

Mr. Chris Thompson
Technical Committee Chairman
Mt. Nebo Water Agency (MNWA)
C/O Dave Pitcher
Central Utah Water Conservancy District
1426 East 750 North
Orem, UT 84097-5474

June 5, 2023

RE: Proposal for Groundwater Management Plan Development

Dear Chris,

Hansen, Allen & Luce, Inc. has been asked to provide this proposal to the Mt. Nebo Water Agency (MNWA) to provide technical assistance for continued collaboration on the development of a groundwater management plan. Included in this effort is the initial planning and development of the plan with MNWA. It will consider the previous findings of the existing basin conditions and the implementation of a groundwater database and identify the next critical steps and costs in its possible development.

Development of the groundwater management plan for the Southern Utah Valley will require coordination with MNWA members including Central Utah Water Conservancy District, Genola, Payson, Salem, Santaquin, Spanish Fork, Utah County, and Strawberry High Line Canal. Additionally, cooperation with Goshen, Woodland Hills, Elk Ridge, Springville, Mapleton, SWUA, USGS, Utah Division of Water Rights, Utah Department of Natural Resources, and irrigators with large wells will be important as explained below.

SCOPE OF WORK

TASK 1 - Project Management and Coordination

- a. Participate in Kickoff Meeting to review project objectives, schedule, data availability, what other entities should be approached, etc.
- b. Participate in MNWA technical committee meetings to review progress and receive input from MNWA.
- c. Participate in MNWA board meetings to present information that was developed in the technical meetings.

TASK 2 – Investigation into Regulatory Requirements

- a. Review requirements through the Division of Water Rights to establish a groundwater management plan and percent of necessary participants.
- b. Seek legal advice and guidance as necessary.

TASK 3 – Assessing Previous Efforts

- a. Research and summarize existing data, studies, publications, and projects associated with study area and scope of work.
- b. Use previous studies to analyze the existing condition of the basin.
- c. Review previous assumptions for existing and future demands.
- d. Analyze existing supplies and previous efforts to measure them.
- e. Review existing data for viable MAR/ASR sites and potential recharge capacity.
- f. Determine recharge capacity for potential future sites based on available land area for recharge and evaluate options for various recharge methods.

TASK 4 – Groundwater Monitoring Plan

- a. Review previous work that was completed on the groundwater management program with the implementation of a well monitoring plan and database.
- b. Review model and compare with updated information.
- c. Outline recommendations for a monitoring plan in a memorandum.

TASK 5 – Establish Goals and Framework

- a. Develop goals for groundwater management plan that meet the needs of the MWNA members while maintaining sustainable groundwater practices.
- b. Develop an annual operating range for the future program that meets the needs of each of the agencies.
- c. Establish a model that accounts for both supplies and demands.
- d. Develop method to balance production and recharge for the program.
- e. Evaluate a viable method for pumping management that balances the needs of the MNWA members.
- f. Consider various supply management policies that can be implemented into the program.

TASK 6 – Develop Cost Estimate

- a. Develop preliminary cost estimates for the implementation of the groundwater management plan.

TASK 7 – Summary Memorandum

- a. Develop a memorandum summarizing the work that has been completed through this process including cost estimates for the groundwater management plan.

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PROPOSED BUDGET

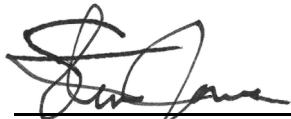
The following is a suggested proposed budget based on the tasks described above and the attached cost estimate. All work will be billed according to HAL's attached standard hourly rates.

Task 1 – Project Management and Coordination	\$4,734
Task 2 – Investigation into Regulatory Requirements	\$1,716
Task 3 – Assessing Previous Efforts	\$7,050
Task 4 – Groundwater Monitoring Plan	\$726
Task 5 – Establish Goals and Framework	\$5,878
Task 6 – Develop Cost Estimate	\$933
Task 7 – Summary Memorandum	<u>\$1,452</u>
TOTAL BUDGET	\$22,488

Thank you for the opportunity to work with MNWA to develop a groundwater management plan for the basin. Please let us know if you have any questions about this proposal.

Respectfully,

HANSEN, ALLEN & LUCE, INC.



