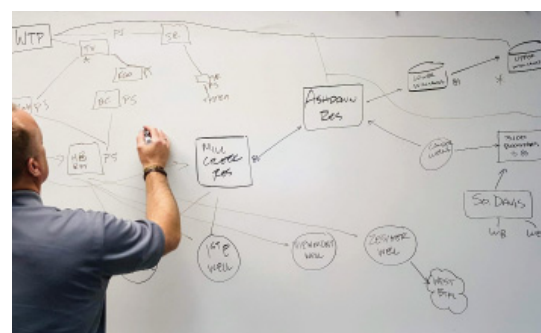


## Submitted to:

**WESTERN MUNICIPAL WATER DISTRICT | WESTERN WATER  
Bureau of Reclamation's Water Conservation Field Services Funding Source**

April 14, 2025



Western Municipal Water District  
Ryan Shaw, Director of Water Resources  
14205 Meridian Parkway  
Riverside, CA 92518

April 14, 2025

Re: Murrieta System Optimization Review (W-328)

Dear Mr. Shaw and Evaluation Committee:

The Murrieta Service Area of Western Water faces challenges related to water supply and growing demand. Before investing millions of dollars into capital projects, a study is needed to analyze water supply and opportunities for system optimization. Hansen, Allen & Luce (HAL) is well prepared to help Western cost-efficiently accommodate future growth and expansion while maintaining the level of service for the existing community to maximize return on infrastructure investments.

Working with our highly qualified system optimization team, Western Water will experience:

- **A focused, prepared, and service-oriented project manager, Steven Jones, PE.** Steve's hydraulic modeling and master planning experience of over 25 years and substantial institutional knowledge has positioned him as an ideal team member for this system optimization review.
- **A high level of efficiency.** Our recent work on the Murrieta Service Area has already given us a significant start on the system optimization review. Our project team members are very familiar with existing data sets and are ready to hit the ground running. We will help you maximize the value of this plan by capitalizing on existing data sets when possible.
- **A team of experts.** HAL has completed dozens of drinking water master plans, water quality assistance projects, system optimization reviews, water infrastructure capital improvement planning projects across the Intermountain West. HAL is a recognized expert firm for system optimization, water quality, hydraulic modeling, and master planning.
  - Our team includes an experienced principal in charge and project manager, accomplished support engineers and a seasoned technical advisor, all with experience specific to modeling, planning, and water quality.
- **Competent project understanding and history with Western Municipal Water District:** HAL has successfully assisted with a variety of projects for Western Water.
  - Our long relationship with Western and proven ability to understand Western's objectives, coupled with knowledge, experience, and relationships gained while working on the recent Murrieta Service Area, *will ensure that this System Optimization Review delivers a maximum cost-to-benefit ratio and provides information and output that will prove useful and valuable for years to come.*
  - Our cost estimate is based on our extensive experience and the level of effort required to produce an effective and accurate plan. While this is based on our experience with others, we also understand that our assumptions need to match your needs. We invite you to review our proposal carefully and would request the opportunity, if needed, to be able to refine our approach to better meet your expectations following selection.

We welcome the opportunity to meet with you to answer questions and discuss specific project goals, issues, schedule and budget.

Sincerely,

HANSEN, ALLEN & LUCE, INC.



Steve Jones, M.S, P.E.  
Chief Executive Officer

## OVERVIEW OF HANSEN, ALLEN & LUCE

**Hansen, Allen & Luce (HAL)** is a regional engineering firm that has served the needs of the water community for over 50 years. HAL has completed thousands of civil, water resources, and environmental engineering-related projects for a variety of clients throughout the Intermountain West, providing a suite of planning and design services including:

- Drinking water, secondary water, wastewater (sewer), and storm water master plans
- Water system optimization and strategic management
- Water infrastructure capital improvement plans
- Environmental characterization and sampling
- Water supply alternatives analysis
- Environmental compliance
- Groundwater monitoring and characterization
- Well development and rehabilitation
- Risk and resilience assessments (RRAs)

HAL has over 75 employees located in our office in South Jordan, Utah. Among our staff are 35 Professional Engineers, **many of whom are licensed in the state of California**. HAL maintains a highly educated, technical staff of BS, MS, and PhD graduates who specialize in water system optimization and have had long careers in the field of water resources engineering.



