

November 21, 2013

Hand Delivered

Mr. David Noren, Chair
Mr. Matthias St. John, Executive Officer
North Coast Regional Water Quality Control Board
5550 Skyline Boulevard
Santa Rosa, CA 95430

Re: Total Maximum Daily Load Process for the Upper Elk River

Dear Chairman Noren, Members of the Regional Water Quality Control Board and Mr. St. John:

We have carefully reviewed the North Coast Regional Water Board's plan and process for completing a TMDL for the Elk River Watershed, and we have met extensively with Regional Board staff to discuss the plan and staff's expectations. Although we appreciate the time staff has spent explaining its objectives, we are concerned that the legitimate issues we have raised have largely been ignored. In short, the proposed process for development of the TMDL is fundamentally unfair to Green Diamond. As such, we find it necessary to object to the process now because it dictates an outcome that will not produce real improvements to water quality, but will harm our business and lead the Regional Board to act outside its authority and without scientific justification.

Over the years, Green Diamond and the Regional Board have gone to great lengths to build trust and develop highly innovative solutions. With encouragement from the Regional Board and staff, Green Diamond has invested considerably in an approach to protection of water quality that relies on two sets of ownership wide Waste Discharge Requirements. The most recent set—our Forest Management Waste Discharge Requirements ("FMWDRs")--was completed and approved just over one year ago. It had a specific component for Green Diamond's ownership within the South Fork Elk River Watershed. The Regional Board and staff hailed this achievement as a great success and a template for efficient and effective water quality protection.

In that light, we are taken aback by the TMDL proposal before you. It is entirely inconsistent with the policy and the water quality protection approach reflected in the FMWDRs and Green Diamond's South Fork Elk Management Plan. Green Diamond supports the Regional Board's intention to complete the TMDL process as soon as possible. However, we object to the basic assumptions, the proposed process and the scientific basis reflected in the current plan for the Upper Elk River TMDL. Without justification, the TMDL would effectively revoke our South Fork Elk Management

Plan and FMWDRs and replace them with onerous, one-size-fits-all prescriptions based on flawed science that Green Diamond and the Regional Board and its staff rejected just one year ago. Moreover, the TMDL plan's intended prescriptions include off-site mitigation for historic coarse sediment impacts that were not caused by the regulated actions and the limitations on forest management, while costly to Green Diamond, will not improve water quality beyond the measures that Green Diamond already implements through Waste Discharge Requirements ("WDRs"). The issues we have identified are so critical to Green Diamond that we must raise them to the Board at this stage of the process and press for fundamental changes.

We summarize our most significant concerns in this letter. We respectfully request that the Regional Board reconsider and revise its plan and process for the Upper Elk River TMDL before proceeding any further.

Background and Historical Context. Our concerns stem from the great successes we have enjoyed together with your Board in addressing some of the North Coast's significant water quality challenges. Initially, in 2006 we worked closely with your staff to develop watershed-wide WDRs for our ownership in the South Fork of Elk River (Order R1-2006-0043). This WDR recognized the sensitivity of the drainage and incorporated special management measures, including a complete inventory of all potential road-related sediment sites. Green Diamond was never subject to any Elk River cleanup and abatement orders, and was never regulated under either the Tier I or II harvest limitations. With considerable encouragement and cooperation from the Regional Board and its staff, Green Diamond then moved forward to complete two sets of property-wide WDRs. Just in October 2012, the Regional Board approved our FMWDRs, which incorporated an updated version of the 2006 South Fork Elk River Management Plan for our ownership in the South Fork Elk Watershed.¹

The FMWDRs were the capstone of a 20-year planning and study process that produced our Aquatic Species Habitat Conservation Plan, approved by U.S. Fish and Wildlife Service and the National Marine Fisheries Service in 2007. We then adapted the AHCP to provide the basis for property-wide approvals by the California Department of Fish and Wildlife and the Regional Board. These approvals have allowed us to provide protection of endangered species, other wildlife and the quality and beneficial uses of water with methods specifically adapted for our land and operations. They have streamlined the Timber Harvesting Plan process by allowing the Regional Board staff and the Department of Fish and Wildlife to prioritize their THP reviews and rely on the foundation ownership wide planning documents.

