI's recommendations, was to avoid active landslide features and improve the stability of the areas proposed for vineyard development. GGI's recommendations are designed to avoid those areas in which there may be a significant risk of unstable slopes. The commenter is correct that frequent, severe landslide failures are indicative of poor ground conditions. Such conditions may exist at other locations in the region. GGI undertook its evaluation in order to determine whether and where such conditions may exist on the Walt Ranch property. Follow-up investigations of the final Walt Ranch Project (209 net acres) with respect to the specific blocks near the Circle Oaks community mentioned by other Appellants and the SR 121 slide have been conducted.⁷⁸

The EIR acknowledges that Circle Oaks has steep terrain, unstable underlying geology, and a history of landslides and soil slippage. However, as discussed in the response to Appeal Ground No. SC26 (above), the Walt Ranch Project will not have a significant impact to downslope residents and properties as a result of Mitigation Measure 4.4-3, adoption of the Reduced Intensity Alternative, and voluntary avoidance. Furthermore, the Geologic Investigation discussed the potential impact of tree removal on deep-seated landslide stability. As discussed in more depth in response to Appeal Ground No. COCWD20, the latest research shows that up to

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⁷⁸ Engineering Geological and Geotechnical Evaluation, Walt Ranch ECP/EIR. July 5, 2016. Lou Gilpin of Langan Treadwell Rollo.

Gilpin Geosciences, Inc. Technical Memorandum RE: Response to Comments from Kamman Hydrology and Engineering, Inc. September 27, 2016.

Gilpin Geosciences, Inc. Memorandum RE: Highway 121 Failure 13 March 2016. From Lou Gilpin to Brian Bordona. October 26, 2016.

an approximately 20 percent reduction of tree cover of any given watershed has no observable effect on the groundwater volume. Therefore, 20 percent is a conservative threshold for predicting significant changes to the groundwater volume and therefore the reduction in slope stability of deep-seated slides. The project areas that could pose a risk to Circle Oaks are underlain by Franciscan Complex sandstone and shales. The tree cover removal on the largest areas of the site, underlain by Franciscan Complex sandstones and shales, range from 0 to 10 percent. Therefore, the removal of trees on the unstable Franciscan Complex geologic units is not anticipated to have a significant effect on slope stability.

In addition, Gilpin Geosciences, Inc. provided an assessment of the recent SR 121 failure that occurred on March 13, 2016 to determine whether this event is relevant to the potential for unstable slopes in the Walt Ranch vicinity. Gilpin visited the site and concluded that the road failure was a result of several factors, including vulnerable road alignment caused by cut slopes up to 35 feet in height, underdesigned culverts, and lack of attention to ongoing road failure as evidenced by 4 to 5 feet of accumulated asphalt on the downslope road edge. Gilpin concluded that the vineyard development at the Walt Ranch does not incorporate any of the aforementioned factors that led to the slide at SR 121.⁷⁹

Appeal Ground No. SC28: Appellant asserts that the Draft EIR is incorrect on p 4.4-9, when it states that the Green Valley Fault approaches no nearer to the project than 3.1 miles. As Figure 1 and 2 below show, the Atlas Peak-Foss Valley portion of the fault runs through the Walt property, with geomorphic features reaching almost as far north as the town of St Helena.

Staff Response: This was addressed in Final EIR Response to Comment O11-29. The present site conditions are the cumulative result of thousands of years of seismic activity in the region. The Atlas Peak-Foss Valley features are mapped only as lineaments, which in geologic terminology means they are usually smaller features of unknown importance. The subtle expression of these features provides evidence of their lack of activity and low hazard. The Draft EIR is correct on page 4.4-9 when it says that the Green Valley Fault is the closest active fault to the project site, located approximately 3.1 miles south. Regardless of whether or not the lineaments may create seismic events in the future, the conclusions of the Initial Study (Appendix B of the Draft EIR) remain valid. Because the Walt Ranch Project does not include the development of housing or structures that would put people at risk, there is no significant impact under CEQA.

Appeal Ground No. SC29: Appellant asserts the Draft EIR estimates the maximum earthquake energy possible from the Green Valley Fault to be 6.7. However, more recent research, released

⁷⁹ Gilpin Geosciences, Inc. Memorandum RE: Highway 121 Failure 13 March 2016. From Lou Gilpin to Brian Bordona. October 26, 2016.

after the Napa earthquake of August, 2014, shows the fault capable of generating a 7.1 earthquake and therefore the Draft EIR should better address seismic hazards.

Staff Response: This was addressed in Final EIR Response to Comment O11-30. The recent South Napa earthquake and research findings on the Green Valley Fault are part of an ongoing discussion of the Northern Bay Area earthquake hazards. The USGS now projects an earthquake on the Green Valley Fault near or over magnitude 7.1, which is greater than the previous 6.7 Ms prediction, although the details of the actual rupture dimensions and geometry are speculative. The previous estimate of 6.7 Ms earthquake corresponds to a Modified Mercalli Intensity (MMI) rating of VIII. The revised estimate of 7.1 Ms corresponds to a MMI rating of IX.

There is considerable damage in ordinary substantial buildings with partial collapse in both MMI ratings VIII and IX; specially designed structures are more significantly affected by MMI rating IX earthquakes. MMI VIII is described as "severe" shaking, whereas MMI IX is described as "violent." Although the magnitude of predicted future earthquakes has increased, the conclusions of the Draft EIR in regards to seismic events will not substantially change. The Walt Ranch Project seeks only to develop agricultural operations and would not place housing or structures in an area with a significant seismic risk, and therefore this impact is less-than-significant. As discussed in responses to Appeal Grounds No. SC26 and SC28 above, there are no potential offsite impacts to the Circle Oaks community due to landslides.

Appeal Ground No. SC30: Appellant asserts the Draft EIR should determine if the proposed use of the Circle Oaks Drive road would threaten the integrity of the underground infrastructure, possibly jeopardizing public services and increasing the need for expensive repairs, present safety issues to pedestrians, or place local residences at risk due to landslides or slumps caused by the frequency and excessive weight of construction and other vehicles. At a minimum, the roads need to be investigated and tested to determine if they can withstand the use and whether use as a commercial route would present unacceptable safety issues.

Staff Response: Mitigation Measure 4.7-4 requires that Circle Oaks Drive shall be assessed by an independent third party consultant prior to the start of construction and following the completion of construction. If the third party determines that roadway deterioration, or deterioration of infrastructure located underneath Circle Oaks Drive, has occurred as a result of construction traffic, the applicant shall pay to have the roadway resurfaced to restore the pavement to at least pre-construction condition, unless the resurfacing is already expected to occur within a year or sooner in conjunction with other planned or proposed roadway improvements, and shall repair the identified damage to sub-surface infrastructure.

⁸⁰ USGS, 2014. Earthquakes Hazard Program: Magnitude/Intensity Comparison. Last updated September 29, 2014. Available online at: http://earthquake.usgs.gov/learn/topics/mag_vs_int.php.

As discussed in more depth in response to Appeal Ground No. COCWD12, Condition of Approval No. 2 imposed upon the project additional traffic restrictions requiring that all construction equipment be routed away from Circle Oaks Drive and through the northernmost access driveway directly off of State Route 121. Specifically, all extra-legal loads (defined as anything greater than 80,000 pounds that requires special Caltrans permits per Mitigation Measure 4.7-4) and construction equipment deliveries (defined as any construction equipment listed in Table 3-5 of the EIR, including: excavators, graders, rubber tired dozer, tractors, loaders, and backhoes) shall utilize Gate 1. This additional Condition of Approval significantly minimizes any potential traffic disruption to the Circle Oaks community or damage to infrastructure.

The existing roadway surface of Circle Oaks Drive is in a deteriorated condition as discussed in Impact 4.7-4, and the EIR identified that the Walt Ranch Project could have a significant impact to this roadway. The Final EIR provided Mitigation Measure 4.7-4 to minimize impacts to the roadway surface and to subsurface infrastructure (e.g. water lines and sewer pipelines) below the roadway, which reduced the Walt Ranch Project's impacts to a less-than-significant level. However, routing all construction equipment deliveries away from this roadway will avoid the impact altogether.

Appeal Ground No. SC31: Appellant asserts that Circle Oaks Drive is not a viable access point. Another access point should be found and environmental review of the impact of creating that access included in a revised Draft EIR. The Draft EIR has failed to include the environmental impact of the construction necessary to create access from Circle Oaks Drive or preferably, from another more suitable access point.

<u>Staff Response:</u> As discussed in response to Appeal Ground No. COCWD12, a condition of approval was added to the project to require that construction equipment be delivered via an alternative access point.

Appeal Ground No. SC32: Appellant asserts the Project fails to adequately mitigate for the destruction of 312 acres of oak woodland. It is not feasible for the applicant to propose mitigation by onsite conservation easement of 625 acres of oak woodland because that would fail to meet the definition of "mitigation' under CEQA. This mitigation is inconsistent with how the Air Resources Board of the California EPA defines what constitutes acceptable mitigation in avoided-conversion of woodlands.

Staff Response: This was addressed in Final EIR Response to Comment O11-41. It is unclear how the commenter determined that 625 acres are required to mitigate for loss of oak woodlands. As discussed in Impact and Mitigation Measure 4.2-2, a combination of avoidance and preservation is required for various types of oak woodland resulting in 524.8 acres to be placed into permanent protection via a conservation easement.

As discussed further in response to Appeal Ground No. SC6 (above), the permanent preservation of oak woodland both reduces and compensates for the project's impacts is therefore adequate under CEQA.

Appeal Ground No. SC33: Appellant asserts the use of onsite mitigation is inappropriate regarding permanent protection of 248 acres of habitat as mitigation for project construction emissions.

Staff Response: Refer to the response to Appeal Ground No. CBD38.

Appeal Ground No. SC34: Appellant asserts the EIR fails to account for the impacts of disposing of the 28,000+ trees to be cut down.

Staff Response: Please refer to the response to Appeal Ground No. SC13 above.

<u>Appeal Ground No. SC35:</u> Appellant asserts the Draft EIR Section 4.2-6, page 2-16 erroneously concludes that project impacts to wildlife movement would be less than significant. It fails to address the status of the Walt Ranch property as a critical wildlife movement corridor.

Staff Response: This was addressed in Final EIR Response to Comment O11-48. The commenter incorrectly states that the Draft EIR found a less-than-significant impact to wildlife movement. Impact 4.2-6 found that "the Proposed Project could interfere with existing wildlife movement corridors and could conflict with General Plan Policy CON-18, which relates to wildlife movement. This is a potentially significant impact." The Draft EIR then goes on to require mitigation to reduce these impacts.

Mitigation Measure 4.2-4 ensures that Napa County designated streams within the project site shall have setbacks that provide wildlife corridors ranging from 110 to 250 feet. In addition, Mitigation Measure 4.2-6 provides for 100 foot minimum corridors between fenced vineyard blocks and possible overall reduction in deer exclusion fencing after avoidance areas are removed from the project footprint either as a result of mitigation measures, or the adoption of one of the project alternatives. The proposed Mitigated Project deer fencing has been added to Figure 6-1 of the Final EIR (Volume II) to illustrate this. This ensures that the Mitigated Project is consistent with Napa County General Plan Policy 18, specifically subsections (d) and (e):

Policy CON-18: To reduce impacts on habitat conservation and connectivity:

- d) The County shall require discretionary projects to retain movement corridors of adequate size and habitat quality to allow for continued wildlife use based on the needs of the species occupying the habitat.
- e) The County shall require new vineyard development to be designed to minimize the reduction of wildlife movement to the maximum extent feasible. In the event the County concludes that such development will have a significant impact on wildlife

movement, the County may require the applicant to relocate or remove existing perimeter fencing installed on or after February 16, 2007 to offset the impact caused by the new vineyard development.

