



AECOM
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January 20, 2023

Daniel Maldonado, Water Resources Planner
City of Bakersfield, Water Resources Department
1000 Buena Vista Road
Bakersfield, CA 93311

Subject: Proposal for Water Master Plan

Dear Daniel,

AECOM Technical Services, Inc. (AECOM) is pleased to submit this proposal for engineering services to the City of Bakersfield (City). This proposal is based on our understanding of the requirements listed in the request for proposal dated December 12, 2022, for the subject project.

This cost proposal is created using the billing rates and titles defined by the City Public Works Department in 2022 as part of the Library of Consultants.

PROJECT UNDERSTANDING

We understand that the objective of this project is to develop a Water Master Plan that includes the following subjects:

1. Narrative introduction to the Kern River
2. Defines City's current water supplies and projected future supply, including a summary of contractual obligations
3. Defines City's current and projected future water demands, including a summary of contractual obligations
4. Develops sustainable water management priorities
5. Develops capital improvement projects
6. Summary of Kern River GSA, GSP, and introduction to SGMA requirements

These subjects and recommendations are to be compiled into a single master plan document. We understand the master plan will be used for the following purposes:

1. Defining City goals and priorities for sustainable water management
2. Provide knowledge transfer for City staff
3. Capital improvement budget funding and phasing

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SCOPE OF WORK

Task 1 – Preliminary Research

Kickoff Meeting. AECOM will lead one project kickoff meeting that will be held at the City's office. AECOM will prepare an agenda and minutes for the meeting.

Prepare Data Request. AECOM will prepare a list of reports, data, and information we believe are necessary to prepare the master plan. City staff can augment that list with additional resources based on their experience. AECOM will also review documents in our archives to locate any resources that may be pertinent.

Review City Provided Documents. AECOM will review the documents provided by the City particularly in regard to City water supplies, water rights, and contractual obligations.

Interview City Staff. AECOM will interview staff selected by the City who have experience with the City's facilities and operations. These interviews will supplement the written data provided by the City.

Site Visit to City Water Facilities. AECOM will accompany City staff on a tour of water infrastructure where future capital projects could be required. These facilities could include Kern River weirs, canal headworks, and recharge facilities as selected by the City.

Prepare Technical Memorandum. A technical memorandum will be prepared that summarizes the data gathered, documents reviewed, staff interviews, and site visit. Comments received on the technical memorandum will be implemented in the master plan chapters.

Deliverables:

- *Data Request (MS Excel Spreadsheet)*
- *Data Gathering Technical Memorandum (PDF)*

Assumptions:

- *Site visit is assumed for a duration of 4 hours.*
- *Staff interviews are assumed for a duration of 4 hours.*
- *Structural inspections or condition assessments of existing infrastructure is not included.*

Task 2 – Community Outreach

Community Outreach. AECOM will prepare letters that describe the master plan scope of work, identify the public meeting, and solicit written input. The City will provide a list of agencies where the letter is to be sent.

Public Meeting. AECOM will assist the City in holding a public meeting at the City's office. AECOM will prepare and give a short presentation on the master plan scope of work.

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Summary of Public Comments. AECOM will prepare a comment matrix for written public comments received. The City's project manager will direct AECOM which comments are to be incorporated into the Master Plan.

Deliverables:

- *Public Outreach Letter (MS Word file)*
- *Presentation slides*
- *Comment Matrix (MS Excel spreadsheet)*

Assumptions:

- *Not more than one (1) public meeting is held.*
- *Letters will be printed and mailed by City staff. Cost of postage is not included.*
- *Not more than fifty (50) public comments are received.*

Task 3 – Final Development

Summarize Existing Supply and Calculate Future Demand. AECOM will summarize existing supply and demand data in a MS Excel spreadsheet. Future demand will be estimated based on the City's adopted Urban Water Management Plan (UWMP). UWMPs prepared by other agencies selected by the City will also be reviewed. An estimate of maximum sustainable demand based on projected supply (e.g. number of residences) will be made.

Develop Capital Projects. A list of potential capital projects will be developed based on the information obtained in Task 1. A conceptual construction cost estimate will be prepared for each project. Projects will be ranked based on priority and a conceptual phasing approach will be prepared. This information will be presented in a technical memorandum and comments received will be implemented in the master plan chapters.

Workshop for City Staff. AECOM will lead one workshop for City staff to discuss demand calculations, capital projects, master plan content, and master plan organizational structure. It is assumed that this meeting will be held at AECOM's office.

Prepare Individual Draft Chapters. AECOM will prepare draft chapters for the master plan. Each chapter will be submitted to the City as they are prepared, which is the same process used for the Urban Water Management Plan. Comments received on each chapter will be implemented in the draft master plan. The chapters are assumed to consist of:

- 1) Introduction to Kern River
- 2) City of Bakersfield Supplies, Including Kern River Water Rights
- 3) Municipality Demands
- 4) Contractual Obligations
- 5) Conjunctive Use and Related Management Options, Projects and Priorities
- 6) SGMA

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7) Recommendations

Prepare Draft Master Plan. AECOM will prepare a single document with all the chapters and appendices for review by City staff. Comments received will be implemented as part of the revised draft master plan.

Prepare Revised Draft Master Plan. AECOM will address City comments from the draft master plan. Comments received will be implemented as part of the final master plan. It is assumed that the revised draft master plan will be the version issued or discussed for public comment.

Prepare Final Master Plan. AECOM will address City and public comments from the revised draft master plan and prepare a final document.

Presentation to City Staff. AECOM will prepare and give one detailed presentation on the Final Master Plan to City staff. It is assumed this meeting will be held at the City offices.

Presentation to City Council. AECOM will prepare and give one short presentation on the Final Master Plan to the City Council.