Steven C. Jones, P.E.
CEO

Detailed Fee Estimate



MNWA - Groundwater Management Plan Development

& LUCE ENGINEERS inc			Steve Jones		Lance Nielsen		Josh Hortin		Easton Hopkins		Hours	Labor Cost	Communication Cost	Miles	Total Cost
			\$211		\$200		\$120		\$120						
			Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost					
Project Task and Subtasks															
1	Project Management and Coordination		17	\$ 3,587	0	\$ -	1	\$ 120	1	\$ 120	19	\$ 3,827	\$ 133	1190	\$ 4,734
	1-A	Kickoff Meeting	1	\$ 211		\$ -	1	\$ 120	1	\$ 120	3	\$ 451	\$ 21	70	\$ 518
	1-B	MNWA Technical Meetings participation	8	\$ 1,688		\$ -		\$ -		\$ -	8	\$ 1,688	\$ 56	560	\$ 2,108
	1-C	MNWA Board Meetings participation	8	\$ 1,688		\$ -		\$ -		\$ -	8	\$ 1,688	\$ 56	560	\$ 2,108
2	Investigation into the Division of Wate Rights Requirements		3	\$ 633	0	\$ -	4	\$ 480	4	\$ 480	11	\$ 1,593	\$ 77	70	\$ 1,716
	2-A	Review DWRi requirements	1	\$ 211		\$ -	2	\$ 240	2	\$ 240	5	\$ 691	\$ 35		\$ 726
	2-B	Legal coordiantion	2	\$ 422		\$ -	2	\$ 240	2	\$ 240	6	\$ 902	\$ 42	70	\$ 990
3	Assesing Previous Efforts		8	\$ 1,688	6	\$ 1,200	16	\$ 1,920	16	\$ 1,920	46	\$ 6,728	\$ 322	0	\$ 7,050
	3-A	Research and summarize previous work	1	\$ 211		\$ -	4	\$ 480	4	\$ 480	9	\$ 1,171	\$ 63		\$ 1,234
	3-B	Evaluate existing condtion of the Basin	2	\$ 422	2	\$ 400	2	\$ 240	2	\$ 240	8	\$ 1,302	\$ 56		\$ 1,358
	3-C	Review previous demand assumptions	1	\$ 211		\$ -	2	\$ 240	2	\$ 240	5	\$ 691	\$ 35		\$ 726
	3-D	Review existing supplies	1	\$ 211		\$ -	3	\$ 360	3	\$ 360	7	\$ 931	\$ 49		\$ 980
	3-E	Review existing MAR/ASR sites	1	\$ 211	2	\$ 400	2	\$ 240	2	\$ 240	7	\$ 1,091	\$ 49		\$ 1,140
	3-F	Research future recharge facilities	2	\$ 422	2	\$ 400	3	\$ 360	3	\$ 360	10	\$ 1,542	\$ 70		\$ 1,612
4	Groundwater Monitoring Plan		1	\$ 211	0	\$ -	2	\$ 240	2	\$ 240	5	\$ 691	\$ 35	0	\$ 726
	4-A	Review previous work completed	1	\$ 211		\$ -	2	\$ 240	2	\$ 240	5	\$ 691	\$ 35		\$ 726
	4-B	Review model	1	\$ 211		\$ -	3	\$ 360	3	\$ 360	7	\$ 931	\$ 49		\$ 980
	4-C	Outline recommendations in a memo	1	\$ 211		\$ -	4	\$ 480	4	\$ 480	9	\$ 1,171	\$ 63		\$ 1,234
5	Establish Goals and Framework		8	\$ 1,688	0	\$ -	16	\$ 1,920	16	\$ 1,920	40	\$ 5,528	\$ 280	70	\$ 5,878
	5-A	Develop goals	1	\$ 211		\$ -	3	\$ 360	3	\$ 360	7	\$ 931	\$ 49	70	\$ 1,026
	5-B	Develop annual operating range	1	\$ 211		\$ -	2	\$ 240	2	\$ 240	5	\$ 691	\$ 35		\$ 726
	5-C	Establish demand and supply model	1	\$ 211		\$ -	2	\$ 240	2	\$ 240	5	\$ 691	\$ 35		\$ 726
	5-D	Develop method for prdouctiong and recharge	2	\$ 422		\$ -	3	\$ 360	3	\$ 360	8	\$ 1,142	\$ 56		\$ 1,198
	5-E	Develop method for pumping management	2	\$ 422		\$ -	4	\$ 480	4	\$ 480	10	\$ 1,382	\$ 70		\$ 1,452
	5-F	Review policy options for the program	1	\$ 211		\$ -	2	\$ 240	2	\$ 240	5	\$ 691	\$ 35		\$ 726
6	Develop Cost Estimate		1	\$ 211	1	\$ 200	2	\$ 240	2	\$ 240	6	\$ 891	\$ 42	0	\$ 933
	6-A	Develop Cost Estimate	1	\$ 211	1	\$ 200	2	\$ 240	2	\$ 240	6	\$ 891	\$ 42		\$ 933
7	Summary Memorandum		2	\$ 422	0	\$ -	4	\$ 480	4	\$ 480	10	\$ 1,382	\$ 70	0	\$ 1,452
	7-A	Outline a summary of findings in a memo	2	\$ 422		\$ -	4	\$ 480	4	\$ 480	10	\$ 1,382	\$ 70		\$ 1,452
TOTAL PROJECT			40	\$ 8,440	7	\$ 1,400	45	\$ 5,400	45	\$ 5,400	137	\$ 20,640		1330	\$ 22,488

STANDARD FEE SCHEDULE 2023

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	\$220
Managing Professional II	\$211
Managing Professional I	\$200
Senior Professional III	\$189
Senior Professional II	\$180
Senior Professional I	\$167
Professional III.....	\$157
Professional II.....	\$141
Professional I.....	\$132
Professional Intern.....	\$120
Environmental Scientist I	\$115
Environmental Scientist II	\$128
Engineering Student Intern	\$64
Water Resource Specialist II	\$154
Water Resource Specialist I	\$134
Professional Geologist.....	\$155
Senior Designer.....	\$140
Designer.....	\$122
Senior Field Technician	\$126
Field Technician	\$104
CAD Operator.....	\$104
Public Relations Specialist.....	\$152
Landscape Architect	\$150
Administrative Assistant	\$73
Professional Land Surveyor.....	\$150
1 Man GPS Surveying Services.....	\$168
Drone Pilot	\$202
Expert Legal Services.....	\$338

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)	\$64 per day
Vehicle	\$0.70 per mile
Outside consulting and services	Cost plus 10%
Other direct expenses incurred during the project	Cost plus 10%
Trimble GPS Unit	\$150 per day
Data Logger/Transducer.....	\$150 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.