

EXHIBIT A – SCOPE OF WORK

NAPA River Sediment TMDL Accounting and Tracking Project



Prepared For
Napa County
Department of Public Works
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Prepared By
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SCOPE OF WORK

TASK 5.1: ESTABLISH TRACKING AND ACCOUNTING FRAMEWORK

The Contractor shall compile and review the existing science, assessments and analyses conducted in support of the Napa River Sediment TMDL development and implementation plan, including the TMDL monitoring program currently under development by the Napa County Resource Conservation District under Water Board Agreement No. 10-442-552. Based on available information and data the Contractor shall identify a wide-ranging list of potentially relevant tracking and accounting metrics. The Contractor shall qualify each metric to facilitate TAC discussions and comparisons towards selection. The qualifications shall include a description of the existing hypotheses linking the metric to assumed progress toward the specific Napa TMDL objective targets (ref TMDL), information/data obtainment approach, reporting units, existing data/information gaps, adequate spatial and temporal scale, advantages and challenges of each. Advantages or challenges may include availability of existing datasets and analysis approaches; costs to obtain, summarize and report; communication power; linkage to desired system conditions; overlap with existing TMDL and WAF metrics; and sensitivity of metric to specific implementation actions. Example application of each metric for use to track goals, objectives, track performance standards, define milestones using quantitative or qualitative targets and prioritize actions shall be provided and summarized. Expected realistic timelines to evaluate TMDL progress as result of metric tracking and/or accounting will also be identified. Response times will inform the identification of both short term performance measures by which incremental progress of actions can be tracked as well as long term indicators that will demonstrate overall desired system response as result of continued cumulative improvements. Based on existing distribution of land use activities, watershed conditions and hydro-geomorphic function, the metrics will be regionalized into appropriate sub-watershed units to simplify the communication of progress, protect landowner privacy and increase the likelihood of implementation reporting.

In order to focus efforts and demonstrate utility from development to web reporting, the number of priority metrics utilized in the initial implementation tracking and accounting system (ITAS) shall be limited to 3-5. Once the priority 3-5 tracking and accounting metrics are identified and agreed upon by the TAC and the County, the Contractor shall obtain available relevant data and information to document the existing status of each metric. If possible, available and comparable historic data shall be used to

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document temporal changes up to current conditions to establish baseline conditions, with limitations or assumptions well documented. Recommended procedures to implement metric monitoring, tracking and accounting into the future shall be provided. Where necessary, the conceptual process may be illustrated using placeholders or example data to allow the focused development and agreement on actual numeric targets and milestones through a more intensive stakeholder process beyond this project.

Task 5.1 Deliverables:

Task 5.1 Deliverables

Organized list or spreadsheet of relevant Napa River Sediment TMDL parameters/metrics and justification for 3-5 qualified priority parameters/metrics to be initially tracked and accounted with associated goals, objectives, performance standards, milestones, actions, quantitative and qualitative targets, completion dates and timelines as appropriate.

Draft and final map (including GIS files) of proposed sub-watershed boundaries for tracking and assessment purposes with justification and use in ITAS website.

Graphic displays of analyzed data or if data is limited, use of placeholder data to communicate and agree upon graphic reporting tools and layouts for use in the ITAS

Assessment and report on existing data that could inform progress and management actions towards meeting TMDL qualitative and numeric targets

Itemization of any metrics that may overlap between the TMDL and earlier metrics identified under the WAF project.

Task 5.1 Budget:

TASK	HOURS	RATE	EXTENDED TOTAL	ROLE
5.1	2	\$196.65	\$393.30	Program Manager
	20	\$181.13	\$3,622.60	Project Manager
	10	\$142.83	\$1,428.30	Sr GIS/IT Developer
	68	\$194.67	\$13,237.56	TMDL Subject Matter Expert
	120	\$152.15	\$18,258.00	Sr. Scientist
	140	\$104.54	\$14,635.60	Scientist
Task 5.1 Total	360		\$51,575.36	

