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GSA Schedule 899 Contract #GS-10F-0244V



January 13, 2016

Kason Grady
Compliance Assurance
North Coast Regional Water Quality Control Board
5550 Skylane Blvd Suite A
Santa Rosa, CA 95403-1072

Re: Request for Proposals for Third Party Compliance Certification, Cannabis Cultivation Waste Discharge Regulatory Program, Order No. 2015-0023

Dear Mr. Grady:

Pacific Watershed Associates Inc. (PWA) is pleased to submit the following proposal in response to the North Coast Regional Water Quality Control Board's (NCRWQCB) RFP for development of a Third Party Certification Program under the recently adopted Cannabis Cultivation Waste Discharge Regulatory Program. PWA provides unparalleled expertise with respect to protecting and restoring water quality and aquatic habitat with over 25 years of experience working in northern California watersheds. PWA has a strong business and environmental track record and excellent working relationship with the NCRWQCB and other regulatory agencies with responsibility for resource protection.

We appreciated having the recent opportunity to submit comments on the draft waiver of waste discharge in June of 2015, drawing from our broad experience and interest in assisting the NCRWQCB meet its objectives with respect to water quality protection (see Appendix A). Many of the comments we provided on the draft Order have now been incorporated into the final Order. Additionally, several references to our recently-revised Handbook for Forest, Ranch and Rural Roads (2015) have been included in the BMP-guidance presented in Appendix B of the adopted Order.

Should you have any questions about our submittal, please contact either myself or Dr. Bill Weaver at (707) 839-5130.

Sincerely,
PACIFIC WATERSHED ASSOCIATES INC.

Kathy Moley, Environmental Division Manager
kathym@pacificwatershed.com

**Third Party Certification Proposal: Cannabis Cultivation
Waste Discharge Regulatory Program (Order No. R1-2015-
0023), North Coast Regional Water Quality Control Board**

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1. PROGRAM PURPOSE

Pacific Watershed Associates (PWA) has the administrative capacity and broad-based technical proficiency to perform the duties of a Third Party Certifier for the North Coast Regional Water Quality Control Board (NCRWQCB) Order No. 2015-0023 Waiver of Waste Discharge and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects (Order). Past performance by PWA has demonstrated trusted working relationships to serve as a functional liaison between rural landowners and the NCRWQCB. The following is a list of the specific functions listed in Order Finding 21 that PWA proposes to fulfill, including a description of procedures and processes that will be used implement the proposed functions.

Discharger Tracking System - PWA will develop a discharger tracking system (DTS) through the use of commercially available (e.g. Microsoft Access/Excel), that enables the creation and tracking of each unique discharger, in the context of the watershed. Each discharger choosing to enroll through PWA’s proposed third party compliance program will be given a unique alphanumeric identification code that identifies the Hydrologic Unit Code (HUC) level 12 watershed in which the discharger’s cultivation site(s) is/are located. Additional information to be captured will be the names, property location, and parcel number associated with each cultivation site.

PWA will establish the DTS such that enrolled dischargers who have submitted Notice of Intent (NOI) and paid associated fees will have their unique and secure discharger ID (including HUC-12 watershed location) transmitted to the NCRWQCB through the California Integrated Water Quality System (CIWQS). Furthermore, PWA will maintain a record within the database that will allow the NCRWQCB to audit our Third Party Certifier program with respect to accounting and our cultivator client records.

PWA's DTS will capture the date of initial enrollment, status of administrative fees collected/received from each discharger, and status of NOIs and Annual Reports to the CIWQS and tracking of monitoring and reporting. Additionally, the DTS will allow PWA to alert dischargers in advance of their annual renewal date, as a reminder to maintain coverage as an enrolled discharger through our 3rd Party compliance program. In the event that a discharger previously enrolled through PWA's DTS fails to submit annual compliance fees required in accordance with the enrollee's tier status, the DTS will flag the discharger as no longer being enrolled with PWA in our Third Party Certifier program. Efforts will be made to re-enroll the discharger through PWA's program; however, dischargers who remain delinquent 30 days following March 31 will be considered unenrolled from PWA's 3rd Party program. Similarly, in the case where dischargers may remain enrolled in our program by virtue of paying annual fees but who fail to maintain compliance with the prescribed BMP implementation schedule associated with Tier-2 status dischargers' required Water Resource Protection Plan (WRPPs), will be identified and flagged as non-compliant.

Should the NCRWQCB choose to audit PWA's proposed compliance program, we would be capable of rapidly querying our compliance program's relational database to generate custom reports aimed at addressing/answering any questions relating to the performance (compliance) and/or enrollment status of dischargers.

