



Water Business Group
Recharge Fresno Program Office
2101 G Street, Bldg A
Fresno, CA 93706
(559) 621-1614
www.ch2m.com

May 28, 2018

Fresno P.O. No.: 0000072890 and 0000072968
CH2M Project No.: 482124

Mr. Michael Carbajal
City of Fresno
Department of Public Utilities
2101 G Street, Bldg A
Fresno, CA 93706-1620

Subject: Fresno Metro Program – Program Management Services
CH2M Program Management Contract Annual Summary Report for FY 2018

Dear Mr. Carbajal:

I am pleased to submit the attached Program Management Contract Annual Summary Report for FY 2018 programmatic activities, summarizing the CH2M team's fiscal-year-to-date financial performance, staffing, accomplishments and activities for FY 2018 program management services provided under our Professional Consultant Agreement approved by City Council on October 31st, 2013.

Please note that this report is currently submitted prior to completion of the fiscal year. Therefore, unbilled activity has been estimated to enable approximation of final expenditure values.

CH2M is proud to serve you in implementing your Water Capital Improvement Program. I hope that this summary report provides appropriate and adequate information regarding FY2018 activities and accomplishments.

If you have questions or would like to discuss this document, please contact me at your convenience.

Sincerely,

A handwritten signature in blue ink that reads 'Gino Rapagna'.

Gino Rapagna
Senior Program Manager
CH2M

EXECUTIVE SUMMARY:

On October 31, 2013, the City Council approved a professional consultant agreement with CH2M HILL for Program Management Services, in the amount of \$6,993,000. Since then, CH2M HILL has engaged in program support services related to program oversight and operations; project management, construction management, engineering and technical support, program controls; project validation and budget planning; financial and funding support; document management; stakeholder communication; public outreach and communication; Administration and Council communication support; CIP planning; regulatory and environmental support; permitting support; hydraulic modeling and GIS support; business and operational improvement planning and implementation; resource planning and staff projections; development of a Program Management Plan and set of delivery guidelines; program systems development and maintenance (PMIS, DMS, SharePoint, Public Website, etc.); professional outreach and awards facilitation as well as many other as-needed and as-requested support activities. The purpose of these activities is to enable accurate budget forecasting, appropriate planning for project implementation, use of best and most efficient practices in project delivery, reduction of overall CIP implementation costs and improved asset management, during current and future heightened levels of CIP activity.

On August 5, 2014, the City approved Amendment No. 1 to the original professional consultant agreement, extending the period of service for original contract (FY2014) funding through July 2014.

On August 28, 2014, the City Council approved Amendment No. 2 to the original professional consultant agreement, providing additional funding in the amount of \$6,900,000 for FY2015.

On June 18, 2015, the City Council approved Amendment No. 3 to the original professional consultant agreement, providing additional funding in the amount of \$7,100,000 for FY2016.

On August 5, 2015, the City Council approved Amendment No. 4 to the original professional consultant agreement, providing additional funding in the amount of \$1,140,000 for FY2016.

On May 19, 2016, the City Council approved Amendment No. 5 to the original professional consultant agreement, providing additional funding in the amount of \$11,950,000 for FY2017.

On May 11, 2017, the City Council approved Amendment No. 6 to the original professional consultant agreement, providing additional funding in the amount of \$13,600,000 for FY2018.

Program Management Services are focused on achieving the following goals:

- Develop best-in class Program and project management systems to enable on-schedule and on-budget project delivery.
- Improve effectiveness and efficiency of project delivery and O&M activities.
- Communicate the value of the Water Capital Plan to customers and all stakeholders, maximize involvement of local business, and create opportunities for economic development.
- Ensure a safe potable water supply to customers while mitigating impacts from pending regulations.
- Implement Water Capital Plan projects to enable a balanced water supply by maximizing use of surface water supplies, reducing groundwater pumping, and increasing groundwater recharge, water conservation and water reuse.
- Apply asset management strategies to renew aging infrastructure.
- Enable knowledge transfer to support professional development and certification for Water Division professionals.