TASK 5.2: DEVELOP NAPA IMPLEMENTATION, TRACKING AND ACCOUNTING SYSTEM (ITAS) WEBPAGE

To accomplish the goals of tracking and accounting system for the Napa River watershed to identify progress, prioritize implementation, inform management strategies, and communicate results relating to the required and recommended implementation actions prescribed in the Napa River Sediment Reduction and Habitat Enhancement Plan, the Contractor shall use our Unified Plan Execute and Deliver (uPED) process, a framework to application development that is proven effective in delivering quality applications and reducing overall costs. The process focuses on early identification of the risk level of the core requirements and their critical path in the development process. During design, development, and testing, the Contractor in consultation with project team shall focus first on the high risk requirements because they are the ones most likely to affect budget and schedule. The Contractor shall address these

requirements through use cases, iteration planning, and frequent build release for view by the County and TAC throughout the project using team expertise to elaborate on the requirements.

The Contractor shall begin Task 5.2 by gathering requirements and focusing on bringing the TAC and stakeholders together and working collaboratively to finalize a solution. The Contractor shall use an agile and iterative development methodology in our uPED process allowing us to iterate through design and build to demonstrate progress throughout the project. These iterative releases help the County to re-view the functionality and requirements of the ITAS and provide feedback on the system. The Contractor shall work closely with County staff and partners to track the feedback and issues discovered during the demonstration builds and incorporate fixes during subsequent builds. The Contractor shall leverage our subject matter experts to support County, partner and TAC reviews and conduct the requirements validation testing. The Contractor shall work collaboratively with the County to minimize the effects of the project on the daily work duties of County staff during the project.

All of the feedback collected will be tracked in Mantis and will be prioritized and approved by the County and the Contractor. The approved feedback will be implemented into the next iteration of the design prototype, which shall then be submitted to the County for review. Feedback that is not prioritized and scoped into the initial version of ITAS will be maintained in Mantis and categorized as potential future enhancements. These items can be revisited by the County and Contractor for inclusion into subsequent versions of ITAS as budget and schedule allow.

Before each build, the Contractor shall scope out the requirements/design elements going into each build and release scope using our iteration plan that will be sent to the County project manager for approval. The Contractor shall conduct prerelease meetings for each release. The meetings are conducted to increase exposure and inform project team members, partners and stakeholders. At the conclusion of each design review webcast, the team will collect the stakeholder feedback, which shall be used to inform revisions to any aspects that do not meet the stated requirements. The Contractor shall store all feedbacks in our Mantis issue tracking system. Napa ITAS will have full access to Mantis for transparency into the status and progress.

Our Integrated Solution

Based on our review and understanding of Napa requirements and our current understanding of the technical environment the Contractor shall use the Chesapeake Bay Tracking and Accounting system (BayTAS) as a starting point for development of the Napa River ITAS using .NET, ESRI Flex or JS API and SQL Server. The Contractor shall refine and customize the BayTAS system based on the requirements gathering and gap analysis conducted and the data assessment under Task 5.1. The features described below is a starting point, during the execution of the project requirements shall be identified, documented and integrated into a solution that provides not only short-term implementation but establishes an architecture for long-term growth and expansion of the system.