Fee transactions - As a consultant with extensive experience working on behalf of rural landowners seeking environmental permits or other regulatory approvals requiring fee transactions, PWA has a well-documented and auditable accounting system capable of tracking fees that have been collected from clients and subsequently submitted to resource agencies such as California Department of Fish and Wildlife (CDFW), NCRWQCB, and county planning and building departments (e.g. Humboldt, Mendocino, Trinity). PWA uses QuickBooks financial accounting software to track accounts payable and receivable, and will maintain precise records regarding the collection and submittal of compliance-related fees.

Liaison role - PWA maintains strong working relationships with resource and regulatory agencies and rural landowners. Furthermore, we understand the importance of facilitating effective communications between clients and agency staff with the goal of finding common ground solutions to resolve environmental/regulatory compliance issues. We assume that as an overall component of our third party compliance program, we would work cooperatively with the NCRWQCB to ensure that we are informed and kept abreast of any updates or changes relating

to the status of implementing the Waiver program. Additionally, we already have an established communication protocol that includes options such as electronic mailing, phone, and physical mail correspondence tailored to the diverse needs, circumstances, and technological capabilities of our rural clients.

Tier assessment - One of PWA's strongest assets is our capacity to identify, assess, characterize and develop treatment prescriptions relating to past, present and future threats to water quality and aquatic habitat (see Appendix A). PWA's skills are well-suited to providing tier assessment. PWA's lead professionals authored the most widely used technical guidance manuals for rural road-related erosion remediation (*Handbook for Forest, Ranch and Rural Roads* and *Upslope Erosion Inventory and Sediment Control Guidance*), and have spearheaded groundbreaking watershed assessment and restoration projects throughout northern and central California. In fact, PWA's Handbook for Forest, Ranch and Rural Roads is referenced in the Order's Appendix B for providing best management practice (BMP) guidance relating to roads and stream crossing maintenance.

PWA staff is well-versed in fluvial geomorphology and topographic surveying. They have the necessary skills and equipment to characterize slope gradients, identify jurisdictional and non jurisdictional creeks, streams and springs, and classify stream channel characteristics with respect to establishing adequate riparian buffers. PWA staff is also adept and experienced at identifying existing and potential mass-wasting features/concerns and appropriate soil compaction conditions/standards associated with road and pad-related grading activities.

Self-certification verification - For dischargers falling under Tier 1, PWA can provide guidance to individuals/clients regarding interpretation of existing conditions for area(s) under cultivation and associated agricultural practices, including water procurement and storage.

Water Resource Protection Plan development and guidance - For dischargers enrolling under Tier 2, PWA will develop, or assist clients in the development of, a Water Resource Protection Plan (WRPP) as required under the Order. PWA will work with individuals, or a group of dischargers to identify, assess, and develop treatment prescriptions for features requiring upgrading, cleanup, remediation, and/or restoration. PWA will also develop an implementation schedule for identified features requiring treatment, prioritizing projects on the basis of immediacy with respect to their existing or potential future impacts to water quality. Management-related practices subject to inclusion in a WRPP will include controllable sediment delivery sites, riparian protection, grading, road construction and maintenance, spoils storage and disposal, chemical handling and management, waste handling and disposal, irrigation runoff, and water storage and use¹.

¹ Management practices subject to WRRP coverage excerpted from the Sample Water Resource Protection Plan (NCRWQCB 2015).

For corrective actions prescribed in or near streams and wetlands, PWA will make a preliminary determination regarding potential permitting requirements associated with the proposed work. Actual determinations regarding the need for site-specific permits/agreements will be the responsibility of state, federal and local regulatory agencies including the NCRWQCB, CDFW and Army Corps of Engineers (ACE). Any identified permitting requirements will then be incorporated in the WRPP. All work prescribed in streams and wetlands will be implemented under the guidance and responsible charge of a PWA licensed Civil Engineer, Engineering Geologist, or Professional Geologist, and will utilize standard BMPs to treat the site/feature.

In some cases, it may be appropriate and desirable to pursue community-based WRPPs, based on adjacency and/or proximity to other dischargers within the same watershed. In our experience, neighboring landowners are often familiar with each other and generally live within the shared context of the watershed or geographic area in which they reside. Promoting the development of community-based WRPPs where practicable, may provide added benefits of consistency with respect to assessment and prioritization of features requiring treatment in addition to reduced costs and increased efficiency associated with sharing the burden of plan development and heavy equipment mobilization. Further, an added benefit of developing community-based WRPPs is that they increase the overall cost-effectiveness of compliance with the Order, and also have the potential for expediting treatment of prioritized problem sites and features.

