

UPPER COLORADO RIVER AUTHORITY
WORKPLAN FOR CLEAN RIVERS PROGRAM BIENNIUM FY 2020-2021

TASK 1: PROJECT ADMINISTRATION

Objective: To manage all administrative functions required to support the Clean Rivers Program (CRP) contract, including:

- informative and timely Progress Reports;
- participation in conference calls;
- participation at CRP meetings;
- timely and accurate reimbursement forms with adequate documentation;
- efficient cost control to ensure expenses are allowable and applicable;
- responsibility for procurement and oversight of subcontractors;
- participation in fiscal monitoring reviews;
- timely and accurate deliverables that meet the intent of the FY 2020-2021 CRP Guidance;
- adherence to TCEQ contract provisions;
- detailed and reasonable Work Plan development;
- financial reporting and budget monitoring; and
- training to ensure personnel are properly prepared to conduct work.

Task Description: The Upper Colorado River Authority (UCRA) will maintain complete and accurate records of all costs incurred and appropriately monitor and track all work conducted under this contract and report these activities as described below.

Progress Reports - Progress Reports will contain a level of detail sufficient to document the activities which occurred during the appropriate quarter, and provide detailed supporting documentation and justification for reimbursement requests. Progress Reports will contain a general description of activities, a detailed tracking of deliverables, and the amount of water quality monitoring which occurred during the quarter. The Progress Report will be in the format provided in Exhibit 1D of the FY 2020-2021 CRP Guidance.

Reimbursement Requests - A Financial Status Report, Supplemental Forms, and a current Personnel Eligibility List (PEL) will be submitted along with appropriate additional documentation on a quarterly basis. An updated Equipment Inventory List will be submitted when changes occur during the quarter. Budget Revision Requests will be made in advance of making changes to the budget.

Contractor and Subcontractor Evaluations - An annual self-evaluation and evaluations of subcontractors will be submitted at the end of each fiscal year.

Conference Calls - UCRA will participate in all scheduled conference calls unless other arrangements are made with the LCRA Project Manager.

Conferences and Training Events - UCRA will participate in meetings and training events as scheduled by the CRP. All non-CRP conferences and training events need to be pre-approved by the LCRA Project Manager prior to incurring costs associated with such events.

Documentation for Desk Review or On-Site Visit - Detailed supporting documentation, in addition to the quarterly documentation, will be made available upon request. The additional supporting reimbursement documentation will include those items outlined in Exhibit 1B of the FY 2020-2021 CRP Guidance. In the case of an on-site visit, the appropriate UCRA personnel will be available during the visit.

FY 2022 - 2023 Work Plan and Supporting Documentation - The Work Plan and supporting documentation will be prepared and submitted as specified in the FY 2022-2023 CRP Guidance. Supporting documentation will include (as applicable): budget by category, budget by task, PEL, fringe rate methodology, indirect rate methodology, allocated costs documentation, equipment purchase request list, equipment inventory, list of tasks that will be sub-contracted and a list of known training events/conferences. The Work Plan will include the tasks and deliverables outlined in the FY 2022-2023 Guidance and will be negotiated with the LCRA Project Manager. A list of all deliverables in due date order will be submitted with the final Work Plan.

Deliverables and Due Dates:

September 1, 2019 through August 31, 2020

- A. Progress Reports - *December 5, 2019; March 5 and June 5, 2020*
- B. Annual Self-Evaluation and, if applicable, Subcontract Evaluations - *August 17, 2020*
- C. Additional Submission Documentation for Desk Review or Site Visit - *upon request*

September 1, 2020 through August 31, 2021

- A. Progress Reports - *September 5 and December 5, 2020; March 5, June 5, and August 31, 2021*
- B. Proposed FY 2022 - 2023 Work Plan and Supporting Documentation – *December 15, 2020*
- C. Final FY 2022 - 2023 Work Plan and Supporting Documentation – *February 1, 2021*
- D. Annual Self Evaluation and, if applicable, Subcontract Evaluations - *August 16, 2021*
- E. Additional Submission Documentation for Desk Review or Site Visit - *upon request*

TASK 2: QUALITY ASSURANCE

Objective: To conduct data collection activities in accordance with an integrated system of quality management activities involving planning, assessment, implementation, training, and quality improvement. This task addresses objectives and processes for:

- Quality Assurance Project Plan (QAPP) development and implementation;
- laboratory quality assurance;
- data review, verification, and validation; and
- oversight of project(s)

Task Description: All work funded by this Agreement that involves the acquisition of environmental data generated from direct measurement activities, collected from other sources, or compiled from computerized databases and information systems shall be planned in consultation with the LCRA and be documented in a fully approved QAPP before data collection can be implemented.