### **Hansen, Allen & Luce (HAL)**

859 W. South Jordan Pkwy. Ste. 200  
South Jordan, Utah 84095  
[www.halengineers.com](http://www.halengineers.com)  
801-566-5599

#### Primary Contact:

**Steve Jones, PE** | Chief Executive Officer  
[steve@halengineers.com](mailto:steve@halengineers.com)

## FAMILIARITY WITH WESTERN MUNICIPAL WATER DISTRICT AND MURRIETA SERVICE AREA

Our existing knowledge of the Murrieta Service Area water system allows our team to provide a system optimization review efficiently and effectively and guide the District in developing a strategic water management plan. HAL has successfully worked with the Western Municipal Water District (the District/Western) on some of the following recently completed projects:

- Pumping Cost Analysis – Potable and Non-Potable Systems (ongoing)
- Unidirectional Flushing Plan (2024)
- Murrieta Service Area Hydraulic Model Review and Water Quality Analysis (2023)
- Fire Suppression and Emergency Storage Recommendations (2022)
- Western Municipal Water District Hydraulic Model Update (2020)
- Water System Optimization Study – Phases 1 to 4 (2017 - Present)

HAL is excited about the opportunity to serve the Murrieta community, continue its relationship with the District and its stakeholders, and to support the District's ongoing efforts to provide reliable, safe water for all its customers in the present and in the future.

## PROJECT MANAGEMENT AND QA/QC APPROACH

## PROJECT SCHEDULE & LEVEL OF EFFORT

[illegible]

LEVEL OF EFFORT						
MP III	MP I	SP I	PE III	PE II	EIT	Task Total
0	0	0	5	0	10	15
5	0	0	5	0	0	10

1	1	0	8	0	40	50
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2	0	1	16	2	102	123
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2	0	1	8	2	60	73
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1	0	0	2	0	30	33
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2	0	2	4	0	0	8
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2	0	2	8	0	92	104
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2	0	0	8	3	112	125
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2	0	4	16	0	134	<b>156</b>
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1	0	0	2	0	40	43
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2	0	0	4	2	32	40
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4	0	2	4	0	0	10
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4	2	4	8	4	180	<b>202</b>
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2	0	2	2	0	52	58
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2	0	0	2	0	50	54
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2	2	2	4	0	40	50
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## QA/QC PROGRAM

HAL follows an in-house QA/QC program that is based on proactiveness before, during, and after project development. The following describes HAL practices that have been and will be employed to ensure that the Murrieta System Optimization Review is completed within the agreed time and budget limits.

HAL PROPOSAL SPREADSHEET



	LABOR BILLING RATE WITH COMMUNICATION CHARGE:	\$246.00	\$225.00	\$189.00	\$178.00	BASE COST/HR \$161.00	\$152.00	\$140.00	\$176.00	\$87.00
5 %	Billing Period 2 - Projected Rate Increase									

CLIENT: Western Municipal Water District

PROJECT: Murrieta System Optimization Review (SOR)