Water Resource Protection Plan implementation - In parallel with the development of individual or community-based WRPPs, PWA will establish a timeline for conducting site inspections that will include documentation of overall compliance with the WRPP implementation schedule, and the effectiveness to which identified features have been treated. For features that have not been addressed according to the WRPP schedule as determined by site inspections, PWA will notify the discharger of their failure to comply with the order and recommend site/feature treatment as soon as site and/or weather conditions allow. For sites that have been treated but require remedial action to achieve the full desired outcome, additional corrective actions will be identified and incorporated into the WRPP. In this way, each individual or community-based WRPP will be, at a minimum, a living document that is amended on an annual basis, to reflect new or deteriorated conditions, and/or incremental improvement of conditions on the ground.

Compliance monitoring and reporting - As prescribed by the NCRWQCB, PWA intends to use the CIWQS for monitoring and reporting on the compliance status of dischargers enrolled through our proposed third party compliance program. We anticipate that the NCRWQCB will establish more specific guidance with respect to utilizing CIWQS for the purpose of this Order in the near future. However, because the CIWQS is essentially a web-based relational database platform, we are confident that our DTS, which will be built on a similar platform, will integrate with it effectively. At a basic level, CIWQS provides for permit, inspection, monitoring, reporting, and billing tracking functionality. These functions will also be integral to PWA's proposed DTS, and we will therefore, establish the necessary communication protocols to upload compliance monitoring and reporting information to CIWQS upon approval of our compliance program.

2. TECHNICAL EXPERIENCE AND QUALIFICATIONS

Background

Pacific Watershed Associates Inc. (PWA) is a full service environmental consulting firm specializing in the development of technically sound management, restoration, and geologic solutions for watershed, forest, riverine, wetland, and coastal habitats. PWA is uniquely and exceptionally well qualified to provide expertise in the development and implementation of watershed sediment control and restoration plans for sediment-impaired and disturbed hydrologic systems. PWA is nationally recognized for its innovative and groundbreaking work in conducting watershed-wide geologic/geomorphic studies, sediment source assessments, road related sediment control projects, on-the-ground sediment control project implementation, watershed-scale prioritization and restoration, erosion control planning, and technical and non-technical training related to sediment control, water quality and salmonid habitat protection and restoration measures. Our projects range from simple site investigations and erosion control projects, to large-scale watershed assessments and sediment source investigations, to highly complex restoration and sediment control efforts.

Established in 1989, PWA includes a staff of 27 full-time professional engineers, geologists, engineering geologists, and qualified Storm Water Pollution Prevention Plan (SWPPP) developers & practitioners licensed by the State of California, and associated support personnel. PWA's scientists have proven expertise in northern California geology, hydrology, soil conservation and natural resource management issues. PWA's team of full-time professionals is complemented by on-call botanists and registered professional archaeologists who together have extensive expertise in California botanical, cultural, and historic resources.

PWA's lead professionals authored the most widely used technical guidance manuals for rural road-related erosion remediation (*Handbook for Forest, Ranch and Rural Roads* and *Upslope Erosion Inventory and Sediment Control Guidance*), and have spearheaded groundbreaking watershed assessment and restoration projects throughout northern and central California. State-of-the-art protocols developed and used by PWA for watershed erosion assessments (including both fluvial and mass wasting processes), watershed erosion prevention plans, and rural road storm-proofing and long-term management are now used by the State of California as the standards for State-funded fisheries restoration grant programs.

PWA is nationally recognized for its innovative work in sediment source assessment, watershed restoration, and erosion control plans for upland salmonid habitat and water quality protection. Projects range from simple site investigations and erosion control projects, to large-scale watershed assessments and sediment source studies, to highly complex restoration and sediment control efforts. In 2008, PWA was awarded "Restoration Organization of the Year" by the Alliance for Sustainable Jobs and the Environment (ASJE) in recognition of successful watershed restoration efforts, leadership in developing and teaching effective techniques for reducing erosion

and improving water quality and fish habitat, and for implementing environmentally based projects that have generated good jobs and millions of dollars in revenue for local economies in central and northern California over the past 25 years. The firm was officially recognized for their restoration accomplishments and community support by the California State Assembly and Senate, and the U.S. House of Representatives.

Frequently, PWA is called upon by both private and public landowners who are faced with a need to respond rapidly to potentially hazardous and/or environmentally damaging erosion and sediment delivery associated with improper grading, road construction, and other soil disturbing activities. At PWA, we specialize in the rapid assessment and characterization of challenging erosion and erosion control problems and have gained the professional respect of local, state, and federal regulatory agencies with whom we have worked on numerous environmental restoration projects. This gives us a unique ability to facilitate constructive dialog and conflict resolution between disputing parties. We excel at developing cost-effective treatment prescriptions and providing technical oversight to ensure that mitigation strategies are implemented successfully. PWA provides effectiveness monitoring and reporting to document compliance with requirements for corrective action. Our expertise also includes forensic and expert witness services to support the resolution of legal disputes for individuals, licensed-contractors, private companies, municipalities, and county and state agencies. Because of our extensive experience and reputation in these topics, PWA's principals recently provided expert witness consultation and testimony at the International Court of Justice (The World Court) at The Hague, Netherlands, in a legal case brought by Nicaragua involving road construction and grading impacts caused by Costa Rica.

