California Regional Water Quality Control Board
North Coast Region

Cleanup and Abatement Order
No. R1-2009-0039

For

Mr. Nolan Phillips and Mr. Patrick Shannon
APN # 522-174-09, 522-174-05, 522-175-03, 522-175-07
Willow Creek Area

Humboldt County

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board), finds that:

1. Mr. Nolan Phillips and Mr. Patrick Shannon (hereinafter Discharger) own land adjacent to Highway 299, two miles west of Willow Creek, identified as Humboldt County Assessor's Parcel Numbers 522-174-09, 522-174-05, 522-175-03, 522-175-07 (hereinafter Site). The Discharger has conducted unauthorized cut and fill activities within the Katherine Creek watershed, a tributary to Willow Creek; which are waters of the State. The Discharger's activities at the Site have resulted in significant discharges and continued threatened discharges of sediment to downstream waters of the State, including both Katherine and Willow Creeks.

2. On February 13, 2009, Regional Water Board staff (Staff) received a complaint call from Caltrans personnel reporting that recent rains had resulted in significant deposition of sediments into both Katherine Creek and portions of Willow Creek. The sediment discharges allegedly resulted from heavy equipment activities that had disturbed significant volumes of soil in an upland area of the Site.

3. On February 19, 2009, staff from the Regional Water Board, Caltrans, and the Department of Fish and Game, and the Discharger's representative inspected the Site. Staff observed the following:

   <u>In and around Katherine Creek</u>

   a) Evidence of a recent debris flow that had inundated several hundred linear feet of Katherine Creek with sediment. Sediment depths across this linear debris flow ranged from several inches to up to one foot deep at the wetted perimeter of Katherine Creek, to approximately 4-6 feet deep at a point approximately 50-feet horizontal distance from the creek. (Photo 1)

   b) Hay bales check dams that Caltrans had reportedly recently installed within Katherine Creek, just upgradient of a Caltrans 48" culvert that carries the creek under Highway 299. The hay bales check dams were necessary in order to protect the culvert from being plugged by the

sediment and downed trees that might potentially be delivered from the Site. (Photo 2)

c) A series of debris flows, static at the time of inspection, had occurred along slopes as steep as 80%. Staff observed scores of uprooted trees stuck within the static sediment plumes, poised to continue their downward trek with the next significant rain event. (Photo 3)

On the hillside above Katherine Creek

d) Evidence of recent roadwork activities, including deep cuts into the hillside and scores of uprooted, side cast mature trees.

e) Thousands of yards of cut soil side cast over steep slopes. Recent heavy rains mobilized this soil, delivering a portion into Katherine Creek; the remaining soil, hung up on long steep hill slopes, is susceptible to delivery during future rainfall events. Staff noted numerous trees that had been carried downgradient within these sediment flows. (Photo 4)

f) Side cast soils on steep slopes wedged up against crib walls built of root wads, whole trees and slash, braced by standing trees located further down slope. (Photo 5)

g) An approximately 2-acre area had been recently cleared and graded. Soils had been pushed downhill by heavy equipment creating a flattened area with outsloped fill prisms of unconsolidated soil (upwards of 30 feet thick at toe). Staff observed root wads and large branches mixed in with the graded soils. (Photo 6)

4. Discharges of sediment during February 11 and 13 rain events caused sediment plumes to enter Katherine Creek and Willow Creek (Photos 7 and 8). These plumes were significant enough to be seen at the confluence of Willow Creek and the Trinity River, approximately 2 miles downstream from the source of the sediment discharges (Photos 9 and 10).

5. Department of Fish and Game reported significant deposition of sediment on rocks within Willow Creek at a distance of approximately one mile downstream from its confluence with Katherine Creek. The deposition of this sediment constitutes an apparent violation of Fish & Game Code Section 5650 (water pollution). In addition, the substantial alteration of the bed, bank or channel as evidenced along Katherine Creek constitutes an apparent violation of Fish & Game Code Section 1602. (Photos 1, 11 and 12)

6. The Willow Creek Community Services District reported that turbidity in its raw water intake (located downstream of the site) was 124 NTUs on February 11, the highest turbidity level measured by the district in the last 42 years. Typical turbidity readings for the CSD's raw water are in the range of 0.5 NTUs. The water district was forced to backwash its filters as a result of this elevated turbidity.