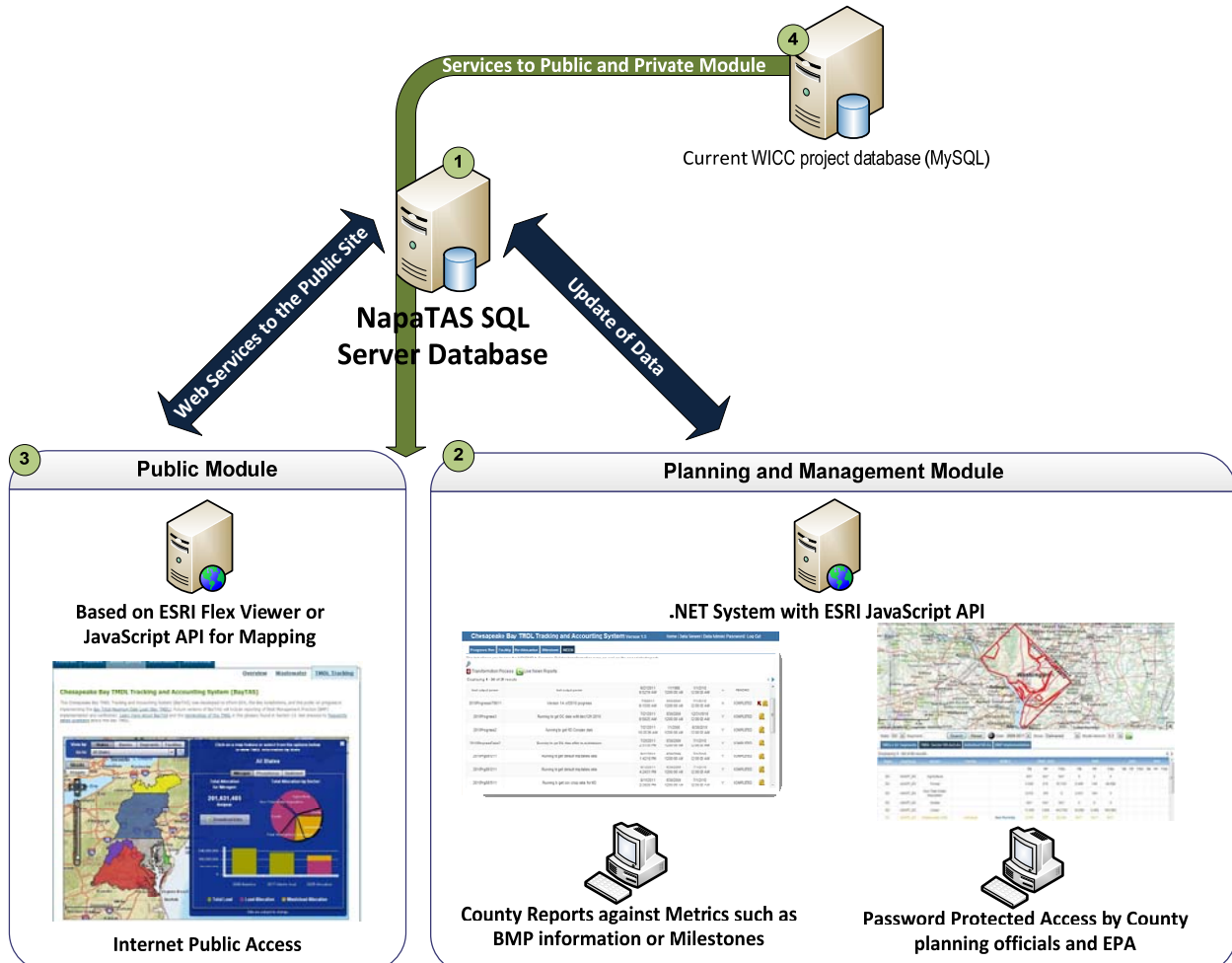
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The solution shall provide a highly extensible, scalable and performance-oriented platform upon which many additional functions and capabilities can be added. The following diagram describes the technical integration and deployment environment and provides a description of the key features that will be employed in the Napa River ITAS. If the County chooses to outsource hosting of the Napa River ITAS, the Contractor could provide hosting service through Cloud providers and/or owned hosting environment.

Similar to BayTAS, the Contractor will, at minimum, implement a single system with 2 modules; one for planning and managing the data, and another for reporting the results to the public. This approach allows the County to maintain the data and post it to the public once it is ready.

- 1. Napa ITAS SQL Serve Database.** Like the BayTAS system, Napa ITAS shall include a SQL server enterprise database that includes storage and reporting services. Currently the County runs SQL server so this database platform can easily integrate with the existing County databases. The ITAS database shall be modeled to support short and long-term goals and allow the County to add future metrics and tracking against those metrics. These will also include qualitative and quantitative milestone and implementation tracking. The Napa ITAS database will also leverage the ability to track BMP projects as necessary.
- 2. Public Module:** The Napa ITAS Public Module shall be designed to display TMDL parameters/metrics in a way that is easily understandable and meaningful to the public using a GIS interface integrated with the existing Napa website using either ESRI Flex or Javascript viewer (not Flex viewer



which was used for BayTAS). The Public Module will provide a public facing web page that will inform the state, local, and federal stakeholders of the progress being made but will also encourage continued support and confidence in TMDL implementation actions by responsible parties. The County will have full control over the data that is shared through the Public Module so that the data available is relevant, timely, and accurate. In addition to distribution of data, the Public Module will also serve as a communication and outreach tool to communicate success, improve awareness and encourage community action. The following are examples of the public facing pages for BayTAS. The Planning and Management module in BayTAS provides services to the public facing portion of the application maintained by the Bay program. The same initial design shall be developed for the Napa ITAS, which will provide key features and benefits in meeting the County's requirements and will be a starting point for further refinement per the uPED process;