NELAP Accreditation - UCRA utilizes the LCRA Environmental Laboratory Services (ELS) for all CRP analytical services. ELS has a quality assurance program consistent with the NELAC Institute (TNI) standards.

Basin-wide QAPP - UCRA will work closely with the LCRA QA Officer to develop the Colorado River QAPP as it pertains to the Upper Basin CRP monitoring activities. Sites and parameters monitored by UCRA will be included in the document. Amendments will be coordinated through the LCRA QA Officer in accordance with TCEQ guidance.

Documentation of amendments will be maintained as part of the UCRA's quality assurance records and available for review during a LCRA and/or TCEQ monitoring systems audit.

Sections of the Basin-wide QAPP will be posted to the UCRA CRP Web page. These sections include the monitoring program or project objectives, measurement performance specifications (i.e., Table A7 of the QAPP), appendices, and the monitoring schedule and maps of sampling sites. In lieu of the monitoring schedule and maps, a link to the coordinated monitoring schedule (CMS) website may be provided, with a disclaimer that states the CMS includes stations monitored by other entities.

QAPP Amendment to Appendix B - The monitoring schedule in Appendix B of the Basin-wide QAPP will be updated for the second year of the contract biennium after the annual coordinated monitoring meeting. This special type of QAPP amendment will be submitted using the TCEQ-approved shell format. Only the sites covered by the Colorado River Basin QAPP will be included in Appendix B of the QAPP.

QAPP Amendments and Revisions to Appendices - Changes in parameters, sampling or analytical procedures, project organization, and other items of an existing project necessitates an amendment to the QAPP and/or Revisions to Appendices. Amendments and revisions to Appendices will be submitted electronically to the CRP Project Manager on an "as needed" basis in the TCEQ shell format for agency review. QAPP Amendments and Revisions to Appendices will be distributed, upon approval, to all personnel on the distribution list maintained by the UCRA.

Project Oversight - UCRA will participate in monitoring systems audits and laboratory inspections by the LCRA and/or TCEQ once during the contract cycle. UCRA will be provided with an audit report within 30 days following the on-site assessment. Audit reports will contain references to written specifications, as defined in the QAPP or in a standard operating procedure (SOP). UCRA will respond in writing within 30 days of receipt of the report. Documentation of the audit report and the response will be submitted to the LCRA CRP Project Manager with the progress report no later than the quarter following the one in which the audit was conducted.

Corrective Action Reports - Issues that may affect data quality and availability will be tracked, addressed, and reported to the LCRA using the definitions and corrective action strategy laid out in the 2020-2021 CRP Guidance. LCRA Project Manager will then report the corrective action to TCEQ. The UCRA must address deviations associated with sampling activities, chain-of-custody, analytical method requirements, quality control, and data management.

Deliverables and Due Dates:

September 1, 2019 through August 31, 2020

- A. Basin-wide QAPP Receipt Acknowledgement and Adherence Letters (if applicable) - *October 1, 2019*
- B. Specified sections of the Basin-wide QAPP posted to the Web page - *October 15, 2019*
- C. Draft QAPP Appendix B Amendment for FY 2021 monitoring - *June 1, 2020*
- D. Final QAPP Appendix B Amendment for FY 2021 monitoring – *August 1, 2020*
- E. QAPP Amendments and revisions to Appendices (if applicable) - *as needed*
- F. QAPP Appendix and Amendment Receipt Acknowledgement - *no later than 45 days after LCRA approval of the QAPP, but prior to the monitoring event*
- G. Participate in LCRA and/or TCEQ monitoring systems audit and response to comments (if applicable) - *date planned in consultation with LCRA*
- H. Corrective action status report (if applicable) - *with Progress Report*

