

STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

DIVISION DECISION 99-04

DRY CREEK WATERSHED, NAPA COUNTY

APPLICATION 29740

December 29, 1999

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APPLICATION 29740

1.0 INTRODUCTION

This Division of Water Rights (Division) decision describes the actions to be taken on the pending water right application filed by John Scully. This application (A29740) requests the right to divert a total of 30 acre-feet per annum (afa) to storage for the purpose of irrigation of vineyards. Water is to be collected in two ponds that are to be located on unnamed tributaries within the Dry Creek sub-basin of the Napa River watershed.

In 1998, the Division conducted a field investigation relating to three pending water right applications within the Dry Creek watershed to collect information relating to protests against these applications. The field investigation provided the applicants and protestants the opportunity to present evidence and information relating to issues raised in protests against the applications. This decision deals only with Scully's application. The Division will act on the two other applications (29865 and 29929) under a separate process.

The Division has reviewed the environmental and prior rights claims presented by the protestants, evaluated the hydrology of the Dry Creek watershed, and analyzed the flow regime necessary to protect its fisheries resources. In addition, under the provisions of the California Environmental Quality Act (CEQA), the Division has prepared an Initial Study and Draft Mitigated Negative Declaration, which addresses the project's potential environmental impacts, including but not limited to those addressed by the protestants. The Division has determined that a water right permit should be issued for A29740 which, subject to the conditions contained herein, and those specified within the CEQA document, would authorize the storage of 30 acre-feet of water per year for the purpose of irrigation.

2.0 DESCRIPTION OF APPLICATION

In 1990, Thomas Lindstrum submitted A29740 requesting the right to store a total of 50 acre-feet of water in two 25 acre-foot onstream reservoirs; one to be located on an unnamed stream tributary to Dry Creek thence Napa River, and the other to be located on an unnamed stream tributary to Montgomery Creek thence Dry Creek. Figure 1 shows the locations of the proposed diversions. The applicant originally requested a collection season of October 1 of each year

through April 30 of each succeeding year. Because the State Water Resources Control Board (SWRCB) had declared that the Napa River and its tributaries are fully appropriated from May 1 through October 31, the applicant removed the month of October from his collection season prior to the notice of A29740. The property was then sold and the new owner, John Scully-SPO Partners (Scully), agreed to further reduce his collection season to the period of December 1 through March 31 as a result of protest negotiations between the applicant and the Department of Fish and Game (DFG). Subsequent to the field investigation, the applicant determined that he

FIGURE 1

will not develop the full 50 acres of vineyards that were his requested place of use. He requested that that his place of use be reduced to 35 acres and that his storage amount be reduced from 50 acre-feet to 30 acre-feet in two 15 acre-foot reservoirs. Water will be used to irrigate a total of 35 acres of vineyards, 25 acres of which have already been planted. The vineyards currently under production are irrigated with well water. Because the wells have not proven to be a reliable source of water, the applicant is seeking a permit to store water in the two reservoirs.

3.0 PROTESTS

On December 28, 1990, the Division distributed a notice of this application to interested parties in accordance with sections 1300-1324 of the Water Code and received four protests. Prior to the field investigation, negotiations between Scully (the applicant) and individuals submitting protests (the protestants) resulted in the resolution of two of the protests. The applicant agreed to incorporate terms in the permit which address reservoir releases, installation of an outlet pipe and staff gage, and acknowledgement of the prior rights of the protestants. The following provides a summary of the two protests which remained at the time of the investigation.

3.1 Department of Fish and Game DFG submitted a protest, based on environmental concerns, which was accepted by the Division. Negotiations between the applicant and protestant, which began before and concluded after the field investigation, resulted in withdrawal of the protest after the applicant agreed to the inclusion of special terms in any water right permit issued pursuant to this application. The terms require 1) installation of an outlet pipe; 2) a minimum bypass of 0.1 cubic feet per second (cfs) at POD #1 and 8 gallons per minute (gpm) at POD #2 with a season of diversion of December 1 through March 31; 3) obtaining a DFG streambed alteration agreement; 4) developing and

implementing a revegetation plan for reservoir perimeters; and 5) developing and implementing erosion control measures.