- ✓ Provides a flexible GIS framework and driven webpage, dedicated to TMDL tracking and accounting that contains sub-watershed information on progress towards implementing the TMDL.
 - ✓ As data is populated and managed in the Planning and Management Module it will be automatically visible in the Public Module using web services.
 - ✓ Includes general information related to the TMDL process and opportunities to be engaged and provides information relevant to those responsible for implementing various aspects of the TMDL and what resource may be available to assist them (e.g., conditional waiver programs).
 - ✓ Displays implementation actions spatially to allow the public to see the activities going on
 - ✓ Allows user to view progress across the key parameters and metrics of the Sediment TMDL and spatially communicate progress toward meeting TMDL
 - ✓ Can be fully integrated into the Watershed Information Center and Conservancy (WICC) web presence to leverage existing stakeholder awareness and to ensure consistency and recognition for the user community
 - ✓ Integrate the WICC project database with the "map-based" reporting tool.
- 3. Planning and Management Module:** The Napa ITAS Planning and Management Module shall be designed for users who are responsible for the planning, management, and oversight of the TMDL implementation activities. This would include County staff, partner agency staff, responsible parties named in the TMDL or people that are recording information against specific metrics. The Module shall provide users with tools that allow them to enter, manage, track, account, and report all of the data related to the TMDL, or future watershed metrics added to the system. This include screens for data entry and editing of basic data elements, data upload tools for streamlining loading of larger more complex data sets, a map interface for spatial tagging and viewing TMDL progress and actions across the key parameters/metrics, and a reporting dashboard to provide real time metric tracking and enable enhanced decision making. The Planning and Management Module shall provide a single login secure access point for all of the data being collected, analyzed, and tracked as part of the Sediment TMDL.

The Contractor shall leverage the BayTAS data model to allow the Napa ITAS to accommodate both quantitative and qualitative data to enable reporting on the Sediment TMDL targets, such as streambed scour, as well as Performance Standards, such as surface erosion control BMPs across land uses. The Napa ITAS system shall leverage BayTAS data entry screens, enhanced with customized workflows that will allow data owners the ability enter, review, edit, and publish to the public as appropriate. These data entry screens shall be supported by a browse/upload feature to accom-

modate larger more complex data loading, such as model run or tabular monitoring data. Below are some examples of the BayTAS Planning and Management forms and how they will help the County in Tracking and Accounting the Napa TMDL.

Home Page and Data Viewer

- ✓ Password protected to allow only certain users to add/edit information.
- ✓ Home Page provides a snap shot of progress at the State, Basin, Pollutant, and Implementation level
- ✓ Toggling capability provides the ability to view data across a variety of filters such as Delivered and Edge of Stream loadings as well as multiple data source dates or versions
- ✓ A series of action icons serve as communication and outreach tools, allowing users to generate standardized reports in various formats, providing ease access to supplemental resources, and highlighting current system functions and future enhancements.
- ✓ The site will provide access to online information identified or developed as part of this Project so that implementing parties can prioritize their activities and report on progress toward meeting TMDL goals, objectives and compliance milestones.
- ✓ Utilize the WAF sub-watershed reporting areas (or alternative boundaries if selected during Task 5.1) and incorporate results from the analysis conducted in Task 5.1 to spatially communicate progress toward achieving TMDL
- ✓ Data viewer provides a GIS map interface with supporting tabular data dynamically updated based on map selection and filtering
- ✓ Provides spatial view of progress and implementation activities
- ✓ The map can be integrated through service calls with external data sources such as national data sets and the WICC Project Database to provide a robust GIS solution

