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Sonoma County Permit Resources and Management Department
Attention: Paula Stamp
2550 Ventura Avenue
Santa Rosa, 95403

September 4, 2007

SUBJECT: Gualala River gravel mining (File No. UPE04-0040, Gualala Instream), Sonoma County; Draft Negative Declaration (California Environmental Quality Act) general comments

Dear Ms. Stamp:

The following comments address procedural (CEQA) and substantive aspects of Sonoma County Permits and Resource Management Department (PRMD) proposed draft Negative Declaration for reauthorization of gravel mining on the Gualala River and amendment of the Aggregate Resources Management Plan and mining ordinance, dated August 5, 2007.

I am a professional plant ecologist specializing in the conservation, restoration, and management of coastal vegetation, rare and endangered species, and their ecosystems. I have over 27 years of professional experience in this capacity, including extensive regulatory and environmental planning experience with the U.S. Fish and Wildlife Service (Sacramento Fish and Wildlife Office) and the U.S. Army Corps of Engineers, San Francisco District Regulatory Branch. My current independent work includes preparation of CEQA/NEPA (EIR/S) documents for the California Department of Water Resources and California Coastal Conservancy, and coastal streams and tidal wetlands restoration plans for the California State Parks, U.S. Fish and Wildlife Service, and nonprofit conservation organizations.

The major general findings, conclusions, and recommendations from my critical review of the Negative Declaration are summarized below.

1. Significant impacts, inadequate mitigation. The proposed project (permit “renewal” for instream gravel mining and amendment of ARM standards on the Gualala River) may have significant impacts that are either unmitigated or inadequately mitigated by the proposed actions considered in the Negative Declaration. Moreover, after-the-fact authorization of instream gravel mining following the expiration of Resolution No 95-0617 necessarily covers actions that did in fact cause or substantially contribute to cumulative, indirect, and direct significant adverse impacts on the Gualala River in 2005-

2006. *The negative declaration's finding of "less than significant" impacts after mitigation is not supported for many ecological concerns cited in the detailed critical review of the Negative Declaration below regarding river geomorphology, fish, plants, riparian habitats, invasive species, contaminants (hydrocarbons), and water resources.*

2. Incomplete assessment of significant impacts from unauthorized recent past gravel mining that must be considered. The Negative Declaration omits disclosure, assessment, and mitigation for significant impacts of unauthorized gravel mining that occurred with knowledge and active assistance of PRMD after expiration of Resolution No. 95-0617 on April 17, 2007, within the scope of the "renewal" of the gravel mining permit application (file No. UPE04-0040). This is a fundamental flaw in the CEQA environmental baseline for assessment of impacts.

3. Flawed and outdated environmental baseline: The principal physical environmental documents on which the Negative Declaration relies for impact assessment and mitigation are mostly from 2003 (during the previous, expired permit period), and rely on 2002 data. These documents do not reflect the significant fluvial geomorphic process and form changes associated with unauthorized gravel mining (2005-2006), or drought-year (2007) gravel transport and recharge (deposition). The Negative Declaration must consider all actions within the proposed period of authorization, including previously unauthorized actions that may be authorized after-the-fact, and current environmental conditions prevalent around the time of the Negative Declaration's preparation and public or agency review.

4. Assessment of reach-specific annual sediment budget and risk of extraction rates exceeding local versus average rates of sediment recharge. The Negative Declaration assumes an "annual gravel recharge rate within the propose project reach of 15,625 to 47,500 cubic yards", based on outdated 2003 assessment conditions that rely on 2002 or earlier estimated data. The upper range of recharge rates is about three times the lower range, and there are twelve very different gravel bar extraction locations on the Wheatfield and South Forks, each with different local rates of recharge. The Negative Declaration fails to consider the risk or impacts of over-extraction (extraction exceeding site-specific, year-specific recharge rates) related to annual variability or site-specific variability of gravel recharge rates. The Negative Declaration fails to discuss or assess the significant net reduction in bar size and height (and associated changes in high flow conditions and low-flow channel configuration) in 2007.

5. Inadequate site-specific assessment of mitigation. The Negative Declaration assesses the efficacy of proposed mitigation such as "horseshoe method of mining" only in general and prospective terms, and fails to apply actual data from past episodes of its application, such as at Valley Crossing, to assessment of its effectiveness in minimizing impacts to less-than-significant levels. The reduction of the Valley Crossing bar mining site to low gravel flats is not consistent with the Negative Declaration's uncritically optimistic reliance on at least one major proposed mitigation measure. Mitigation measures proposed, despite uneven levels of technical detail in methodology, are generally unenforceable or unworkable (ineffective) in terms of basic reporting, assessment, and linkage to agency corrective actions.

6. Significant cumulative riparian habitat impacts are not adequately assessed. The Negative Declaration fails to assess background changes in the abundance, distribution, and change in quality (maturity, height, density, composition) of riparian vegetation of mid-channel bars, point bars, and floodplains of the reaches upstream of gravel mining sites, and their actual or potential interactions (cumulative effects) on sediment transport, trapping, stabilization, and bar recharge.