3.2 George and Carmen Wyllie Mr. and Mrs. Wyllie submitted a protest, based on injury to vested rights, environmental concerns and other issues, which was accepted by the Division. The protestants contended that, should this application be permitted, there would be insufficient water available during low flow months to satisfy their riparian claim and appropriative water right (A16367, L5360) to divert from Dry Creek and an unnamed stream tributary to Dry Creek. Figure 1 shows the locations of the Wyllie's diversions. The protestants also contended that there are insufficient hydrological data available to determine whether water is available for appropriation within the Dry Creek watershed and that approval of the application will result in a general degradation of the watershed. Although both the applicant and the protestants participated in negotiations, there has been no resolution of this protest to date.

4.0 FIELD INVESTIGATION

4.1 General On January 26, 1998, the Division distributed a Notice of Field Investigation on three pending water right applications within the Dry Creek watershed in Napa County. The Notice, which was distributed to the applicants and to those protestants with unresolved protests, described the purpose of the field investigation and the unresolved issues to be discussed. The Notice also informed the protestants that they were to provide information that demonstrated that approval of the applications would cause specific injury to the environment or downstream water users.

Division staff conducted the field investigation on March 18, 1998 in accordance with sections 1345-1348 of the Water Code. A detailed summary of the investigation is on file with the Division, located in the A29740 file folder. The field investigation was held at the Chateau Potelle Winery, located at 3875 Mt. Veeder Road in Napa County. It began at 10:00 a.m. and concluded approximately 2½ hours later. The following seven persons participated in the field investigation:

Laura Vasquez Division Staff

Sharon Stohrer Division Staff

Nicholas Bonsignore The Office of Wagner & Bonsignore,
Consulting Engineers, representing all three applicants

Jean-Noel Fourmeaux du Sartel Applicant (A29865 and A29929)

Dave Hudgins Vineyard Manager for applicant John Scully (A29740)

Ken Aasen DFG staff

George Wyllie Protestant

After a brief presentation of the procedures for conducting the field investigation, Division staff began the discussion of the issues with a notation that both Chinook salmon and Steelhead trout, which are found in the Napa River watershed, have recently been listed as threatened under the Federal Endangered Species Act.

4.2 Discussion of Wyllies' Protest To discuss their concerns that insufficient water is available to fulfill their prior vested rights, Division staff provided a description of the Wyllies' diversion facilities. On an informal site visit in November of 1997 Laura Vasquez, Nicholas Bonsignore, Larry Week (of DFG), and George Wyllie had met at the Wyllies' property and observed the diversion facilities at his property (5333 Dry Creek Road in Napa, CA). Laura Vasquez read a description of these facilities from her memo-to-files dated November 6, 1997 as follows:

"The first diversion observed was a direct diversion from Dry Creek under claim of riparian (S14184 for 2880 gpd, year-round, irrigation) and appropriative (A16367 for 800 gpd, irrigation and domestic, April 1 - Oct 15)) rights. This water is used to irrigate landscaping around the house and approximately 60 grape vines as well as refill of an in-ground swimming pool, Dry Creek goes dry in mid-summer approximately one year in two. The second diversion was from a spring located on an unnamed stream tributary to Dry Creek. Water from the spring is piped into a 300-gal cistern and is the preferred source for domestic water but is also used for irrigation. The spring also goes dry in mid-summer approximately one year in two. Neither S14184 nor A16367 covers this point of diversion although it appears to be riparian. Lastly we observed the well which was located on the Wyllies' property. The 192-foot well pumps water into a large fiberglass holding tank of approximately 6,000-gallon capacity. The well water is used for both irrigation and domestic. The well pumps year round and has not ever gone dry. "

George Wyllie stated that this was an accurate description of his facilities and operation except that the capacity of his holding tank was, in fact, 3,000 gallons rather than 6,000 gallons. It was determined that since there was an accurate description of the Wyllies' facilities based on a previous inspection, there would be no need to inspect them again.