Scientific studies indicate that vegetated riparian corridors of widths greater than 30 meters (98 feet) are most likely to be used by wildlife.⁸¹ Therefore, Napa County Code Section 18.108.025 requires stream setbacks that have a dual purpose of protecting water quality and protecting riparian habitat, as well as facilitating wildlife movement. Riparian wildlife corridors on the Walt Ranch property will range from 110 feet up to 300 feet, in accordance with Napa County Code. Additionally, corridors between fenced vineyard blocks are a minimum of 100 feet wide and shall be maintained as existing habitat; therefore these corridors would continue to function as movement and dispersal corridors.

Even larger non-riparian corridors have been proposed for the conservation easement area, as discussed in Section 5.4 and shown in Figure 21 of the BRMP. There are 524.8 acres of woodland that will be preserved on the property, and of this area, 494.8 acres of oak woodland are designated as "Biologist-Recommended Oak Woodland Deed Restriction" (refer to Figure 21 of the BRMP). The remaining area (30 acres) is oak woodland that is included in the category "Deed Restriction Required by Mitigation" (Figure 23 of the BRMP). These preserved forested areas were chosen to meet the mitigation ratio requirements for each relevant habitat type, while also facilitating wildlife movement by preserving in permanent protection large swaths of natural woodland landscape in areas selected by a qualified biologist as important wildlife movement corridors. Four northwest-southeast trending woodland corridors were selected, in addition to four north-south corridors, including along a drainage that provides western pond turtle upland and nesting habitat. These permanent wildlife corridors would facilitate animal dispersal and minimize animal displacement into nearby residential property. The corridors recommended for permanent preservation range from approximately 180 to 600 feet wide in some locations. It should be noted that these are just the areas that will be placed into the conservation easement; in total, there will be approximately 1,984 acres (greater than 86 percent of the total property) that will be left in open space and available for wildlife movement.

Through a combination of undeveloped habitat along riparian corridors, wetland buffer zones, and preserved habitat between fenced vineyard blocks, the potential impacts from west to east (or east to west) and north to south (or south to north) impediments to wildlife passage would not be significant, as the corridors and open space would serve to facilitate wildlife movement through the project site. With mitigation, there is no conflict with the Napa County General Plan

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⁸¹ Hilty J. and A. Merenlender, 2002. *Vineyard Landscape, Wildlife Activity Along Creek Corridors*. Practical Winery and Vineyard: November/December 2002. Available online at: http://www.practicalwinery.com/novdec02/novdec02p6.htm.

policies concerning wildlife corridors and there is a less-than-significant impact to wildlife movement in accordance with CEQA *Guidelines* Appendix G Environmental Checklist.

Although some habitat fragmentation is inevitable should the Walt Ranch Project be constructed, concentrating all vineyard development in one section of the project site is infeasible. Proposed vineyard blocks have been chosen based on multiple factors, including soils, topography, and farmability. Areas that are suitable for vineyards are not located in one particular area; rather, such areas are located at various sites across the property. The application focuses on those areas that are considered suitable vineyard areas. Additionally, the vineyard blocks as proposed are located in areas that can be developed with minimal environmental effects, including impacts to biological resources, erosion, and slope stability. Mitigation measures and development alternatives presented in the EIR will further reduce these environmental impacts in accordance with CEQA. While consolidating vineyard development in one section of the project site may increase the size of wildlife corridors, an impact that was already reduced to less-than-significant levels through incorporation of Mitigation Measure 4.2-6, it would likely increase other environmental impacts due to placement of vineyard blocks in sensitive plant habitat or unstable slopes. Although some habitat fragmentation may occur, it has been reduced to less-thansignificant levels in accordance with CEQA and the CEQA Guidelines through the implementation of measures to maintain wildlife corridors and protect sensitive habitats and woodlands.

Appeal Ground No. SC36: Appellant asserts there is a cumulative impact on wildlife movement in this critical corridor when the adjacent Circle S vineyard project is considered. Between these two properties alone, most of 6.1 square miles of Atlas Peak open space/habitat will be effectively fragmented, including total destruction of 600 acres of oak woodland. Walt and Circle S together stretch a total length of four miles across the wildlife migration corridor.

Staff Response: This was addressed in Final EIR Response to Comment O11-51 and Section 6.1.4-2 of the Draft EIR. The Circle S development is included in the cumulative environment considered in Section 6.1.4-2 of the EIR. Both the Circle S project and the Walt Ranch project will result in significant amounts of land placed into permanent preservation to act as wildlife habitat and movement corridors. As stated in the response to Appeal Ground No. SC35 above, effort has been made to ensure that these preserved areas create suitable wildlife corridors to protect wildlife movement and dispersal.

<u>Appeal Ground No. SC37:</u> Appellant asserts the Draft EIR erroneously concludes (Section 1, Introduction, pg 1-13) that no impact to recreation will occur. CEQA requires evaluating not just current recreation, but recreational opportunities. The Draft EIR fails to take account of well-documented recreational opportunity on the Walt Ranch of hiking trails.

Staff Response: As discussed within Final EIR Response to Comment O11-54 and the Initial Study for the Walt Ranch Project (Appendix B of the Draft EIR), the Walt Ranch Project would

not have any adverse impacts on recreational uses. The Walt Ranch Project is located in rural Napa County and the project area is characterized primarily by open space, agriculture, and rural residential land uses. As stated in this comment, the Priority Conservation Area (PCA) program administered by the Association of Bay Area Governments (ABAG) identifies open spaces that "provide regionally significant *agricultural*, natural resources, scenic, recreational, and/or ecological values and ecosystem functions" (emphasis added). The area from Moore Creek to Milliken Creek was nominated for inclusion in the ABAG's PCA program by the Napa County Board of Supervisors per Resolution No. 2014-39.⁸² The PCA program designates PCAs based on four different categories: natural landscapes, agricultural lands, urban greening, and regional recreation.

According to the Napa County General Plan (2008), the proposed Bay Area Ridge Trail alignment is currently under evaluation. Figure ROS-5 in the General Plan shows a proposed alignment that runs in the vicinity of the southern portion of the project site. With the implementation of the Walt Ranch BRMP, no less than 524.8 acres of woodland would be preserved on the property in perpetuity in a conservation easement, as well as other areas providing habitat for sensitive plants or animals. This land would be protected from development and other uses that would degrade the quality of the habitat, and the protection would not inhibit such uses that would occur with the development of a potential trail alignment as long as the recreational activity does not run counter to the intent and goals of the easement.

Discussions about potential trail development on the property and possible locations should be addressed directly with the property owner. Conditions of approval for the Walt Ranch Project would not preclude the property from trail use in the future should locations agreeable with the property owner be reached and as long as recreational activity is consistent with the intent and goals of the conservation easement established on the property.

Appeal Ground No. SC38: Appellant asserts the Draft EIR fails to analyze the cumulative and growth-inducing impacts which would be incurred from sell off of the vineyard parcels individually. According to the Appellant, Craig Hall, one of the property's owners, has specifically failed to rule out breaking up the property and selling off individual pieces. This outcome is reasonably foreseeable. Individual parcel development would increase traffic, groundwater use, habitat fragmentation, and reliance on county services including fire, police, and emergency services. The Draft EIR needs to analyze these foreseeable impacts of the project. Failure to do so represents project segmentation, or piece-mealing.

Staff Response: The Laurel Heights Improvement Assoc. v. Regents of University of California (1988) 47 Cal.3d 376 decision explained that "an EIR must include an analysis of the

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⁸² Napa County, 2014. Board of Supervisors Resolution No. 2014-39. A Resolution of the Napa County Board of Supervisors, State of California, Supporting Priority Conservation Area Designations within Napa County.

environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." The project applicant has sold parcels individually from its Hall Ranch vineyard in Sonoma County, which features gentle topography, easy site access from Healdsburg, nearby amenities including restaurants and River Rock Casino, and a well-developed road network on the property. These features, which are lacking from Walt Ranch, make it unclear why the commenter assumes individual parcel development is a "reasonably foreseeable" consequence.

Please also refer to response to Appeal Ground No. COCWD37 for additional discussion of growth-inducing impacts of the Walt Ranch Project.

<u>Appeal Ground No. SC39:</u> Appellant asserts the Draft EIR fails to address how the Walt project contributes to the cumulative effects of open space fragmentation foreseen in the Baseline Data Report.

Staff Response: This was addressed in Final EIR Response to Comment O11-59. The value of Walt Ranch as a wildlife movement corridor is discussed in Section 4.2.2-10 of the Draft EIR. Section 6.1.4-2 of the EIR analyzes the Walt Ranch Project's impacts to wildlife movement corridors and habitat fragmentation in the cumulative environment. As stated therein:

"It is anticipated that projects in the cumulative environment would produce similar impacts to biological resources and could result in habitat fragmentation. However, with mitigation the Proposed Project has maintained these wildlife corridors and habitats, and the Proposed Project's contribution to the cumulative impact on habitat fragmentation is not expected to be cumulatively considerable."

Please also see responses to Appeal Grounds No. SC35 and SC36, above.

Appeal Ground No. SC40: Appellant asserts the Draft EIR fails to discuss how the project meshes with County's CON-1 Goal in the General Plan.

Staff Response: This was addressed in Final EIR Response to Comment O11-61. Napa County General Plan Goal CON-1 states that the "County of Napa will conserve resources by determining the most appropriate use of land, matching land uses and activities to the land's natural suitability, and minimizing conflicts with the natural environment and the agriculture it supports." The County determined the appropriate land use in the designation of land use and zoning in its general plan process, and determined at that time that the project site was appropriately zoned as "Agricultural Watershed." Land uses allowed include agriculture, one single family dwelling per each legal lot, small residential care facilities, antennas, telecommunication facilities, hunting clubs, recreation vehicle parks, campgrounds, and floating docks. Through the Draft EIR, the County analyzes the Walt Ranch Project for inconsistency

with local policies and State and federal regulations. Where the Walt Ranch Project is not consistent with the goals of the General Plan or regulations, mitigation measures have been provided.

APRIL 4, 2016 LETTER FROM TAMARISK:

Appeal Ground No. SC41: The project estimates use of 0.5 af per year per acre of planted vineyard, which with 40 af of water for frost protection totals 213 af per year. Without knowing the underlying assumption of vines per acre in the Water Availability Analysis (WAA) and Circle S, it is impossible to compare the estimate in the EIR with that of the UC Extension and argue which is most accurate.

Staff Response: The applicability of the UC Davis Department of Agricultural & Resource Economics and UC Cooperative Extension study was addressed in Section 2.6 of the Responses to Final EIR memorandum and in Premiere Viticultural Services 2016 memorandum. The proposed vine density of 2,420 vines per acre was disclosed in Section 4.6.1-4 of the Draft EIR, Appendix D of the Draft EIR, Appendix E of the Draft EIR, and Appendix Q of the Final EIR.

The UC Davis Department of Agricultural & Resource Economics and the UC Cooperative Extension, through the collaboration of local farm advisors and independent growers has been producing cost studies for wine grapes and various crops since the 1940's to help businesses understand the risk and most current costs/returns associated with farming specific crops in specific areas. The Premiere Viticultural Services memo explains that "these cost studies have most recently involved the Napa Valley Grapegrowers (NVG) and members of the NVG that farm many properties in various locations with various conditions throughout Napa County. This volunteer group provides actual budget analysis from each one of their vineyards for every activity listed in the study and the median prices of those activities are represented in the final data set. The cost study makes assumptions about spacing, infrastructure, property size, frost protection, pest management, irrigation, cover crop, trellis system, harvest, fertility, etc. All of these assumptions do not actually represent one vineyard, but rather "the hypothetical farm operation" that is described in the assumptions. The Walt Ranch may have some similarities to the costs put forth in this study, but due to the site specific nature of any vineyard project, many items in this cost study should not be applied to our specific farming operation, especially broad assumptions about water use."83

The Premiere Viticultural Services memorandum describes various site-specific factors as they apply to the Walt Ranch Project, including: drought tolerance of various rootstocks, site-specific soil chemical and water holding capacity analyses that have been conducted for each vineyard block, and solar radiation and evapotranspiration calculations as they relate to water use. The

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⁸³ Premiere Viticultural Services, 2016. Memo RE: Walt Ranch Response to Comments about Water Use. April 21, 2016. From Garrett Buckland to Director Dave Morrison.

memorandum discusses how the trellising system the Applicant has chosen reduces the specific crop coefficient (K_C), which is a measure of how much water the crop uses when compared to the reference point. The Walt Ranch Project will utilize a "vertical shoot positioning system which has the lowest K_C compared to other trellis/training styles. For example a vertical shoot positioned vineyard may have a K_C of .45 during the peak of summer, while a California sprawl or Lyre system would have a K_C of .8 to .9." This means that the same crop using a different trellising system could require 40 to 50 percent more water for the same vine spacing.