7. On February 16, 2009 Humboldt County issued a Stop Work Order for all grading activities at the Site, with the exception of grading activities necessary to perform immediate erosion control work to stem the flow of sediments into Katherine Creek.

8. At the close of the inspection on February 19, 2009, Staff advised the Discharger's representative that immediate steps must be taken to arrest onsite erosion. Staff further described immediate erosion and sediment control practices that might be implemented, and staff discussed the need for a long term remediation plan. The representative was remorseful for the damage caused by the grading work and agreed to immediately contract with a local restoration consultant. Implementation of emergency erosion controls was performed by Pacific Watershed Associates the following day.

9. Katherine Creek and Willow Creek are tributary to the Trinity River, whose beneficial uses are designated in the Water Quality Control Plan for the North Coast Region (Basin Plan), and include:

   a. Municipal and domestic supply
   b. Agricultural supply
   c. Industrial service supply
   d. Groundwater recharge
   e. Freshwater replenishment
   f. Navigation
   g. Water contact recreation
   h. Non-contact water recreation
   i. Commercial and sport fishing
   j. Cold freshwater habitat
   k. Rare, threatened, or endangered species (RARE)
   l. Wildlife habitat
   m. Migration of aquatic organisms
   n. Spawning, reproduction, and/or early development
   o. Aquaculture

   Beneficial uses of any specifically identified water body generally apply to all its tributaries.

10. The Trinity River and its tributaries are listed on the Clean Water Act Section 303(d) list for a number of impairments including sediment/siltation. The Basin Plan contains specific standards and provisions for maintaining high quality waters of the state that provide protection to the beneficial uses listed above.

11. The Basin Plan's Action Plan for Logging, Construction and Associated Activities (Action Plan) includes two prohibitions:

    • Prohibition 1 - "*The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated*

activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited."

- Prohibition 2 - "*The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited."*

12. The Action Plan states: "where investigations indicate that the beneficial uses of water may be adversely affected by waste discharges, the staff shall require the submission of Reports of Waste Discharge."

13. Section 3 of the Basin Plan contains water quality objectives that specify limitations on certain water quality parameters not to be exceeded as a result of waste discharges. The water quality objectives (pages 3-2.00 and 3-3.00) that are considered of particular importance in protecting the beneficial uses from unreasonable effects due to discharges from logging, construction, or associated activities, such as the Discharger's activities, include the following:

    - Color: Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.

    - Suspended Material: Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

    - Settleable Material: Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

    - Sediment: The suspended sediment load and suspended discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

    - Turbidity: Turbidity shall not be increased more than 20 percent above naturally occurring back ground levels. Allowable zones within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

14. As described above, the Discharger caused sediment to discharge into Katherine Creek and Willow Creek and placed sediment where it could enter these creeks, in quantities deleterious to fish, wildlife and other beneficial uses, violating both Prohibitions 1 and 2 in the Action Plan, as described in Paragraph 11, above.

15. In addition to violating Prohibitions 1 and 2, the discharges from the cut and fill activities to waters of the State, and to areas where additional sediment may enter the waters of the State, have created, or threaten to create, a condition of pollution. Water Code Section 13050(l) defines "pollution" as an alteration of

the quality of the waters of the State by waste to a degree that unreasonably affects the waters for beneficial uses.

16. The beneficial uses of Katherine and Willow Creeks have been unreasonably affected by the discharge of the sediments. This includes documented impacts to the town of Willow Creek's municipal water supply, impacts to spawning and rearing habitat in Willow Creek, and the threat of continued sediment discharges for the remainder of the rain season. The unauthorized cut and fill activities at the Site are therefore subject to cleanup and abatement under California Water Code section 13304.

17. Water Code section 13304, subdivision (a) provides: "Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into waters of the state and creates, or threatens to create a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts."