September 1, 2020 through August 31, 2021

- A. Comments to Draft FY 2022-2023 Basin-wide QAPP – *two weeks from receipt*
- B. Respond to QAPP amendments and revisions to Appendices – *within 15 days of receipt*
- C. QAPP Appendix and Amendment Receipt Acknowledgement - *no later than 15 days after receipt from LCRA, but prior to the monitoring event*
- D. Participate in LCRA monitoring systems audit and response to comments (if applicable) - *date planned in consultation with LCRA*
- E. Corrective action status report (if applicable) - *with Progress Report*

TASK 3: WATER QUALITY MONITORING

Objectives: Water quality monitoring will focus on collecting information to characterize water quality in a variety of locations and conditions. These efforts will include a combination of:

- planning and coordinating basin-wide monitoring;
- routine, regularly-scheduled monitoring to collect long-term information and support statewide assessment of water quality;
- systematic, regularly-scheduled short-term monitoring to screen water bodies for issues;
- permit support monitoring to provide information for setting permit effluent limits; and
- special study, intensive monitoring targeted to:
 - identify sources and causes of pollution;
 - assess priority water quality issues;
 - obtain background water quality information;
 - provide information for setting site-specific permit effluent limits; and
 - evaluate statewide, regional, and site-specific water quality standards.

Task Description: UCRA will monitor water quality in O.H. Ivie Reservoir, the Colorado River and its tributaries above O.H. Ivie Reservoir and Brady Creek. Coordinated monitoring meetings will be held annually and the statewide coordinated monitoring schedule will be maintained.

UCRA will complete the following subtasks described below:

Monitoring Description - UCRA staff will routinely monitor water quality conditions at forty-seven sites within segments 1411, 1412, 1413, 1416, 1421, 1422, 1423, 1424, 1425, 1426 and 1433 of the Colorado River basin. Stream sites are to be monitored quarterly for flow data and field parameters with conventional + nutrients, bacteriological and chlorophyll samples collected. Reservoir sites will be monitored twice annually with the collection of field profile data, conventional + nutrient, chlorophyll, bacteriological samples as well as elevation/contents data. Conventional + nutrient analysis includes sulfates, chlorides, Chlorophyll a, total phosphorus, nitrite/nitrate nitrogen and TKN. Bacteriological analysis will be for *E. coli* bacteria. All conventional chemical and bacteriological samples will be submitted to the LCRA ELS for analysis. Three sites will monitor 24 hour diurnal dissolved oxygen twice annually, with one event during the index period and one event during the critical period dependent on adequate flow. All monitoring procedures and methods will follow the guidelines prescribed in the QAPP, TCEQ *Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods for Water, Sediment, and Tissue (RG-415)* and the TCEQ *Surface Water Quality Monitoring Procedures, Volume 2: Methods for Collecting and Analyzing Biological Community and Habitat Data (RG-416)*. Publication used will be the most current edition.

Coordinated Monitoring Meeting - The UCRA will host an annual coordinated monitoring meeting in the spring of each year. Professional monitoring organizations will be invited to attend the working meeting in which monitoring needs and purposes will be discussed segment by segment and station by station. Information from participants will be used to select stations and parameters that will enhance overall water quality monitoring coverage, eliminate duplication of effort, and address basin priorities. The changes to the monitoring schedule will be entered into the statewide database on the Internet (<http://cms.lcra.org>) and communicated to meeting attendees. Changes to the UCRA monitoring schedule that occur during the course of the year will be entered into the statewide database on the Internet and communicated to meeting attendees.

Progress Report - Each Progress Report will indicate the number of sampling events and the types of monitoring conducted in the quarter, to include all types of monitoring.