Over the years, the Applicant has used numerous scientific techniques and farming methods on its other vineyards to reduce the total amount of water that is required to irrigate its vines. These methods include:

- Evapotranspiration (ET) modeling for irrigation scheduling
- Weather stations located onsite running full evapotranspiration models
- Pressure chamber measurements for Leaf Water Potential
- Neutron probes/soil moisture probes
- Vineyard Heat mapping with FLIR (forward looking infra-red) tools
- Tule Technologies real-time ET stations
- Dendrometers/Phytogram
- Porometers
- NDVI imagery
- Monitor root growth and uptake efficiency

As a result of these numerous measures that have promoted water use efficiency, along with trellis system, rootstock choice, and vine density, the Applicant has reduced its irrigation from a weekly schedule to one that waters the vines between 4 to 6 times per year. As a result, the Applicant has been successfully deficit irrigating its existing vineyards to below 0.5 acre-feet of water per acre (the assumption provided in the EIR), and will do so on the Walt Ranch Project. The UC Davis Study provides a thorough analysis of a "hypothetical farm" as opposed to site-specific data for an average vineyard operation.

In addition, a new Condition of Approval No. 15 is recommended for the project to limit the annual groundwater extraction to 145 af per year in order to ensure the Applicant operates the vineyards in compliance with the groundwater estimates presented above.

Appeal Ground No. SC42: Appellant asserts the County's groundwater modeling is either inaccurate or relied upon the wrong modeling scenarios for likely future groundwater recharge rates.

Staff Response: This was addressed on page 14 of the 2016 RCS Responses Memorandum.⁸⁴ As stated therein, analyses presented by RCS included and referenced multiple rainfall datasets, and relied on conservative values of average rainfall at the property to address the uncertainty in rainfall assumptions.

The EIR presented a range of supportable groundwater recharge estimates based on best available science and based on peer-reviewed data sources specific to the watershed in question. Utilization of the more conservative recharge rate is an appropriate environmental baseline in accordance with CEQA *Guidelines* § 15125. Refer to responses to Appeal Ground Nos. LRC9 and LRC13.

Appeal Ground No. SC43: Appellant asserts there is no reference evaluation to line of sight constraints and safety hazards at project access points in the Draft EIR.

Staff Response: Potential safety hazards and line of sight constraints were discussed in General Response 17 in the Final EIR. In addition, the Initial Study (Appendix B of the Draft EIR) discusses that the Walt Ranch Project would not result in a change in area traffic patterns or changes to area roadway design features or uses. As discussed in Section 4.7.3 of the Draft EIR, installation of the Walt Ranch Project could increase potential conflicts between vehicles on area roadways given the additional vehicles that would be entering and exiting the project site. Both SR-121 and Circle Oaks Drive are of sufficient width to accommodate a variety of vehicle types, including construction related equipment, and the available sight distance for drivers at the project site access road is not unduly restricted. Additionally, the implementation of Mitigation Measure 4.7-3 would further reduce this less-than-significant impact by requiring advance warning signs (e.g., "Intersection Ahead" and/or "Truck Crossing Ahead") to be posted on Circle Oaks Drive and Country Club Lane consistent with Napa County sign placement standards. This will alert motorists of potential safety hazards and of an upcoming intersection with turning vehicles and increase the safety of these roadways. Therefore, the Walt Ranch Project will result in no impact due to this potential safety hazard.

Mitigation Measure 4.7-4 requires that the Applicant obtain Caltrans traffic permits for the movement of heavy equipment to and from the project site. As part of the Caltrans traffic permit for overweight vehicles, pilot cars are required during the movement of equipment on each of the potential routes that may be used to access the project site. As such, there are no significant issues due to line of sight or safety hazards with compliance with the Caltrans permit terms.

See also response to Appeal Ground No. SC44 below.

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⁸⁴ RCS, 2016. Technical Memorandum RE: Response to Comments on the Walt Ranch Final EIR. June 10, 2016. Included as Attachment C to the Responses to Final EIR Comments Memorandum.

⁸⁵ Caltrans, 2016. Single Trip Permit Pilot Car Maps and Red Route Summary Table. Last Updated August 10, 2016. Available online at: http://www.dot.ca.gov/trafficops/permits/pcmaps.html.

Appeal Ground No. SC44: Appellant asserts the EIR and Draft EIR lack details regarding the extent of environmental damage which would be incurred in order to utilize the alternate roads to Circle Oaks Drive for project access.

Staff Response: As discussed in response to Appeal Ground No. COCWD12, the Final EIR correctly identified that developing a new access point may cause new environmental impacts not previously disclosed (see Final EIR General Response 17 at page 4-32); fortunately, use of the existing access road would not require significant improvements or cause safety hazards. The Applicant is proposing the use of an existing access road directly off of State Route 121 (SR 121) for the delivery of construction equipment; this road may also be utilized for materials deliveries. This existing driveway is the northern-most driveway located on the eastern property boundary, directly adjacent to SR 121 and approximately 1.5 miles southwest of the intersection of SR 121 and SR 128. The existing road network would then be utilized to provide access to the remainder of the Walt Ranch property. The EIR already reviewed the existing and proposed road network and provided mitigation measures to substantially lessen impacts caused by the use of roads on the Walt Ranch property.

As discussed in the Walt Ranch Alternative Access Proposed by Applicant memorandum, ⁸⁶ the alternative access route would be upgraded consistent with the Long-Term Road Management Plan provided in Appendix C of the Draft EIR. Commenters pointed out that the EIR was vague in its discussion of why this access point was eliminated; this is because cultural resources locations are not allowed to be disclosed in public CEQA documentation in accordance with Section 304 of the National Historic Preservation Act (16 USC 470w-3) and the Archaeological Resources Protection Act (16 U.S.C. Section 470h). However, the County is able to acknowledge that the resources present in the vicinity of that existing access point would be protected by mitigation measures that are already in place within the EIR (see Mitigation Measures 4.2-1, 4.2-2, 4.2-9, 4.2-10, 4.3-1, and 4.6-2). As such, there are no new significant environmental impacts that would require revision or recirculation of the Draft EIR consistent with CEQA *Guidelines* § 15088.5. Conditions of approval requiring the use of this alternative access for construction equipment delivery and the specific recommendations discussed in Table 2 of the Updated MMRP.

Appeal Ground No. SC45: Appellant asserts that placing signs stating "Intersection Ahead" or "Truck Crossing Ahead" will not decrease the likelihood of collisions between heavy vehicles and pedestrians on a steep, twisting road featuring short lines of sight. (There will not be any truck crossings along Circle Oaks Drive- the Walt Project trucks will shoot straight up and down Circle Oaks Drive). This is insufficient mitigation to protect pedestrian safety. A more adequate mitigation would be for the Project to lay sidewalks along the length of Circle Oaks Drive to

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⁸⁶ AES, 2016. Memorandum RE: Walt Ranch Alternative Access Proposed by Applicant. July 7, 2016. Included as Attachment B to the Responses to Final EIR Comments Memorandum.

enable pedestrians safe passage. The Final EIR is deficient in that it fails to analyze the dangers to pedestrian traffic from heavy equipment on Circle Oaks Drive.

Staff Response: Following the release of the Final EIR, the County received additional comments regarding traffic, road and infrastructure conditions, and pedestrian safety. Based on these comments, the Applicant has proposed an alternative access route to address the concerns among neighbors within the Circle Oaks community regarding the use of Circle Oaks Drive for construction equipment. As such, large construction equipment and materials delivery trips will be routed away from Circle Oaks Drive, thereby significantly reducing the safety concerns mentioned by the commenters regarding large trucks traveling on the narrow streets within the Circle Oaks neighborhood. Many commenters were concerned regarding the potential conflicts of pedestrians walking in the streets and the project-related truck traffic. Although the trucks will now be routed away from Circle Oaks Drive, Mitigation Measure 4.7-3 which requires safety signage will still be required.

Appeal Ground No. SC46: Appellant asserts that it is doubtful that the current Circle Oaks entrance could be used for the larger vehicles needed during both the construction phase and the operational phase for 200+ acres of vineyards without alteration. The tight turns at the entrance cannot be easily navigated by large construction vehicles and operational vehicles such as grape carriers, without substantial modification which would include re-alignment and tree removal.

Staff Response: Refer to alternative access for construction equipment discussed in the response to Appeal Ground No. SC44, above.

<u>Appeal Ground No. SC47:</u> Appellant asserts that based on local testimony and photographic evidence, including typical wetland flora and fauna, the Final EIR Response to Comment I139-4 is incorrect in denying the existence of a wetland in the vicinity of the access road.

Staff Response: Although the Appellant may disagree with the assessment that there is no wetland at the aforementioned location, USACE has certified the wetland delineation on the Walt Ranch property in September 15, 2008 and August 13, 2013, and has not delineated a wetland at the terminus of Circle Oaks Drive. The USACE wetland delineation, the Draft EIR, and the Final EIR show that the entrance to the property does cross an existing drainage; as disclosed in the EIR, this existing culvert would be upgraded and would result in impacts to 38.73 linear feet of waters of the U.S. Mitigation Measure 4.2-4 requires the Applicant obtain the appropriate permits for impacts to all waters of the U.S., including this existing culvert.

Appeal Ground No. SC48: Appellant asserts the EIR is deficient in that it fails to account for the foreseeable traffic impacts of development of individual properties on Circle Oaks Drive, if the Circle Oaks Drive access road is designated as the primary access road for the property. Insufficient analysis has been produced of the environmental and safety conditions of Circle Oaks Drive as well as of the feasibility of the alternate access roads.

Staff Response: Refer to the responses to Appeal Grounds No. SC43 and SC44, above.

Appeal Ground No. SC49: Appellant asserts the Draft EIR proposes inadequate mitigation for loss of carbon sequestration due to clearing of trees and vegetation. Pretend mitigations, such as not cutting down even more trees, do not affect GHG accounting balance sheet.

Staff Response: Refer to the responses to Appeal Ground No. CBD38.

APRIL 1, 2016 JOINT LETTER FROM CBD AND SC NAPA GROUP (ATTACHED TO SIERRA CLUB'S APPEAL):

Appeal Ground No. SC50: Appellant asserts the County has added significant new information and data on a wide variety of topics and changed the project. Pursuant to Section 21092.1, therefore, an amended Draft EIR must be circulated with corresponding notice and opportunity for comment.

Staff Response: Refer to the response to Appeal Ground No. CBD46.

Appeal Ground No. SC51: Appellant asserts the County's project description violates the CEQA requirement to provide an "accurate, stable, and finite" description of the project in a number of different ways. Where exactly land use changes will occur on the Project site remain unclear and this needs to be rectified with greatly improved project description and maps. Since the Project description is not stable or finite, it fails to inform decision-makers and the public of the true scope of the Project from which all interested parties could assess the direct and indirect environmental effects of the Project. (City of Santee v. County of San Diego (1989) 214 Cal.App.3d 1438, at 1454-55; San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645, at 655; Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4th 70, 83-86.)

Staff Response: This was addressed in the response to Appeal Ground No. CBD1.

Appeal Ground No. SC52: Appellant asserts that although the County acknowledges that the Project has potential significant impacts to the California red-legged frog (CRLF), the foothill yellow-legged frog (FYLF) and the western pond turtle (WPT), it fails to fully analyze how this project can impact each species based on each species' unique characteristics and life histories. It also fails to analyze and explain how the mitigation measures will be sufficient to reduce the impacts to less than significant levels for each species.

