TESTIMONY OF CHARLES L. LINDSAY

I. Introduction

My name is Charles Lindsay. I am a Senior Water Resource Control Engineer with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division). I have over eight years of experience working in the Division, which includes almost seven years in the Compliance and Enforcement unit, about one year in the Licensing Unit, and almost seven months as Chief of the Hearings Unit. My experience with the Compliance and Enforcement Unit includes inspecting permitted and licensed water right projects for compliance with terms and conditions and preparing administrative civil liabilities and cease and desist orders. A copy of my resume is attached as exhibit WR-2.

The hearing notice dated February 7, 2007, identifies two hearing issues. My testimony, herein provided, addresses these hearing issues and identifies my personal knowledge of the evidence and actions leading to the Division's notice of its intent to issue a Cease and Desist Order (CDO) consistent with draft CDO No 262.31-14 and an Administrative Civil Liability (ACL) consistent with ACL 262.5-44 against The Vineyard Club, Inc. (Vineyard Club) (WR-5; WR-6.) My abbreviated responses to these first two hearing issues are set forth immediately below and more detailed information follows.

Hearing Issue 1: "Should the State Water Board issue a CDO to The Vineyard Club, Inc. in response to Draft CDO No. 262.31-14? If a cease and desist order should be issued, what modifications, if any, should be made to the measures in the draft order, and what is the basis for such modifications?" **Answer**: Yes, the State Water Board should issue a CDO to the Vineyard Club in response to Draft CDO No. 262.31-14. No modification to the CDO is required.

Hearing Issue 2: "Should the State Water Board order a liability in response to Administrative Civil Liability Complaint No. 262.5-44 against The Vineyard Club, Inc.? If the State Water Board orders liability, should the amount be increased or decreased, and if so on what basis?

Answer: Yes, the State Water Board should order liability in response to Administrative Civil Liability Complaint No. 262.5-44. The ACL states that the amount of \$4,100 "discounts the maximum liability in this case to achieve settlement with the licensee, streamline the enforcement process, and avoid the expense of a hearing before the State Water Board" (WR-6, p. 3.). Since this matter has proceeded to a hearing, I recommend the State Water Board increase the amount of liability up to the statutory maximum.

II. Draft Cease and Desist Order

Under California Water Code Section 1831, the State Water Board may issue a Cease and Desist Order in response to a threatened violation of any of the terms or conditions of a permit or license.

The Cease and Desist Order shall require the water right holder to comply immediately or in accordance with a time schedule set by the State Water Board. The purpose of draft CDO No. 262.31-44 is to enforce the measuring device term of water right License 12831 (WR-7) held by the Vineyard Club and to establish an enforceable schedule of compliance with that term.

A. Requirement to Comply with the Measuring Device Term.

The Vineyard Club, Inc, owns the subject water right license. License 12831 authorizes the diversion to storage of 245 acre-feet to be collected from October 1 of each year to May 31 of the succeeding year. The license includes two points of diversion. One is located on an unnamed stream at Vineyard Lake Dam. The other is on an unnamed stream that is also known as Oak Flat Creek. Both diversions are tributary to Gill Creek and thence the Russian River. The Oak Flat Creek diversion is a diversion to offstream storage, which means water is conveyed (in this case by a pipe) to storage off the stream channel from which it originated. The maximum rate of diversion to offstream storage is 0.25 cubic foot per second (cfs). A condition of the license requires the licensee to bypass, at the Oak Flat Creek diversion, a minimum of 0.4 cfs, or the natural flow, whichever is less. As a further condition of this license, the Vineyard Club must comply with the following term included on the second page of its License 12831:

No water shall be diverted under this license unless licensee has installed a device in Oak Flat Creek, satisfactory to the State Water Resources Control Board, which is capable of measuring the flows required by the conditions of this license. Said measuring device should be properly maintained.

There is nothing ambiguous or confusing about the requirement for a measuring device to be installed at the Oak Flat Creek diversion point. Under this term, diversion of water is not authorized unless licensee has installed a measuring device.

B. <u>Threatened Violation of License Term</u>

The violation of the license term does not begin with my discovery of the missing measuring device during my inspection on May 4, 2005. The Vineyard Club has a history of failing to comply with this term in their permit and their subsequently issued license. Permit for Diversion and Use of Water number 20035 was issued to the Vineyard Club on March 6, 1987 (WR-12). The permit has a term almost exactly like the license, requiring a measuring device at the point of diversion on Oak Flat Creek. However, when an inspector visited the project in May 1991 for the purpose of issuing a license, there was no measuring device of any type installed (WR-15). A photograph taken on May 8, 1991, shows water flowing over the diversion dam without any measuring device in place (WR-14). This inspection was shortly after the Vineyard Club submitted their Annual Progress Report by Permitee for 1990 (WR-13). In this form,