This report summarizes the CH2M HILL team's financial performance, staffing, accomplishments and activities for FY 2018 program management services provided under the Professional Consultant Agreement approved by City Council on October 31st, 2013.

Including actual billings through the end of March and projected billings for May and June, expenditures against Amendment #6 are estimated at \$11.6 million, in comparison to an \$13.6 million budget. Approximately \$2,000,000 remains as estimated surplus budget that will remain unspent at the end of the fiscal year.

Integrated team staffing is currently at 45 team members, including 18 City staff, 26 CH2M Team staff and 1 safety consultant. Size of the integrated team may increase or decrease as necessary to assure effective delivery of the Department of Public Utilities' CIP. The integrated team is supplemented by staff assigned to local and remote consultant/subconsultant offices, these staff bringing necessary and valuable expertise in many areas of program delivery, design and construction management. Included in the CH2M team staff are 6 from local subconsultants, 6 local hires, and 8 staff that have relocated their homes to the Fresno area.

A list and description of significant program and project-specific accomplishments and activities may be found below. These accomplishments contribute greatly to the City's future success in implementing the many important projects of Recharge Fresno, the Metropolitan Water Resources Management Plan, the Recycled Water Master Plan, and the overall Department of Public Utilities CIP.

PROGRAM MANAGEMENT SERVICES AMENDMENT #8 BUDGET PERFORMANCE:

FY 2018 Budget, Billings and Surplus:	
Authorized Budget, Amendments #5:	\$ 13,600,000
Actual Billings, through March 2018:	\$ 8,716,526
Estimated Billings, April through June 2018:	\$ 2,900,000
Estimated Billings, through June 2018:	\$ 11,600,000
Estimated % spent, through June 2018:	85 %
Estimated Surplus, at end of June 2018:	\$ 2,000,000

FY 2017 INTEGRATED STAFFING

Integrated Team Members (as of April 2018):	City Staff	CH2M Team Staff ⁽¹⁾	Total
Program Management & Leadership	2	2	4
CIP Project Management	6	1	7
Engineering & Technical Support	9	2	11
Construction Management		15	15
Community Relations		2	2
Program Controls		2	2
Document Mgmt and Administrative Support	1	2	3
Safety Oversight (SafeWork)	1		1
Total	19	26	45

⁽¹⁾ Includes current CH2M HILL Team staff who are integrated full- or part-time into the Program team. Does not include staff which support the Program on an as-needed basis from other offices.

FY 2018 ACCOMPLISHMENTS:

Listed below are highlighted accomplishments of the integrated Program Management Team during FY2018, to date.

Progress on Major CIP Projects

- Friant-Kern Canal Pipeline (FKCP):
 - Completed construction, testing and commissioning of pipeline.
 - Put facilities into operation, to allow use as water source for the NESWTF.
 - Completed construction.
- Kings River Pipeline (KRP):
 - Progressed construction through approximate 98% completion level by end of fiscal year.
 - Completed construction, testing and commissioning of pipeline in time for start-up of the SESWTF.

- *Maintained strong public and stakeholder outreach as related to construction phase communications for work occurring along the pipeline route.*
- Southeast Surface Water Treatment Facility (SESWTF):
 - *Progressed construction through approximate 95% completion level.*
 - *Completed construction, testing and commissioning of treatment processes in time for start-up of the SESWTF.*
 - *Put treatment processes into operation on time as promised to City Council and rate-payers.*
- Regional Transmission Mains (RTMs):
 - *Completed construction, testing and commissioning of Segments A1 and A2, in time for start-up of the SESWTF.*
 - *Completed bidding of construction contract for Segment B/C and initiated construction.*
 - *Maintained strong public and stakeholder outreach as related to construction phase communications for work occurring along the pipeline routes.*
- Recycled Water Transmission Mains (RWTMs):
 - *Completed commissioning of Segment SW1C.*
 - *Completed construction, testing and commissioning of Segment SW1B.*
 - *Put Segments SW1A, SW1B and SW1C into operations enabling delivery of water to customers.*
 - *Initiated and construction of SW1C2, anticipate completing construction soon after end of fiscal year.*
 - *For Segments SW1D and SW4, anticipate progressing design to approximately 90% completion, for bidding next fiscal year.*
- Northeast SWTF Water Storage Tank:
 - *Re-initiated preparation of design documents for bidding in FY2019.*