PWA has been retained by numerous clients that find themselves subject to Cease and Desist Orders (CAD), Clean-up and Abatement Orders (CAO) and other land use violations levied by regulatory agencies in response to water quality and other code violations associated with unpermitted grading and road building activities. We've developed emergency and long term erosion control and restoration plans and overseen implementation measures designed to reduce erosion and sediment delivery caused by poorly conceived or unpermitted grading and earth-moving activities. These include site preparation for future property development, as well as construction of fire breaks, access roads, site pads, cultivation areas, stream crossings and earthen dams (irrigation/stock ponds).

At PWA, we pride ourselves on finding common ground, practical, cost-effective solutions to redress environmental degradation. PWA was the first private company in northern California to specifically focus on road and trail system planning with an emphasis on protecting water quality and aquatic habitat. Changing paradigms in watershed management have led to a broadening in PWA's focus and operations. While our history is firmly rooted in addressing legacy impacts from industrial forestry practices (e.g. extensive road building in streamside and inner gorge locations, and tractor logging, etc.), our work now includes addressing the unintended consequences of unregulated land development brought by marijuana cultivation and rural development. In many of the same watersheds that were previously impacted by industrial forestry, the current green-rush of cannabis cultivation is leading to the reopening/reoccupation

of old wounds associated with legacy forest haul roads, skid trails, and landings that had largely healed from historic disturbance.

As recent outreach efforts by NCRWQCB and CDFW have brought these issues to the forefront of our community dialog, PWA has responded to the growing call from rural landowners to aid them in achieving compliance with environmental regulations, county code requirements, and California water law. PWA is eager to partner with the NCRWQCB as a third party under the Order in the hopes of furthering our common goals of protecting and restoring water quality and aquatic habitat conditions throughout the north coast region of California. Copies of PWA's most pertinent, relevant projects, a list of technical skills and current vitas, are found in Appendix A.

3. ORGANIZATIONAL CAPACITY AND FUNDING MECHANISMS

Pacific Watershed Associates, Inc. is an S-Corp class corporate entity and certified small business (#49390) with 27 employees and two office locations (McKinleyville and Petaluma) serving northern and central California. For a copy of our Humboldt County Business License and PWA's California Certified Small Business Certificate see Appendix B.

PWA provides a wide range of environmental, geologic, and engineering-related consulting services to public and private sectors. Typically, PWA works on a time-and-materials basis and provides detailed cost estimates and breakdowns to clients for services proposed and rendered. Figure 1 provides a fee schedule for estimated, typical costs (or cost ranges) associated with conducting the most common Tier-based work tasks required under the NCRWQCB Waiver of Waste Discharge Order. Figure 2 provides our standard commercial rate schedule including additional direct costs not incorporated into our hourly rates. PWA also maintains a comprehensive suite of insurance policies and liability protections to safeguard our clients, PWA employees, and our organization from accidents, negligence or other unforeseen events. Table 1 provides a list of PWA's actively maintained insurance coverages and protection policies.

The principal functions of our proposed 3rd Party compliance program will include managing enrollees' personal information, conducting tier assessment, and performing compliance inspections, monitoring, and annual reporting to the NCRWQCB. For properties that fall within Tier 2 of the Order PWA will work with landowners/clients to develop a Water Resource Protection Plan (WRPP). For properties that fall within Tier 3 of the Order, PWA will work with landowners to bring their properties into compliance with the Waiver program and related environmental requirements. We anticipate some portion of our current and future prospective clients (dischargers) will choose to enroll through our 3rd Party program at least partly on the basis of perceived privacy concerns. While the costs associated with achieving compliance with the Order are expected to vary considerably between individual dischargers based on site-specific factors, the costs associated with administering a third party program can be established primarily on the basis of the tier structure established in the Order. PWA's compliance certification program will be predicated on establishing a fee structure that serves to support program infrastructure and administrative capabilities/capacity above and beyond the site-specific costs associated with helping dischargers achieve compliance with the Order.



PACIFIC WATERSHED ASSOCIATES INC.