Data Admin, Milestones and Facilities

- ✓ Data Admin screens provide straight forward data entry screens for the adding, editing, and review of relevant County data. Allows the County to manage and work with their own data including adding new metrics at a later date.
- ✓ The Facility data entry module provides screens for capturing Facility location, permitting, DMR, and allocation data to allow for integrated tracking of Facilities within the sub basins.
- ✓ The Facility data entry screens are integrated with the GIS capabilities so as Facilities are added or progress data is updated they become accessible from the map interface
- ✓ Data Admin screens provide straight forward data entry screens for the adding, editing, and review of implementation Milestones for the tracking and accounting of planned activities and future progress.
- ✓ The system accommodates both quantitative and qualitative Milestones providing users full flexibility in capturing the planned implementation actions.
- ✓ Each Milestone can be linked spatially to sub-basins and displayed through the map interface
- ✓ Milestone tracking can be integrated with the WICC Project Database to show a consolidated view of actual vs planned actions

Management Reporting

- ✓ The fully integrated and automated Management Report can be generated at any time and will reflect the most current data.

- ✓ The Management Report presents a status of the progress towards meeting the Sediment TMDL including Point Source and Non Point Source loads, aggregated Loads by Pollutant, Facility permitting action status, and overall Load vs Allocation comparison.
- ✓ The Management Report can be generated in a variety of formats (PDF, Word, Excel) and can be used as both a formal communication tool as well as an internal working reporting for data analysis and decision support.

4. Integration with WICC database. In addition to tracking sediment parameters and metrics the Napa ITAS system shall also track and account for other watershed projects that meet TMDL implementation goals. These projects can come from the WICC Project Database or can be manually loaded into the system or through batch loading. It is the Contractor's understanding that the WICC project database is in PHP and has a database back-end, the Napa ITAS will either connect to the WICC database directly or will call services that are exposed by the database. The application will then map the projects and allow users to interact with the map and view the metadata on projects in the Napa ITAS. This approach to integration provides the following:

- ✓ A GIS interface to integrate the Napa ITAS sub-watershed reporting areas
- ✓ Spatial and tabular access to viewing and reporting on key parameters and metrics of the Sediment TMDL
- ✓ Data entry screens and workflow management
- ✓ Reporting dashboard for enhanced decision making
- ✓ Data sharing with the WICC Project Database to enable the integration of TMDL Projects with the key parameters and metrics

Long - Term O&M Strategy Plan

In support of the production deployment of the Napa ITAS, the Consultant shall develop an Operations and Maintenance (O&M) Plan, which will address staffing, tasks, processes, and tools necessary to ensure consistent, reliable, and comprehensive production support of the Napa ITAS. The Consultant shall leverage its broad experience in providing operations and maintenance support while working with the County to develop an O&M Plan that is tailored to the specific needs and resources of Napa County. The Contractor shall work directly with the County's Project Manager to recommend O&M and hosting service level agreements (SLA) to be documented in the plan in order to establish clear and standardized performance benchmarks to be maintained throughout the O&M period by the hosting provider.

The O&M Plan shall lay out a strategy along with the roles and responsibilities for the continued use and enhancement of the Napa ITAS. The O&M Plan shall recommend a Change Control Board that serve as the primary decision makers regarding system priorities and enhancements and shall document the processes that will be followed for the submission of enhancement request for the Board to consider. The O&M Plan shall also include technical considerations such as implementation of web services, technology enhancements, and integration with other County, State or Federal tools.

Task 5.2 Deliverables:

Task 5.2 Deliverables

Provide a Draft Napa River Sediment TMDL Tracking and Accounting webpage(s) for review and comment, and Final webpage(s) linked to the WICC Web Center (www.napawatersheds.org). The system will be developed using .NET for the application, SQL Server for the database and ESRI ArcGIS Flex or Javascript API for GIS for the Planning Module and public module.

Development and implantation of an online mapping tool to display, on a sub-watershed area basis, an interactive map to track and report on TMDL implementation progress based on the 3-5 metrics identified under task 5.1. The mapping interface will be developed in ESRI ArcGIS Flex or Javascript API for GIS for the Planning and Management Module and Public Module.

Provide a Draft and Final Napa ITAS long-term operation and maintenance plan.