Staff Response: Refer to the responses to Appeal Ground Nos. LRC4 and CBD4.

Appeal Ground No. SC53: Appellant asserts County persists in ignoring a variety of wildlife species known to be present or with a potential to be present onsite in its review. County must address the species listed in the USFWS Information for Planning and Conservation report. The County must conduct surveys to determine the presence of peregrine falcons and their nesting

and foraging habitat. In addition, the County must put in place strict avoidance protocols that would prohibit the take of these species in any form.

Staff Response: Refer to the responses to Appeal Ground No. CBD10 and Appeal Ground No. CBD17.

Appeal Ground No. SC54: Appellant asserts that the Draft EIR fails to analyze impacts to Contra Costa Goldfields or provide for mitigation to lost critical habitat.

Staff Response: Refer to the response to Appeal Ground No. CBD13.

Appeal Ground No. SC55: Appellant asserts the EIR's air quality analysis still fails to take into account all sources of air quality impacts from the project and underestimates the emissions it does consider. For example, the EIR continues to underestimate the amount of traffic likely to occur because of the project. Also troubling, the EIR's air quality analysis fails to take into account the air quality impacts from pesticides used on the site. The EIR's air quality analysis should be revised to ensure that all potential air quality impacts are included, analyzed and if needed, mitigated to the extent feasible. Until the EIR's air quality analysis is updated, it will continue to be inadequate and in violation of the CEQA.

Staff Response: The following excerpt from the Responses to Final EIR Comments memo (Section 2.3) explains the traffic impacts:

"First, it should be noted that there was apparent confusion regarding the level of traffic that would be caused by the Proposed Project, with some commenters stating numbers that were two or even three times larger than the anticipated number of trips. The correct number of trips can be found in Section 4.7 of the Revised Draft EIR (Final EIR: Volume II) or General Response 16 (Final EIR: Volume I). During the construction period, 38 trips entering the project site in the morning and 38 construction trips leaving the site in the evening are anticipated. Four of these trips would be large trucks; the rest would be passenger vehicles carrying workers. The EIR notes that the construction equipment would be delivered in 15 trips once at the start of construction (between April 1 and April 15) and removed again at the end of construction (see page 4.7-4). This total number of truck trips (4 daily and 15 twice per season) during construction is substantially lower than the "hundreds of daily truck trips" claimed by many commenters.

Operational traffic levels were similarly overstated by commenters. Only a few workers would be needed onsite during the majority of the year. During the pruning season (between December and March), approximately 45 vineyard workers are expected onsite. During the harvest/crush season (between August and October), approximately 60 vineyard workers would be needed onsite and 4 grape trucks each day. The EIR analyzes the peak traffic scenario during harvest/crush to provide a conservative analysis;

however, this is only for three months out of the year and the remainder of the months will have significantly fewer trips."

As discussed further in the response to Appeal Ground No. CBD35, the analysis of Proposed Project emissions compares daily emissions from all sources (including mobile emissions) with the BAAQMD thresholds in accordance with the 2012 BAAQMD CEQA Guidelines and found no significant impact. This was addressed in Impact 4.1-2 and Impact 4.1-3 of the Draft EIR, and Final EIR Response to Comment O21-126, which explains that mobile trips are accounted for in the CalEEMod analysis. If the mobile source emissions combined with all other emissions sources did not exceed the BAAQMD significance thresholds, then no mitigation is required. Although this was a less-than-significant impact, the EIR adopted mitigation measures recommended by the BAAQMD to further reduce these impacts.

Refer to the response to Appeal Ground No. CBD34 for a discussion of pesticides as it relates to the air quality analysis presented in the EIR.

Appeal Ground No. SC56: Appellant asserts there are significant flaws in the EIR's GHG emissions analysis and that mitigation measures taken are insufficient.

Staff Response: Refer to the responses to Appeal Grounds No. CBD36 through No. CBD38.

NOVEMBER 21, 2014 JOINT LETTER FROM CBD AND SC NAPA GROUP (ATTACHED TO THE SIERRA CLUB APPEAL):

Appeal Ground No. SC57: Appellant asserts that County's analysis overlooks the lost ecosystem value of the largest old growth trees on the Walt Ranch property which will be destroyed by the developer to create vineyard land.

Staff Response: Mitigation Measure 4.2-16 removed portions of two vineyard blocks (Blocks 12 and 19) from the proposed development to protect stands of notable oak woodland, protects 74 specimen trees, and provides a 5:1 replacement ratio for the remainder of the impacted specimen trees. The BRMP prepared for the Walt Ranch Project includes a breakdown of the species of all 34 impacted specimen trees, and a detailed map and table of the replanting areas for each species (see Appendix P). Over 20.6 acres of potential specimen tree replanting areas were located by a qualified botanist based on the unique needs of each species for sunlight, soil moisture, and topography. The analysis presented within the EIR was appropriately focused and detailed, and considered the significance of specimen trees (referred to by the Appellant as "largest old growth trees") in accordance with CEQA *Guidelines* §15064.

Appeal Ground No. SC58: Appellant asserts that County's the Draft EIR's proposed CRLF mitigation is inadequate. The County neglected to propose a mitigation scheme specific to CRLF that analyzed or would directly address the project's harm or the cumulative harm to the threatened CRLF or its critical habitat. County did not create a specially tailored set of

mitigation measures for the CRLF. For its primary mitigation measure, the County adopted its proposed mitigation for western pond turtles-a protected reptile that is in no way biologically similar or related to the CRLF. (Draft EIR 2-26.) As a secondary mitigation measure, Napa simply referred to the mitigation measure that dealt with the applicant obtaining a federal section 404 permit. (Id.) This mitigation measure focused solely on federal water quality compliance and not on protecting threatened biological resources in wetlands, such as the CRLF.

<u>Staff Response:</u> Refer to the response to Appeal Ground No. CBD6.

Appeal Ground No. SC59: Appellant asserts the Draft EIR fails to adequately address and mitigate the impacts of pesticides on CRLF. The Draft EIR's reliance on integrated pest management ("IPM") for the pond turtle and, thus, the CRLF, is ill-placed. IPM is entirely voluntary; it does not legally bind the Applicant to employ IPM strategies, and it only loosely defines which products the Applicant has promised not to use. Because the Applicant is under no legal compulsion to adhere to this promise, the County cannot and should not rely on this mitigation measure to reduce harm to CRLF individuals on or near the Walt Ranch property.

Staff Response: Refer to the response to Appeal Ground No. LRC16. The IPM Plan is required via Mitigation Measure 4.2-10 and has been incorporated into the Updated MMRP adopted with the project, which is a legally binding and enforceable plan. Compliance with the IPM Plan is compelled by the MMRP, consistent with other vineyard projects in the County and with CEQA *Guidelines* § 15126.4(a)(2). This is discussed in Impacts 4.2-10 and 4.2-11 of the EIR, as well as Section 2.8 and 2.10 of the Responses to Final EIR Comments memorandum. Refer to response to Appeal Ground No. LRC15 regarding other mitigation measures that are required to minimize risk of hazardous materials use.

Appeal Ground No. SC60: Appellant asserts the Draft EIR fails to establish adequate mitigation measures for the foothill yellow legged frog for the same reasons as CRLF.

Staff Response: Refer to the response to Appeal Ground No. CBD8.

Appeal Ground No. SC61: Appellant asserts the Draft EIR proposes inadequate mitigation for Project impacts on the western pond turtle. The County-designated nesting habitat comprises a much narrower band around these important breeding areas than the WPT has been shown to use, and it is much narrower than is even allowed for the turtle's other upland uses of hibernation and refuge. Because WPT are known to nest as far as 400 meters away from streams, the County should require the Applicant to provide much more of this habitat than is currently proposed. The Draft EIR's reliance on BMPs as it is currently stated in the Draft EIR violates CEQA requirements because they do not commit the Applicant to any specific conduct or provide the public with adequate information upon which to base a recommendation.

Staff Response: Refer to the response to Appeal Ground No. CBD8. As discussed therein, the EIR provides detailed mapping of over 530 acres of upland habitat that occurs on the Walt Ranch property. This is composed of approximately 20.7 acres of prime nesting habitat and approximately 509.8 acres of upland habitat. A combination of avoidance and preservation of existing habitat (both upland and aquatic), preconstruction surveys, agrichemical limitations, and exclusionary fencing was proposed in Mitigation Measure 4.2-10 to protect this species.

Appeal Ground No. SC62: Appellant asserts the Draft EIR failed to assess the following federally endangered and threatened species: Conservancy fairy shrimp, California freshwater shrimp, California tiger salamander, Winter-run chinook salmon, Sebastopol meadowfoam, Northern spotted owl, Western snowy plover, California brown pelican, and California least tern. To cure the Draft EIR's inadequate biological resources baseline, the County should, inter alia, (1) conduct further species surveys at Walt Ranch, (2) discuss these species' life histories and whether there is suitable habitat for these species at Walt Ranch, (3) discuss the potential direct impacts of the project to this species, (4) discuss any potential impacts to these species as a result of the Proposed Project and nearby activities that cumulatively effect these species, and (5) anything else necessary to create an accurate baseline, impacts, and mitigation assessment.

Staff Response: Refer to the response to Appeal Ground No. CBD17.

<u>Appeal Ground No. SC63:</u> Appellant asserts that County will permit construction of exclusionary fencing surrounding vineyards, which will decrease wildlife movement and decrease the project's effectiveness as a wildlife corridor, in violation of General Plan policies, CON-s and CON-18. The EIR does not adequately discuss the impacts arising from this fencing, and provides inadequate mitigation to counterbalance these impacts. (CEQA *Guidelines* §§ 15126, 15126.4.)

<u>Staff Response:</u> Refer to the response to Appeal Ground No. CBD19.

Appeal Ground No. SC64: Appellant asserts that County does not discuss impacts to wildlife from the construction and rebuilding of over 20 miles of roads within Walt Ranch, and it does not provide adequate avoidance and mitigation for these impacts. (CEQA *Guidelines* §§ 15126, 15126.4.)

<u>Staff Response:</u> Refer to the response to Appeal Ground No. CBD20.

<u>Appeal Ground No. SC65:</u> Appellant asserts that the County does not provide an adequate baseline and impacts discussion regarding mountain lions, which have a high possibility of being present on site. (CEQA *Guidelines* §§15125, 151 26; Fish & Game Code § 4800.) Furthermore, the EIR does not mitigate impacts to mountain lions to less than significant. (CEQA *Guidelines* § 15126.4.)

Staff Response: Refer to the response to Appeal Ground No. CBD11.

Appeal Ground No. SC66: Appellant asserts that County fails to adequately avoid and mitigate impacts to on-site oak trees, in violation of Napa Policy CON-24 and California Public Resource Code F§ 21 083.4(b). (CEQA *Guidelines* § 15126.4.)

Staff Response: Refer to the response to Appeal Ground No. CBD12.

Appeal Ground No. SC67: Appellant asserts that County admits the project will impact goldfields' designated critical habitat, but erroneously concludes this impact is less than significant and does not require mitigation. (CEQA *Guidelines* § 15126, 15126.4.) Contrary to the County's conclusion, impacts to dozens of acres of critical habitat are significant and require avoidance or mitigation. (See, e.g., 40 C.F.R. § 1508.27.) The EIR fails to acknowledge the need to either obtain an incidental take permit or to conduct Section 7 consultation for this species. (16 U.S.C. §§ 1 536(a)(2); 1539(a).)

<u>Staff Response:</u> Refer to the response to Appeal Ground No. CBD14.

Appeal Ground No. SC68: Appellant asserts that the EIR provides inadequate mitigation for impacts to a particularly important community of narrow-anthered California brodiaea. (CEQA *Guidelines* § 15126.4.)

Staff Response: Refer to the response to Appeal Ground No. CBD15.