8. Alternative sites. The Negative Declaration fails to adequately evaluate alternate mining sites or site feasibility evaluation criteria to minimize impacts.

9. Recommendations. The subject permit action may cause potential significant cumulative, indirect, and direct impacts that are not reduced to less-than-significant levels by proposed mitigation. The County must therefore either (a) prepare an EIR for the project, or (b) correct substantial omissions and deficiencies in impact assessment, mitigation, and alternatives identified by comments, and recirculate an Initial Study and Negative Declaration with appropriate modifications to ensure that impacts will be less than significant.

In addition, the County should focus its efforts on bringing assessment of baseline conditions up to date, and consistent with the whole period of the permit action (including after-the-fact authorization) and all state and federal permits.

1. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) AND RELATED REGULATORY ISSUES.

1.1. Scope of analysis and CEQA environmental baseline must include previously unauthorized gravel mining included in after-the-fact authorization. Gravel mining on the Gualala River continued in 2005 and 2006 with the knowledge and active assistance of PRMD after the previous PRMD permit expired, and without authorization from the U.S. Army Corps of Engineers or National Marine Fisheries Service. The impacts of unauthorized gravel mining must be considered within the scope of analysis of the current negative declaration if the County and other regulatory agencies with which it coordinates intend to use this CEQA document for after-the-fact authorization of 2005-2006 gravel mining. Otherwise, including the impacts of unauthorized gravel mining within the “existing conditions” environmental baseline (at the time of Negative Declaration notice) would impermissibly merge them with the environmental baseline. This would result in a deliberate omission and understatement of significant direct, indirect, and cumulative impacts of gravel mining, and would fail to comply with CEQA and parallel federal environmental laws. Thus, the County must consider impacts of unauthorized gravel mining impacts during the interim “grace period” of 2005-2006. To my knowledge, the Gualala River is the only North Coast California river where unauthorized commercial gravel mining operations occur.

The draft Negative Declaration fails to analyze the actual past impacts of unauthorized gravel mining Valley Crossing (versus predicted future impacts) during the period of 2006-2007. The

draft Negative Declaration erroneously concludes that reauthorization of gravel mining, with mitigation, would result in no significant impacts.

2.0 SPECIFIC COMMENTS ON NEGATIVE DECLARATION TEXT

Page 7 – Aesthetics. Page 7 states,

There are no locations where the public can view the project area as part of a scenic vista...At the confluence of the Wheatfield and south Forks, the river may be viewed by motorists driving over the Twin Bridge. However, views of the river from the bridges are not considered especially high quality due to the speed at which the cars are traveling...the final reclamation plan will involve revegetation of the site which will eliminate visual impacts.

This is invalid and unsound reasoning because:

- The public can view the project area from the bridge by walking or driving, and driving speeds below 35 mph do not preclude the scenic vista viewing;
- Valley Crossing is a long-established, grandfathered recreational spot (swimming, fishing, hiking, kayaking, dog-walking) used especially by Sea Ranch visitors, either from Hot Spot or local access points.
- The “final reclamation plan” cannot possibly have bearing on esthetic impacts that occur within the permit period.
- Persistent esthetic impacts occur from failure to recharge sufficient gravel, and from channel avulsion (switching position from perennial flow along riparian banks, to cross-bar summer-dry thalweg).

Page 10 – Air quality mitigation measures and incidental significant impacts

Page 10 states that mitigation measures for dust shall include “chemical soil stabilizers or dust suppressants or water all active unpaved vehicle circulation areas daily”. The gravel operator and landowner have applied bittern salts (commercial name “Dust-Off”, hygroscopic and deliquescent potassium and magnesium chloride, sulfate in saturated solution), a by-product of solar salt production in San Francisco Bay, to the Valley Crossing haul road in the past. Bittern is highly toxic to aquatic organisms (fish, invertebrates) in concentrated form, and requires dilution by at least 100:1 for discharge into even naturally brackish or saline estuarine waters (20 ppt or higher) by the State Water Quality Control Board. Channel pools with native fish, including federally listed steelhead, should not be exposed to risk of “first flush” runoff of road bittern into channel pools in fall, before significant flows occur. Bittern applications for dust mitigation may result in significant adverse impacts to steelhead and other native aquatic organisms during fall rains.

Page 10 states that mitigation measures for dust shall include “hydroseed...”. Past seeding with invasive non-native ryegrasses (*Lolium perenne*, *L. multiflorum*) is inappropriate for gravel bars or riparian woodland habitats because they can and do persist and spread, competing with re-establishment of native riparian vegetation. This could be a significant impact at some locations. Only sterile wheat, weed-free mulches or native woodland materials, or native revegetation should be used to vegetatively stabilize dust sources.