Task 5.2 Budget:

TASK	HOURS	RATE	EXTENDED TOTAL	ROLE
5.2	3	\$196.65	\$589.95	Program Manager
	120	\$181.13	\$21,735.60	Project Manager
	480	\$142.83	\$68,558.40	Sr GIS/IT Developer
	80	\$150.08	\$12,006.40	Database Developer
	40	\$152.15	\$6,086.00	Sr Scientist
Task 5.2 Total	723		\$108,976.35	

OPTIONAL TASK 5.3: CONSIDERATION OF ENHANCED FEATURES TO ASSIST DECISION MAKING

This optional task shall not be executed by the Contractor unless funding is secured and approval is granted from the County Director of Public Works. Funding and approval of Task 5.3 would allow the Contractor to provide the technical guidance and support to more directly link critical tracking and accounting metrics to existing or future data collection and monitoring efforts. It is likely that collection of the potential metrics identified in Task 5.1 will include metrics that can greatly leverage, focus and refine existing watershed and/or project monitoring and assessment efforts completed by local stakeholders. The past approach to monitoring and research on natural systems has created a large volume of disparate and short-term physical, chemical and biological datasets. While these efforts have greatly informed our hypotheses of system function, identification of stressors and development of strategies to improve natural resource conditions, these datasets lack spatial, temporal and measurement consistency necessary to fully achieve the TMDL tracking and accounting objectives, particularly those related to recommended habitat improvement and enhancement. In addition, many monitoring efforts include expensive high resolution and/or technically complex data collection techniques without a clear vision of how the data generated will be used to inform management decisions or evaluate actual effectiveness of actions beyond sampling error or natural variability. These monitoring efforts result in extremely costly datasets obtained over relatively short time scales (2 yrs) from a small area. The ability to use watershed and/or project monitoring and data collection to evaluate specific action effectiveness, meet regulatory requirements AND contribute to the Napa ITAS is possible given foresight and planning of

how the data can be managed, analyzed and ultimately used. Funding Task 5.3 would allow the Contractor to provide the following additional products:

- a. Focused recommendations on priority existing or past data collection efforts that, if continued (likely with adjustments) would provide the necessary data to meet multiple objectives noted in the TMDL, including implementation tracking and accounting, NPDES Phase II monitoring requirements], restoration or BMP specific effectiveness monitoring and/or inform continued action prioritization efforts.
- b. Conceptual development of priority condition assessment tools that are expected to provide a realistic and valuable approach to the cumulative incremental improvements and progress towards TMDL objectives over time.
- c. The identification of tracking and accounting tools that can focus repeatable and reliable data collection, data management and data reporting to broaden the potential spatial and temporal assessments to objectively evaluate landscape conditions and track improvements in watershed health and function.

Align existing and future monitoring with Napa ITAS and other regulatory requirements.

As outlined in Task 5.1, the consultant team shall collaborate with the TAC and other stakeholders to develop an extensive list of potential tracking and accounting metrics. The tabular list of potential metrics from which those included for the completion of the Task 5.1 and 5.2, will also identify past or continued datasets and/or monitoring efforts that, in their existing state, would inform metric development. Funding of Task 5.3 would provide a compilation and review of existing monitoring requirements, ongoing data collection efforts and/or project specific monitoring efforts (i.e. Rutherford stream restoration project), NPDES Phase II stormwater permit monitoring requirements, BMP or restoration effectiveness monitoring, volunteer riparian assessments and monitoring, etc. and will provide recommendations on how these efforts/requirements could leverage one another and information/data contained in the Napa ITAS. The final product of Task 5.3 would clearly identify multiple uses of existing or obtained data, such as how various data can provide both specific action effectiveness monitoring as well as contribute to meeting the goals and objectives tracked in the Napa ITAS. If funded the Contractor shall provide recommendations in a technical memo that documents parameters, locations, temporal resolution, data reporting formats, etc. of existing monitoring programs both voluntary and required conducted in the Napa River watershed and provides a linkage assessment of these efforts to meet priority ITAS objectives as determined under Task 5.1. The technical memo shall provide a clear vision for the data collection, data management and data reporting needs including parameters, locations, temporal resolution, existing data or information gaps, parameter options based on relative cost and associated accuracy and precision, data management approach, recommended reporting formats, etc.

Deliverables:

Optional Task 5.3 Deliverables (if funded and approved by the County)

Technical recommendations memo providing a summary of linkages between TMDL goals and other watershed monitoring and assessment parameters that may be incorporated into Napa ITAS.