Appeal Ground No. SC69: Appellant asserts that County impermissibly allows the destruction of hundreds of acres of native grasslands by severely limiting what qualifies as a native grassland, in violation of Napa Policy CON-17. The County does not adopt all feasible avoidance and mitigation, such as prohibiting on-site herbicide use. (CEQA *Guidelines* § 15126.4.) The County has not cited to any policy that supports its choice to only mitigate impacts to grasslands with densities of over ten percent native grasses.

Staff Response: Refer to the response to Appeal Ground No. CBD16.

<u>Appeal Ground No. SC70:</u> Appellant asserts the Draft EIR downplays the benefits of the Reduced Intensity and Multiple Resource Protection Alternatives compared to the Proposed Project. The County has understated the differences in intensity between the Proposed Projects and the other alternatives it discussed. Because the Draft EIR does not meaningfully "evaluate the comparative merits of the alternatives," its discussion of the alternatives is inadequate.

<u>Staff Response:</u> Refer to the response to Appeal Ground No. COCWD19.

Appeal Ground No. SC71: Appellant asserts the Draft EIR should have considered an alternative that eliminated or reduced fencing and consolidated vineyard acreage.

Staff Response: Refer to the response to Appeal Ground No. COCWD19 regarding the adequacy of the alternatives analysis presented in the EIR. CEQA *Guidelines* § 15126.6 requires

that an EIR "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project." Because deer fencing is essential for farming operations as it protects the crop, it would not be feasible to eliminate deer fencing. Furthermore, as explained in response to Appeal Ground No. CBD1, the deer fencing plan has been revised to be in compliance with Mitigation Measure 4.2-6, which reduces potential impacts to wildlife movement to less-than-significant levels.

Appeal Ground No. SC72: Appellant asserts the Draft EIR impermissibly defers mitigation. Appellant is concerned with the statement "...in the event the Applicant is unable to demonstrate the infeasibility of avoiding these resources." (Draft EIR 5-5). It is not the Applicant's duty to prove the feasibility of any mitigation; that duty rests solely on the County. (See CEQA Guidelines § 15126.6(f)(1).) As the Applicant has strong profit-based incentives to maximize vineyard acreage at the cost of other project objectives, it would be unwise for the County to rely on the Applicant's feasibility determinations.

Staff Response: Refer to the response to Appeal Ground No. LRC6 and SC7 regarding the infeasibility of further avoidance.

Appeal Ground No. SC73: Appellant asserts that the EIR fails to accurately discuss the traffic baseline and impacts. (CEQA *Guidelines* §§ 15125, 15126.) It fails to provide adequate mitigation for impacts during project construction and operation. (CEQA *Guidelines* § 15126.4.)

Staff Response: Refer to the response to Appeal Ground No. CBD21.

Appeal Ground No. SC74: Appellant asserts the Draft EIR fails to adequately address Project impacts regarding runoff and sedimentation.

Staff Response: Refer to the responses to Appeal Grounds No. COCWD5 and LRC1.

<u>Appeal Ground No. SC75:</u> Appellant asserts the Draft EIR developed a flawed threshold of significance for water quality impacts that does not comply with Total Daily Maximum Load requirements for the Napa River watershed.

Staff Response: Refer to the response to Appeal Ground No. LRC1.

Appeal Ground No. SC76: Appellant asserts the Draft EIR provides conflicting and inadequate information regarding runoff and sedimentation impacts.

Staff Response: This was addressed in Final EIR Response to Comment O21-098 and O21-099. Impact 4.6-1 of the Draft EIR states that there will be a marginal increase in peak discharge of 0.4 percent on the Capell Creek portion of the property, although the introductory sentence mentioned by the commenter may have been unclear. Therefore, the Final EIR was clarified at page 4.6-39 to state:

Development of the Proposed Project would alter the drainage pattern of the project site, but would not result in an increased rate or volume of runoff on the Milliken Reservoir watershed portion of the property. In fact, the runoff and soil loss models predict the Proposed Project would result in an overall decrease in both the peak discharge and volume of surface runoff leaving the property in the Milliken Reservoir watershed. As shown in Table 4.6-2 above, the calculated peak discharge was reduced by 4.5 percent in the first Milliken watershed and by 4.7 percent in the second Milliken watershed. In the Capell Creek subwatersheds, there was a marginal increase in peak discharge of 0.4 percent (Appendix G).

The small 0.4 percent increase in peak runoff modeled on the Capell Creek portion of the property was discussed in Impact 4.6-1. Mitigation Measure 4.6-1 of the Draft EIR required numerous measures to mitigate the peak runoff increases and reduce the potential impact to less-than-significant levels. As required by Mitigation Measure 4.6-1, the final ECP submitted to the County on July 11, 2016 included measures to offset the peak runoff increases. The results of supplemental hydrologic modeling for the final 209-acre vineyard were submitted to the County with the final ECP. Per RiverSmith Engineering, the "revised hydrologic modeling incorporates all mitigations and the results now fully meet the no net increase requirement." Therefore, there is no potential for increased sediment production caused by increases in peak runoff because there are no increases in peak runoff, in compliance with Napa County General Plan Policy CON-50.

Appeal Ground No. SC77: Appellant asserts the Draft EIR provides insufficient mitigation measures to alleviate runoff and sedimentation impacts.

Staff Response: This was addressed in Final EIR Response to Comment O21-100, O21-101, and O21-102, as well as the response to Appeal Ground No. SC76 above. All road crossings will be treated as described in the Walt Ranch Road Sedimentation and Erosion Potential Evaluation prepared by the Napa County RCD, found in Appendix C of the Draft EIR, and all roads are required to be upgraded per the ECP and Road Plan (Appendix C) prior to use. Upgrading these stream crossings will reduce sediment loads, which was estimated by Napa County RCD staff. In addition, there will be no impact to fish spawning due to construction of the crossing structures since the project site is isolated from all spawning populations.

Furthermore, the project is in compliance with the Napa River watershed TMDL. Specifically, the TMDL requires a 51 percent decrease in sedimentation for the entire Napa River watershed, not each individual development project. The commenter is correct that Table 4.4-2 of the Draft EIR presents the detailed, block by block erosion calculations from the USLE model (full model results are presented in Appendix O). As stated in Appendix O, Table 4.4-2, and Impact 4.4-1, implementation of the Walt Ranch Project would result in a reduction in soil loss of 43.61 percent from the Milliken Reservoir watershed portion of the property. This is in compliance

with Napa County General Plan policies, ordinances, and the Napa River Sediment TMDL. There will be a reduction in soil loss of 43.61 percent from the Milliken Reservoir watershed and a reduction of 13.11 percent from the Capell Creek watershed portion of the property.

The hydrologic analysis prepared for the Walt Ranch Project provided six general recommendations on page 34 of the March 2013 Hydrologic Analysis of Proposed Vineyard Blocks within the Walt Ranch Property, which are referenced by the commenter. ⁸⁷ One of these suggestions is to improve infiltration in the Capell Creek watershed by improving existing brushy areas, although the report acknowledges that "this will require re-running the hydrologic model" to determine exactly how effective that would be. Alternatively, the report recommends mitigation options for the Capell watershed vineyard blocks that are detailed within the report and incorporated into the EIR through Mitigation Measure 4.6-1, and as such are legally binding and enforceable measures as part of the MMRP. These mitigation measures are consistent with CEQA *Guidelines* § 15126.4.

Also see response to Appeal Ground No. SC76 above.

Appeal Ground No. SC78: Appellant asserts the Draft EIR provides an inadequate impact analysis and mitigation regarding nutrients and other pollutant impacts due to the Project.

Staff Response: Refer to the response to Appeal Ground No. CBD28.

Appeal Ground No. SC79: Appellant asserts the Draft EIR provides an inadequate and conflicting analysis of Project impacts underlying groundwater resources. The Draft EIR provides conflicting conclusions regarding impact significance. The Draft EIR provides conflicting conclusions in stating that the project's proposed extraction is a less than significant impact and will have no impact to off-site wells, (Draft EIR 4.6-43), while concluding in another portion that on-site pumping (especially during irrigation season) could result in drawdown of lower groundwater levels in offsite neighboring wells. (Draft EIR 4.6-44, 4.6-50, and 4.6-51.) The final EIR must clarify and minimize these impacts and ensure that groundwater resources will be conserved and enhanced so that "sufficient amounts of water will be available for uses . . . for the natural environment, and for future generations" to be consistent with conservation goal 10 of the General Plan. (Draft EIR 4.6-22 to 4.6-23.)

Staff Response: See response to Appeal Ground Nos. LRC13 and CBD33. Analyses presented by RCS rely on conservative values of average rainfall and deep percolation at the property to address the inherent uncertainty in the analyses. The GWMMP was developed for the project to address offsite water level drawdown impacts that may occur during pumping.

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⁸⁷ Hydrologic Analysis of Proposed Vineyard Blocks within the Walt Ranch Property. Prepared by RiverSmith Engineering. March 2013. Included as Appendix G to the Draft EIR.

<u>Appeal Ground No. SC80:</u> Appellant asserts the Draft EIR also fails to take into account of important factors that should have been considered to determine impacts on groundwater resources, including the recharge rate of the aquifer and therefore the impact of groundwater extraction by Walt Ranch and other nearby developments.

Staff Response: Refer to response to Appeal Ground No. LRC9.

<u>Appeal Ground No. SC81:</u> Appellant asserts the Draft EIR fails to adequately analyze the cumulative impacts of the Project on groundwater resources. Furthermore, the Draft EIR does not adequately address the cumulative impacts of existing off-site wells as well as foreseeable future off-site wells on groundwater resources in the vicinity of the project.

Staff Response: Cumulative groundwater demands have been addressed throughout the EIR process, specifically in: the Draft EIR (Impact 4.6-4 and Section 6.1.4-6), Final EIR (Appendix Q pages 8 through 10),⁸⁸ and Final EIR General Response 14. As discussed therein, groundwater extractions for the COCWD and the permitted future (but undeveloped) Circle S Ranch project are considered in conjunction with the groundwater demand for the proposed Walt Ranch project. Refer to the response to Appeal Ground No. COCWD1 for the cumulative groundwater demand.

Appeal Ground No. SC82: Appellant asserts the Draft EIR also has not provided any analysis regarding potential and extent of cumulative drawdown impacts from the Project, Circle S Ranch, and other nearby groundwater users including the Circle Oaks County Water District. (Draft EIR 4.6-18.) The Draft EIR is therefore missing key groundwater extraction data and does not allow intelligent, informed decision-making regarding the cumulative impacts of the Project on underlying groundwater resources.

<u>Staff Response</u>: Consideration of COCWD infrastructure was addressed in Final EIR Response to Comment O2-1. The RCS aquifer (pumping) test analysis included theoretical monitoring points that coincided with the estimated locations of the COCWD wells and springs to estimate impacts to COCWD. In addition, wells on the Circle S Ranch property were monitored as part of the aquifer test. As explain in response to Appeal Ground No. COCWD1, once COCWD provided its actual well data to RCS, it was incorporated into the modeling by updating the theoretical or assumed locations to the actual well locations.

Appeal Ground No. SC83: Appellant asserts the Draft EIR fails to adequately analyze impacts on other groundwater basins. The Draft EIR provides that given the different geology and 2.5-mile distance between the Project site and the Milliken-Sarco-Tulocay ("MST") basin that groundwater extraction by the Project will not impact the MST, which is in the state of long-term

-

⁸⁸ RCS, 2015. Technical Memorandum RE: Response to Comments on the Walt Ranch Draft EIR. August 13, 2015. Included as Appendix Q to the Final EIR.

over-draft and under restrictive use standards. (Draft EIR 4.6-11; 4.6-14.) The Draft EIR also concludes that there is no apparent hydraulic connection between the MST and the project site by copying verbatim from the Circle S Ranch Erosion Control Plan. Therefore, the applicant needs to conduct on-site scientific studies to provide adequate support for this assertion.

Staff Response: Refer to response to Appeal Ground No. LRC10.

<u>Appeal Ground No. SC84:</u> Appellant asserts the Draft EIR fails to address potential impacts of groundwater extraction on groundwater-dependent riparian ecosystems. The Draft EIR should analyze how groundwater pumping will affect federally listed chinook salmon and steelhead, and mitigate any effects this project has on these and other aquatic species.