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Once approved, Pacific Watershed Associates (PWA) will operate as a certified 3rd Party Provider under the recently adopted North Coast Regional Water Quality Control Board’s (NCRWQCB) Order No 2015-0023 Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects (Order). Under the program, PWA’s clients will enter into an agreement with PWA to provide certain services necessary to meet conditions stipulated under the Order. PWA will assign each parcel/property a unique California Integrated Water Quality System (CIWQS) ID which will be used to upload and report efforts made on your property to ensure water quality standards and requirements under the Order are met. Information supplied by clients to PWA will be uploaded to the California State Water Board’s CIWQS database by PWA. Client’s personal information will remain with PWA with the understanding that they can be audited by the NCRWQCB at their discretion.

In preparation for becoming a 3rd Party Program, PWA has developed a fee schedule for estimated, typical costs (or cost ranges) associated with conducting the most common Tier-based work tasks required under the NCRWQCB Waiver of Waste Discharge Order. Permits, fees and costs needed to attain environmental compliance with other regulatory agencies outside of the Water Board’s Waiver program are not included in this schedule.

1. Pacific Watershed Associates Third Party Program

1a - Tier 1 Services	Estimated Client Cost
<ul style="list-style-type: none"> • On-site environmental and compliance evaluation and data collection • Assess parcel, buildings, sources of water and water storage, and cultivation area to collect and map the necessary information to complete the Notice of Intent and Monitoring and Reporting forms 	\$1,500 - \$2,000
<ul style="list-style-type: none"> • Office data entry, map development, project communication, tracking, monitoring and reporting 	\$1,300
<ul style="list-style-type: none"> • Tier 1 Enrollment Fees (pass through to NCRWQCB) 	\$700
*Total cost for enrollment in Tier 1	\$3,500 - \$4,000

** Listed costs are estimates assuming that all Tier 1 properties meet the NCRWQCB Standard Conditions. Individual properties with cultivation areas less than 5,000 ft², yet which do not meet the 12 Standard Conditions will need to enroll as a Tier 2 program participant.*

1b - Tier 2 Services*	Estimated Client Cost
<ul style="list-style-type: none"> On-site environmental and compliance evaluation and data collection Assess parcel, buildings, sources of water and water storage, and cultivation area to collect and map the necessary information to complete the Notice of Intent and Monitoring and Reporting forms 	\$1,500 - \$3,000
<ul style="list-style-type: none"> Preparation of a Water Resource Protection Plan (WRPP) for the property 	\$1,500 - \$2,000
<ul style="list-style-type: none"> Office data entry, map development and project communication, tracking, monitoring and reporting 	\$1,300 - \$1,800
<ul style="list-style-type: none"> Tier 2 Enrollment Fees (pass through to NCRWQCB) 	\$1,750
Total cost for enrollment in Tier 2	\$6,050 - \$8,550

* Listed costs are estimates. Individual properties with cultivation areas of greater than 5,000 ft², yet which meet the 12 Standard Conditions, may be able to enroll as a Tier 2* program participant with a reduced enrollment fee.

1b - Tier 3 Services (costs are highly variable and are dependent on environmental site conditions)	Estimated Client Cost
<ul style="list-style-type: none"> On-site evaluation and data collection Assess parcel, buildings, sources of water and water storage, and cultivation area to collect and map the necessary information to complete the Notice of Intent and Monitoring and Reporting forms 	\$1,500-\$3,000
<ul style="list-style-type: none"> Water Resource Protection Plan 	\$1,500 - \$2,000
<ul style="list-style-type: none"> Clean up and action plan <ol style="list-style-type: none"> 1)Assessment and plan development 2)Permitting 3)Construction oversight 	Site specific plans are developed on Time & Materials basis, after client approval
<ul style="list-style-type: none"> Office data entry, map development and project communication, tracking, monitoring and reporting 	\$1,300 - \$1,800
<ul style="list-style-type: none"> Tier 3 Enrollment Fees (pass through to NCRWQCB) 	\$10,000
Total cost for enrollment in Tier 3	Ask for Quote

In addition to the most common work elements needed to comply with the Order, Pacific Watershed Associates also provides services that may be needed or requested to meet other environmental or permitting requirements. The following table lists some of those additional professional services and the typical cost, or range of costs, for that work.