¹ The Regional Board approved Green Diamond's property-wide Road Management WDRs in 2010.

Moreover, since 2006 Green Diamond has treated 90 percent of the identified erosion sites representing 94 percent of the potential sediment on Green Diamond's ownership in the South Fork Elk River Watershed.

We are especially proud of the findings by the Regional Board regarding cumulative effects in the South Fork Elk Watershed: that Green Diamond's South Fork Elk watershed and ownership-specific management measures are not causing or contributing to adverse water quality conditions or to cumulative environmental effects.

Green Diamond's Principal Objections.

The TMDL Proposal Signals That the Regional Board is Reversing its Policy of Encouraging Innovative Landowner-Level Planning. Against this backdrop, we have strong objections to the TMDL process for the Elk River. It glosses over our joint success, made possible by the underlying Regional Board policies and achieved after many years of evaluation and planning. Based on our work together, we have understood that the Regional Board supports a landowner-level approach to water quality control, and Green Diamond's FMWDRs in particular. We were therefore alarmed at the Regional Board's notices, which state that the Upper Elk River TMDL and Watershed-Wide WDRs process would impose significant obligations upon Green Diamond that the Regional Board rejected just over a year ago in approving the FMWDRs. The Upper Elk River TMDL would literally undo the South Fork Elk River component of Green Diamond's FMWDRs. Moreover, it threatens the viability of the FMWDRs and water quality protection planning efforts at the forest landowner level overall. We cannot reconcile the significant conflict between the Regional Board's encouragement, approval and strong defense of the landowner-level water quality South Fork Elk River component of the FMWDRs with the TMDL proposal.

Green Diamond and the Regional Water Board recognized that the Upper Elk River TMDL was under development at the time our FMWDRs were approved. Item #22 of the Order states:

"The TMDL may contain timeframes or tasks that differ from those contained in the Elk River component of this Order. At such time as the TMDL is adopted the provisions of the Elk River provisions of this Order and/or the SF Elk River Management Plan will be reviewed and adjusted, as appropriate, to ensure compliance with the TMDL."

Item #23 of the Order further describes the recognition that the FMWDR and the South Fork Elk River measures were designed in recognition of the pending TMDL:

"The sections of this Order and the attached Monitoring and Reporting Program specific to activities in the Elk River were designed to anticipate requirements of the TMDL currently in development, provide site specific

requirements for this uniquely sensitive watershed, and establish a feedback to ensure adequate implementation of and maximize effectiveness of management measures.”

Finally, Item #24 of the Order emphasizes that future changes in the South Fork Elk River Management Plan should be limited to those demonstrated to be necessary in the TMDL process:

The South Fork Elk River Management Plan may be updated, with approval by the Regional Water Board, due to necessary changes from TMDL adoption, changes to the Basin Plan, or adaptive management.

Unfortunately, as designed, the TMDL plan and the WDRs process are fundamentally inconsistent with the prerequisites for changing Green Diamond’s FMWDRs. Further, the current proposal is entirely inconsistent with the robust science and Regional Board policy underlying the South Fork Elk component of Green Diamond’s FMWDRs just approved in October 2012.

The Peer Review draft staff report identified no scientific analysis and no water quality impact that was not already considered in Green Diamond’s preparation and the Regional Board’s review of the South Fork Elk River component of the FMWDRs. Yet, the Upper Elk River TMDL and WDRs would inexplicably require that we abandon the approved WDRs and fundamentally change our management approach. They would effectively revoke the South Fork Elk River component of our FMWDRs and impose obligations upon Green Diamond that the Regional Board thoroughly considered and rejected just one year ago. Such an action based on obsolete studies is poor policy, and it goes against the promise the Regional Board made to Green Diamond in the FMWDRs—that adaptations to address the TMDL would be required only if the Regional Board finds new information on water quality impacts of Green Diamond’s current and likely future management activities that are inadequately addressed by the South Fork Elk River Management Plan already in place.