Staff Response: Refer to response to Appeal Ground No. COCWD32 for a discussion of the lack of connectivity between the surface water flows in Milliken Creek and the Sonoma Volcanics and response to Appeal Ground No. LRC6 regarding the lack of salmonid habitat on the project site.

Appeal Ground No. SC85: Appellant asserts the Draft EIR's mitigation measures for Project impacts on groundwater resources are inadequate. The Draft EIR does not propose adequate mitigation measures to prevent over-draft of Walt Ranch's groundwater resources. The main mitigation measure the Draft EIR provides regarding groundwater is requiring the applicant to conduct well monitoring for existing and future wells to help provide quantified data during each phase of the project. (Draft EIR 4.6-50, 6-28.) However, this requirement would only monitor the groundwater levels and would not actually minimize or mitigate impacts that could result from the Project. Therefore, the final EIR must establish quantifiable drawdown limits or monitoring criteria through which it will track extraction and drawdown impacts.

Staff Response: Refer to the response to Appeal Ground No. CBD33 regarding the validity of the GWMMP and response to Appeal Ground No. COCWD31 regarding trigger points. The incorporation of specific mitigation strategies within the GWMMP ensures that the Lead Agency has not improperly deferred any mitigation as defined by CEQA *Guidelines* § 15126.4.

Appeal Ground No. SC86: Appellant asserts the Draft EIR's analysis of the Project's greenhouse gas emissions and potential mitigation measures is flawed and incomplete. The Project's GHG emission impacts analysis relies on a legally impermissible comparison to make its significance determination rather than using existing environmental conditions. Rather than aggressively responding to these substantial emissions, the Draft EIR includes a meager mitigation analysis and ultimately adopts a single mitigation measure. The Draft EIR's GHG analysis is woefully inadequate and in violation of CEQA.

Staff Response: Refer to the responses to Appeal Ground No. CBD36 and CBD37.

Appeal Ground No. SC87: Appellant asserts the Draft EIR analysis of the significance of the Project's GHG emissions is misleading and violates CEQA. The Draft EIR's significance threshold and analysis fail to disclose all necessary information. After concluding that the construction of the Project could be a "potentially significant impact," the Draft EIR determines that by preserving 248 acres of woodland, any climate impact from the Project would be less than significant. (Draft EIR 6-17-18.) However, the Draft EIR fails to make clear whether the cutting down of those 248 acres was ever anticipated in the Project design and could even be developed into vineyards.

Staff Response: Refer to the response to Appeal Ground No. CBD37.

Appeal Ground No. SC88: Appellant asserts the Draft EIR simply fails to provide an evidentiary basis-grounded in actual physical conditions-for its conclusion that the Draft EIR will reduce greenhouse gas emissions to a less than significant level. The Draft EIR must analyze the cumulative significance of the Project's emissions in light of reductions needed to avoid contributing to these physical impacts, not just measure them against the AB 32 Scoping Plan and local plans. Troublingly, the proposed Climate Action Plan for Napa County requires a 38 percent reduction in GHG emissions for development and vineyard projects, a threshold that this Project would clearly fail to meet.

Staff Response: Refer to the response to Appeal Ground No. CBD38.

Appeal Ground No. SC89: Appellant asserts the Project's GHG mitigation measures are vague and inadequate. The Draft EIR adopts only one mitigation measures despite anticipating 105,021 metric tons of CO₂ emissions resulting from Project construction. (Draft EIR 6-17.) These emissions represent a tremendous amount that should be mitigated to the extent possible. Examples of potential mitigation measures include the alternative construction materials, onsite energy generation and additional on-site mitigation of tree loss. The Draft EIR, however, includes no analysis of the availability and feasibility of adopting such measures despite acknowledging the Project's large carbon foot print. The Draft EIR simply fails to evaluate the many available mitigation measures for development projects and refuses to analyze or adopt any mitigation measures other than agreeing to preserve a small portion of the site. This failure is a violation of CEQA and contradicts established state policy.

Staff Response: Refer to the response to Appeal Ground No. CBD38.

Appeal Ground No. SC90: Appellant asserts the Air Quality Analysis in the Draft EIR is Inadequate. The Draft EIR's air quality impacts analysis is flawed because it underestimates the air quality impacts likely resulting from the Project and fails to adopt all feasible mitigation measures. The Draft EIR concludes that the Project's anticipated mobile emissions will not be significant and therefore adopts no mitigation measures. However, as noted above, the Draft EIR traffic analysis was flawed and used an improper baseline when analyzing the Project's likely

impacts. Because impacts from traffic are linked to air quality, the County should redo their air quality impact analysis.

Staff Response: Refer to the responses to Appeal Ground Nos. CBD34 and CBD35.

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GILPIN GEOSCIENCES, INC. Earthquake & Engineering Geology

MEMORANDUM

To:

Brian Bordona

Napa County Planning, Building, and Environmental Services

1195 Third Street Napa, CA 94558

From:

Lou Gilpin, Gilpin Geosciences, Inc.

Date:

September 27, 2016

Project:

Walt Ranch Vineyard Development

Project No.: 91525.01

Subject:

Response to Comments from Kamman Hydrology and Engineering, Inc.,

dated 26 August 2016

This memorandum summarizes our responses to comments submitted by Kamman Hydrology and Engineering (KHEI) on 26 August 2016. We are responding to comments regarding our report "Engineering Geologic Evaluation Walt Ranch Vineyard Development" dated 6 March 2013. The comments are contained in the KHEI letter section 3.0 Project Effects on Landslide Potential, p. 5-7.

The reviewer "evaluated a subset of the 69 vineyard blocks, focusing only on the 41 blocks where post-project storm runoff rates exceed pre-project rates as estimated by Riversmith (2013). Of these blocks, we found that drainage from blocks 31A, 40B, 50, 52, 54, 57, and 61 will be directed directly onto mapped landslides."

We conclude in our report (2013) that proposed development of vineyard blocks on dormant or ancient landslides will improve the slope stability of the underlying or downslope deposits by controlling the surface runoff to outlet on erosion resistant or controlled surfaces. Such surface runoff controls proposed include wattles, rolling dips, rock and pipe level spreaders, diversion ditches and rock energy dissapators. These surface erosion improvements combined with the presence of inactive, dormant or ancient, deep-seated (greater than 20 feet in depth) landslides combine to reduce the chance of future slope instability.

Current agricultural practices for vineyard management encourage minimal irrigation use to optimize the vine growth in the high evapo-transpiration environment, resulting in insignificant or no changes to infiltration.

Walt Ranch Response September 27, 2016 91410.02 Page 2

Block 31A is on a mapped ancient landslide characterized as slump-flow type deposit that we estimate is over 50 feet deep. Ancient landslides have been subject to thousands to tens of thousands of years of weathering and erosion, and are characterized by a lack of well-defined surficial features indicative of movement in the recent past. These deposits lack well defined limits and in general have a very subdued topographical expression. The proposed vineyard on Block 31A will not impact, nor be impacted by the landslide deposit because of its great age and depth. Shallow surface water infiltration will have little affect on the deep-seated slide plane. However, this block has been removed from the final ECP due to mitigation.

Block 40B lies within a mapped ancient landslide characterized by slump-flow type movement. Similar to our evaluation of Block 31A above, the subdued topographic expression and deep-seated slide plane indicate that the proposed vineyard Block 40B will not impact, nor be impacted by the underlying landslide deposit. Well developed blue-line streams downslope of the proposed vineyard block present a well developed, low erosion outlet for runoff from the vineyard. However, this block has been removed from the final ECP due to mitigation.

Block 50 lies within a deep-seated dormant slump-flow type landslide deposit. The slope stability of the site will be enhanced by the contol and proper outletting of the surface water runoff. A proposed detention basin will not impact the stability of the slide because the slide plane lies at great depth, probably greater than 50 feet from the surface. However, this block has been removed from the final ECP due to mitigation.

Most of Block 52 lies on a dormant slump-flow type landslide that we estimate to be between 15 and 50 feet in depth. We noted no evidence of recent slope instability on or adjacent to this landslide deposit. The slope stability will be enhanced by the control and proper outletting of the surface runoff on low erosion surfaces. A proposed detention structure will control the runoff during and after relatively short-lived heavy precipitation events, and in our opinion will not have any impact on the greater than 20 feet deep landslide deposit. However, this block has been removed from the final ECP due to mitigation.

Block 54 is located on the nose of a prominent upland ridgeline above Capell Creek. It is not located on any identified landslide deposit. Dormant landslides are mapped downslope of the proposed vineyard to the north and southest. A steep slope with a drainage at lower elevations lies to the northeast of the block. The Erosion Control Plan shows a rock energy dissapator proposed for the northwest edge of the vineyard block located above a drainage channel that flows across the dormant landslide that lies north of the block. A minimum two foot high gravel berm is proposed for the northeast downslope edge of the block above the steep slope and drainage.

It is our opinion that the proposed construction of the Block 54 vineyard will reduce the sheetflow energy an improvement over the existing condition, and will not adversely

Glipin Geosciences, Inc.

Walt Ranch Response September 27, 2016 91410.02 Page 3

impact the stability of the dormant landslides. The landslides mapped in the vicinity of Block 54 are characterized as dormant slump or slump-flow type deposits with an estimated depth of 5 to 15 feet. The proposed storm water control improvements for Block 54 will reduce the potential for surface runoff to impact the existing dormant landslides. At present the largest part of the proposed Block 54 drainage area is directed at the northeast edge with the steep slope and drainage channel downslope. The newest revisions show an additional set back from the top of this slope, and placement of a proposed gravel berm to reduce the surface sheet flow velocities. Likewise, the rock energy dissapator at the northwest edge of the vineyard will reduce the erosion power of the drainage channel through the downslope dormant landslide.

Block 57B lies on a dormant slump-flow type deposit of 15 to 50 feet depth. The proposed vineyard improvements including a minimum 2 feet high gravel berm will improve the slope stability by controlling the surface runoff and outletting it onto an appropriate low erosion surface. However, this block has been removed from the final ECP due to mitigation.

Block 61 lies on a dormant slump-flow type landslide deposit of 15 to 50 feet in depth. The proposed vineyard improvements including a minimum 2 feet high gravel berm will improve the slope stability by controlling the surface runoff and outletting it onto an appropriate low erosion surface. However, this block has been removed from the final ECP due to mitigation.

We trust this memorandum provides you with the information you require at this time. If you have any questions regarding this memorandum, please call or email.

GILPIN GEOSCIENCES, INC. Earthquake & Engineering Geology

MEMORANDUM

To:

Brian Bordona

Napa County Planning, Building, and Environmental Services

1195 Third Street Napa, CA 94558

From:

Lou Gilpin, EG, PhD, Gilpin Geosciences, Inc.

Date:

October 26, 2016

Project:

Walt Ranch Vineyard Development

Project No.: 91525.01

Subject:

Highway 121 Failure 13 March 2016

This memorandum supplements our responses to comments submitted by Kamman Hydrology and Engineering (KHEI) on 26 August 2016. We previously submitted a memorandum dated 27 September 2016. We are responding to comments regarding our report "Engineering Geologic Evaluation Walt Ranch Vineyard Development" dated 6 March 2013. The comments are contained in the KHEI letter section 3.0 Project Effects on Landslide Potential, p. 5-7.

Per your request, we have looked into the recent Highway 121 failure that occurred on Sunday afternoon 13 March 2016. We have evaluated this issue in order to determine whether this event is relevant to the potential for unstable slopes in the Walt Ranch vicinity. We visited the road failure site on 26 October 2016 and observed the conditions exposed during the ongoing construction repair. We present evidence here that the catastrophic road failure is the result of several factors:

- 1. Heavy rainfall that totalled 5.4 inches in the 7 days previous to the 13 March failure (NapaValley Regional Rainfall and Stream Monitoring System, 2016)
- 2. Vulnerable road alignment caused by cut slopes up to 35 feet in height, some of which show recent landslide failure, and crossing steep ravine drainage courses
- 3. Underdesigned culverts draining the steep upslope ravines, and
- 4. Lack of attention to ongoing road failure as evidenced by 4-5 feet of accumulated asphalt (ongoing settlement over many maintenance seasons) on the affected downslope road edge.