Deliverables and Dues Dates:

September 1, 2019 through August 31, 2020

- A. Conduct water quality monitoring, report on the number of sites monitored each quarter and submit with Progress Report - *December 5, 2019; March 5 and June 5, 2020*
- B. Coordinated Monitoring Meeting - *between March 15 and April 30, 2020*
- C. Coordinated Monitoring Meeting Summary of Changes - *within 2 weeks of the meeting*
- D. Email notification that Coordinated Monitoring Schedule updates are complete – *within 2 weeks of the meeting.*

September 1, 2020 through August 31, 2021

- A. Conduct water quality monitoring, report on the number of sites monitored each quarter, and submit with Progress Report - *September 5 and December 5, 2020; March 5 and June 5 and August 31, 2021*
- B. Coordinated Monitoring Meeting - *between March 15 and April 30, 2021*
- C. Coordinated Monitoring Meeting Summary of Changes – *within 2 weeks of the meeting*
- D. Email notification that Coordinated Monitoring Schedule updates are complete – *within two weeks of meeting.*

TASK 4: DATA MANAGEMENT

Objectives: To manage a quality-assured water quality monitoring database and transfer data to the TCEQ Surface Water Quality Monitoring Information System (SWQMIS) database.

Task Description: Surface water quality monitoring data files and targeted monitoring data, as applicable, will be transferred to the LCRA in the correct format required.

UCRA will review each data set using the Data Review Checklist and the SWQMIS Data Loader. Data will be submitted to the LCRA Data Manager in an excel spreadsheet format monthly. If necessary, the Data Summary will be included. It will contain basic identifying information about the data set, information regarding inconsistencies and errors identified during data verification and validation steps, and/or problems with data collection efforts.

Data correction requests and station location requests will be submitted to LCRA Data Manager, as needed.

Water quality data approved by the TCEQ will be posted on UCRA's Web page at least two times per year, or a link may be provided to the TCEQ Surface Water Quality Web Reporting Tool at <http://www80.tceq.texas.gov/SwqmisPublic/public/default.htm> .

Deliverables and Due Dates:

September 1, 2019 through August 31, 2020

- A. Surface water quality monitoring data files and summary files if applicable – *15th day of the month following sampling or earlier*
- B. Surface water quality monitoring data updates to Web page or link to LCRA/TCEQ's water quality data – *January 15 and July 15, 2020*
- C. BLOB files - coordinate due date(s) with LCRA Project Manager

September 1, 2020 through August 31, 2021

- A. Surface water quality monitoring data files and summary files if applicable – *15th day of the month following sampling or earlier*
- B. Surface water quality monitoring data updates posted to Web page, or link to LCRA/TCEQ's water quality data – *January 15 and July 15, 2021*
- C. Data submittal progress report – as requested

TASK 5: DATA ANALYSIS AND REPORTING

Objectives: Conduct data analysis and develop reports that provide information to describe water quality and identify priority water quality issues for further investigation or action. This work will:

- correlate watershed characteristics with water quality conditions;
- highlight areas where water quality appears to be improving or declining;
- support and/or validate the findings of the Texas Integrated Report of Surface Water Quality;
- support planning of monitoring efforts;
- identify areas where nonpoint source management efforts may be applied; and
- provide information for stakeholders to discuss at Water Quality Advisory Committee meetings.

Task Description: Working closely with LCRA Project Manager, a water quality report with sections containing information on UCRA's monitoring coverage area in basin 14 will be developed each year using TCEQ guidelines as follows.

Basin Highlights Report - UCRA will work closely with the LCRA Project Manager to develop the Basin Highlights Report (BHR). The BHR will follow one of the versions described below as detailed in the FY 2020-2021 CRP Guidance.

The Standard Report

- an overview of basin water quality monitoring describing each organization's participation
- the top water quality issues in the basin for stakeholder prioritization and monitoring decisions
- a description of water quality conditions for each segment/water body
- a summary of findings from special studies
- maps showing the location of sampling sites and water quality issues
- summary of Water Quality Advisory Committee and other public outreach activities
- instructions on how to get involved in Water Quality Advisory Committee meetings, volunteer monitoring, and other opportunities for participation
- information on the CRP content featured on UCRA's Web page

Watershed Characterization

- descriptions of segments with the areas of impairment or interest described
- stream/reservoir hydrology
- impairment/area of interest description
- land use and natural characteristics
- potential causes of each impairment
- potential stakeholders
- recommendations for improving water quality
- maps including water bodies and relevant spatial conditions
- ongoing projects
- images of water bodies and watershed areas being characterized
- major watershed events (present and future)

Program Update

- an update on major basin activities, changes and events
- an update of basin water quality monitoring activities
- an update on the top water quality concerns and issues in the basin
- a summary of findings from special studies
- maps showing the location of sampling sites and major water quality issues
- an update on public outreach and educational activities

- links to additional resources

The reports will be made available to basin stakeholders, and linked on UCRA's Web page.