Laura Vasquez went on to state that during the site visit it was observed that the Wyllies' spring was on an unnamed stream tributary to Dry Creek within a different sub-watershed from A29740 and the other two applications which were part of the field investigation. Division staff asked George Wyllie if he had any information that would substantiate his claim that diversions under these applications would interfere with the Wyllies' ability to divert from their spring even though the spring is not in hydraulic continuity with the projects in question. George Wyllie responded that he had no information other than his intuition. It was also noted that George Wyllie stated at the 1997 visit that the spring and Dry Creek go dry only in mid-summer (one in two years) and that the well has never gone dry.

When asked if he ever had any problems diverting in April (the only month that his appropriative right coincides with the season of diversion proposed by the applicant) George Wyllie said it had

never been a problem. Nicholas Bonsignore stated that, during earlier negotiations with George Wyllie, his client agreed to delete the month of April from his application, but that the offer is rescinded because they were not able to resolve the protest prior to the field investigation. This statement was made prior to successful negotiations with DFG that resulted in the removal of the month of April from the season of diversion of A29740.

In regards to his environmental concerns, George Wyllie stated that he is a participant in the Dry Creek Watershed Stewardship Group. He stated that the group had just begun taking streamflow measurements in the area. He said that it is clear that Dry Creek flow is augmented by many sources, including subterranean flow. George Wyllie stated that no one really knows what route the water takes to Dry Creek. He went on to say that without this type of information it would seem impossible to determine what additional diversions would do to the health of the watershed. George Wyllie said that he believes an EIR should be prepared, and also stated that his biggest concern is that no more development take place in the Dry Creek watershed. George Wyllie did not present any other evidence that substantiated his allegation that approval of this application would have significant environmental impacts.

Staff explained that an environmental review would be conducted for each of the pending applications and the Division expects that Negative Declarations, with mitigation measures imposed as permit terms, would be developed to minimize impacts to the environment. It was explained that the criteria used in the proposed approach for Russian River anadromous fisheries would be applied to the Napa River watershed. (A copy of the Staff Report was supplied to George Wyllie.) He was assured that the environmental document and its supporting Initial Study disclosure document would be circulated for public review and comment. He requested to be included in the mailing of all CEQA documents.

4.3 Discussion of Department of Fish and Game's Protest Ken Aasen stated that DFG had concerns for steelhead and red-legged frog populations and for the preservation of their habitat within the Dry Creek watershed. According to Ken Aasen, adult steelhead would certainly move upstream to spawn and rear in Montgomery Creek as high as the culvert below Mt. Veeder Road, and that red-legged frog populations and habitat could be found anywhere within the entire drainage area. In addition, DFG had concerns because the Napa River is known to provide Chinook salmon habitat and is critical as a migration corridor for this species. He explained that as tributaries of the Napa River, Dry Creek and Montgomery Creek are necessary for augmenting Napa River flows.

The discussion turned to the recent Division staff report that addressed proposed actions to be taken by the Division on pending applications within the Russian River watershed. It was Ken Aasen's understanding that the Division will impose permit terms and conditions for the Napa River Watershed that are comparable to those proposed for the Russian River for the preservation of salmonid habitat including: 1) narrowing the season of diversion to the months of highest precipitation; 2) bypass of 60% of the average annual unimpaired flow for that drainage; 3) avoiding barriers to fish movement and gravel recruitment; 4) restricting the rate of diversion; and 5) providing fish screens on all diversion facilities. However, he also stated flow requirements might be open to negotiation based on individual project characteristics.

Both Ken Aesen and Sharon Stohrer agreed that because steelhead, salmon, and red-legged frog species are listed federally, landowners proposing projects within a watershed known to support these species are also subject to requirements imposed by the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (ESA). They also agreed that it is the responsibility of the landowner to consult with the appropriate federal agency (either NMFS or USFWS) prior to construction of a project, and to pursue a Section 10 Incidental Take Permit from one or both agencies, if necessary. It is unknown whether NMFS and/or USFWS will require more (or less) stringent conditions than the protection measures described in this decision in order to prevent jeopardy to listed species.