Reptiles, amphibians - The Negative Declaration fails to disclose that channel pools within the project area *do in fact* support juvenile and mature northwest pond turtles (*Clemmys marmorata marmorata*; not just their habitats, as stated) and backwater riparian pools (perennial and seasonal ones) generally support populations of foothill yellow-legged frogs (*Rana boylei*), both species of concern because of statewide declines. Frog-bearing pools were affected by side-cast spoil deposition associated with reconstruction and expansion of the riparian haul road to Bar 62 in 2006, and a frog-bearing pool occurs at the wet crossing of the haul road end to the river. Proposed mitigation has been inadequate to protect these habitats and local populations against significant indirect and direct impacts of gravel mining.

The Negative Declaration fails to consider potential impacts to Pacific Giant Salamanders.

Degradation of channel pool habitats due to gravel mining and accessory activities (haul road use, side-cast) may indirectly affect the viability of native amphibian populations by establishing conditions in which non-native bullfrogs (*Rana catesbiana*; predators and competitors of native frogs) have a competitive advantage. Bullfrog detection and control measures should be included in pools affected by gravel mining and accessory operations. Bullfrogs are present on the Gualala River, and their numbers become significant in years of reduced peak winter flows.

Noise from gravel mining or processing operations, particularly at dusk, is likely to interfere with prey detection or predatory detection/avoidance of federally listed northern spotted owls (*Strix occidentalis*) that may occur within the effects area of the project, either individual vagrants or established home ranges. Canopy gaps created by tree canopy removal in riparian forest due to excessive “brushing” (haul road expansion, reconstruction, side-casting) degrade habitat quality for spotted owls in otherwise dark, dense riparian floodplain mixed redwood forest stands, and facilitate habitat for their predators and competitors, such as great horned owls and barred owls. The negative declaration failed to consider or mitigate potentially significant cumulative and indirect impacts to northern spotted owls in either the short-term or long-term.

I believe the Negative Declaration misrepresents the findings of California Department of Fish and Game staff Stacy Martinelli regarding marbled murrelets (*Brachyramphus marmoratus*), or provides outdated and incorrect information. My understanding is that Ms. Martinelli did determine that the riparian forests and channel along the South Fork were indeed part of a dispersal corridor for marbled murrelets that she verified by field surveys within the last few years. PRMD should reinitiate consultation with CDFG to determine (a) whether marbled murrelets do use or have used the river corridor within the project area for dispersal, and (b) whether direct, indirect, or cumulative impacts of gravel mining operations may adversely affect marbled murrelets, including haul road expansion or reconstruction.

p. 13 – Plants. The Negative Declaration relies on unreasonably old and obsolete botanical surveys from 1999 (data prior to 1999), prior to some extreme flooding events that serve as major mechanisms for plant dispersal and colonization. Significant population changes to sensitive plant species should be expected to occur in riparian vegetation within nearly 10 years. The plant

survey report cited does not provide meaningful or scientific support for the Negative Declaration's contemporary environmental baseline.

The negative declaration must consider cumulative effects on plants that are regionally uncommon or rare, or in regional decline, and not just state-listed species, to determine whether potentially significant impacts may occur. Swamp harebell (*Campanula californica*) is not the only plant species within the project area that may suffer significant impacts. A review of the Sonoma County flora indicates that many mycotrophic (fungal-dependent) herbs, orchids, and lily family plants, and important disjunct populations of plant species (plants far outside their main range) are uncommon to rare in Sonoma County and Mendocino County, and may occur in riparian terrace or floodplain forests.

Site-specific, contemporary plant surveys and vegetation surveys are needed to assess potential significant impacts to plants (including current localities of swamp harebell and other state-rare or regionally rare plants) and vegetation, and to develop meaningful mitigation measures to reduce them to less-than-significant levels. These are currently lacking.

p. 14 – Fish

The negative declaration does not adequately assess the indirect effects between channel or bar destabilization (p. 16-17) and habitat or population impacts on steelhead. I incorporate by reference my previous comments on this negative declaration dated August 28, 2007, which described the significant loss of shaded, previously stable steelhead channel habitat adjacent to the failed, overexploited, breached bar (with putative “mitigation” by horseshoe mining, but with insufficient head-of-bar height and flow restriction) at Valley Crossing.

Similarly, the Negative Declaration fails to consider the indirect impact of excessive gravel mining in any given year (intensive short-term sediment deficits caused by imbalance between current-year, site-specific extraction rates and recharge rates) on the potential for channel avulsion (switching channel configuration from thalweg to degraded bar troughs) to result in persistent loss of high-quality steelhead channel habitat. There is no quantification of the potential length of channel habitat at risk of avulsion and consequent habitat degradation. In fact, the discussion of “fish stranding” on p. 14 fails to consider the type of avulsion event (see p. 17) that did in fact happen at Valley Crossing in 2006 and persisted in 2007, where juvenile (young of year) steelhead were present in pools rapidly isolated by warm riffles and disappeared in July 2007. The negative declaration also failed entirely to discuss potential significant cumulative impacts between mining-related channel habitat declines, drought, and ongoing or expanded agricultural and timber diversion of river water (including below-bed flows) on the Wheatfield Fork.