Deliverables:

- *Supply and Demand Calculations (MS Excel spreadsheet)*
- *Capital Projects Technical Memorandum (PDF)*
- *Individual Draft Chapters (MS Word)*
- *Draft Master Plan (PDF)*
- *Revised Draft Master Plan (PDF)*
- *Final Master Plan (PDF & 6 hardcopies)*

Assumptions:

- *This work does not include land surveying or geotechnical services.*
- *Engineering design of proposed facilities is not included.*
- *Hydraulic and hydrologic modeling is not included.*

Task 4 – Project Management and Quality Control

Project Management. AECOM's project manager will manage the project.

Biweekly Meetings. AECOM will lead status meetings with the City's project manager via conference call. AECOM will prepare agendas and minutes for each meeting. Frequency of meetings is assumed to be biweekly, but can be scheduled on an as-needed basis based on direction from the City's project manager.

Quality Control. AECOM will implement our Quality Management System that includes an internal review for all deliverables.

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Assumptions:

- *Not more than twenty (20) biweekly meetings are held.*

Schedule:

Data Request	10 working days from NTP
Data Gathering Technical Memorandum	30 working days from receipt of documents
Public Outreach Letter	15 working days prior to public meeting
Presentation slides	10 working days prior to public meeting
Comment Matrix	10 working days after public meeting
Supply and Demand Calculations	30 working days after Data Gathering Tech Memo
Capital Projects Technical Memorandum	30 working days after Data Gathering Tech Memo
Individual Draft Chapters	40 working days after Workshop for City Staff
Draft Master Plan	40 working days after receipt of City comments
Revised Draft Master Plan	30 working days after receipt of City comments
Final Master Plan	15 working days after receipt of City comments


Assuming a 2 week review cycle by City staff, we project that work can be completed by mid-December 2023.


Compensation:

Task 1 – Preliminary Research	\$32,300	Time and Materials
Task 2 – Community Outreach	\$11,840	Time and Materials
Task 3 – Final Development	\$216,170	Time and Materials
Task 4 – Project Management and Quality Control	<u>\$28,040</u>	Time and Materials
Total:	\$288,350	

Thank you for the opportunity. Please contact either of us if you have any questions or concerns about our proposed scope or fee. We look forward to working with you and your staff on this project.

Yours sincerely,


 Daniel Cronquist, PE
 Project Manager


 Ben Horn, PE
 Managing Engineer

Project Budget

Water Master Plan

City of Bakersfield

Task Description	Personnel Hours							Budget			
	Specialty Professional	Principal Engineer	Project Engineer III	Project Engineer II	Project Engineer I	CAD Designer	Engineering Technician	Total Hours	Labor	Non-Labor Fee	Total
Task 1 - Preliminary Research											
Kickoff Meeting	2	2	2	4				10	\$ 2,150	\$ 1,639	\$ 3,789
Prepare Data Request		2	2	6				10	\$ 1,920	\$ 58	\$ 1,978
Review City Provided Documents		10	20	40				70	\$ 13,300	\$ 399	\$ 13,699
Interview City Staff		4	4	4				12	\$ 2,560	\$ 77	\$ 2,637
Site Visit to City Water Facilities		4	4	4				12	\$ 2,560	\$ 77	\$ 2,637
Prepare Technical Memorandum		4	10	20	8			42	\$ 7,340	\$ 220	\$ 7,560
Subtotal	2	26	42	78	8	-	-	156	\$ 29,830	\$ 2,470	\$ 32,300
Task 2 - Community Outreach											
Community Outreach			8		20			28	\$ 4,080	\$ 128	\$ 4,208
Public Meeting	2	2	4	8	8			24	\$ 4,170	\$ 125	\$ 4,295
Summary of Public Comments			4		20			24	\$ 3,240	\$ 97	\$ 3,337
Subtotal	2	2	16	8	48	-	-	76	\$ 11,490	\$ 350	\$ 11,840
Task 3 - Final Development											
Summarize Existing Supply and Calculate Future Demand		10	20	40				70	\$ 13,300	\$ 402	\$ 13,702
Develop Capital Projects		20	40	60				120	\$ 23,400	\$ 702	\$ 24,102
Workshop for City Staff		6	12	16	8			42	\$ 7,660	\$ 230	\$ 7,890
Prepare Individual Draft Chapters		64	112	280	28	84		568	\$ 99,460	\$ 2,984	\$ 102,444
Prepare Draft Master Plan		20	40	80	16	40		196	\$ 33,520	\$ 1,006	\$ 34,526
Prepare Revised Draft Master Plan		10	20	40	12	20		102	\$ 17,240	\$ 517	\$ 17,757
Prepare Final Master Plan		5	10	20	10	10		55	\$ 9,100	\$ 273	\$ 9,373
Presentation to City Staff (Assume 1)	2	2	4	8	8			24	\$ 4,170	\$ 125	\$ 4,295
Presentation to City Council (Assume 1)			2	4	8			14	\$ 2,020	\$ 61	\$ 2,081
Subtotal	2	137	260	548	90	154	-	1,191	\$ 209,870	\$ 6,300	\$ 216,170
Task 4 - Project Management and Quality Control											
Project Management			30				12	42	\$ 7,440	\$ 227	\$ 7,667
Biweekly Meetings (Assume 20)			20	40				60	\$ 10,600	\$ 318	\$ 10,918
Quality Control	32							36	\$ 9,180	\$ 275	\$ 9,455
Subtotal	32	-	50	40	-	-	16	138	\$ 27,220	\$ 820	\$ 28,040
Total	38	165	368	674	146	154	16	1,561	\$ 278,410	\$ 9,940	\$ 288,350