Ken Aesen stated that NMFS has recently given an opinion regarding waters above constructed barriers: "...even above barriers, the water must be able to contribute naturally to the mainstem of a drainage which supports listed anadromous fish or it is defined as a Take." Ken Aesen suggested that, similar to Division findings for the Russian River, 60% of the average annual unimpaired flow of Dry Creek should provide an adequate, rather a minimum, flow necessary to protect fishery resources.

To ensure compliance with any diversion limitations imposed on the applicants, Ken Aesen supports the use of passive but positive systems to split bypass flows from those flows diverted to storage. He explained that it is DFG's desire that all storage reservoirs be constructed offstream. However, it is understood that on the smaller tributaries high in the watershed, there may be no feasible alternative to onstream storage. Ken Aesen stated that under certain circumstances, onstream dams may be considered as long as they do not present a barrier to fish movement, and include passive structures that are capable of bypassing the total streamflow outside of the collection season. Ken Aesen also pointed out that any of these activities would be subject to review by DFG and would require a Streambed Alteration Agreement.

When asked about onstream structures acting to obstruct gravel recruitment, Ken Aesen stated that DFG would not be too concerned with dams constructed on tributaries high in the drainage.

Nick Bonsignore asked how DFG intends to deal with prior agreements and negotiations. Ken Aesen explained that without legal obligation to change proposed and agreed upon protest settlement terms, he expects that the previous negotiations will be honored. He stated that he would recommend to Brian Hunter, Regional Manager, Region 3 of DFG and John Waithman, Associate Biologist, Region 3 of DFG that they respect and follow through with previous agreements, including the proposed terms for Scully.

4.4 Discussion of Hydrology/Water Availability Issues Ken Aesen expressed concerns that water be diverted to storage only during the season of highest precipitation.

Nick Bonsignore submitted a summary of facts and calculations he feels support a finding that water is available for permitting these applications. The report also included proposed bypass flow rates for his clients' applications that he feels meets the 60% of average annual unimpaired streamflow requirement as proposed by the "Russian River approach." The report is attached to the summary of the field investigation that was prepared by Division staff subsequent to the field investigation and located in the application's file folder.

5.0 EVALUATION OF ISSUES

5.1 Prior Rights of George and Carmen Wyllie George and Carmen Wyllie hold an appropriative water right (license #5360 issued by the SWRCB) to divert 800 gallons per day (gpd) from Dry Creek during the period of April 1 through October 15 of each year for the purposes of domestic use and irrigation. They also appear to have riparian rights to Dry Creek, to an unnamed stream whose confluence with Dry Creek is in the NW¹/₄ of Section 10, T6N, R5W, MDB&M, and to an unnamed spring that is located on the unnamed stream near the confluence. There is no direct hydraulic continuity between the unnamed stream and Dry Creek upstream from their confluence, and no evidence to suggest that sub-surface continuity exists between the unnamed stream and the proposed diversion points. According to George Wyllie, their points of diversion at Dry Creek and the unnamed spring (and presumably the unnamed stream) do not go dry except in the mid summer months, and his well has never gone dry. The total watershed area above the applicant's two POD's contributes less than one percent of the watershed area of Dry Creek above Wyllie's POD. Based on available information, the Division concludes that diversions from the upper reaches of the Dry Creek watershed during the period of December 15 through March 31 will not significantly diminish the quantity of water available for diversion by Wyllie.

5.2 Environmental Concerns

5.2.1 Sensitive Species The Napa River watershed is known to support plant and animal species listed as Endangered or Threatened, or recognized as Species of Concern by either the California Fish and Game Commission (state list) or by the U.S. Secretary of the Interior (federal list). DFG submitted a protest against A29740 contending that the diversion could reduce streamflows necessary for the survival of steelhead and other fish species and that clearing of the land for the planting of vineyards could result in the loss of wildlife habitat. From Ken Aasen's presentation at the field investigation, it appears that DFG's primary concerns are for the protection of steelhead and red-legged frog populations and habitats within the Dry Creek watershed, and with Dry Creek's contribution to the flow of Napa River which supports Chinook salmon.