signed under penalty of perjury, the Vineyard Club manager certified that he had both reviewed the permit and was complying with the conditions under which the permit was issued. However, the Vineyard Club had been violating the permit term and diverting illegally, likely since the Permit was issued, a period of about four years. The Division did not take enforcement action at that time. The inspector even helped the Vineyard Club by providing a design for a device (WR-16). Once the Division received confirmation that the device was installed, License 12831 was issued on March 26, 1992. A photograph of the measuring device appears in the water right file attached to a memo dated January 14, 1992 (WR-16). It appears the measuring device was constructed with wood, perhaps plywood. This is the last definitive evidence of a measuring device. Sometime after the issuance of the license, use of the measuring device ceased. The reason is unknown. It may have been damaged or simply deteriorated and was never replaced. We do know that the Vineyard Club submitted a Report of Licensee for 1998, 1999, and 2000, signed on June 29, 2001 (WR-11). In this report, again the Vineyard Club certified that it had reviewed its license and was complying with conditions.

On March 18, 2005, about six weeks prior to my inspection, the Division of Water Rights mailed a letter to water right owners within the Russian River watershed in Sonoma County (WR-21). The Vineyard Club was included in the mailing list. This letter included suggestions to prepare for the inspection by ensuring compliance with the terms and conditions, including those requiring measuring devices. The letter also warned the recipients "that any diversion in violation of a term or condition may constitute an unauthorized diversion subject to administrative civil liability."

At the beginning of my inspection on May 4, 2005, I provided Mr. Sagues with a copy of the water right license. He indicated to me that he was not familiar with it, even considering that I had explained the purpose of my visit to him when I made the appointment to inspect the project. I found no measuring device in place and no evidence that any such device existed. During the inspection, Mr. Sagues told me he had been the manager for about two years. He had no knowledge of the measuring device requirement. Therefore, the last definitive proof in Division records of an installed measuring device was over 13 years prior to my inspection.

This history indicates four things. First, my inspection in 2005 is the second documented occurrence of failure to comply with the measuring device term. Second, there appear to be periods of violation lasting for years since the permit was issued in 1987. Third, the Vineyard Club apparently ignored the letter dated March 18, 2005, informing it of the compliance inspection. Finally, history shows no evidence that the Vineyard Club will diligently comply with its water right terms and conditions in the future without compulsion through formal enforcement action. A threat of continued violation exists.

C. <u>Provisions of the Draft Cease and Desist Order</u>

The CDO establishes a schedule of compliance and ensures that a suitable measuring device will be installed. A suitable device should not only be accurate, but also durable. The Division should not accept any device unless designed by a civil engineer, made of steel or similar durable material, and installed in accordance with an approved Department of Fish and Game streambed alteration agreement. The CDO does not impose any new or more stringent standards than those already imposed by License 12831 and it does not alter the license terms.

A schedule of compliance is necessary to prompt immediate design and installation of an acceptable measuring device. Although it has been almost two years since I notified the Vineyard Club of the violation, neither the Division nor the Department of Fish and Game have accepted a suitable measuring device installation plan.

On the day of my inspection, I informed Mr. Sagues that the Vineyard Club was in violation of its License by failing to maintain the measuring device at the Oak Flat Creek diversion. I told him the Vineyard Club would have to install a device that was designed and certified by an engineer and approved by the Division. I told him that the next written report, or notification of the violation, could be enforcement action. I told him about ACLs. When I discussed the violation I was careful not to make any "deals" or "settlement" promises. While I suggested that he should begin to correct the violation as soon as possible, I did not state, and I do not have the authority to state, that if he corrected the violation by a certain date, the Vineyard Club might avoid enforcement action. I did emphasize the need to comply as soon as possible. I provided a copy of the license, and I explained the bypass and measuring device terms.

On August 16, 2005, Mr. Sagues and I spoke on the phone and I prepared a Contact Report of that conversation (WR-9). I told Mr. Sagues that the Division was still considering enforcement action, and that is why the Vineyard Club had not received anything in writing. As I stated in my Contact Report, I told him the same things I did at the time of the inspection. At the end of the conversation and at his request, I faxed a copy of the License to Mr. Sagues. He did not explain what had happened to the copy I gave him on the date of the inspection.