The TMDL Proposal Ignores Scientific Information the Regional Board Previously Considered.

As the Regional Board found in October 2012, the management measures and methods reflected in the South Fork Elk River component of our FMWDRs are based on many years of study and extensive review by Regional Board staff. In its CEQA review and response to public comments, the Regional Board emphasized that the extensive evaluation made and reviewed in support of Green Diamond’s FMWDRs, as well as the management strategy reflected in our South Fork Elk River Management Plan, fully addressed the unique water quality concerns associated with the South Fork Elk River Watershed—including cumulative effects. Among other things, our analysis addressed the Klein et al (2012) paper.

Ironically, that paper, which is outdated and flawed, is a key foundation for the proposed Upper Elk TMDL. However, when the Regional Board considered the Klein paper in light of the ownership-specific analysis and management measures incorporated in Green Diamond's South Fork Elk River Management Plan, the Regional Board found that the Klein paper did not provide any basis to impose new or additional requirements beyond those proposed in Green Diamond's South Fork Elk River Management Plan. No new information or analysis has been produced that would justify a change of that conclusion, particularly as applied to Green Diamond's ownership in the South Fork Elk River Watershed. Therefore, it is inconceivable that the Regional Board would now rely on that same report as the basis for imposing highly objectionable requirements on Green Diamond that the Regional Board rejected just last year. The Regional Board cannot justify its change in position with regard to the Klein paper and Green Diamond's management of ownership in the South Fork Elk River Watershed.

Further, recognizing that the TMDL process was underway for the Elk River Watershed, the FMWDRs provided that the "South Fork Elk River Management Plan may be updated, with approval by the Regional Water Board, due to *necessary* changes from TMDL adoption." FMWDRs 24. Similarly, the FMWDRs provided that the South Fork Elk River component would be "reviewed and adjusted, as appropriate" to ensure compliance with the TMDL. FMWDRs 22. However, without identifying any new scientific analysis or evidence of an issue or impact not addressed in the Regional Board's approval of the FMWDRs, the TMDL process cannot support a conclusion that changes are necessary or appropriate. The Upper Elk River TMDL states its intention to replace Green Diamond's site-specific management measures with a generic, "one-size-fits-all" set of measures. Green Diamond cannot support such an approach which, if pursued here, would be arbitrary and capricious.

Further, the Regional Board has requested extensive information from Green Diamond and indicated it will issue an Order under Water Code Section 13267 if necessary. Green Diamond has a strong record of working with Board Staff, conducting scientifically based analysis, and providing documentation to the Regional Board. Indeed, the just-finished FMWDRs process was the product of extensive submissions. The information requests to Green Diamond essentially ignore all the documentation that Green Diamond submitted and the Regional Board relied on in making its extensive findings on the South Fork Elk River component of the FMWDRs. This request is most disturbing—not just because of the demand for information that was previously provided and relied upon in approving the FMWDRs—but because it confirms our concern reflected in the Upper Elk River TMDL Peer Review report—that the analysis prepared in support of Green

Diamond's FMWDRs, including an extensive review of the scientific literature upon which the Upper Elk River TMDL proposal is based, was ignored in its development.

We are willing to resubmit the information that Green Diamond and the Regional Board have in our files. However, staff's insistence on essentially "starting over" reflects one of our fundamental objections to the Upper Elk River TMDL process: it makes extensive assumptions about impacts of forest management based on the application of outdated studies, uses extremely questionable sediment yields and assumptions based on limited data from a small reference watershed, and imposes generic obligations on all forestland owners in the watershed based on those assumptions—rather than the site-specific and more current analysis reflected in the record of the FMWDRs. We ask the Regional Board to carefully reconsider that premise. Issuing a 13267 Order to Green Diamond would be arbitrary and capricious under these circumstances. We should work together to identify any changes in Green Diamonds FMDWRs that may be appropriate when the TMDL process is complete rather than revoking the South Fork Elk River component of the FMWDRs and attempting to impose generic, one-size-fits-all restrictions that are entirely based on analyses of forest practices pre-dating the management approaches that are currently applied in the Elk River watershed.