The discussion of “fish stranding” impacts (p. 14) are not supported by the Halligan (2003) assessments or O'Connor (2003) assessments, which in any case do not address contemporary baseline impacts for this CEQA document. The “fish stranding” impacts and mitigation fail to consider impacts of channel avulsion and changes of channel pool conditions associated with threshold changes in bar and channel form or processes, or in interaction with variables such as drought or withdrawal/diversion of hyporhoic (below-bed gravel flows) upstream that may cause drops in pool levels.

The negative declaration fails to provide a contemporary assessment of steelhead habitat conditions and population levels adjacent to and downstream of proposed extraction sites. It also has failed to identify or evaluate recent trends in steelhead populations in stream reaches near mining sites for purposes of cumulative impact assessment. It relies primarily instead on obsolete reports and data from the previous permit period. *No 2006 or 2007 data or technical assessments are cited in the body of the Negative Declaration.*

The Negative Declaration fails to discuss *indirect* impacts of mining sites on stream temperatures (p. 19). The permanent removal of vegetation over gravel flats that occupy mining sites may cause significant heating of subsurface flows that affect stream and pool reaches downstream of mining sites. No temperature data on subsurface gravel flows from upstream or downstream of mining sites were considered to evaluate whether the thermal gaps in riparian corridors may cause significant (threshold for steelhead physiological stress) warming of subsurface flows that affect steelhead-inhabited pools and channels downstream. Mitigation measure BIO-13, which requires “minimal or no net *loss* of riparian vegetation” in the context of fish habitat is *utterly meaningless* in real time, where over 33 acres of riparian vegetation will be prevented from forming or regenerating! The previously permitted conditions have *already eradicated* this resource, and perpetuate its absence. The *long-term cumulative impact on riparian vegetation*, not the *net short-term impact*, is the significant ecological issue.

p. 14 – Hydrocarbon contamination. The Negative declaration fails to disclose past water quality violations associated with the gravel mining operation, including operation and fueling of portable diesel pumps on the dry gravel bed in 2005 across from the processing plant, where water pumping occurs. Fuel spills or leaks from pumps or vehicles (trucks, equipment) may cause local but significant hydrocarbon contamination during the low-flow period between operations and early fall rains.

p. 20, 22 – Riparian vegetation. The discussion of riparian vegetation is not credible, because *all of the proposed mitigation conditions were violated* during the unauthorized “grace period” (post-permit) haul road reconstruction and expansion. See attached letter from Friends of the Gualala River dated October 28, 2006. The county staff person overseeing unauthorized gravel mining and haul road “maintenance” described the unmitigated significant tree removal, debris side-casting over channel bank edges, wetland cut and fill, road expansion, and sowing of invasive non-native grass seed as “very professional” work. The county has allowed violation of all proposed mitigation already, and has proposed no corrective measures for past non-compliance within the “permit renewal” period since the last permit expired. The County has an outstanding riparian impact mitigation debt to repay from the “grace period”, and this must be enforced in a mitigated CEQA document sufficient for past and future significant impacts within the scope of the permit period. The Negative Declaration’s conclusion (p. 22) that only minimal impacts to riparian vegetation would occur is wholly incorrect.

Significant net growth and expansion of riparian vegetation (torrent sedge, alder, willow, blackberry, horsetail) has occurred since 2002 in most reaches of the Gualala River Wheatfield Fork and South Fork except mined sites. These expanded riparian woodland and scrub stands, and torrent sedge-lined low-flow channels, have apparently increased the river’s storage capacity for

sediment (ability to remove sediment from thalweg/low flow channel bed and bank profile, long residence times of deposited, stabilized sediment within perennial/woody vegetation). The significant effect of gravel mining on the rapid acceleration of natural riparian successional processes, evident in most river reaches, is ignored in the context of cumulative impacts.

Mitigation measure BIO-13, which requires “minimal or no net *loss* of riparian vegetation” in the context of fish habitat is *utterly meaningless* in real time, where over 33 acres of riparian vegetation will be prevented from forming or regenerating! The previously permitted conditions have *already eradicated* this resource, and perpetuate its absence. The *long-term cumulative impact on riparian vegetation*, not the *net short-term impact*, is the significant ecological issue.

Note that the negative declaration describes the fragmentation of riparian vegetation by 12 mining sites within a 152 acre permit area as a “minimal effect ...since these areas are already typically devoid, or contain only isolated patches, of riparian vegetation”. This is viciously misleading, because it is exactly the past permitting of these gravel mining sites that maintained them in this condition, and it is precisely the proposed mining authorization that would perpetuate significant degradation of riparian vegetation succession, and preclude natural regeneration of riparian scrub, woodland, and forest.