Basin Summary Report - The Basin Summary Report will follow the outline described in the FY 2020-2021 CRP Guidance. The report will include a comprehensive review of water quality for the entire basin, including:

- a description of the water quality conditions and issues;
- trend analysis of water quality by station and parameter;
- maps showing watershed characteristics, sampling stations, and water quality issues;
- a discussion of the watershed characteristics and their potential influence on water quality; and
- recommendations for water quality management strategies to correct identified water quality problems and pollution sources.

A meeting between the Performing Party and the TCEQ CRP staff will be arranged prior to the commencement of substantial work on the report. The Performing Party will be prepared to discuss site selection for trend analysis, report content and layout, methodology for data review, and address other questions or suggestions for the report.

A pre-draft or watershed summary will be provided to the TCEQ CRP Project Manager and must be approved prior to completing the first draft. The Basin Summary Report will be presented to the Steering Committee for review and comment. Resolution of comments will be coordinated with the public and the TCEQ, if necessary. The Performing Party will provide an electronic copy of the draft report to the TCEQ and TCEQ will provide comments; final approval of the report will rest with the TCEQ. Five copies of the final report will be provided to the TCEQ. The reports will be made available to Steering Committee members and all basin stakeholders and will be posted on the Performing Party's web page. The final Basin Summary Report will be provided to the Texas Parks and Wildlife Department, Texas State Soil and Water Conservation Board, the governor, the lieutenant governor, and the speaker of the House of Representatives not later than the 90th day after the date the report is submitted to the TCEQ.

Deliverables and Due Dates:

September 1, 2019 through August 31, 2020

- A. Preparation meeting for Basin Summary Report – by November 15, 2019
- B. Pre-Draft Watershed Summary – December 15, 2019
- C. Draft Basin Highlights Report - February 15, 2020
- D. Draft Basin Summary Report - March 15, 2020
- E. Final Basin Highlights Report – May 15, 2020
- F. Final Basin Summary Report – May 31, 2020
- G. Post Report to web page - June 30, 2020

September 1, 2020 through August 31, 2021

- A. Preparation meeting for Basin Summary Report – by November 15, 2020
- B. Pre-Draft Watershed Summary – December 15, 2020
- C. Draft Basin Highlights Report - February 15, 2021
- D. Draft Basin Summary Report - March 15, 2021
- E. Final Basin Highlights Report – May 15, 2021
- F. Final Basin Summary Report – May 31, 2021
- G. Post Report to web page – June 30, 2021

TASK 6: STAKEHOLDER PARTICIPATION AND PUBLIC OUTREACH

Objectives: Enhance and support participation of stakeholders in the development of water quality objectives and priorities for the basin, and CRP as a whole. Engage in education and outreach activities to enhance stakeholder knowledge and involvement.

The Water Quality Advisory Committee serves as the focus of public input and assists with:

- creation of specific, achievable water quality objectives and basin priorities;
- review and development of work plans and allocation of resources;
- review, development and approval of major reports;
- establishment of monitoring priorities and development of monitoring plans; and
- identification of priority problem areas and possible actions to address these problems and pollutant sources.

Stakeholders should be engaged through outreach and education activities that support the CRP goals. This can be accomplished by:

- providing several forums for citizens to contribute their ideas and concerns;
- participating in outreach and education activities to increase public awareness about water quality issues in the basin;
- communicating information on water quality issues so that priorities may be set considering local, regional, state, and federal needs; and
- providing opportunities for volunteer citizen monitoring of basin water bodies.

Task Description: UCRA will engage stakeholders in the upper Colorado River basin above O.H. Ivie Reservoir by hosting annual Water Quality Advisory Committee meetings. The purpose of the meetings will be to educate the public about water quality and to receive input about local water quality concerns and CRP initiatives.