The Application of the Single Action Implementation Strategy is Improper if It Necessitates Revocation and Replacement of Green Diamond's FMWDRs with Generic Watershed WDRs. It appears that a significant driving force behind the Upper Elk River TMDL and the willingness reflected in the plan to undo Green Diamond's ownership-specific FMWDRs is the objective of utilizing the "single action" implementation strategy.² Under this TMDL approach, the Regional Board would avoid the traditional TMDL process and procedural steps of preparing and adopting a technical TMDL and implementation strategy that is incorporated into the Basin Plan before incorporating the TMDL into WDRs and other regulatory actions. Instead, the Regional Board would incorporate the technical components of the Upper Elk River TMDL into new watershed-wide WDRs that would replace individual landowner's WDRs.

Although such an approach may be appropriate in other circumstances, we believe that adoption of a TMDL and watershed WDRs through a single action is not proper

² The Regional Board's letter explaining the Upper Elk River TMDL approach indicates an intention to revise the Technical Report for the TMDL in part by "making revisions to support the adoption of an implementation program for the Upper Elk TMDL through a 'single action' of the Regional Water Board." (page 1).

for the Elk River watershed. As the State Board has articulated in its guidance document for addressing impaired waters,³ a single action is applicable when a single order of the Regional Board is “adequate to address the impairment.”⁴ For example, if a lone discharger or source is responsible for the impairment, a single action can be effective. In fact, a single action is preferred in those circumstances because a separate, planning step may be “redundant.” By contrast, and most significant here, the State Board reasons that a single order is not adequate when a combination of sources, pollutants, and conditions are contributing to the impairment.⁵

Here, the Regional Board is proposing to adopt basin-wide WDRs, which will apply to all operations affecting the watershed, including, like Green Diamond, operators already subject to distinct WDRs. Because multiple operators are potentially contributing to the impairment of the watershed, this TMDL is not a proper candidate for a single-vote permitting action. There is no justification for forcing Green Diamond out of its ownership-specific FMWDRs and its South Fork Elk River component. Indeed, a singular premise of the FMWDRs and the Regional Board’s policy behind supporting such landowner efforts is to encourage innovative, site-specific solutions. The notice’s assertion that having one set of methods to address cumulative impacts is a sound basis for revoking individual permits is entirely inconsistent with the Regional Board’s findings and defense of the FMWDRs.

The Regional Board specifically endorsed Green Diamond’s ownership-specific approach to addressing water quality concerns and cumulative effects. The flexibility to address and resolve such issues in different ways is a critical element of successful resource management, whereas the generic, one-size-fits-all approach is not only arbitrary and capricious in its application but has been proven ineffective repeatedly. Further, the Water Code itself prohibits the Regional Board from dictating specific methods to achieve compliance. Water Code Section 13360. For the many reasons cited in this letter, it would be entirely inappropriate to revoke the South Fork Elk River component of Green Diamond’s FMWDRs, so that the Regional Board can qualify under the “single action” implementation approach. We ask that the Regional

³ State of California S.B. 469 TMDL Guidance, A Process for Addressing Impaired Waters in California, *available at* http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/iw_guidance.pdf.

⁴ TMDL Guidance at 63.

⁵ TMDL Guidance at 59.

Board to identify another implementation alternative that would be appropriate for these circumstances.

The Management Measures Proposed in the Peer Review Report are Highly Objectionable. In addition to the objections we have about the process being considered, Green Diamond is very concerned about many of the measures that the TMDL would impose upon Green Diamond as reflected in Table 6 of the Regional Board's Response to Peer Review Comments. Among the most objectionable are:

- Defining "riparian areas" as two site potential trees (300 ft.) for class I & II watercourses, and one site potential tree (150 ft.) for Class III watercourses,
- 20 percent per decade limit on harvesting in individual Class II and III catchments,
- Limit annual average canopy removal to 0.4% initially with an annual maximum of 1.5% over time,
- Implement dredging of instream deposits.