The negative declaration appears to ignore the fish biologist’s Halligan (2003) recommendation for “delineation and quantification of riparian vegetation ...to the monitoring program....once every three or four years”. Finally, the Negative Declaration fails to quantify significant persistent and ongoing impacts of gravel mining to *regeneration and maturation of riparian woodland within mined bars*. The Negative declaration fails to disclose that these barrens exist only because of ongoing mining activities, and the 12 extensive and erratic gravel barrens of mining sites cause significant habitat fragmentation and thermal gaps in otherwise relatively continuous riparian corridors.

p. 20-21 – Unenforceable and ineffective, vague monitoring. Mitigation measure BIO-17 is worded,

...the applicant shall be responsible for hiring qualified professionals to collect annual monitoring data...[which]...shall be submitted to PRMD and other [unspecified] regulatory agencies”....Upon request by PRMD, the operator shall hire a fluvial geomorphologist to analyze and report on ...changes observed at each cross section.

From a scientific and permit enforcement perspective, this mitigation language is deeply flawed. It identifies “responsibility” (does not require the action itself) for hiring “qualified” professionals to collect *annual* data that are only *optionally* analyzed and reported, at unknown and discretionary frequency, and without reference to professional standards themselves (what makes a professional “qualified”), scientific peer-review for quality control, or disclosure of conflict of interest. What is the point of making an applicant responsible for paying for collecting data that are not subsequently analyzed or reported? What is the point of having qualified professionals collect data if the data are not used to re-evaluate permit condition compliance or mitigation efficacy? The technical details of methods on page 21 are irrelevant if the basic relationship between sampling design, data collection, data analysis, data interpretation, scientific peer review, quality control/assurance, and regulatory review are not make specific and explicit. All regulatory

agencies monitoring requirements should be explicit and coordinated like the Humboldt County gravel mining Letter of Permission (explicit multi-agency review process is included in permit conditions).

The potential abuse of mitigation BIO-17 is obvious. Any inconvenient data (say, for example, a drought year fails to recharge a mined-out bar) can be omitted from analysis and reporting at the discretion of county staff, perhaps under pressure from the landowner. This has in fact already occurred during the “grace period” of permit expiration and continued gravel mining. The fact that the Negative Declaration fails to cite any current year or 2006 data, and cites only reports from 1999 to 2003 highlights this fatal flaw. This fatal flaw makes all mitigation measures for significant impacts useless if they depend on adaptive management and monitoring.

p. 22. Invasive Species. The Negative Declaration fails to identify past or ongoing invasion of pertinent invasive species within and around established gravel mining areas, particularly in riparian zones, such as jubata grass (*Cortaderia jubata*), Himalayan blackberry (*Rubus armeniacus*; syn. *R. discolor*). In September, 2007, I detected a pioneer plant of Mediterranean stinkweed, *Dittrichia graveolens*, in the dry gravel bed of the Wheatfield Fork upstream mining site (Bar 62). This is the first report in western Sonoma County, unfortunately. This species has only recently established in Sonoma County, and gravel mining sites are ideal habitat for extremely rapid proliferation and effective dispersal. Its seed sources are now established along Highway 101 to at least Windsor, and it may be readily dispersed by vehicles visiting aggregate transfer sites, such as Port Sonoma, where it is a severe infestation.

The assessment and mitigation for invasive species proposed (Mitigation BIO-18) is not consistent with basic standards and protocols for invasive plant species management. The agriculture commission is not the appropriate scientific authority for invasive species risks and mitigation in riparian habitats of western Sonoma County. The mitigation is vague and procedural, and insufficient to reduce potential significant impacts of gravel mining on invasive species to minimal levels.

p. 23 – Wetlands. The Negative Declaration is flatly incorrect in its statement that the mining areas do not include wetlands subject to Corps of Engineers jurisdiction, and it is profoundly misleading to use only Corps wetland jurisdictional (legal) criteria to assess potential impacts to actual wetland habitat. The Corps regulatory process is specific to earthen fill authorization, not wetland management or regulation in general. Actual marsh (*bona fide* wetlands) occurs along and within channel beds (torrent sedge marsh, *Carex nudata*, in entisols or non-soil sediment), as well as vegetated wetlands patches composed of cattail, rush, other sedges, broadleaf marsh plants, horsetails, willow thickets, all with wetland hydrology. True wetlands were indeed bladed and buried by the 2006 haul road grading activities, including side-casting. These impacts were unreported and unmitigated by PRMD. All impacts, including truck and equipment access impacts, to all wetlands (not just Section 404 Clean Water Act wetlands) within the project area must be assessed.

p. 32 – Groundwater (below bed river water) impacts. The assessment of water withdrawal impacts of gravel mining is basically flawed. The significance of potential impacts inheres in the effect on below-bed (hyporhoic) water level depression and flow rates caused by local well or surface pumping during the low-flow summer and fall conditions, which are naturally variable

among years. The Negative Declaration does not make a coherent or credible argument that “about 171,430 gallons...for 40,000 cubic yards of washed rock” would not have a significant adverse impact on pool or channel levels in the effects area of water withdrawal during summer-fall low flow conditions. The vague and unenforceable monitoring prescription on p. 32 refer to no critical water level thresholds, reporting procedures, review procedures, responsibilities, substantive actions, or authorities of PRMD staff or delegated public agencies. It is thus inadequate to prevent significant potential impacts of water withdrawal on steelhead habitat and channel pools. Average gravel extraction rates and water use rates are not sufficient to predict likely impacts during years of below-average rainfall.