Program and Project Delivery

- Closely collaborated with construction contractors to elevate safety as a top priority of the Recharge Fresno Program, enhance the safety orientation and culture of Program team, avoid significant personal injury, and maintain a low OSHA Recordable Incident Rate for the overall Program.
- Managed cost and delay risk to maintain on-schedule and on-budget performance for overall program.
- Enhanced project delivery systems and continued to employ Earned Value Management (EVM) practices to accurately track and forecast progress in alignment with spending.
- Initiated and maintained comprehensive reporting to Capital Project Oversight Board regarding status and change for all large construction contracts.
- Enhanced project budgeting, approval and change management practices and tools.
- Further improved front end specifications to support effective construction management and risk mitigation.
- Maintained strong public outreach to keep community up to date on major construction activities and impacts to the community. Improved communication media including the RechargeFresno.com public website and printed materials.
- Collaborated with Fresno Irrigation District and County of Fresno to assure best coordination of construction related traffic control and public outreach activities.
- Coordinated with utility companies to best manage utility conflict risks during construction.
- Consistently and effectively managed contractor prequalification for all major projects to meet requirements of the Construction Management Act and to minimize risk of protest by contractors.
- Maintained level of construction management staffing to assure appropriate resources are in place for effective construction oversight and quality control, and to minimize cost by most efficiently utilizing assigned staff across multiple projects.

- Further enhanced Project Management Information System (PMIS), including the Program Delivery Portal, Program Performance Dashboards, and document management systems.
- Further enhanced on-line tools for construction contract, change and records management, reporting and maintained consistency in construction contract management practices across all projects.
- Continued application of improved project management, planning and engineering practices to recycled water distribution system projects, similar as has been applied to Recharge Fresno water projects over the past few years.
- Implemented integration of Water and Wastewater engineering and planning functions and staff.
- Initiated planning for migration of PMIS systems and tools from CH2M managed hosting to City internal IT, with physical migration of systems to occur in FY2019.

FY 2018 ACTIVITY:

To accomplish goals listed in the Executive Summary, program management services have been categorized in the following three areas of activity:

- Program Management and Administration - This area of activity focuses on ongoing program-level activities to support programmatic oversight and execution.
- Program Initiation - This area of activity includes activities necessary for program set-up and to enable readiness for ongoing program management and project delivery functions. These tasks are essentially complete, although certain systems are being further developed and refined.
- Project Delivery - This area of activity includes staff augmentation for project-specific project management and technical support, to enable successful and efficient delivery of planned capital projects.

The following table includes general descriptions of activities performed within each task during FY 2018, although it is not inclusive of all program activity.

CH2M Task Number and Description	Activity Description
Task 01 Program Management & Administration (Task 01 activities are generically described to reflect ongoing program efforts.)	
Program Mgmt 01.01.PM and 10.01.PM	Management, oversight and/or support for all program activities, including: Staffing and staff oversight; Management, administration and council communication; Team communication; Planning; Financial planning and funding; Project management and engineering; Construction management, quality assurance and control; Program controls and document management; Change management; Risk management; Environmental review and permitting; Land acquisition; Procurement; Public outreach and community relations; Operations, commissioning and start-up support; Business and operational improvement support; and Training and skills transfer; as well as management and oversight of all activities relating to CH2M's service to the City of Fresno. Also provided support for preparation of materials and presentations for communication with City Administration and Council Members and the community, and guidance to City team leadership regarding Program and CIP management practices.