Technical memo documenting the Contractor’s analysis of potential tools and methods that can be used by the County and its partners in TMDL implementation prioritization and decision making.

Optional Task Budget:

TASK	HOURS	RATE	EXTENDED TOTAL	ROLE
OPTIONAL TASK				
Task 5.3	40	\$181.13	\$7,245.20	Project Manager
	110	\$194.67	\$21,413.70	TMDL Subject Matter Expert
	40	\$152.15	\$6,086.00	Sr Scientist
	56	\$104.54	\$5,854.24	Scientist
	65	\$111.78	\$7,265.70	GIS Analyst
Task 5.3 Total	311		\$47,864.84	

TASK 5.4: PROJECT MANAGEMENT AND REPORTING

The Contractor shall employ specific practices to align with and achieve Capability Maturity Model Integration® (CMMI) process goals in the areas of requirements management, project planning, risk management, project monitoring and control, product and process quality assurance, and configuration management in support of the project. Working with the County, the Contractor will follow those practices to successfully implement the project deliverables on schedule and within budget. All process will be maintained and communicated to Contractor project staff through an internal SharePoint/Wiki site. The Contractor shall establish a project site using a MS SharePoint Portal. The site shall contain resources that the County can use to track schedule, deliverables, progress reports, and other project documents. The County staff will have full access to the SharePoint site to enable easy access to project artifacts and function as a portal for project communications.

Progress Reporting & Invoicing

The Contractor shall use MS Project and Project Server 2007 to manage milestones and report actual costs for each task to help in audits. In addition, The Contractor shall establish an Oracle Enterprise Resource Planning system to track project costs at the tasks and subtask level and will provide those costs weekly or monthly in the form of progress reports at the request of the County. The systems established will be fully compliant with federal standards and will be used in reporting financials to the EPA and can be used by the County to support its auditing process by providing actual costs for the project.

The Contractor will submit a monthly progress report with costs and tasks completed/percent completed and upcoming tasks. In addition, informal project meetings will be held weekly or biweekly with the County to discuss budget, progress/schedule, make decisions and manage risk. The meetings will occur

over the phone and will be on the same day at the same time each week. Status meetings with County staff will be conducted regularly. All contract and task-related correspondence prepared and received by the Contractor shall be incorporated into a project administrative record and hosted to the project SharePoint site. The project site will include all data and reports obtained during the project.

Communication and Progress Reporting

The first step in successful project execution is establishing open communication and collaboration. As such, the Contractor shall work with the County to establish a stakeholder group called the Integrated Project Team (IPT) with representation throughout the Napa River watershed, the RWQCB, the EPA regional office, and key Tetra Tech personnel. Pre-existing stakeholder groups or advisory committees, in whole or in part, may serve as the IPT and shall be representative of the greater stakeholder community to provide valuable input into design decisions and buy-in for the Napa ITAS project.

The Contractor shall initiate the project by conducting a project kick-off meeting within 15 business days of award. The kick-off meeting shall be planned with the County Project Manager. During the project kick-off meeting the Contractor in consultation with the County shall layout the schedule for the upcoming subtasks, meet project stakeholders, and identify the IPT members.

On-going project communication shall be between the Contractor Project Manager and the County Project Manager through regularly scheduled telephone calls, quarterly progress reports, preparation of an administrative record, and the project SharePoint site. In general, the Contractor's Project Manager will correspond directly with the County Project Manager, as needed, to ensure efficient and timely communication throughout the life of the project. The Contractor's Project Manager will be the main Point of Contact (POC) for the County, managing all of the Contractor's staff and partners. However, to ensure timely and effective communication the Contractor's staff may correspond directly with the relevant staff, as identified by the County Project Manager. The Contractor has a strong local presence and can attend critical management, review and progress meetings as necessary in person.