2. Pacific Watershed Associates Additional Permitting and Consulting Fees

Services (Each property and landowner is unique and may require additional services. These services are performed on a time and materials cost basis)*	Estimated Client Cost
<ul style="list-style-type: none"> • Initial site evaluation for review of environmental compliance • Preliminary data collection for State and County permitting • Summary trip report and draft recommendations 	\$1,000-\$2,000
Initial field visit and consultation for Holistic Management farm or ranch planning	\$1,000-\$1,500
Water Rights - Initial Statement of Use and Diversion	\$500
Small Domestic Use Appropriation (Registration), State Water Resources Control Board Division of Water Rights	\$1,500
Small Irrigation Use Appropriation (Registration), State Water Resources Control Board Division of Water Rights	\$1,500-\$5,000
California Fish and Wildlife Lake and Streambed Alteration Agreement (LSAA)	\$1,000-\$3,000
Onsite Wastewater Onsite Investigation and System Design	\$5,500-\$7,500
Holistic Farm and Ranch Planning (hourly)	\$95
Engineered Pond Design and associated Environmental Permitting	\$7,000-\$10,000

* Costs are charged based on time and materials at rates indicated on the PWA Rate Sheet for additional services. All project work and estimated costs are negotiated with the landowner prior to commencing work. Costs do not include agency fees for permits or other required regulatory Agreements that may be needed. Typical costs listed in this table are estimates and are generally reflective of parcels ≤40 acres and within about 2 hours travel time of Arcata, CA. Additional costs, if any, will be mutually agreed upon and determined on a time and materials basis.

Figure 1. Typical costs (or cost ranges) associated with conducting the most common Tier-based work tasks required under the NCRWQCB Waiver of Waste Discharge Order.



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PACIFIC WATERSHED ASSOCIATES

Rate Schedule for Additional Services

April, 2014

Standard Professional Services

Principal Geologist/Geomorphologist	\$140/hr
Senior Civil Engineer.....	\$130/hr
Senior Geologist, Engineering Geologist.....	\$130/hr
Project Geologist.....	\$105/hr
Ecologist/Natural Resources Specialist	\$95/hr
Project Scientist	\$95/hr
Physical Scientist (geologist, hydrologist, erosion control specialist).....	\$85/hr
Physical Science Technician.....	\$70/hr
Graphics, GIS, Database, and drafts-person	\$70/hr
Clerical.....	\$45/hr

Litigation and Court Related Work

Principals/Seniors, field work, preparation, reports.....	\$180/hr
Principals/Seniors, depositions and court time	\$225/hr
Staff Professionals	\$125/hr

Other Costs

Vehicles (mileage)	\$.75/mi
Quads	\$50/day
GPS unit.....	\$75/day
Total station	\$100/day
Hand auger	\$50/day
Per Diem (per person)	\$150/day
All other expenses.....	Cost + 15%

Figure 2. Pacific Watershed Associates Standard Rate Schedule for Additional Services.

Table 1. Pacific Watershed Associates actively maintained insurance coverages and protection policies.

Policy	Aggregate	Occurrence
Workers' compensation	N/A	\$1,000,000
Professional liability (E&O)	\$2,000,000	\$1,000,000
General liability	\$2,000,000	\$1,000,000
Contractors pollution liability	\$2,000,000	\$1,000,000
Automobile liability	N/A	\$1,000,000

The cost difference between the annual fee requirements for Tiers 1-3, whether enrolling directly with the NCRWQCB or through an approved third party program, are \$300 for Tier 1 and \$750 for Tier 2 (see Categories 1 and 2; 2015-2016 fee schedules document). However, the costs for Tier 3 and for any Tier 2 site requiring corrective actions will be equivalent to the Category 1 fee schedule until all corrective actions are completed as determined by the NCRWQCB. As a result of this requirement, PWA will likely need to propose a funding mechanism (fee schedule) that is higher than Category 1 for clients that have identified deficiencies requiring corrective action. PWA likely would not be in a position to know the final costs to a client for 3rd Party compliance services until after we've conducted the tier assessment (usually through a field inspection) and identified necessary corrective actions. Corrective actions will be prioritized to protect water quality and beneficial uses.

For each client we will estimate/determine the individual cost structure associated with Third party compliance services. These may include, but are not limited to: 1) establishing and maintaining their information in the database(s) to track all aspects of compliance, 2) administrative charges required for accepting/processing payments, 3) assistance with permitting and agency interactions, 4) professional or technical costs for conducting site inspection(s) (when necessary) to establish tier assessment, 5) assisting with, or preparing, their Water Resource Protection Plan, 6) when necessary, developing the client's cleanup and restoration plan, 7) when requested, selecting contractors and/or providing construction oversight for heavy equipment and/or labor implementation work, and 8) conducting compliance tracking, site monitoring and reporting. The type of services and level of effort required by each client will vary considerably depending on physical characteristics of the property as well as the level of landowner/land manager assistance that is requested.

Audits, accounting, and financial records

Discharger files will be maintained for the entire duration of enrollment/permit activity plus four years after termination. PWA will also maintain financial accounts, documents and records (collectively, "records") relating to this agreement, in accordance with the guidelines of "Generally Accepted Accounting Practices" ("GAAP") published by the American Institute of Certified Public Accountants. The records shall include, without limitation, evidence sufficient to reflect properly the amount, receipt, deposit, and disbursement of all funds related to work under this agreement. Time and effort reports are also required. PWA will maintain adequate supporting records in a manner that permits tracing from the request for disbursement forms to

the accounting records and to the supporting documentation.