CH2M Task Number and Description	Activity Description
Program Admin 01.01.AD and 10.01.AD	CH2M contract budgeting, financial management and invoicing; subconsultant procurement, administration and financial/contract management, labor compliance management, and program/construction offices administrative support.
Safety Management 01.01.SM and 10.01.SM	Safety-related guidance and support, including advising and consulting with the Program Leadership Team and the City's Safety Oversight Lead to drive best practices and safety culture development; as well as CH2M-specific safety reviews/direction as related to CH2M construction management activities, including periodic (quarterly) visits to the Program office and active construction sites.
Construction Management Oversight, Support and Coordination 01.01.CM and 10.01.CM	<p>Oversight of Construction Management (CM) activities, providing overall CM planning, procurement, coordination, and control of construction projects from award through completion. Ensure functionally and financially viable construction projects by managing quality assurance and driving consistent use of established CM best practices and guidelines. Further development of construction guidelines and construction related contract specification standards. Standardization of processes, systems and tools for construction management, including support for development, testing, deployment, and training. Monitoring and mitigation of general construction related issues and risks, including and especially those related to cost, schedule, quality and safety.</p> <p>Perform quality control inspection, special inspection (shop fabrication inspection and weld inspection), and construction materials sampling and testing for FKCP, KRP, RTM A1, RTM A2, RTM B/C, RWTM SW1B, RWTM SW1C, and RWTM SW1C2 pipeline construction projects.</p> <p>Work with the project teams contractors and other parties to consider recovery schedule alternatives for mitigation of potential project delays and to consider and minimize contract change.</p>
Permit and Land Acquisition Management 01.01.PL	Permitting and land acquisition support to Program and project teams; guidance on environmental and permitting issues; support of State Revolving Fund loan applications and reporting; maintenance of permitting and real estate documentation; oversight of permitting and environmental related field activities; response to field issues (findings, coordination with regulatory agencies, etc.). Note that most Permit and Land Acquisition work is charged to individual projects. Only non-project-specific activity would be charges to this task.

CH2M Task Number and Description	Activity Description
Program Controls 01.01.PC and 10.01.PC	Program-level controls for cost and schedule management by schedulers, cost analysts and estimators including cost and schedule database management; operation of cost and schedule systems and software; integration of City of Fresno financial data; posting of performance data to PMIS (Performance Dashboards) and other applications; preparation of monthly and ad-hoc reports; preparation of budget/funding requests; preparation of schedules and cost reports for all CIP projects; earned value management (EVM) and KPI analysis; identification and understanding of budget/schedule variances; and other program controls related activities. Special activities included further developing and optimizing cost projection processes; developing and improving templates for program- and project-level performance reports.
Document Management 01.01.DM and 10.01.DM	Monitoring and maintenance of all team collaboration tools and document management applications, including the Program Delivery Portal, programmatic document libraries, CM document and photo libraries, and all CM contract compliance applications (Submittal, RFIs Meeting Minutes, Daily Inspection Report, Transmittal, Contractor Payment Application, COR, RFP, WCD, CO), and other data and application accessed through the Program Delivery Portal; Creation and maintenance of CM Project Sites and associated applications for new and ongoing construction projects; Training of project team members on use of CM Project Sites and associated applications; Production of status reports for project teams to summarize outstanding RFIs, Submittals and Daily Inspection Reports; User support for project team members on all systems.
Project Validation & Budget Planning 01.01.PV and 10.01.PV	Validation and assessment of projects to support as-needed revisions to the CIP, to accommodate new projects, and project deferrals necessary to meet projected reduced revenue limitations. Work with rate consultant to analyze CIP changes and validate revised expenditure projections against approved rate plan. Coordinate CIP budget preparation process for Fiscal Years 2019 through 2023, including project cost and schedule review/modification, synchronization of CIP/project implementation plan with finance, confirmation of funding sources, and preparation for data transfer to finance.
Procurement and Contracts Support 01.01.PR	Support for preparation and coordination of consulting and construction solicitations (RFQs, RFPs and construction bid advertisements), and associated selection processes.
General Technical Support 01.01.GT and 10.01.GT	Non-project-specific engineering and planning efforts that are not related to CIP delivery. Special activities included the following: <ul style="list-style-type: none"> • Technical and advisory support regarding water resource modelling. • Technical and advisory support for Northeast and Southeast water quality analysis.
Operations & Commissioning Support 01.01.OC and 10.01.OC	Activities included operations-related technical and advisory support for Northeast SWTP water quality management and Southeast SWTF start-up and commissioning.