Pha	Task #	Task Activity	Billing Period	Hours								Total Hours	Labor Cost	Communications /Office Expense	Miles Travel	Direct Expense	Expense Cost	Total HAL Cost with Contingency & Rate Inc.	COMMENT	
				Man Prof III	Man Prof I	Sr Prof I	Prof III	Prof II	Prof I	EIT (PEI)	Wtr. Res II									Admin
a Project Management																				
	a.1	Project Milestone/Monthly/Stakeholder Meetings	1				5			10			15	\$2,185.00	\$105.00		6000	\$6,105.00	\$9,948.00	
	a.2	QA/QC	1	5			5					10	\$2,050.00	\$70.00			\$70.00	\$2,544.00		
		SUBTOTAL HOURS/UNITS:		5	0	0	10	0	0	10	0	0	25		\$175.00		0	6000		
		SUBTOTAL:		\$1,195	\$0	\$0	\$1,710	\$0	\$0	\$1,330	\$0	\$0		\$4,235.00	\$175.00	\$0.00	\$6,000.00	\$6,175.00	\$12,492.00	
II Existing System and Data Review																				
	II.1	Develop data gap checklist	1	1	1		8			40			50	\$7,145.00	\$350.00			\$350.00	\$8,994.00	
	II.2	Hydraulic Model Data Request Meeting	1										0	\$0.00	\$0.00			\$0.00	\$0.00	
	II.3	Update and calibrate existing Murrieta model	1	2		1	16	2		102			123	\$17,270.00	\$861.00			\$861.00	\$21,757.20	
	II.4	Hydraulic Model Data Request Meeting (2)	1										0	\$0.00	\$0.00			\$0.00	\$0.00	
	II.5	Update and calibrate existing Murrieta model (2)	1	2		1	8	2		60			73	\$10,316.00	\$511.00			\$511.00	\$12,992.40	
	II.6	Phase I & II efforts into 1st Draft SOR report	1	1			2			30			33	\$4,571.00	\$231.00			\$231.00	\$5,762.40	
	II.7	Summary of existing system, data, and model available	1										0	\$0.00	\$0.00			\$0.00	\$0.00	
	II.8	QA/QC	1	2		2	4					8	\$1,526.00	\$56.00			\$56.00	\$1,898.40		
		SUBTOTAL HOURS/UNITS:		8	1	4	38	4	0	232	0	0	287		\$2,009.00		0	0		
		SUBTOTAL:		\$1,912	\$218	\$728	\$6,498	\$616	\$0	\$30,856	\$0	\$0		\$40,828.00	\$2,009.00	\$0.00	\$0.00	\$2,009.00	\$51,404.40	
III System Optimization Analysis																				
	III.1	Analysis Scenario Meeting	1										0	\$0.00	\$0.00			\$0.00	\$0.00	
	III.2	Conduct hydraulic analysis	1	2		2	8			92			104	\$14,446.00	\$728.00			\$728.00	\$18,208.80	
	III.3	Conduct water quality analysis	1	2			8	3		112			125	\$17,204.00	\$875.00			\$875.00	\$21,694.80	
	III.4	Conduct optimization analysis	1	2		4	16			134			156	\$21,764.00	\$1,092.00			\$1,092.00	\$27,427.20	
	III.5	Phase III efforts into 1st Draft SOR report	1	1			2			40			43	\$5,901.00	\$301.00			\$301.00	\$7,442.40	
	III.6	1st Draft of Murrierta SOR Report Available	1										0	\$0.00	\$0.00			\$0.00	\$0.00	
	III.7	District reviews 1st Draft SOR report	1										0	\$0.00	\$0.00			\$0.00	\$0.00	
	III.8	1st Draft Feedback Meeting	1										0	\$0.00	\$0.00			\$0.00	\$0.00	
	III.9	Revisions (into 2nd draft SOR report)	1	2			4	2		32			40	\$5,726.00	\$280.00			\$280.00	\$7,207.20	
	III.10	QA/QC	1	4		2	4						10	\$2,004.00	\$70.00			\$70.00	\$2,488.80	
		SUBTOTAL HOURS/UNITS:		13	0	8	42	5	0	410	0	0	478		\$3,346.00		0	0		
		SUBTOTAL:		\$3,107	\$0	\$1,456	\$7,182	\$770	\$0	\$54,530	\$0	\$0		\$67,045.00	\$3,346.00	\$0.00	\$0.00	\$3,346.00	\$84,469.20	
IV System Optimization Review and Support																				
	IV.1	Improvement Projects Review Meeting											0	\$0.00	\$0.00			\$0.00	\$0.00	
	IV.2	Evaluate proposed improvement projects		4	2	4	8	4		180			202	\$28,044.00	\$1,414.00			\$1,414.00	\$35,349.60	
	IV.3	Develop decision matrix		2		2	2			52			58	\$8,100.00	\$406.00			\$406.00	\$10,207.20	
	IV.4	Phase IV efforts into 2nd draft SOR report		2			2			50			54	\$7,470.00	\$378.00			\$378.00	\$9,417.60	
	IV.5	2nd Draft of Murrierta SOR Report Available											0	\$0.00	\$0.00			\$0.00	\$0.00	
	IV.6	District reviews 2nd Draft SOR report											0	\$0.00	\$0.00			\$0.00	\$0.00	
	IV.7	2nd Draft Feedback Meeting											0	\$0.00	\$0.00			\$0.00	\$0.00	
	IV.8	Revisions (into Final SOR report)		2	2	2	4			40			50	\$7,282.00	\$350.00			\$350.00	\$9,158.40	
	IV.9	Final SOR Report Available											0	\$0.00	\$0.00			\$0.00	\$0.00	
	IV.10	QA/QC		8	2	2	8						20	\$4,080.00	\$140.00			\$140.00	\$5,064.00	
		SUBTOTAL HOURS/UNITS:		18	6	10	24	4	0	322	0	0	384		\$2,688.00		0	0		
		SUBTOTAL:		\$4,302	\$1,308	\$1,820	\$4,104	\$616	\$0	\$42,826	\$0	\$0		\$54,976.00	\$2,688.00	\$0.00	\$0.00	\$2,688.00	\$69,196.80	
	TOTAL HOURS BY EMPLOYEE:			44	7	22	114	13	0	974	0	0								