Walt Ranch Response October 26, 2016 91410.02 Page 2

Except for the first factor which is a natural condition that we cannot control, none of the remaining factors in the Highway 121 road collapse can be associated with conditions existing at Walt Ranch now, or as planned for the vineyard improvement.

The road failure occurred as catastrophic vertical settlement (landsliding) of up to 4 to 5 feet of the outer 5 to 8 feet of the asphalt roadway over a long stretch of road which spanned several very steep and deep throughgoing drainage ravines. The road was original constructed by cutting into the steep slopes and placing the cut material on the steep downslope areas to create the level roadway bench. The recent roadway settlement is concentrated where the ravines cross the road alignment and form very steep downslope areas. Under-sized culverts resulted in ponding of runoff upslope of the road and caused saturation which weakend the fill along the downslope shoulder. Under-designed keyways and lack of containment on the downslope shoulder resulted in long term settlement (4-5 feet of acumulated asphalt layers exposed in the failure scarp) and ultimate catastrophic failure during the heavy March rainfall this spring.

Highway 121 is a major California highway designed and maintained by CALTRANS. Routine maintenance is substituted for conservative geotechnical road way design. Cut slope failures noted during our site visit are routinely "cleaned up" rather than subject to expensive permanent repairs. Likewise, asphalt placed incrementally over many seasons brings the settled areas up to "grade".

Vineyard development at the Walt Ranch does **not** incorporate:

- 1. high cutslopes with inclinations of 45 degrees and greater
- 2. road fill blocking steep ravine drainages with under-designed culverts
- 3. ANY development on active landslides.

The ultimate catastrophic failure of Highway 121 was very predictable as it was actively moving as evidenced by the multiple layers of asphalt along the downslope shoulder of the roadway. The vineyard development at Walt Ranch has been designed for a low impact with conservative geotechnical recommendations. Proposed stormwater controls at Walt Ranch will improve the stability of the adjacent slopes, not decrease the stability as the Highway 121 alignment accomplished.

We trust this memorandum provides you with the information you require at this time. If you have any questions regarding this memorandum, please call or email.

RiverSmith

ENGINEERING

A SERVICE DISABLED VETERAN BUSINESS ENTERPRISE

November 3, 2016

Brian Bordona Napa County Planning, Building, and Environmental Services 1195 Third Street Napa, CA 94558

RE: Walt Ranch, Responses and Considerations to Mr. Kamman Letter of August 26, 2016

Mr. Bordona,

I have further reviewed the referenced letter by Mr. Kamman which includes comments regarding the hydrologic analysis for Walt Ranch and offer the following updated responses. Comments are arranged by section headings within the subject letter and reference results from on-site testing to verify hydrologic assumptions used in our analysis.

1.0 Runoff Curve Number Adjustments by Ripping Soil

Mr. Kamman challenges the assumption made in our hydrologic analysis that the deep ripping of soils can alter their hydrologic soil group (HSG) and their associated runoff curve number (CN) in a manner that will result in increased infiltration and reduced runoff.

In general, we agree that the common agricultural practices of chiseling and ripping a soil matrix do not provide long term increases in the infiltration rate. In our hydrologic analysis, we have only taken a credit for improved infiltration from a ripping practice where the depth to an impermeable layer in the foundation is shallow and that layer is broken up in the process. With the impermeable layer shattered, the soil matrix itself then becomes the basis for the determination of the infiltration rate and HSG.

We have further investigated this practice by conducting actual field tests on a developed Walt Ranch site. That testing was performed on October 20, 2016 by PPI Engineering under the guidance and supervision of Mr. Ken Oster, Soil Scientist, with Natural Resources Conservation Services. This testing was done on a Walt Ranch site developed in 2006 that had been blasted and ripped.

The full details and results of this testing are contained in the report titled, "Field Testing for Determination of Hydrologic Soil Group on Developed Vineyard at the Walt Ranch", prepared by PPI Engineering, October 28, 2016.

2.0 Effect of Vineyard Drainage Elements on Storm Runoff Rates

Mr. Kamman re-states the concern for inclusion of new vineyard drainage elements within the Hydrologic Model. As we have stated previously, the time of concentration for each analyzed subwatershed is by definition the longest hydrologic flow path through the drainage. Where proposed drainage improvements are located on this longest path, we have incorporated them into our analysis appropriately. In the cases where there is an improved drain off the longest hydrologic path, there can be a change in the shape of the hydrograph by bringing in some of the runoff at a different time (than in the pre-project condition), but it will not increase the peak runoff which only occurs when the entire watershed is contributing (from the most hydraulically distant point). An improved drainage in itself does not create more water and, if it is off the longest hydrologic path, does not increase the peak flow within the analyzed unit.

We performed a hydrologic analysis on Block 21B to try and duplicate the results generated by Mr. Kamman. Our results showed a small reduction in peak flow post-project rather than the large increases reported in his letter. Our computations demonstrated a slight reduction from 4.2 cubic feet per second (cfs) to 4.1 cfs for the 100-year event, which corresponds with the slight decrease in composite curve number. We also took into account the reduced travel time caused by the proposed drainage infrastructure. We used the same curve number assumptions that are stated in Mr. Kamman's letter and modeled the approximately 2-acre watershed using HydroCAD computer software. HydroCAD utilizes the same NRCS curve number method hydrologic calculations that were previously modeled using HEC-HMS. The simulated runoff results produced by Kamman are substantially larger than what our models generated. His estimate, in excess of 20 cfs peak flow, for the 100-year event from a 2 acre pervious site yields a unit flow rate greater than 10 cfs per acre in an agricultural setting. In our experience we have found that unit flow rates for agricultural watersheds within the Napa Valley typically range from 1 to 2 cfs per acre for the 100-year storm. It is unclear to us how Mr. Kamman's model could result in such a high peak flow.

The results of our hydrologic analysis of Block 21B confirm our original statements and conclusions put forth in the EIR. A qualitative approach to mitigate potential increases within small watersheds (less than 5 acres) based on predicted increases in curve number are appropriate given the short overall travel times and minor changes to peak flow.

As required by Mitigation Measure 4.6-1 of the DEIR, the final ECP submitted to the County on July 11, 2016 included measures to offset the peak runoff increases. The results of supplemental hydrologic modeling for the final 209-acre vineyard were submitted to the County with the final ECP. As stated in our memo of July 1, 2016, the "revised hydrologic modeling incorporates all mitigations and the results now fully meet the no net increase requirement."

We are confident that the hydrologic analysis performed for the Walt Ranch project has more than adequately analyzed any potential impacts to the surrounding streams and to the receiving waters. Please let me know if there are any further concerns or questions.

Sincerely,

Thomas W. Smith, PE, GE

President/ Water Resources/Geotechnical Engineer

RiverSmith Engineering Inc.



October 21, 2016

Nate Galambos Napa County Planning, Building, and Environmental Services 1195 Third Street, Suite 210 Napa, CA 94558

Subject: Soils Report of Hydrologic Soil Groups at Walt Ranch

On October 20, 2016 I visited the Walt Ranch with you, Patrick Ryan of your staff, as well as members of PPI Engineering staff to determine the hydrologic soil group for the Lower Pine Flat Block. I found it is in Hydrologic Soil Group B, while most undisturbed soils adjacent to this vineyard were in Soil Hydrologic Group D.

Method:

I described 5 soil profiles within the vineyard, and 4 undisturbed soil profiles adjacent to the vineyard to determine soil depth to impermeable layer. I measured depth to fractured bedrock. This is the minimum depth because I often found roots in the fissures in the bedrock suggesting water flows into the fissures and roots follow. Depth of soils range from 22 to 27 inches deep. Soil infiltration rates were measured at 3 data points adjacent to soil pits in the vineyard and PPI Engineering made statistical analysis of the results. Soil infiltration rates range from 1.80 to 3.46 inches per hour. I applied the criteria for assignment of soil hydrologic group to this data to find the soils in the vineyard are in soil hydrologic group B. Three of the four undisturbed soils outside the vineyard were less than 20 inches deep to an impermeable layer and are in soil hydrologic group D.

Attachments:

- 1. Site Map
- 2. Photos of soil profiles and surfaces.
- 3. Table of soil profiles, soil infiltration and hydrologic soil groups
- 4. Analysis of soils infiltration measurements made on 10/20/2016 by PPI Engineering.
- 5. Criteria for assignment of hydrologic soil group (HSG)

Ken Oster Area Resource Soil Scientist

Site Map

Customer(s): WALT RANCH

Agency: NRCS Assisted By: KEN OSTER

Location: Southeast corner of Foss Valley about 2 miles west of the Intersection of Highway 121 and Circle Oaks Drive, Napa County, California



Prepared with assistance from USDA-Natural Resources Conservation Service

Legend

O Data Points

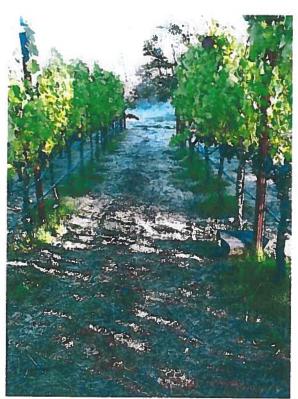








Data Point P1: Soil Profile



Data Point P1: Surface

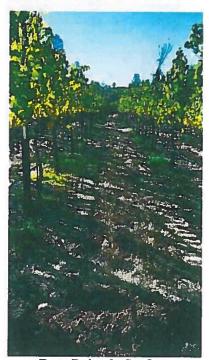


Data Point P2: Soil Profile

Data Point P2: No Surface Photo, but in Vineyard.



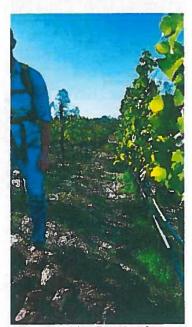
Data Point 3: Soil Profile



Data Point 3: Surface



Data Point 4: Soil Profile



Data Point P4: Surface



Data Point 5: Soil Profile



Data Point 5: Surface



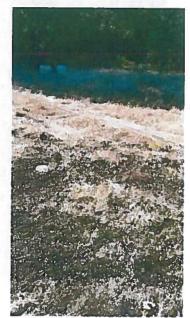
Data Point 6: Soil Profile



Data Point 6: Surface



Data Point 7: Soil Profile



Data Point 7: Surface



Data Point P8: Soil Profile



Data Point P8: Surface



Data Point 9: Soil Profile



Data Point P9: Surface

				Soil Profiles			
Date:10/2	0/201	6					
Client: Wa	lt Ran	ch					
Project: Do	ocume	entatio	n of so	oil in Lower Pine Flat	Block 10 years a	fter plantin	a
Location	Data	Depth	(inches)		Texture	Soil Infiltration Rate (1) inches/ hour	Hydrologi Soil Group
In vineyard	P1	0	5	dark brown	sandy loam	3.23	8
		5	24	dark brown	sandy loam		
		24	29	Hard, fractured bedrock			
	P2	0	21	dark brown	sandy loam	Not	В
		21		brown	cobbly sandy loam	measured but assume 1.8	
		27	30	Hard, fractured bedrock			
	Р3	0	18	dark brown	sandy loam	1.8	В
		18		dark gray	gravelly sandy loam		
		26	30	Hard, fractured bedrock			
	P4	0		dark brown	sandy loam	Not measured but assume	В
		17	23	reddish brown	gravelly loamy coarse sand		
		23	40	Hard, fractured bedrock		1.8	
	P5	0	10	dark brown	cobbly sandy loam	3.46	. В
		10	22	brown	very gravelly loamy coarse sand		
		22	30	Hard, fractured berock. 1	Many roots.		
Undisturbed	P6	. 0	6	dark brown	sandy loam	Not	D
sites		6+	ga soona p	Hard, massive bedrock		measured	
	P7	0	12	dark brown	sandy loam	Not	D
		12+		Hard, massive bedrock	EREN	measured	
	P8	0		dark brown	sandy loam	Not	В
		10	29	dark brown	loam	measured	
		29+		Soft, massive bedrock		but assume 1.8	
	P9	0	16	dark brown	sandy loam	Not	D
		16+		Hard, massive bedrock		measured	

⁽¹⁾ Measured in field with single-ring infiltrometer on 10/20/2016.