18. Water Code section 13267, subdivision (a) provides that the Regional Water Board may investigate the quality of any waters of the state within its region in connection with any action relating to the Basin Plan. Water Code section 13267, subdivision (b) provides that the Regional Water Board, in conducting an investigation, may require a discharger to furnish, under penalty of perjury, technical or monitoring program reports. A restoration workplan required by this Order, pursuant to Water Code section 13267, is necessary to ensure that the prior harm and future threat to water quality created by activities on the Site, which resulted in the discharges described above, are properly assessed, abated and controlled.

19. This is an enforcement action taken by a regulatory agency for the protection of the environment and is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, section 21000 *et seq*.), in accordance with California Code of Regulations, title 14, sections 15308 and 15321.

20. Failure to comply with the terms of this Order may subject the Discharger to an enforcement action under the Water Code, including administrative civil liabilities under Water Code section 13385, in an amount not to exceed the sum of ten thousand dollars ($10,000) per day and ten dollars ($10) per gallon of waste discharged in excess of 1,000 gallons.

21. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and title 23, California Code of Regulations, section 2050-2068. The State Water Board must receive the

petition within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Executive Officer to reconsider this Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. Additionally, if the Discharger chooses to request reconsideration of this Order or file a petition with the State Water Board, the Discharger is hereby advised that it must comply with the Order while its request for reconsideration and/or petition is being considered.

THEREFORE, IT IS HEREBY ORDERED that, pursuant to Water Code section 13304 and 13267, the Discharger shall provide the following information and perform the following cleanup and abatement actions:

1. Cease the discharge of earthen materials, soil, and sediment to waters of the State, including Katherine and Willow Creeks, and clean up and abate, in accordance with requirement numbers 2 and 3 below, the earthen materials, soil, and sediment placed adjacent to Katherine Creek.

2. Implement the April 2, 2009 Pacific Watershed Associates short-term emergency erosion control workplan, received and subsequently approved by the Regional Water Board, before May 15, 2009 that includes the following:

    a. Proposed measures now taken and proposed to be taken in the short-term to prevent any further discharge of sediments to waters of the state. Measures to be considered include the rerouting of stormwater runoff away from fill prisms, creating a barrier between Katherine Creek and the sediment presently threatened to discharge, and providing for groundcover on all exposed soils.

    b. A list, description, and plan/map showing all erosion and sediment transport control best management practices that are now being implemented on the Site to prevent further sediment discharges to Katherine Creek.

3. Submit a long-term workplan to the Regional Water Board, for Executive Officer concurrence, on or before May 30, 2009, that includes the following:

    a. A restoration plan that describes and shows in detail how the Discharger proposes to restore all graded areas at the Site. The plan shall contain an engineering and biological design for any hydrological restoration components, a time schedule for restoration activities, criteria to judge the success of the restoration project, and a monitoring proposal to evaluate whether the restoration is successful. The restoration plan must be prepared by a professional experienced in rural road restoration and erosion/sediment control and must be approved by the Executive Officer.

b. A description of the Discharger's activities at the Site, including the purpose of the cut and fill activities, a chronology of actions taken, future plans for the property, and how Katherine and Willow Creeks will be protected from subsequent sediment discharges.

4. Following Executive Officer written concurrence, the Discharger shall implement the long term workplan. All work to remediate site grading activities and to restore all affected areas at the Site shall be completed, with the exception of continuing monitoring requirements, before any further construction activities commence. All restoration work shall be completed prior to the onset of the fall 2009 rainy season.

5. If the Discharger is unable to perform any activity or to submit any documentation in compliance with the deadlines in this Order, the Discharger may submit a written request to the Executive Officer for an extension of the time schedule. The written extension request shall explain why the delay is beyond the reasonable control of the Discharger and must be received by the Regional Water Board no less than 15 calendar days prior to the respective deadline. An extension may be granted by the Executive Officer, for good cause, in which case this Order will be accordingly revised.

6. This Order in no way limits the authority of this Regional Water Board to institute additional enforcement actions or to require additional investigation and cleanup at the Site consistent with the California Water Code. This Order may be revised by the Executive Officer as additional information becomes available.