3.0. Conclusions and recommendations. Based on the detailed critical review of the Negative Declaration, and my own observations and professional judgment, I conclude that the subject permit action may cause potential significant cumulative, indirect, and direct impacts that are not reduced to less-than-significant levels by proposed mitigation. The County must therefore either (a) prepare an EIR for the project, or (b) correct substantial omissions and deficiencies in impact assessment, mitigation, and alternatives identified by comments, and recirculate an Initial Study and Negative Declaration with appropriate modifications to ensure that impacts will be less than significant.

In addition, the County should focus its efforts on bringing assessment of baseline conditions up to date, and consistent with the whole period of the permit action (including after-the-fact authorization) and all state and federal permits. The County should strive to ensure adequate, objective interdisciplinary expert review of assessments and mitigation by independent academic and government experts, and not rely unduly on scientific consultants paid to advocate the interests of their private clients/applicants.

Regulation of gravel mining on the Gualala River must not proceed in a piecemeal, agency-by-agency fashion. It should be coordinated to protect the overall public interest, and not merely to expedite permit issuance based on local economic demand for relatively inexpensive local aggregate supply. To regain public confidence, the County must correct its history of undue deference to local Gualala River gravel mining interests, indicated by its record of agency staff actually expediting unauthorized gravel mining. Public confidence would be merited by rigorous scientific review and mitigation of impacts, rigorous and enforceable permit conditions, vigilant and rational monitoring, and prompt implementation of corrective measures or adaptive management.

Respectfully submitted,



Peter R. Baye, Ph.D.

Copies furnished:

Peter Straub, Regulatory Branch, U.S. Army Corps of Engineers, San Francisco District
Richard Butler, National Marine Fisheries Service, Santa Rosa

Regional Water Quality Control Board, Santa Rosa
Prof. Matt Kondolf, University of California, Berkeley
Stuart Siegel, Ph.D., Wetlands and Water Resources, San Rafael
Friends of the Gualala River, Gualala
Independent Coast Observer, Gualala
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ATTACHMENT:

2006 Friends of The Gualala River compliance request to state and federal regulatory agencies regarding unauthorized impacts of gravel mining haul road expansion and reconstruction.

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October 26, 2006

SUBJECT: Request for compliance inspection, Gualala River Wheatfield Fork above Valley Crossing, Annapolis Road, Sonoma County; impacts of unauthorized fill, excavation, and vegetation removal from haul road expansion in forested riparian floodplain, including wetlands; August-October, 2006.

Friends of the Gualala River (FoGR) is requesting that you review the attached documentation regarding the impacts and expansion of a reconstructed haul road through a sensitive riparian forest, (including floodplain forest and forested wetlands), where unconsolidated fill and debris have been deposited up to and over the banks of the Wheatfield Fork of the Gualala River. We further request that you conduct an on-site compliance inspection in coordination with federal and state regulatory agencies with jurisdiction over some or all of the activities or official CEQA responsibilities. Essential background information, which we believe may be sufficient for you to determine that a compliance inspection is warranted, is provided below.

FoGR is a 501(c)(3) nonprofit organization dedicated to the protection and recovery of the Gualala River and its watershed). FoGR and other organizations have worked successfully in recent years to protect the Gualala River's riparian forests against impermissible impacts of timber harvest plans within the river's floodplain and riparian zones. We contacted Sonoma County Permits and Resource Management Agency on September 1, 2006 (cc to staff of your agency) with a request for a compliance inspection of the riparian road expansion and impacts. We believe their response (e-mail from Mike Sotak, PRMD, dated September 12; see Attachment D) of was woefully incomplete, cursory, biased, dismissive, and unacceptable. We therefore now directly request compliance inspection of the site by your agency.

The haul road expansion is located within forested floodplains along the north bank of the Wheatfield Fork, Gualala River, upstream of the Valley Crossing bridge on Annapolis Road (above the confluence of Wheatfield and South Forks), Sonoma County. The road expansion and associated grading and vegetation removal occurred in late August and September 2006, apparently without valid authorization from Sonoma County Permit and Resource Management Department, U.S. Army Corps of Engineers, Regional Water Quality Control Board, or NOAA Fisheries. As shown in Attachments A, B, and C, the road expansion consisted of grading, excavation, fill, hillslope devegetation and soil disturbance, and major vegetation removal far beyond the pre-existing footprint of the original haul road. Vegetation removal included felling of mature conifers, alders, and excavation/removal of streambank ground layer, shrub layer, and overstory canopy. Grading activities included both temporary and permanent stockpiling of graded sediment, construction of turn-outs and double-wide road sections, and discharge of unconsolidated sediment and debris over the river bank (see Attachments A, B, C).