Additionally, the Water Board may review, obtain, and copy all records relating to performance of the agreement in as much as they pertain to the Waiver program requirements. PWA shall provide the Water Board or its agents with any relevant information and shall permit the Water Board or its agents access to the PWA's premises upon reasonable notice, during normal business hours, to interview employees and inspect and copy books, records, accounts, and other material that may be relevant to a matter under investigation for the purpose of determining compliance with this agreement and any applicable laws and regulations.

Additionally, PWA shall prepare and maintain accounting records in support of all amounts billed to the Client on behalf of the Water Board. PWA files and records shall be subject to audit by the State as specified in this Third Party Agreement. The Auditors of the State may examine the records of PWA for a period of three years from the end of PWA's representation of that landowner under the third party agreement.

4. SAMPLE WATER RESOURCE PROTECTION PLAN (WRPP)

PWA has experience conducting site investigations for the purpose of both property development and remedial actions. To remain compliant with the NCRWQCB, individuals within Tier 2 of the Order must either develop, or have developed for them, a WRPP. WRPP's are to be kept on site and made available to the Water Board upon request. As per the Order, a WRPP should include the following components.

1. Map(s) at appropriate scales of the property including areas of operations, roads, water bodies, all cleared/developed areas, and including general drainage patterns and directions.
2. Applicable design drawings and schematics for watercourse structures, fish passages, roads, septic tanks, fill prisms, pads, ponds, or any other constructed feature that has been designed or engineered.
3. An assessment of current conditions and identification of any features needing improvements to correct the function of any roads or developed areas, drainage features or measures, encroachments into riparian buffer areas, controllable sediment delivery sites, including stream crossings in need of correction (undersized, improperly installed, improperly maintained, or otherwise substandard).
4. Detailed list of specific management practices designed to meet standard conditions incorporating applicable standard BMPs from Appendix B of the Order, and any improvement work needed to bring site features into compliance with the standard conditions. Management practices must address erosion control/stability, stream crossing construction/maintenance, riparian protection, road construction and maintenance, spoils storage and disposal, chemical handling and management, waste handling and disposal, irrigation runoff, and water storage and use.

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5. If site problems are identified, include a prioritization and implementation schedule for corrective action based on potential impacts to the beneficial uses of water, and a plan to inspect the site to evaluate the effectiveness of corrective action and identify where additional work may be needed. Proposed work in streams and wetlands shall be designed by a qualified registered professional and shall incorporate applicable standard BMPs from Appendix B.
 6. List of chemicals stored onsite, and information about use (e.g., quantities used and frequency applied).
 7. Monitoring element to ensure that BMPs are being implemented and to evaluate their effectiveness.
 8. Water Use: Plan shall record water source, relevant water right documentation, and amount used monthly. Plan must describe water conservation measures and document approach to ensure that the quantity and timing of water use is not impacting water quality objectives and beneficial uses (including cumulative impacts based on other operations using water in the same watershed). Water use will be presumed to not adversely impact water quality under one of the following scenarios:
 - No surface water diversions from May 15-Oct 31.
 - Water diversion pursuant to a local plan that is protective of instream beneficial uses.
 - Other options: (e.g., % of flow present in stream; riffle depth; gage at bottom of Class I stream; AB2121 equations; DFW flow recommendations; promulgated flow objective in Basin Plan).

Appendix C contains an example WRPP cover letter and plan that would be generated for someone within PWA's Third Party Certification Program. Additionally within Appendix C there is a sample *Inspection Report and Erosion Control Plan*, a sample *Hazardous Materials Compliance Plan*, a sample *Hazardous Materials Report of Compliance*, a sample *Restoration Plan*, and a sample *Remediation Report of Findings*.

5. SAMPLE LIABILITY WAIVER

The following general conditions, limitations, and liability considerations are included and made a part of any agreement(s) subject to this Order:

- 1) Client has the legal authority to enter into this Agreement and to authorize work on the parcel or parcels identified herein. Client has legal access to the property and will provide right of entry for PWA to inspect the property and complete the agreed upon Scope of Services.
- 2) Client will provide PWA with all available supporting documents and information relevant to this Agreement and the Scope of Services.
- 3) Liability (typical contract clauses)

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- PWA performs site assessments, design work, and in some cases, provides implementation oversight for work performed by licensed contractors; however, PWA does not actively engage or participate in an implementation role.
 - PWA shall have no liability for additional work outside of the scope of services described herein, and there shall be no liability for failure to perform beyond the scope of services agreed to between PWA and the Client in this Agreement.
 - PWA shall not be held liable for any actions, negligence, or misrepresentations on the part of Client that are inconsistent with the information provided to PWA or contained in any permit applications submitted by Client or PWA on behalf of Client.
 - PWA assumes no liabilities for the negligence or intentional misconduct of others.
 - PWA has no liability for the performance of other workers or suppliers while following PWA's recommendations.