CH2M Task Number and Description	Activity Description
Training & Skills Transfer 01.01.TS and 10.01.TS	Much of training and skills transfer is through interaction of team as part of other program and project activities. Charges to this task would include special activities related to training and skills development of City team members, aimed toward broadening capabilities within roles, or to transfer understanding and skills related to management of programmatic processes, system and tools which have been put in place.
Public Outreach (General) 01.01.PO and 10.01.PO	Maintenance and update of major project outreach plans; participation in PM meetings and other program/project meetings to provide status updates and discuss strategy for public outreach; coordination and/or support for stakeholder communications, including meetings to discuss construction impacts and provide information regarding Recharge Fresno projects; coordination with project teams to collect raw data, information and documents (narrative and photos) for use in preparing public outreach content; preparation, maintenance/update and distribution of public outreach materials (letters, notifications, door hangers, fact sheets, maps, signage, web site content, FAQs and other outreach documents), including coordination of materials and content translation for multi-lingual audiences; monitoring and logging of stakeholder communications, media and social media commentary, Recharge Fresno Information Line and e-mail inquiries, and other stakeholder correspondence, and coordination of response as appropriate; maintenance and update of Recharge Fresno website content; and coordination and development of website enhancements.
PMIS Administration 01.01.PS and 10.01.PS	General support for administration and maintenance of PMIS (Performance Dashboards), Program Portal, Public Website and other applications, including help-desk support for all hosted applications.
PMIS Enhancements Development 01.01.PE	Development and testing of enhancements to PMIS (Performance Dashboards), Program Portal, Public Website and other applications. Also included in this task is coordination for upcoming migration of Program Portal and all PMIS applications from current hosting location to the City's IT environment.
Misc programmatic Labor and Expense 01.83 and 10.83	Miscellaneous programmatic labor and expenses, not directly related to CIP project delivery.
01.EX - Expenses - Program Mgmt, Admin & Support	Programmatic expenses, directly related to CIP project delivery.

Tasks 03, 05, 06 and 07 Project Delivery (Task 03, 05, 06, and 07 activities include ongoing program efforts that are specific to City of Fresno CIP jobs.)	
All associated subtasks, as aligned with specific CIP projects	<p>Project management and technical support directly and specifically associated with City of Fresno CIP jobs (as indicated on invoice by CIP job number). Aligned with City of Fresno activity codes, work efforts may have included any of the following: Project Mgmt; Scope, Cost and Schedule Mgmt; Project Controls, Cost Estimating and Scheduling; Communication Mgmt; Risk Mgmt; Change Mgmt; Contract Administration and Procurement Support; Planning; Regulatory and Environmental Support; Permitting Support ; Land Acquisition Support; Engineering, Design Oversight and Quality Control; Construction Mgmt, Inspection and Administration; Operations, Commissioning and Start-up Support; Document Mgmt; Design and other Technical Support.</p> <p>Projects with significant activity during FY2017 include:</p> <ul style="list-style-type: none"> • Friant-Kern Pipeline (construction) • Kings River Pipeline (construction) • Southeast Surface Water Treatment Facility (construction) • Regional Transmission Mains (3 construction contracts) • NESWTF Finished Water Storage Tank DB (design) • Recycled Water Transmission Mains (3 construction contracts and 2 design packages) • Well construction and rehabilitation projects • Pipeline rehabilitation and replacement projects