The road expansion in August 2006 was performed in association with gravel mining activities on the Wheatfield Fork (Bar 62). Prior to implementation, the road expansion was casually represented by the Sonoma County Permit and Resource Agency (PRMD) as mere routine, maintenance consisting of "brushing and clearing the road" (e-mail from Mike Sotak, August 8, 2006; Attachment D). In the previous episode of gravel mining at the Wheatfield Fork site, the single haul road through riparian forest was used without expansion of the footprint or major vegetation removal or grading. FoGR was gravely disappointed that in 2006 the "brushing and clearing", were exploited as an opportunity to conduct otherwise impermissible high-impact activities in sensitive forested floodplain and riparian habitat prior to permit applications and commencement of CEQA (and thus prior to determination of the CEQA baseline for impacts).

It had been FoGR's understanding that the County Use permit for gravel mining on the Gualala River expired in May 2005, and a permit would be required for 2006 operations. This understanding was based on a written statement from PRMD that "*It is anticipated that the grace period will be for a one year duration and that the CEQA analysis and further approvals of the County must be in place for mining during the 2006 mining season*" (letter from David Schiltgen to Peter Baye, September 9, 2006; Attachment D). The PRMD letter also confirmed that no Corps permit or NOAA Section 7 consultation had been completed, and no dates for their issuance were forecast. We are certain that there has been no interagency CEQA or NEPA review, planning, or enforceable mitigation attached to the 2006 riparian road expansion or current year gravel mining. The occurrence of the floodplain forest road expansion and riparian habitat impacts during a *second* year of unauthorized, unregulated gravel mining is due to a lack of adequate environmental review and approval. This is unacceptable, and must be corrected.

FoGR is submitting for your review labeled photographs of the immediate post-construction condition of the riparian road, and the post-mining condition of the road, in Attachments A, B and C. The dates of the haul road and bank photographs are August 31, 2006, and October 5, 2006. As shown, we are concerned that unmitigated, unregulated expansion of the original narrow haul road footprint has significantly encroached into riparian forest and caused significant (and avoidable) impacts to riparian habitats and potential significant impacts to adjacent channel pools. We believe these attachments provide sufficient preliminary evidence to justify a timely compliance inspection to determine if violations of applicable regulations exist, and whether corrective actions are needed.

The following is our preliminary assessment of the impacts of riparian road expansion, as shown in Attachments A-C:

- The road expansion grading removed mature alder and redwood canopy, creating large canopy gaps.
- Bank clearing described by PRMD as mere “brushing” in fact included felling of redwoods, douglas fir, and mature alder within the riparian zone (many over a foot in diameter, and some up to the edge of the channel bank in some locations). Trees and shrubs were removed far beyond the road footprint required for truck passage.
- The nominal “brushing” also included bank clearing and destabilization (denuded vegetation and disturbed soils) of previously forested steep slopes with dense ground layer vegetation above the floodplain/terrace. These previously stable steep (>70%) slopes are now nearly bare and subject to rill, gully, and sheet erosion. Sparse grass seeding on these steep slopes is utterly futile, and may interfere with recovery of the native ground-stabilizing forest vegetation layer.
- Ranch and forest road treatments designed to drain upland hillslope roads were applied inappropriately to the floodplain and wetland haul road: new trenching was placed to drain the road within seasonally flooded wetland backwaters, some of which were fed by perennial seeps. This is reasonably likely to have the effect of draining seasonal wetlands within the riparian zone, which are important amphibian and reptile habitat.
- In addition, rocky fill was placed over seasonally submerged segments of the the silt/clay floodplain road. Fill was spread beyond the original road, expanding over intact riparian ground layer vegetation.
- Stockpiling of sidecast spoils and construction of turnouts (double road sections) beyond the original road edge has resulted in some permanent and some temporary removal of dense ground-layer and shrub layer vegetation in riparian woodland (California blackberry, horsetail, willow) and floodplain redwood forest beyond the footprint of the original single-track road.
- Side-cast spoils of graded road sediments (mostly silts) were discharged as unconsolidated slopes directly above perennial channel pools containing fish and amphibians. These loose fills are prone to erode or launch into pools during fall rains. See Attachments A, B.

These road expansion and reconstruction activities *do not correspond with any reasonable interpretation of “maintenance” limited to routine, periodic upkeep of the original design or*

established condition of the road. The extraordinary vegetation clearing (tree removal beyond the road) and construction of trenches, drains, turnouts, and raised solid roadbeds in some road segments is clearly expansion of a previously serviceable road. There was evidently no effort to minimize impacts to the riparian forest canopy or ground layer vegetation prior to the initiation of CEQA or permit review.