The Vineyard Club's first efforts to comply with the License began after the ACL and CDO were issued. In late December 2006, Mr. Bert Sandell began communicating with the Division in an attempt to design a measuring device. He told me he was an engineer but not a civil engineer. He sent some equations for the design of a measuring device to me in an E-mail (WR-17). I responded at least twice in an attempt to lead him to a solution, despite the Vineyard Club's failure to contract for private engineering services. Two of my E-mail responses back to Mr. Sandell are included as WR-17. In one E-mail, dated

December 27, 2006, I explained the coefficient required in the orifice equation and corrected his measurement of the head. Other communications followed. Mr. Sandell would send a proposal, ask for my comments, and then send back another proposal that failed to address my comments. In an E-mail to Mr. Sandell from me dated January 11, 2007 (WR-18), I finally told the Vineyard Club that it was failing to address many of the elements of an acceptable design. In the E-mail I told him that we still needed to know the type of material the Vineyard Club proposed to use in constructing the device, detail of the shape of the lip of the orifice, an operations plan, and a plan to confirm the theoretical calculations. Despite this guidance, which Mr. Sandell acknowledged by E-mail (WR-18), on February 1, 2007, the Vineyard Club submitted a compliance plan to the Division that still did not address many of these areas. This plan did indicate that the Vineyard Club had contacted a licensed civil engineer. The plan, attached to the February 1, 2007 letter to Victoria Whitney and included as WR-19, was essentially the same plan previously submitted, but sealed by an engineer. However, the engineer included caveats to the design (WR-19, p. 4.) and acknowledged that all he had done was review the calculations. He had not addressed what material would be used to construct the device, how it will be mounted in the streambed or the shape of the lip in the orifice. These are elements the Division had previously requested (WR-18).

The main provision of the Cease and Desist Order must be to establish a compliance schedule to keep the Vineyard Club on track and to force it to do what is required to come into compliance. So far, it seems that non-formal processes have failed.

E. Recommended Modifications to the Draft CDO

There is one possible modification to the draft CDO that could be considered by the State Water Board. The precise wording of the measuring device term indicates that: "No water shall be diverted under this license unless licensee has installed a device..." This surely means no water should be diverted from Oak Flat Creek until a measuring device is installed in Oak Flat Creek. The State Water Board should clarify if the prohibition on diversion applies to all points of diversion under the license. The State Water Board could consider changing the cease and desist order so that all diversion under the license must cease until the device is installed. However, this seems unnecessarily punitive, so I do not believe this change is necessary. Diversions at the Vineyard Lake dam from the unnamed stream, with or without a measuring device in Oak Flat Creek, should have no effect on the amount of water in Oak Flat Creek. However, it would be useful for the State Water Board to provide guidance on which points of diversion are subject to the phrase "no water shall be diverted" in the context of this measuring device term.

III. Administrative Civil Liability Order

In Administrative Civil Liability Complaint No. 262.5-44, the Vineyard Club is alleged to have violated Water Code Section 1052, subdivision (a) by committing a trespass against the State Of California through their diversion of water other than as authorized in their water right license. Water Code section

1052, subdivision (b), provides that the State Water Resources Control Board may administratively impose civil liability in an amount not to exceed \$500 for each day that a trespass occurs.

A. Requirement to Comply with the Measuring Device Term

The requirement to install and maintain a device to measure compliance with the bypass flow specified in License 12831 has already been discussed in paragraph IIA above. The term is clear, unambiguous, and linked to the authority to legally divert water. The term originates from State Water Resources Control Board Decision 1608, dated December 19, 1985 (WR-20). This decision resolved a protest against the applicant by the Department of Fish and Game and approved Application 26224 subject to inclusion of the measuring device term. According to the Decision: "Field surveys on May 23, 1984 and June 14, 1985 have shown that both Oak Flat Creek and Gill Creeks provide nursery habitat for immature steelhead." (WR-20, p. 5.)

B. <u>Violation of License Term</u>

On May 4, 2005, I discovered that no measuring device, suitable or not for ensuring compliance with the bypass term in License 12831, was installed at the Oak Flat Creek diversion. Further, there was no evidence that any such device existed, and was just not installed. When questioned, Mr. Sagues, who maintained the lake, had no knowledge of the term in the license. While at the diversion point, I observed that a pipe was connected to a small diversion dam and diversion of water was occurring. The conditions at the point of diversion are shown in photographs in my report (WR-8, p. 9.).

While at the Oak Flat Diversion, I attempted to determine if the required bypass amount of 0.4 cfs, specified in License 12831, was being met. Using a 3-inch portable modified Parshall flume (also known as a Montana flume) I attempted to measure the flow in Oak Flat Creek immediately below the diversion. I tried to divert as much water through the flume as possible using the attached skirt and by piling some rocks in the streambed. I estimate that I was able to divert at least 50% of the stream flow through the flume. I measured the depth in the flume to be 0.31 of a foot (WR-8, p. 11.). After I returned to the office, I calculated the amount of water through the flume to be 0.16 cfs. Assuming this was half the stream flow, the amount of bypass at that time would be 0.32 cfs or slightly short of the required amount. The measurement is inconclusive, and in my report I stated the amount was "very close to the minimum of 0.4 cfs" (WR-8, p. 4.). Flow was probably in the range of 0.3 to 0.4 cfs. Based on this measurement, the Vineyard Club was at best operating in marginal compliance with the required bypass amount. This shows that using a measuring device is a necessity to protect the level of flow in the stream, and is not just a technical formality. Regardless, violation of the bypass amount is not a requirement of, and was not a basis for, issuing the Administrative Civil Liability.