These measures are overly burdensome, infeasible, unnecessary and unsupported by site specific information. Furthermore, these measures will not produce better water quality than the measures that Green Diamond already applies under the recently approved FMWDRs to protect and improve water quality and mitigate the impacts of its activities on its ownership. Since 2006 Green Diamond has applied 150 ft. stream zones on all class I and 75 -100 ft. zones on Class II watercourses. Both of these riparian protection zones include an inner zone and outer zone. The inner zone is essentially a "no cut" zone, and very few trees are removed from the outer zones. These riparian measures are identical to the standards that are found in our Aquatic Habitat Conservation Plan for federally listed salmonid species that was approved in 2007 (and followed by a state consistency determination for coho in 2008). The riparian definition proposed in the Peer Review Draft TMDL is based on the North West Forest Plan (1994) that was developed for the management of the northern spotted owl and associated species on federal lands in the Pacific Northwest. The stream zones created under the plan were intended to be "administrative buffers" that went beyond stream protection and provided additional retention of late seral structure and travel corridors for wildlife. These requirements cannot be considered appropriate for protection of water quality on Green Diamond's ownership, where so much site-specific analysis has provided the basis for the buffers incorporated in Green Diamond's management.

Based on conversations with Board Staff, we understand the primary goal of the 20% canopy removal per decade limitation in catchment areas is intended to prevent soil tube collapse that would increase the drainage network. Given our use of shovel and

cable yarding, and the retention of slash across the harvested area, there is no reason to find that this could occur on Green Diamond's ownership. Further, this limitation would eliminate the use of evenaged management and require a shift from shovel yarding to tractor yarding, a harvesting method that results in more soil disturbance and a greater risk to water quality. It is not proper for the Regional Board to regulate timber harvesting methods, particularly when the Regional Board itself has found that our management measures protect water quality and avoid cumulative effects.

Further, we object to the rate of harvest restrictions, which includes an initial 0.4% annual rate until offsite mitigation involving dredging of the Elk River is complete and sediment loading reduction targets are achieved. Once they are achieved, the rate would increase to 1.5% annual harvest rate.

Green Diamond objects to the rate of harvest as a water quality regulatory tool; the Regional Board should not prescribe forest management measures, particularly when, as Green Diamond has demonstrated, other measures work effectively to protect and improve water quality. As with many of the objectionable elements of the TMDL proposal, the justification for the rate of harvest limit is based on the Klein et al. (2012) paper which clearly has significant flaws and should not be used to set harvest limits. The following items summarize some of the key flaws of the Klein et al. (2012) paper:

The coefficients used in Klein paper to calculate equivalent clearcut area presume that canopy removal is the key process causing increased turbidity, and assigned the same weighting coefficients for clearcut area and roads. There is extensive literature indicating that roads have a much greater effect on runoff, surface erosion and landsliding than clearcuts. This is a significant flaw that grossly overstates the impact of clearcut harvesting.

The Klein paper reviewed harvest data from 1990-2005 and therefore excluded any operations based on current practices including Forest Practice Rules that were updated in 2010, the Green Diamond WDR (2006) or our AHCP (2007). The Klein paper also conducted a multiple regression analysis that included only a single year of turbidity data (2005). This precludes the ability to evaluate the inherent annual variability of turbidity within and between watersheds.

The Klein paper did not provide a process-based explanation that links management and the observed 10% exceedence turbidities. The Klein paper merely speculates that the link to the period 10-15 years preceding the 2005 turbidity record was due to a lag effect for root decay and subsequent harvest-related landslide occurrences; however, there was no landslide inventory information presented for their study watersheds to

substantiate this claim. It provides no basis for imposing rate of harvest limits on Green Diamond or other forest landowners.