The apparent nominal “mitigations” for the impacts of road construction (Attachment C) were mostly superficial placement of straw over unconsolidated, unvegetated soils, often within the active floodplain. Straw mulch is a minor erosion treatment for upland road banks, and offers no stabilization or mitigation value for roads and banks within an active floodplain during high-energy flood flows. The road drainage “mitigations” (rocked drainage ditches, trenches) are themselves likely to have direct impacts to seasonally flooded riparian wetlands, which they now drain along with the road. The misapplication of these conventional *upland* rural road treatments indicates the egregiously low level of planning, supervision, and understanding of floodplain impacts and environments in the absence of regulation and environmental review.

We were aware that PRMD proposed to allow renewed gravel mining on the river after the expiration of the fundamental county authorizations and CEQA (Attachment D). In reliance on PRMD assurances that adequate, CEQA-equivalent supervision and mitigation would govern 2006 gravel mining (Attachment C), FoGR did not actively oppose another extension of the discretionary “grace period” by PRMD in summer 2006 to allow limited gravel mining. FoGR does not oppose, and has not opposed, gravel mining in itself – provided that it is conducted in an environmentally benign and well-regulated manner. We worked in good faith with Sonoma County PRMD to ensure that the substantive equivalent environmental protections of CEQA would govern this year’s gravel mining without the full permit and CEQA process (Attachment D). The excessive, unjustified, and unprecedented road reconstruction in the sensitive riparian floodplain forest was entirely unexpected and betrayed our trust in PRMD.

The failure of environmental regulation in the riparian zone has also renewed FoGR’s concerns about the (unauthorized) gravel mining on the Gualala River itself. We expected that diligent monitoring of ongoing gravel mining would inform the County’s CEQA process for gravel mining permits, but we now have reason to doubt that promise of substantial scientific data collection and public review (letter from D. Schiltgen, September 9, 2005; Attachment D) will be provided. FoGR observed this year that 2005 pit excavation of the degrading terminal bar at the mouth of the South Fork confluence with the Wheatfield Fork (Valley Crossing) appears to have resulted in a major shift of the thalweg/perennial low-flow channel configuration from shaded alder riparian forest (previously stable position) to the breached bar, where it is now fully exposed to sun and flows below bed in summer. Bar 62 and the mining site on the South Fork near Buckeye Creek appear to create a potential for channel capture and switching, or major potential entrapment areas for salmonids (steelhead). Please refer to Attachment E for preliminary evidence of these past and potential future events. We now believe the 2006 gravel mining itself may also warrant specific regulatory review and compliance inspection.

The standard programmatic mitigation measures developed for the Corps Humboldt gravel mining Letter of Permission (LOP 2004-1) to address concerns raised by a draft jeopardy opinion (Section 7, Endangered Species Act) by NOAA Fisheries appear not to be applied to Gualala River gravel mining. Certainly the LOP mitigation condition # 6, “Vegetation and Wetlands” was

grossly violated here. This provision requires that “all riparian woody vegetation and wetlands must be avoided to the maximum extent possible...” and if disturbed, “must be mitigated” consistent with “required mitigation” procedures. We believe that the same mitigation should apply to the Gualala River, based on the original (pre-2006) baseline conditions of the riparian zone.

We believe that the documented excessive and unjustified impacts to the riparian zone and floodplain forest would have been prevented by responsible planning (pre-construction baseline surveys of road condition and dimensions, and assessment/mapping of vegetation and habitat along the road alignment) and routine CEQA impact minimization and avoidance measures (mitigation) applicable to wetlands, riparian zones, and floodplains. These would have resulted from timely regulation of the Gualala gravel mining operations by all agencies with jurisdiction.

Some of the damage done without permits may be mitigated only by time and freedom from additional artificial impacts. But some impacts may be lessened by additional mitigation. We again ask you to rigorously review the documented and field evidence in a timely manner, and consider them also in relation to pending CEQA and proper regulation of gravel mining.

Thank you very much for your attention. Please contact me at baye@earthlink.net or (415) 310-5109 if you have any questions. Please also notify me of any final decisions or actions your agency takes concerning this matter.



Sincerely,

Peter R. Baye, Ph.D
Vice President, Friends of the Gualala River

Attachments (separate e-mail transmittal) [*in original; not included here, available on request*]

ATTACHMENT A – Riparian road reconstruction impacts: floodplain (August 30, 2006)

ATTACHMENT B – Riparian road reconstruction impacts: forested slope (August 30, 2006)

ATTACHMENT C – Post-mining road and riparian impacts (October 5, 2006)

ATTACHMENT D – FoGR-Sonoma Co PRMD correspondence, Gualala River, 2005-2006

ATTACHMENT E – 2005-2006 Gravel mining and impacts, Valley Crossing, South Fork, Wheatfield Fork Gualala River