Ordered by

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Catherine Kuhlman
Executive Officer

April 20, 2009

Photo 1: February 19, 2009 Sediment mass impacting Katherine Creek

Photo 2: February 19, 2009 Caltrans culvert crossing under Highway 299 –Hay bale check dams installed in effort to trap sediments

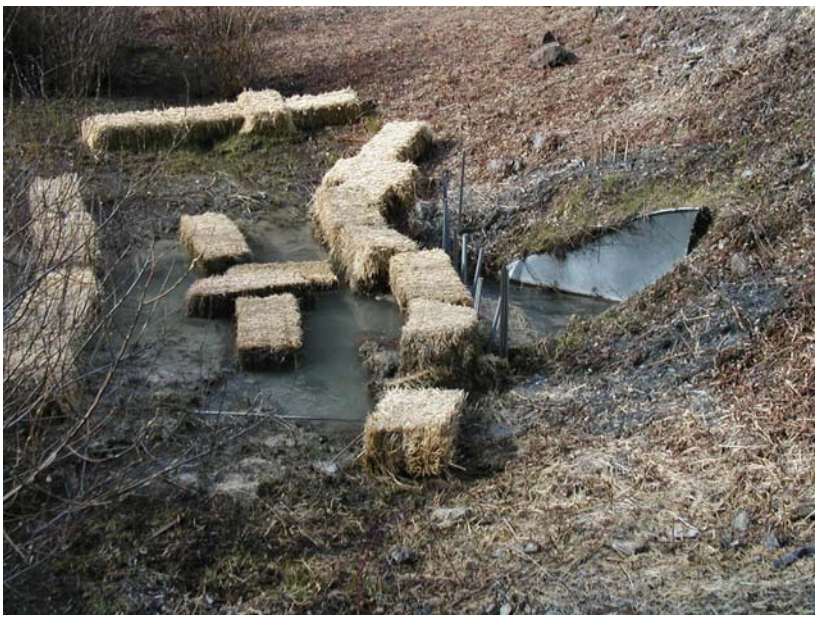

Photo 3 February 19, 2009 Evidence of debris flows - looking up towards sediment sources