4) In the event the Client makes a claim or brings an action against PWA for any act arising out of the performance of PWA's professional services, and the Client fails to prove such claim or action, then the Client shall pay all legal and other costs incurred by PWA in defense of such claims or actions.

5) Neither the Client nor PWA may delegate, assign, sublet or transfer their duties, interest or responsibilities in this Agreement without written consent of the other party.

6) Client recognizes that if significant limitations exist on the property or in the project area this may prevent establishing a technically adequate or economically feasible project.

7) Client recognizes that subsurface conditions may vary from those encountered at the location where observations, excavations or borings are made by PWA and that the data, interpretations, and recommendations of PWA are based solely on the information available or provided to PWA.

8) PWA will be responsible for data, interpretations and recommendations developed by PWA, but will not be responsible for the interpretation by others of that information or for additional work arising out of those plans, interpretations or recommendations.

9) Client agrees that all reports and other work furnished by PWA to the Client or Client's agents, which is not paid for, will be returned upon demand and will not be used by the Client for any purpose whatsoever.

10) Property owner or client agrees to hold PWA harmless for any damages to subterranean structures during any construction work which are not called to PWA's attention and/or correctly shown on plans furnished.

6. FRAMEWORK FOR CONFIRMING COMPLIANCE AND ADDRESSING NON-COMPLIANCE

PWA is committed to providing annual monitoring and related compliance information to the Regional Water Board in a timely and consistent manner via the CIWQS web portal. Annual compliance reporting metrics will include at a minimum, the following:

- 1) Number of sites enrolled through our Third Party compliance program by HUC-12 subwatershed or other smaller subwatershed hierarchy.
- 2) Number of sites enrolled in each subwatershed by Tier category.
- 3) Number of sites complying with standard conditions in each subwatershed.
- 4) Number of Tier 2 sites in compliance with established water resource protection plan milestones.
- 5) Monitoring results from each enrolled site.
- 6) Annual summary of community outreach efforts and workshops conducted, including the number and types of efforts, number of attendees, number of people directly engaged/informed, description of outreach materials provided, number of sites/locations directly influenced by outreach efforts, and planned future outreach activities.

Educational Effectiveness

PWA is committed to continuing education about the impacts each one of us has on our community and environment, and PWA has historically been in the forefront of environmental outreach and education aimed at minimizing our effects in the watersheds where we live. Starting in 1994 with the first addition of the *Handbook for Forest and Ranch Roads*, through 2014 with an updated and expanded version of the Handbook, PWA has been at the forefront of developing and teaching methods to improve and protect water quality and aquatic habitat, especially as they are affected by sediment input from watershed management. Additionally, information discussed in these documents has been utilized as base protocols for road building and maintenance in rural ranch and timber lands throughout Northern California and elsewhere. PWA has conducted literally hundreds of 1 to 3 day workshops on erosion and sediment control, and water quality protection, in rural watersheds over the last several decades. Each of these workshops include a workshop evaluation questionnaire that helps us focus on improving the effectiveness of our instruction and presentation methods.

PWA also conducts hundreds of projects in North Coast watershed areas that are aimed at water quality and fisheries protection. Within Appendix A of this document there are a number of example projects that PWA has completed, many of which have been expanded upon for publication or presentation at various professional meetings.

More recently, PWA staff have participated in educational outreach with rural landowners regarding land development and the impacts of cannabis cultivation and associated land use activities. PWA staff have presented at events such as the Emerald Cup (2014, 2015), and

Cannifest 2015 (Eureka, CA). PWA has also been a sponsor for the Mad River Alliance Green Week (2014).

Currently PWA keeps a running list of community outreach and educational forums/events for the North Coast (Appendix D). Additionally, as part of PWA's client intake form, we ask landowners for their project goals/needs and how they heard of us (e.g., word of mouth, attended a talk, radio advertising, etc.). By tracking PWA's outreach efforts and comparing them with our client intake form we are able to gauge: 1) the effectiveness of our outreach efforts through building a client base, 2) customer satisfaction through referrals, and 3) overall improvement to the watersheds via the number of properties and the environmental improvements where work is conducted by PWA. For examples of PWA's intake form and a recent running list of PWA's list of educational outreach efforts, see Appendix D.