The Dry Creek watershed is recognized by DFG as a productive steelhead spawning system. Montgomery Creek, a perennial tributary to Dry Creek, provides suitable habitat for spawning and rearing, and is accessible to fish upstream to the culvert at Mt. Veeder Road which acts as a barrier to fish movement. Confluence of the subject unnamed stream with Montgomery Creek occurs downstream of that barrier, offering potential passage to steelhead for spawning and early rearing within the unnamed tributary. The proposed onstream diversion structure at POD #1 will create a barrier across the unnamed stream tributary to Montgomery Creek; however, because the construction site is near the headwaters of that ephemeral drainage it is not expected to significantly reduce usable steelhead habitat. Due to steep grade and ephemeral character of the unnamed stream tributary to Dry Creek, staff determined that this tributary provides no fishery habitat; the proposed onstream dam at POD #2 will cause no restriction to fish movement. To

ensure that onstream structures cause minimal impact to local species, the applicant will be required to consult with DFG prior to construction activities and, if necessary, obtain a Streambed Alteration Agreement.

Local populations of the California red-legged frog and the foothill yellow-legged frog may utilize habitat within any reach of Montgomery Creek, Dry Creek, or their tributaries, or around reservoirs, seeps, and ponds well-vegetated with emergent species. Maintenance of riparian canopy and emergent vegetation along stream and reservoir banks is critical for survival and reproduction of these species. A narrowed season of diversion and the exercise of 60% fish bypass flows (as discussed in section 5.3) are expected to provide the necessary aquatic habitat for continued success of these species in the Dry Creek watershed. Once constructed, a re-vegetation program must be undertaken to establish native emergent and willow species around the perimeters of Reservoirs No. 1 and No. 2.

During the allowable season of diversion, the Division will require a minimum bypass flow that is equal to 60 percent of the average annual unimpaired flow as measured at the point of diversion. The methodology used to develop this bypass flow is described in detail in Appendix B of the division Staff Report relating to the Russian River. This methodology is based on the analysis of IFIM studies conducted on four Northern California streams that have coho and steelhead. The analysis included Big Sulphur Creek and Dry Creek within the Russian River watershed, Lagunitas Creek Dry Creek within the Russian River watershed, Lagunitas Creek in Marin County and Brush Creek in Mendocino County. These are the only four IFIM studies that have been completed for Northern California streams that have coho and steelhead.

As illustrated in Figure 2 below, the IFIM procedure determines the quality of the spawning habitat (expressed in terms of weighted usable area) in relation to the streamflow. The Division compared the flow that provided optimum steelhead spawning habitat to the average annual unimpaired flow. For the four IFIM studies, the optimum flow averaged 100 percent and ranged from 72 to 114 percent. Based on this analysis, the Division concluded that the optimum weighted usable area for steelhead spawning would be provided at a flow equal to 100 percent the average annual unimpaired flow.

Based on a previous SWRCB decision relating to Mono Lake, the Division has also concluded that a bypass flow that provided 80 percent of the weighted usable area will protect coho and steelhead in the main stem of the Napa River and its tributaries. As illustrated in Figure 2 below (a typical curve in California streams), 80 percent of the weighted usable area is provided by 60 percent of the average annual unimpaired flow.

Figure 2
Relationship between Weighted Usable Area
And Streamflow

vineyard. Implementation of these practices, under the purview of the RCD, is expected to greatly reduce erosion and soil loss on cultivated slopes.

Maintenance of riparian canopy and emergent vegetation along stream and reservoir banks is critical for the survival and reproduction of aquatic species including steelhead, yellow-legged frog, and red-legged frog. RCD's plan does not include measures to establish stream setbacks or protect the riparian corridor along either unnamed stream or area surrounding the reservoir perimeters.

Accordingly, the Division will include a permit term that requires the applicant to obtain, prior to reservoir construction or clearing of additional acreage, a grading permit from the Napa County Conservation, Development and Planning Department pursuant to Napa County Conservation Regulations, Ch.18.108 et seq. In addition, the applicant must obtain a Streambed Alteration Permit from the Department of Fish and Game, and must consult with the Regional Water Quality Control Board (San Francisco Bay Region) to determine whether construction activities are subject to requirements of the Storm Water Discharge Permit Program.