Photo 4: February 19, 2009 Side casting of cut slope materials

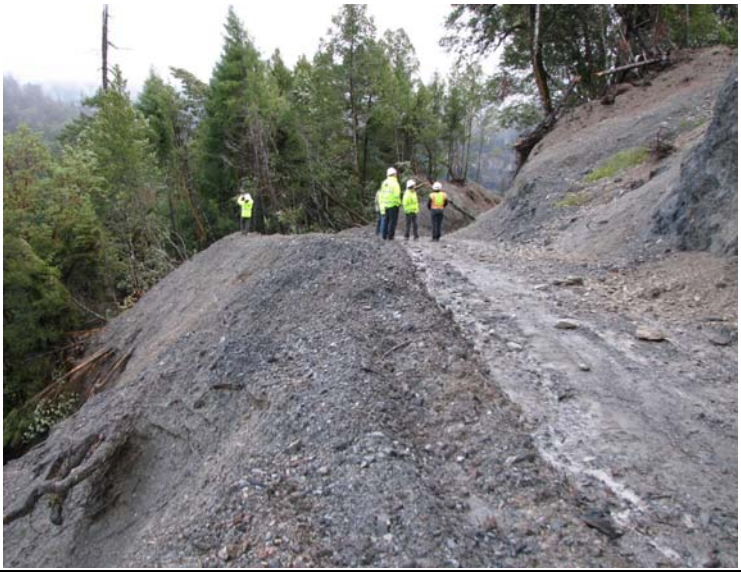

Photo 5: February 19, 2009 Soils pushed up against root wads and uprooted trees

Photo 6: February 19, 2009 2 acre graded area revealing unconsolidated soil

Photo 7: February 11, 2009 Sediment laden runoff entering Katherine Creek

Photo 8: February 11, 2009 Katherine Creek

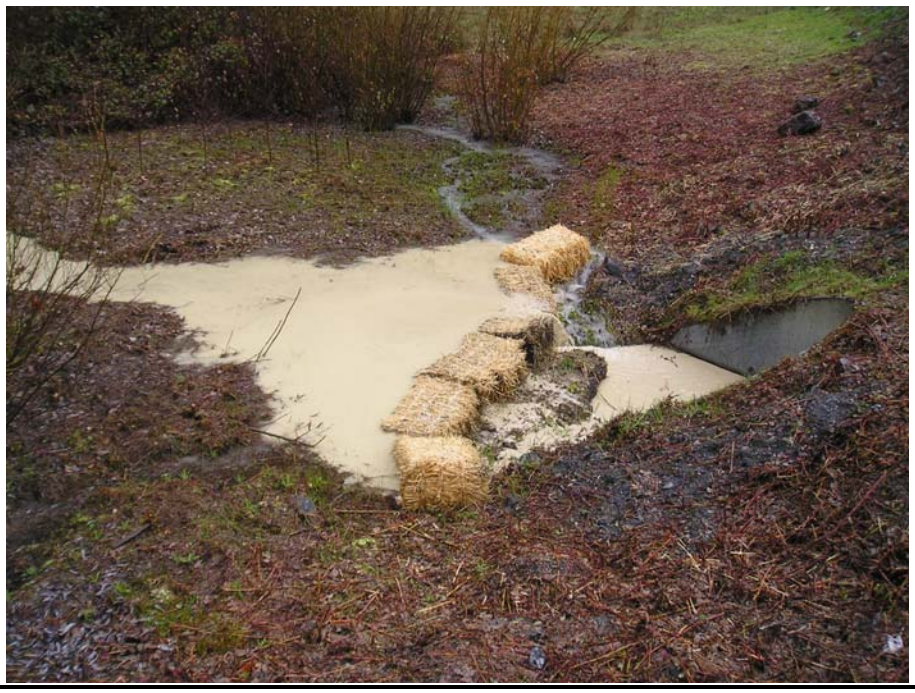

Photo 9 February 11, 2009
Willow Creek downgradient from Katherine Creek confluence

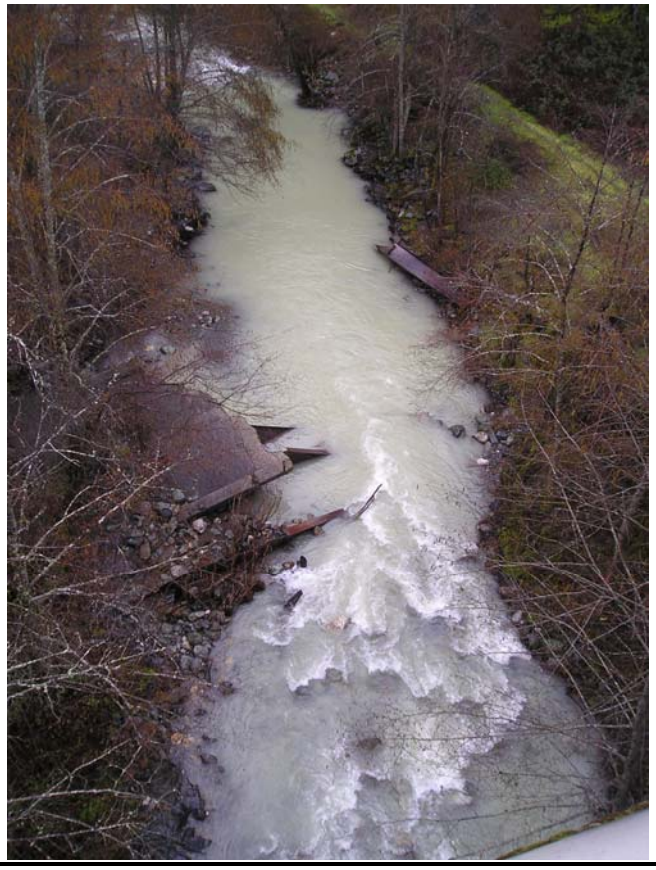

Photo 10 February 11, 2009 Willow Creek confluence with Trinity River (Willow Creek water treatment plant at lower left)

Photo 11 and 12, February 17, 2009, Sediment deposition onto rocks within bed of Willow Creek