After inspecting the Oak Flat Creek point of diversion, Mr. Sagues and I inspected the outlet of the Oak Flat Creek diversion pipe at Vineyard Lake. Water was flowing from the pipe and this is shown in photographs included with my report (WR-8, p. 13.). Mr. Sagues helped me measure the rate of flow from the diversion pipe with a 2-gallon bucket. We conducted the test twice and found that the bucket filled in 2 seconds. This equals a diversion rate of about 60 gallons per minute or 0.13 cfs.

In summary, at the time of my inspection on May 4, 2005, diversion of water at Oak Flat Creek was occurring at the rate of about 0.13 cfs and water was flowing past the diversion point at a rate between 0.3 to 0.4 cfs. There was no measuring device installed and the diversion I observed was therefore unauthorized. Besides my own observations, Mr. Sagues stated to me in an E-mail dated December 11, 2006, after receipt of the ACL and CDO: "We did not, however, have a specifically designed bypass device in place." (WR-10, p. 1.)

C. Actions to Correct the Violation since the Inspection

I have described the Vineyard Club's efforts to comply in Section IIC above. The Vineyard Club has stated that it has ceased diversion from Oak Flat Creek and we have no reason to question that statement, though the Division has not confirmed it.

D. Formulation of the Amount of Liability

The reasoning in the determination of the amount of liability imposed in Administrative Civil Liability Complaint No. 262.5-44 is provided in the body of that document (WR-6. para. 7.). The amount of \$4,100 is much lower than it could be in order to "achieve settlement with the licensee, streamline the enforcement process, and avoid the expense of a hearing" (WR-6, para. 8.). Paragraph 5 of the ACL describes a potential maximum amount of \$500 per day based on Water Code section 1052. The last definitive proof of the measuring device's installation was about January 1992 (WR-16), over 13 years prior to my inspection. At the inspection, Mr. Sagues stated that he had been the manager for two seasons but had no knowledge of the measuring device requirement. He also stated that the Oak Flat Creek diversion normally occurred over a period of two months, April and May (WR-8, p. 5.). The Vineyard Club installs and removes the Oak Flat Creek diversion works each year, so Mr. Sagues should have knowledge of the diversion for at least two seasons. Therefore, during the two years Mr. Sagues managed the operation of the lake, it is apparent that water was diverted from Oak Flat Creek to Vineyard Lake without a measuring device. This would equal 120 days of unauthorized diversion pursuant to Water Code section 1052 (a). Additional unauthorized diversion also likely occurred before Mr. Sagues was the manager.

The maximum liability at \$500 per day to cover the 60 days of unauthorized diversion, considered in the ACL, would equal a liability of \$30,000. This amount is still low in light of the 120 days that Mr. Sagues is likely responsible for unauthorized diversion, and the history of the project prior to his involvement.

E. Recommended Adjustment to the Amount of Liability

In considering this matter, the State Water Board should remember that this is a repeat violation. Also, although the Vineyard Club is certainly entitled to bring these issues before the State Water Board, it is done at a significantly increased staff cost. What is also lost is the time that could be spent on other matters before the Division. The State Water Board needs to demonstrate the consequences of failing to follow the terms and conditions of a water right permit or license. Any liability less than what is recommended by staff may be viewed by other water right holders as simply an operational cost they would be willing to risk in exchange for foregoing the cost of compliance.

IV. Recommendation

The Vineyard Club has shown itself to be either unable or unwilling to commit the resources to resolve this violation. The Vineyard Club has already been guided to compliance with the measuring device term once before, in 1991, just prior to issuing the license. The license clearly states, in writing, that a measuring device is required and must be maintained, or no water may be diverted. In writing and under penalty of perjury, the Vineyard Club certified in 2001, that it had reviewed the license and was in compliance with the conditions in the license (WR-11). The Vineyard Club was warned of the inspection and the potential for enforcement action, well before the inspection was conducted.

In summary, the CDO does not impose any standards on the Vineyard Club that it is not already required to fulfill. Its compliance history and recent efforts demonstrate that a threat of violation continues to exist. The ACL is warranted and even the Vineyard Club itself has not challenged that the violation existed on May 4, 2005. The current amount, \$4,100, is now too low, due to the increased costs of a hearing and lack of settlement. Based on the factors discussed above, I recommend increasing the amount.