⁽²⁾ See National Engineering Handbook, Part 630, Chapter 7, Table 7-1 Criteria for assignment of hydrologic soil group (HSG)(Natural Resources Conservation Service, January 2009)

Hall Brambletree Associates, LP - Walt Ranch Saturated Hydraulic Conductivity Test PPI Engineering 10/21/2016 CC

Walt Ranch - Lower Pine Flats Block

Test Site:

1

Ring Diameter (mm):

210.31

Depth of Water per Trial (mm):

25.91

Volume of Water per Trial (mL):

900

Trial	Time of Infiltration (min)	Time of Infiltration (s)	Cumulative Infiltration Volume (mL)	Cumulative Infiltration, I (mm)	Cumulative Time of Infiltration, t (s)	t ^{1/2} (s ^{1/2})	!/t ^{1/2} (mm/s ^{1/2})
1	3.53	212	900	25.91	212	14.56	1.78
2	9.62	577	1800	51.81	789	28.09	1.84
3	9.55	573	2700	77.72	1362	36.91	2.11
4	9.78	587	3600	103.63	1949	44.15	2.35
5	9.68	581	4500	129.54	2530	50.30	2.58
6	9.68	581	5400	155.44	3111	55.78	2.79
7	9.33	560	6300	181.35	3671	60.59	2.99

b ₁ (mm s ⁻¹):	0.0353
α (mm ⁻¹):	0.012
K _{fs} (mm s ⁻¹):	0.023
K _{fs} (in hr ⁻¹):	3.23

Equation Used:

$$K_{fs} = \frac{b_1}{0.467(\frac{2.92}{r\alpha^*} + 1)}$$

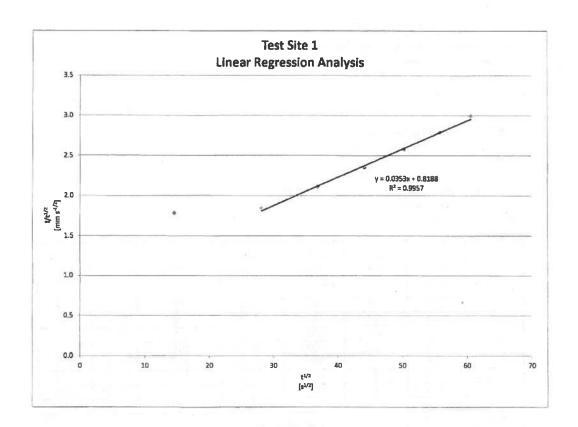
Where:

 $b_1 = \text{Slope of Regression Line } \left(\frac{1}{t^{\frac{1}{2}}} \text{ vs } t^{\frac{1}{2}}\right) \left[\frac{mm}{s}\right]$

I = Cumulative Infiltration [mm] t = Cumulative Time of Infiltration [s]

r = Ring Radius [mm]

 $\alpha^* = 0.012 \text{ [mm}^{-1}\text{]}$



Hall Brambletree Associates, LP - Walt Ranch Saturated Hydraulic Conductivity Test PPI Engineering 10/21/2016 CC

Walt Ranch - Lower Pine Flats Block

Test Site:

2

Ring Diameter (mm):

210.31

Depth of Water per Trial (mm):

25.91

Volum

900

ne	of	Water	per	Trial	(mL):	

	Y						
Trial	Time of Infiltration (min)	Time of Infiltration (s)	Cumulative Infiltration Volume (mL)	Cumulative Infiltration, I (mm)	Cumulative Time of Infiltration, t (s)	t ^{1/2} (s ^{1/2})	l/t ^{1/2} (mm/s ^{1/2})
1	1.00	60	900	25.91	60	7.75	3.34
2	5.08	305	1800	51.81	365	19.10	2.71
3	6.17	370	2700	77.72	735	27.11	2.87
4	7.10	426	3600	103.63	1161	34.07	3.04
5	6.55	393	4500	129.54	1554	39.42	3.29
6	6.53	392	5400	155.44	1946	44.11	3.52
7	6.73	404	6300	181.35	2350	48.48	3.74
8	6.87	412	7200	207.26	- 2762	52.55	3.94

b ₁ (mm s ⁻¹):	0.0378
α (mm ⁻¹):	0.012
K _{fs} (mm s ⁻¹):	0.024
K _{fs} (in hr ⁻¹):	3.46

Equation Used:

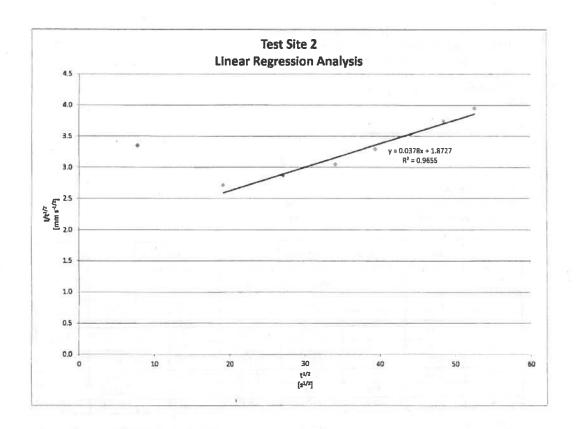
$$K_{fs} = \frac{b_1}{0.467(\frac{2.92}{ra^*} + 1)}$$

 $b_1 = \text{Slope of Regression Line } \left(\frac{1}{\frac{1}{2}} \text{ vs } t^{\frac{1}{2}}\right) \left[\frac{\text{mm}}{s}\right]$

I = Cumulative Infiltration [mm] t = Cumulative Time of Infiltration [s]

r = Ring Radius [mm]

 $\alpha^* = 0.012 \text{ [mm}^{-1}\text{]}$



Hall Brambletree Associates, LP - Walt Ranch Saturated Hydraulic Conductivity Test PPI Engineering 10/21/2016 CC

Walt Ranch - Lower Pine Flats Block

Test Site:

3

Ring Diameter (mm):

210.31

Depth of Water per Trial (mm):

25.91

Volume of Water per Trial (mL):

900

	7				¥2		
Trial	Time of Infiltration (min)	Time of Infiltration (s)	Cumulative Infiltration Volume (mL)	Cumulative Infiltration, I (mm)	Cumulative Time of Infiltration, t (s)	t ^{1/2} (s ^{1/2})	l/t ^{1/2} (mm/s ^{1/2})
1	1.73	104	900	25.91	104	10.20	2.54
2	8.27	496	1800	51.81	600	24.49	2.12
3	9.95	597	2700	77.72	1197	34.60	2.25
4	10.63	638	3600	103.63	1835	42.84	2,42
5	11.50	690	4500	129.54	2525	50.25	2.58
6	12.42	745	5400	155.44	3270	57.18	2.72
7	12.82	769	6300	181.35	4039	63.55	2.85
8	13.17	790	7200	207.26	4829	69,49	2.98

b ₁ (mm s ⁻¹):	0.0197
α (mm ⁻¹):	0.012
K _{fs} (mm s ⁻¹):	0.013
K _{fs} (in hr ⁻¹):	1.80

Equation Used:

$$K_{fs} = \frac{b_1}{0.467(\frac{2.92}{ra^*} + 1)}$$

Where:

$$\begin{split} b_1 &= \text{Slope of Regression Line} \left(\frac{1}{\frac{1}{2}} \text{ vs } t^{\frac{1}{2}}\right) \left[\frac{mm}{s}\right] \\ &= \text{Cumulative Infiltration [mm]} \\ &\quad t = \text{Cumulative Time of Infiltration [s]} \end{split}$$

r = Ring Radius [mm]

 $\alpha^* = 0.012 \text{ [mm}^{-1}\text{]}$

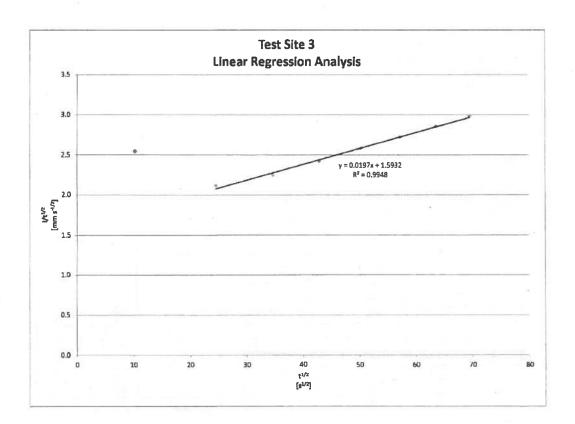


Table 7-1 Criteria for assignment of hydrologic soil group (HSG)

Depth to water impermeable layer ^b	Depth to high water table ³⁷	K _{mt} of least transmissive layer in depth range	K _{est} depth range	HSG 3
<50 cm [<20 in]	-	-	-	D
		>40.0 µm/s (>5.67 in/h)	0 to 60 cm [0 to 24 in]	A/D
	<60 cm	>10.0 to ≤40.0 µm/s (>1.42 to ≤5.67 in/h)	0 to 60 cm [0 to 24 in]	B/D
	[<24 in]	>1,0 to ≤10,0 µm/s (>0.14 to ≤1.42 in/h)	0 to 60 cm [0 to 24 in]	C/D
50 to 100 cm	n.	≤1.0 µm/s (≤0.14 in/h)	0 to 60 cm [0 to 24 in]	D
[20 to 40 in]		>40.0 µm/s (>5.67 in/h)	0 to 50 cm [0 to 20 in]	A
	≥60 cm	>10.0 to ≤40.0 µm/s (>1.42 to ≤5.67 in/h)	0 to 50 cm [0 to 20 in]	В
	(≥24 in)	>1.0 to ≤10.0 µm/s (>0.14 to ≤1.42 in/h)	0 to 50 cm [0 to 20 in]	С
		≤1.0 µm/s (≤0.14 in/h)	0 to 50 cm (0 to 20 in)	D
14		>10.0 µm/s (>1.42 in/h)	0 to 100 cm [0 to 40 in]	A /D
	<60 cm [<24 in]	>4.0 to ≤10.0 µm/s (>0.57 to ≤1.42 ir/h)	0 to 100 cm [0 to 40 in]	B/D
		>0.40 to ≤4.0 µm/s (>0.06 to ≤0.57 in/h)	0 to 100 cm [0 to 40 in]	C/D
>100 cm		≤0.40 µm/s (≤0.06 in/h)	0 to 100 cm [0 to 40 in]	D
[>40 in]		>40.0 µm/s (>5.67 in/h)	0 to 50 cm [0 to 20 in]	A
9	60 to 100 cm	>10.0 to ≤40.0 µm/s (>1.42 to ≤5.67 in/h)	0 to 50 cm [0 to 20 in]	В
	[24 to 40 in]	>1.0 to ≤10.0 µm/s (>0.14 to ≤1.42 ir/h)	0 to 50 cm [0 to 20 in]	С
	0	≤1.0 µm/s (≲0.14 in/h)	0 to 50 cm [0 to 20 in]	D
		>10.0 µm/s (>1.42 ir√h)	0 to 100 cm [0 to 40 in]	A
	>100 cm	>4.0 to ≤ 10.0 µm/s (>0.57 to ≤1.42 ir/h)	0 to 100 cm [0 to 40 in]	В
:	[>40 in] *	>0.40 to ≤4.0 µm/s (>0.06 to ≤0.57 ir/h)	0 to 100 cm [0 to 40 in]	С
		≤0.40 µm/s (≤0.06 in/h)	0 to 100 cm [0 to 40 in]	D