As explained above, Green Diamond and the Regional Board carefully considered this issue in the FMWDR process. The FMWDR record includes significant site-specific information documenting why the Klein recommendations were in appropriate for Green Diamond's ownership. Significantly, the Regional Board agreed with that conclusion in rejecting a demand by the Mad River Alliance that the Regional Board impose a 1.5 % harvest rate limit in the Mad River. Following is an excerpt from the Regional Board's response to comments:

Response: The Mad River Alliance asks that the Regional Water Board (RWB) limit harvest rates in the Mad River to less than 1.5% for all THPs. The quoted rate is derived from one scientific paper, Klein et al., 20121. We are aware of the Klein et al. paper, and while it has interesting conclusions regarding the cumulative effects of logging, it lacks specific information regarding the mechanisms and sources of these impacts. We do not believe, at the current time, that the results of one scientific paper are sufficient to modify the way timber harvest activities are regulated in the north coast region. Instead we rely on a robust combination of extensive management measures, protective riparian buffers, and inventory and treatment of legacy sediment. Verification of proper implementation and effectiveness is achieved with a comprehensive monitoring program. This Order contains requirements that are significantly stronger than what is required from other timber harvest plan proponents in the north coast region, including enhanced riparian and geology buffers, seasonal restrictions, and yarding restrictions. We believe the permit, as drafted, addresses cumulative impacts, including those from rate of harvest, through the required management measures and through the monitoring program. (emphasis added)

As reflected in this response, the Regional Board found that Green Diamond's alternative, site-specific methods ensure that Green Diamond's operations in the South Fork Elk River Watershed do not contribute to cumulative effects and that rate of harvest restrictions were not necessary in order for Green Diamond to protect water quality and avoid contributing to cumulative effects in the watershed.

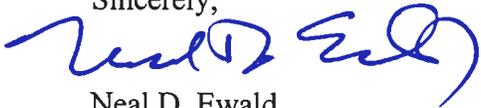
In addition, we strongly object to the prerequisite of completing offsite mitigation before the rate of harvest would increase to 1.5% annual rate. This mitigation, involving dredging of the Elk River, would require lengthy and highly complex Clean Water Act Section 404 and Endangered Species Act permitting, with the likelihood that harvest levels above the 0.4% limit could never be obtained. Such a requirement

simply is not feasible or appropriate. Our current harvest level is 75 acres per year. At a 0.4% rate, we would have access to 7.6 acres per year. This harvest level will not support economic use of our property, let alone the continuation of our sediment reduction program. Such a requirement would clearly violate the legal principles outlined in the Supreme Court's *Nolan* and *Dolan* decisions. There is no "essential nexus" or "rough proportionality" between the impacts of Green Diamond's previous or current operations and the dredging requirements that the TMDL would impose on Green Diamond. The Regional Board should consider whether a TMDL that threatens Green Diamond's operations and other landowners' operations is a worthy and appropriate pursuit, especially when a cost-effective model (the FMWDRs) that sufficiently protects the environment is available.

For all these reasons, Green Diamond requests that the Regional Board reconsider its approach. The procedural benefits that could be gained from the approach outlined in the TMDL proposal are far outweighed by the regulatory burden and unreasonable conditions that would be imposed. In part, this unnecessary burden is tied to the TMDL single action process chosen by the Regional Board. It is clearly unsuitable for this type of regulatory action. In order to be successful in its goals, the Regional Board must once again work directly with us to identify any changes in circumstances or new scientific information that would govern changes in the South Fork Elk River component of Green Diamond's WDRs as well as the TMDL itself. At this point, the TMDL proposal is so flawed that Green Diamond must do all it can to oppose it.

Thank you in advance for your cooperation in our efforts to address these important concerns.

Sincerely,



Neal D. Ewald
Vice President, California Timberlands Division

cc: Mr. Gary C. Rynearson
Mr. Matt House
Galen G. Schuler, Esq.
Wayne M. Whitlock, Esq.