Technical Advisory Committee Meetings

The Contractor shall focus on an organized, structured, and flexible approach to establish clear roles and responsibilities, encourage collaborative discussion, and enable actionable outcomes. The Contractor will work with the County Project Manager to identify the participants for the technical advisory committee meetings and to select dates, times, and locations for the meetings. The Contractor shall convene at least two small-group technical advisory committee meetings that will include EPA and the Regional Water Quality Control Board staff, to assist with development and implementation of the Napa ITAS, identify data gaps and to apply lessons learned to facilitate the development of similar systems to improve TMDL implementation nationwide. Once the participants have been identified and the meeting logistics have been determined, the Contractor shall contact the participants to notify and invite them to the meetings, to inform them of the purpose of the meeting and communicate their expected role in the meetings. The Contractor shall prepare, as needed, the pre-meeting materials such as an agenda, supporting documentation, or review materials.

During the meetings the Contractor shall work with the County Project Manager to facilitate discussion, record meeting minutes, and take action items. The Contractor shall provide a draft version of the meeting minutes to the County Project Manager for their review and finalization. The Contractor shall post the meeting minutes on the Napa ITAS SharePoint project site for availability to all participants.

EXHIBIT A**NAPA RIVER SEDIMENT TMDL ACCOUNTING AND TRACKING PROJECT****Deliverables:****Task 5.4 Deliverables**

Support County preparation and submittal of Quarterly Reports to EPA grant manager

Support County preparation and submittal of Quarterly Invoices and provide Contractor accounting of services preformed and expected as requested by the County

Technical committee meeting materials, summaries and action minutes (County/Contractor prepare jointly)

Prepare Draft and Final Sub-Project #5 Napa River Sediment ITAS Executive Summary Report and Findings (20-30 pgs)

Task 5.4 Budget:

TASK	HOURS	RATE	EXTENDED TOTAL	ROLE
Task 5.4	2	\$196.65	\$393.30	Program Manager
	28	\$181.13	\$5,071.64	Project Manager
	30	\$194.67	\$5,840.10	TMDL Subject Matter Expert
	30	\$104.54	\$3,136.20	Scientist
Task 5.4 Total	90		\$14,441.24	

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OVERALL PROJECT BUDGET

TASK	HOURS	RATE	EXTENDED TOTAL	ROLE
5.1	2	\$196.65	\$393.30	Program Manager
	20	\$181.13	\$3,622.60	Project Manager
	10	\$142.83	\$1,428.30	Sr GIS/IT Developer
	68	\$194.67	\$13,237.56	TMDL Subject Matter Expert
	120	\$152.15	\$18,258.00	Sr. Scientist
	140	\$104.54	\$14,635.60	Scientist
Task 5.1 Total	360		\$51,575.36	
5.2	3	\$196.65	\$589.95	Program Manager
	120	\$181.13	\$21,735.60	Project Manager
	480	\$142.83	\$68,558.40	Sr GIS/IT Developer
	80	\$150.08	\$12,006.40	Database Developer
	40	\$152.15	\$6,086.00	Sr Scientist
Task 5.2 Total	723		\$108,976.35	
Task 5.4	2	\$196.65	\$393.30	Program Manager
	28	\$181.13	\$5,071.64	Project Manager
	30	\$194.67	\$5,840.10	TMDL Subject Matter Expert
	30	\$104.54	\$3,136.20	Scientist
Task 5.4 Total	90		\$14,441.24	
TOTALS				
Task 5.1, 5.2, 5.4	1173		\$174,992.95	
OPTIONAL TASK				
Task 5.3	40	\$181.13	\$7,245.20	Project Manager
	110	\$194.67	\$21,413.70	TMDL Subject Matter Expert
	40	\$152.15	\$6,086.00	Sr Scientist
	56	\$104.54	\$5,854.24	Scientist
	65	\$111.78	\$7,265.70	GIS Analyst
Task 5.3 Total	311		\$47,864.84	
PROJECT TOTAL (if Optional 5.3 is funded)			\$222,857.79	

EXHIBIT B - RATE SHEET

ROLE	RATE
Program Manager	\$196.65
TMDL Subject Matter Expert	\$194.67
Project Manager	\$181.13
Sr. Scientist	\$152.15
Database Developer	\$150.08
Sr. GIS/IT Developer	\$142.83
Scientist	\$104.54
GIS Analyst	\$111.78

NOTE: No travel or other expenses will be reimbursed by Napa County.

EXHIBIT C – EPA GRANT AGREEMENT NO. W9900T60801-2

(SEE ATTACHED)