PHASE	TASK	Labor	Direct Exp	Subtotal	Subconsultant	Subtotal
		Costs	Cost	w/Contingency	Costs	
a	Project Management	\$4,235	\$6,175	\$12,492	\$0	\$12,492
II	Existing System and Data Review	\$40,828	\$2,009	\$51,404	\$0	\$51,404
III	System Optimization Analysis	\$67,045	\$3,346	\$84,469	\$0	\$84,469
IV	System Optimization Review and Support	\$54,976	\$2,688	\$69,197	\$0	\$69,197
TOTAL w/ Contingency (20%)		\$200,501	\$17,062	\$217,562	\$0	\$217,562

Filename: H:\Marketing\Proposals\_SOQ's\2025\WMWD\Drinking Water Master Plan\05\_Proposal\Revisions\WMWD\_Plans\_HAL Cost Proposal Spreadsheet\_revised.xlsm\Drinking Water

# STANDARD FEE SCHEDULE 2025

## PERSONNEL CHARGES

Client agrees to reimburse Hansen, Allen & Luce, Inc. (HAL), for personnel hourly rates related to the completion of the project, in accordance with the following:

Managing Professional III .....	\$239
Managing Professional II .....	\$230
Managing Professional I .....	\$218
Senior Professional III .....	\$206
Senior Professional II .....	\$197
Senior Professional I .....	\$182
Professional III.....	\$171
Professional II.....	\$154
Professional I.....	\$145
Professional Intern.....	\$133
Environmental Scientist I .....	\$125
Environmental Scientist II .....	\$140
Engineering Student Intern .....	\$86
Water Resource Specialist I .....	\$146
Water Resource Specialist II .....	\$169
Professional Geologist I.....	\$159
Professional Geologist II.....	\$173
Geologist .....	\$149
Senior Designer.....	\$145
Designer .....	\$133
Senior Field Technician .....	\$162
Field Technician .....	\$105
CAD Operator.....	\$116
Public Relations Specialist.....	\$165
Administrative Assistant .....	\$80
Professional Land Surveyor.....	\$163
1 Man GPS Surveying Services.....	\$183
Drone Pilot .....	\$220
Expert Legal Services.....	\$360

## DIRECT CHARGES

Client also agrees to reimburse HAL for all other costs related to the completion of the project. Charges shall include, but not be limited to, the following:

Communication, Computer, Reproduction .....	\$7 per labor hour
Out-of-town per diem allowance (lodging not included) .....	\$80 per day
Vehicle .....	\$0.72 per mile
Outside consulting and services .....	Cost plus 10%
Other direct expenses incurred during the project .....	Cost plus 10%
Trimble GPS Unit .....	\$160 per day
Data Logger/Transducer.....	\$160 per week
Credit Card Payment Fee .....	3.5% of Payment Amount

INTEREST CHARGE AFTER 30 DAYS FROM INVOICE DATE..... 1.5% per month

Note: Annual adjustments to personnel and expense charges will occur in January of each year.