Water Quality Advisory Committee Meetings - In order to sufficiently address the different interests, concerns and priorities of each watershed, UCRA will work to ensure that its Upper Basin Water Quality Advisory Committee includes stakeholder volunteers from across the basin that represent the groups identified in the FY 2020-2021 CRP Guidance. If specified groups are not represented, efforts will be made to recruit representatives before the next scheduled meeting. To engage new members and increase participation, UCRA will take every opportunity to promote the CRP and involvement in the Upper Basin Water Quality Advisory Committee.

To meet the goals and coordination requirements of the CRP Guidance, UCRA will conduct one annual Water Quality Advisory Committee meeting each year of the biennium.

UCRA will contact stakeholders at least 30 days in advance of meeting date(s) to encourage participation. An inquiry will be sent to all interested stakeholders, with a request for proposed agenda topics, confirmation of continued interest/participation in the Water Quality Advisory Committee, and request input on additional topics and potential stakeholders. Along with the priority agenda topics identified in the CRP Guidance, the Water Quality Advisory Committee meetings will also include additional topics that have been identified to be of significant interest to stakeholders. A final meeting announcement and agenda will be made available at least 15 days prior to the meeting.

After each Water Quality Advisory Committee meeting, UCRA will ensure all stakeholder input, comments, decisions, and any other meeting accomplishments reached are addressed, where applicable. For all Water Quality Advisory Committee meetings, copies of meeting materials will be provided with the next Progress Report, and include: a copy of the meeting agenda, presentations, meeting minutes, and a list of attendees.

Education and Outreach - For any public participation, outreach, or volunteer monitoring activities, a copy of the activities summary, materials produced or distributed by UCRA, and a list of participants will be included in the subsequent Progress Report.

UCRA will develop, maintain, update, and report on their Web page as specified in the FY 2020-2021 CRP Guidance. The Web page will be reviewed on a quarterly basis to ensure that information and announcements remain current and relevant. UCRA will also include summaries of revisions to the Web page in/with the corresponding quarterly Progress Report.

Deliverables and Due Dates:

September 1, 2019 through August 31, 2020

- A. Document that Web page meets outlined requirements – *December 15, 2019*
- B. Summary of web page updates emailed to Project Manager throughout the quarter and submission dates provided with Progress Reports --*December 5, 2019; March 5 and June 5, 2020*
- C. Contact Water Quality Advisory Committee members for inquiries, draft agenda topics and to confirm participation – *a minimum of 30 days prior to meeting date*
- D. Final announcements and agenda for Water Quality Advisory Committee meetings – *a minimum of 15 days in advance of meeting*
- E. Upper Basin Water Quality Advisory Committee meeting – *one per year with dates negotiated with LCRA & TCEQ project managers*
- F. Upper Basin Water Quality Advisory Committee meeting materials - *with Progress Report following meeting*
- G. Upper Basin Water Quality Advisory Committee meeting minutes posted to the Web page – *indicate in Progress Report following meeting*
- H. Materials from education and outreach activities - *December 5, 2019; March 5 and June 5, 2020*

September 1, 2020 through August 31, 2021

- A. Summary of web page updates emailed to Project Manager throughout the quarter and submission dates provided with Progress Reports – *September 5 and December 5, 2020; March 5, June 5, and August 31, 2021*
- B. Contact Water Quality Advisory Committee members with inquiries, draft agenda topics and to confirm participation – *a minimum of 30 days prior to meeting date*
- C. Final announcements and agenda for Water Quality Advisory Committee meeting – *a minimum of 15 days in advance of meeting*
- D. Upper Basin Water Quality Advisory Committee meeting – *one per year with dates negotiated with LCRA & TCEQ project managers*
- E. Upper Basin Water Quality Advisory Committee meeting materials - *with Progress Report following meeting*
- F. Upper Basin Water Quality Advisory Committee meeting minutes posted to the Web page – *indicate in Progress Report following meeting*
- G. Materials from education and outreach activities – *September 5 and December 5, 2020; March 5, June 5, and August 31, 2021*