5.3 Hydrology An analysis of the hydrology, or streamflow, of the main stem of Dry Creek and the applicable tributaries is necessary to determine whether water is available for appropriation and to determine the minimum bypass flows necessary for this application. Below are the findings of Division staff's analysis of the hydrology of Dry Creek. A complete report of the analysis, including the methodology and calculations used to arrive at these findings, can be found in a July 9, 1999 memorandum on file in the application's file folder.

5.3.1 Precipitation Virtually all runoff within the Dry Creek watershed is a direct result of rainfall. Exact precipitation data is indeterminable because there are no precipitation stations within the Dry Creek watershed. Determination must be made from nearby stations and from published isohyetal maps (i.e. maps showing contour lines of the mean annual precipitation for a given area). The division has determined that the average annual precipitation for the Dry Creek watershed is 39 inches.

5.3.2 Dry Creek Hydrology The United States Geological Survey (USGS) maintained a streamflow gage on Dry Creek from January 1951 until its operation was discontinued in September 1966. The Division used streamflow records from USGS gage #11457000 and Division records of water diversions, permits and licenses to calculate the estimated average annual unimpaired flow (i.e. the natural flow of the creek without diversions) and the average unimpaired annual runoff of Dry Creek. The Division also calculated the average annual unimpaired runoff within the Dry Creek watershed using a method developed by the Natural Resources Conservation Service (with modifications developed by the California Department of Transportation) commonly referred to as the rational runoff method. The two methods produced similar results. For the purposes of this Decision, we will use an average annual unimpaired runoff of 14,250 afa and an average annual unimpaired flow of 19.7 cfs, which represent the more conservative (or lower) of the calculated values. Similarly, the expected average annual runoff of Dry Creek at the present time (i.e. taking into account presently authorized diversions)

was calculated at 13,100 afa, and the average annual present flow of Dry Creek was calculated at 18.1 cfs.

5.3.3. Water Availability at the Project Site It is assumed that the tributaries to Dry Creek have runoff patterns that are comparable to the runoff as measured at the Dry Creek gage. Division staff calculated the estimated annual runoff and the estimated seasonal runoff at the project site based on 1) the flow at the Dry Creek gage (adjusted for present diversions); 2) a proration of the drainage areas at the points of diversion; and 3) the average annual rainfall at the site. The actual amount of water available for diversion is determined by subtracting the required bypass amount from the average seasonal runoff at the project site. The bypass flow is the flow that the applicant must release in order to maintain the flows in Dry Creek and its tributaries. Due to the protest settlement agreement between the applicant and DFG, the bypass amount for A29740 is 0.1 cfs for the unnamed tributary to Montgomery Creek and 8 gpm for the unnamed tributary to Dry Creek.

Based on Division staff's water availability analysis, 32.7 acre-feet of water, or 109% of the storage amount requested by A29740, is available during a year of average precipitation. However, during years of low rainfall, there may not be enough water available to satisfy the amount of water requested by A29740. At the time of the field investigation, Nicholas Bonsignore submitted an "Applicants' Fact Sheet," which included a response to our previous inquiry regarding this issue. Nicholas Bonsignore's position is that the property in question has producing wells that already are, or will be, used for the irrigation of their vineyards. It is due to concerns over the reliability of wells on Mt. Veeder that the applicant is seeking to develop surface water. It should be noted that 25 out of 35 acres for the authorized place of use for A29740 have already been developed and are currently being irrigated without the use of surface water.

6.0 FINDINGS OF THE DIVISION

Based on an evaluation of the prior rights of George and Carmen Wyllie, an investigation into the availability of water to fulfill these prior rights, and the lack of evidence to support a subsurface continuity between the applicant's and their points of diversion, the Division has determined that approval of A29740 will not interfere with the Wyllies' riparian or prior appropriative rights.

Based on analyses summarized in section 5.0, the Division has determined that, with the inclusion of the terms and conditions that are designed to protect fishery resources, there is sufficient water available during the peak winter runoff season for appropriation by the applicant. The Division has also determined that although adequate runoff may not be available during years of low precipitation to completely fill the reservoirs in A29740, sufficient water is available during most years. In addition, the applicant has provided for alternate sources of water during years of insufficient availability.

In accordance with the findings of the Negative Declaration, the Division will impose a more restrictive season of diversion on A29740 than that which was negotiated between the applicant and DFG.

ORDER

IT IS HEREBY ORDERED that Application 29740 is approved and that a permit be issued subject to the terms established in this order. The permit shall contain Standard Permit Terms 1, 2, 3, 4, 6, 9,10, 11, 12, 13, 14, 15, 16 and the following additional terms:

- 1. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 30 cfs to be collected from December 15 of each year to March 31 of the succeeding year (permit term 5C).*
- 2. For the protection of fish and wildlife, permittee shall during the period from December 15 through March 31 bypass a minimum of 0.1 cubic feet per second (45 gallons per minute) at POD#1, and 8 gallons per minute at POD#2. The total streamflow shall be bypassed whenever it is less than the designated amount. The bypass system shall be a passive system, which will divert the bypass flow from the stream channel above the reservoir, convey it through a pipeline around the reservoir, and return it to the stream channel within 50 feet downstream of the dam. Prior to making any diversions under this permit, the permittee shall submit plans of the bypass system to the Chief, Division of Water Rights for approval (permit term 60 modified).*
- 3. Permittee shall install and maintain an outlet pipe of adequate capacity in the dam as near as practicable to the bottom of the natural stream channel, or provide other means satisfactory to the SWRCB, in order that water entering the reservoir which is not authorized for appropriation under this permit can be released. Before starting construction, permittee shall submit plans and specifications of the outlet pipe (or alternative facility) to the Chief of the Division of Water Rights for approval. Before storing water in the reservoir, permittee shall furnish evidence, which substantiates that the outlet pipe (or alternative facility) has been installed in the dam. Evidence shall include photographs showing the completed works or certification by a registered Civil Engineer (permit term 43 modified).*
- 4. In accordance with section 1601, 1603, and 6100 of the Fish and Game Code, no work shall be started on the diversion works and no water shall be diverted under this permit until permittee has entered into a stream alteration agreement with the California Department of Fish and Game and/or the Department has determined that measures to protect fishlife have been incorporated into the plans for construction of such diversion works. Construction, operation, and maintenance costs of any required facility are the responsibility of the permittee.*
- 5. Prior to construction of Reservoir No.1 on the unnamed stream tributary to Montgomery Creek and Reservoir No.2 on the unnamed stream tributary to Dry Creek, permittee shall consult with the appropriate Regional Water Quality Control Board. If required by the Regional Board, permittee shall comply with requirements of the NPDES Storm Water Discharge Permitting Program.*
- 6. Around the perimeter of the proposed reservoir at POD #1, permittee shall plant an average of one shrub of one-gallon size or larger for every ten feet of shoreline, assuming the reservoir is at full pool. The shrubs shall be planted in the area between the high water level and the existing woodland. The shrubs shall be planted in groups but shall not be planted closer than five feet apart. Shrubs shall include species native to the Montgomery Creek watershed. A revegetation plan shall be developed and approved by*

the Department of Fish and Game prior to planting. If a second reservoir is developed at POD #2, a revegetation plan shall be submitted for Department approval and shall include both tree and shrub species. All plantings shall be maintained for a minimum of three years or until established.

- 7. The permittee shall implement, on an ongoing basis, the erosion control measures described in the Lundstrom Vineyard Development Project Erosion Control and Water Quality Protection Plan (August 1990, prepared by the Napa County Resource Conservation District, USDA Soil Conservation Service).*
- 8. Prior to reservoir construction or clearing of additional acreage, trenching, or other heavy earth moving activities, permittee will obtain a Grading Permit from the Napa County Conservation, Development and Planning Department. Prior to any grading on slopes greater than 5%, permittee shall submit to the Chief of the Division of Water Rights, an Erosion Control Plan approved by the County of Napa and a copy of the grading permit granted by that authority.*
- 9. This permit does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, the permittee shall obtain an incidental take permit prior to diversion and use of water. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this permit (permit term 14).*

Harry M. Schueller, Chief

Division of Water Rights

Date: