VIA EMAIL

February 6, 2026

Mr. Benjamin Stireman
Deputy Director - Lands & Minerals
Division of Forestry, Fire and State Lands
1594 West North Temple, Suite 3520
PO Box 145703
Salt Lake City, UT 84114-5703

RE: Waterleaf Phase 1, LLC Great Salt Lake Lithium Extraction Project
Response to Operator Certification of No Negative Impact Insufficiencies
Utah Administrative Rule R652-21-708(4) - 45-Day Response

Dear Mr. Stireman:

Waterleaf Phase 1, LLC (Waterleaf) appreciates the detailed feedback provided by FFSL in its December 24, 2025, review letter (FFSL Review Letter) regarding the Operations Application submitted by Waterleaf on November 10, 2025. We are committed to working collaboratively with FFSL to ensure our application provides the clear, comprehensive technical foundation necessary for your informed evaluation of our proposed Great Salt Lake lithium extraction project.

This letter responds to the Operator Certification of No Negative Impact insufficiencies identified by FFSL in Attachment 1 of the FFSL Review Letter, in accordance with the 45-day submission requirement under Utah Administrative Rule R652-21-708(4). Below, this letter sets forth each FFSL comment in Attachment 1 of the FFSL Review Letter, explains the approach being taken by Waterleaf to address it, and identifies where responsive information will be located in the revised Operations Application. The comprehensive revised Operations Application addressing all comments will be submitted by February 22, 2026, in accordance with the timelines established under R652-21-707 and 709(3)(b).

Revised Application Structure

To address FFSL's feedback, the revised Operations Application incorporates changes to document structure and organization. The table below summarizes key changes from the November 10, 2025 Operations Application submission:

Original Structure	Revised Structure	Scope and Purpose
Section 1: Introduction	Section 1: Introduction	Applicant information, purpose, required showings, and operator experience (substantially expanded)
Section 2: Self-Certification	Section 2: Self-Certification	Unchanged - maintained as regulatory certification statement
Section 3: Project Description	Section 3: Project Scope	Comprehensive description of all physical facilities, process systems, and infrastructure
Not previously separated	**Section 4: Commercial Facility Basis**	**Quantitative validation of commercial design including mass/water balance, scalability analysis, and seasonal operations assessment**
Not previously separated	**Section 5: Resource Sustainability & Environmental Compliance**	**Resource assessment, lake system dynamics, waste management, and comprehensive environmental impact evaluation demonstrating no negative impacts**
Sections 4-11: Various Topics	Sections 6-12: Various Topics	Ownership, water rights, royalty arrangements, cooperative agreements, reclamation, timeline, permits

These changes, among other things, address FFSL's request for additional analysis and discussion in the application body. For example, Section 4 presents quantitative analyses demonstrating commercial feasibility, while Section 5 consolidates environmental assessment topics including long-term chemistry analysis, waste characterization, and impact evaluation.

Response to No-Negative Impact Comments

Below, we provide detailed responses to each comment item identified in Attachment 1 of the FFSL Review Letter. For each item, the response acknowledges the comment, explains the approach being taken to address it, and provides guidance on where relevant information will be located in the revised Operations Application. The revised Operations Application submission will also include a cross-reference guide, providing specific page numbers and detailed locations where each FFSL comment is addressed.

#1: Non-Functional Table of Contents

FFSL Comment: *Applicant failed to provide a functional Table of Contents for Operations Application. Page numbers do not match either the body of the text or the numerous Appendices. Applicant's failure to follow standard expectations renders a thorough and defensible review of the application nearly impossible.*

Waterleaf Response: The revised Operations Application will include a functional Table of Contents for regulatory review. The revised Operations Application includes a completely rebuilt Table of Contents with validated page numbers cross-checked against the final compiled document. All section and subsection titles correspond accurately to their locations in the body text and appendices.

Additional Improvements Being Implemented:

- Professional appendix index with hyperlinked navigation (where electronic format allows)
- Compliance cross-reference matrix mapping regulatory checkboxes to specific application page numbers
- Comprehensive index of all data tables and figures with titles, page numbers, and collection dates

Location in Revised Application: Table of Contents; Appendix Index Section 1 (Required Showings Compliance Matrix)

#2: Sparse Detail and Missing References

FFSL Comment*: Applicant provides sparse detail and limited discussion of the fundamental requirements necessary for approval of its Operations Application. Rather, Applicant generally references the extensive appendices requiring FFSL to speculate or conjure their justification. Throughout the body of the submitted application, the Applicant failed to consistently provide the "collection date" and the "exact location of said information in any attached documentation or report" as required by the Operations Application form.*

Waterleaf Response: The revised Operations Application will include an expanded narrative discussion throughout the application body to present key assumptions, methodologies, and conclusions directly in the main text, and with much greater detail. Appendices now

serve as supporting documentation rather than substitutes for explanation. All data references now include collection dates, and appendix citations specify exact page numbers and section locations within referenced documents.

Specific Enhancements:

- Expanded Executive Summary includes compliance highlights, key project parameters table, and environmental compliance summary
- Enhanced narrative in all technical sections with substantive discussion of how data satisfies regulatory requirements
- Systematic inclusion of data collection dates and precise appendix page references throughout

Location in Revised Application: Various sections.

#3: Missing Internal Pilot Plant Data

***FFSL Comment**: Applicant failed to provide internal data of geochemical constituent concentrations and instantaneous flow rates at a level to determine the potential for negative impacts of resulting discharge to Great Salt Lake. Applicant solely provides data from the average concentrations and average flow rates. This does not adequately characterize the full range of operations at the pilot plant, and does not provide discharge loading estimates that address acute impacts to GSL.*

Waterleaf Response: The revised Operations Application will include internal pilot plant data, such as instantaneous flow rates, constituent concentrations, and process conditions with temporal resolution sufficient for acute impact assessment. The dataset includes time-series data for all monitored constituents during the pilot plant operations, correlation of concentrations with flow rates and operational conditions, and identification of equipment changes and process modifications affecting variability. The analysis distinguishes between peak discharge concentrations for acute assessment, time-weighted averages for chronic assessment, and design basis parameters for Commercial Plant projections incorporating appropriate safety factors.

Location in Revised Application: Section 4 (Commercial Facility Basis); Various Appendices

#4: Manganese Impact Analysis

***FFSL Comment**: Applicant does not consider environmental impacts of manganese discharge in terms of impact to the Chemistry and Biota of Great Salt Lake. Applicant solely provides discussion and analysis based on the impacts to human-health. Moreover, the Applicant does not quantify the accumulation of manganese in the lake system nor discuss potential impacts and subsequent mitigation strategies.*

Waterleaf Response: The revised Operations Application will include manganese treatment in the Commercial Plant design. The depleted brine will be treated to remove manganese after passing through the DLE ion exchange process and prior to filtration. As a result, Commercial Plant discharge concentrations for manganese will be comparable to influent concentrations. The revised Operations Application will include these updated effluent concentrations, along with all other constituents, and will show analysis to confirm no negative impact to Great Salt Lake chemistry and biota.

Location in Revised Application: Section 3.7 (Depleted Brine Treatment and Discharge); Section 4.1 (Mass and Water Balance - updated discharge concentrations); Section 5 (Resource Sustainability & Environmental Compliance)

#5: Groundwater Characterization

***FFSL Comment**: Applicant does not provide data, analysis, or discussion on the chemistry and source of the proposed groundwater that will be treated with reverse osmosis. Analysis of this groundwater is essential to understand other potential impacts from discharge to Great Salt Lake or the potential for additional waste to be created as a result of the reverse osmosis process. Publicly available data exists on existing groundwater wells within a 20 km radius of the Project that details the quality of potential groundwater sources. While this groundwater resource may exist, it is wholly undocumented in this application. Much work is needed to document sufficient volumes and quality of freshwater.*

Waterleaf Response: The revised Operations Application will include comprehensive groundwater characterization, including well location, construction details, pumping test results, and water quality data with collection dates. The analysis includes a detailed mass balance showing how groundwater constituents partition between RO permeate (reused in process) and RO concentrate (blended with depleted brine discharge), quantification of RO

concentrate effects on final discharge chemistry, and assessment of cumulative impacts on long-term lake chemistry.

Location in Revised Application: Section 3 (Project Scope); Section 4 (Commercial Facility Basis); Appendix E (Comprehensive Groundwater Analysis Report)

#6: Non-Target Mineral Analysis

***FFSL Comment**: Applicant does not evaluate non-target mineral balance changes that may result from their process with respect to potential impacts to the chemistry of Great Salt Lake.*

Waterleaf Response: The revised Operations Application will include comprehensive non-target mineral assessment for all Great Salt Lake constituents potentially affected by project operations. The analysis includes complete inventory of major and trace constituents, identification of minerals materially affected by extraction (extracted, concentrated, or added), detailed mass loading calculations over a 10-year timeframe, and modeling to assess impact to Gunnison Bay and Gilbert Bay across multiple lake elevation scenarios. The assessment compares projected changes to natural variability and evaluates cumulative effects considering other operations.

Location in Revised Application: Section 4 (Commercial Facility Basis); Section 5 (Resource Sustainability & Environmental Compliance); Appendix F (10-Year Mineral Loading Analysis)

#7: Lack of Avian Impact Evidence

***FFSL Comment**: Applicant self-certifies that no avian populations were disrupted yet provides no evidence or supporting documentation.*

Waterleaf Response: The revised Operations Application will include professional biological surveys conducted in December 2023 and May 2024 by qualified environmental consultants, including focused surveys for special-status species (burrowing owl, American bittern) and general habitat assessment for migratory birds. The documentation includes survey methodology, dates, observers, findings, project area habitat characterization, and impact avoidance measures. The revised Operations Application will present key findings and conclusions from these surveys in the body text with complete survey reports provided as appendices.

Location in Revised Application: Section 5 (Resource Sustainability & Environmental Compliance)

#8: Discussion of Contaminants and Reagent Quality

***FFSL Comment**: Applicant self-certifies that no process chemicals or contaminants were released into the surrounding environment, yet data indicates that some anomalous metals (Cu, Fe) were released into the environment. Although addressed at the pilot scale in the Final Feasibility Report, there is inadequate discussion within the body of the Operations Application. The mitigation of potentially large amounts of contaminants to be released during ramp-up of the commercial scale facility is not discussed. An understanding of this potential, or at the very least a discussion of mitigation and monitoring strategies, will greatly inform commercial-scale monitoring protocols. As an example, it appears that a large amount of Na from NaOH reagents is discharged to GSL. While the two sources of Na (reagent Na and native GSL Na) may be indistinguishable and unimportant, the masses of materials exchanged highlight the potential for even small amounts of impurities in reagents to have cumulative impacts of minor contaminants in reagents. No assurance of reagent quality is offered.*

Waterleaf Response: The revised Operations Application will include comprehensive analysis of contaminant sources, elimination of pilot-scale issues in commercial design, and establishment of reagent quality protocols.

- **Pilot Plant Metals - Root Cause and Commercial Resolution**: The revised Operations Application documents elevated copper and iron observed during pilot operations, identifies carbon steel tanks as the source, and confirms the commercial design eliminates this pathway through HDPE-lined ponds, FRP vessels, and concrete structures. A materials comparison table demonstrates how commercial equipment eliminates metal dissolution sources.
- **Commercial Ramp-Up Monitoring and Contingency**: Enhanced monitoring protocols during system commissioning include increased sampling frequency with action levels triggering corrective measures if unexpected releases occur.
- **Reagent Quality Assurance**: Procurement specifications and Certificate of Analysis requirements are established for all reagents. The analysis documents typical impurity profiles for commercial-grade reagents and quantifies how impurities affect discharge composition through mass balance calculations, demonstrating that

reagent-derived trace contaminants remain insignificant relative to the constituents already present in the raw brine stream.

- **Sodium Balance Transparency**: The sodium mass balance explicitly accounts for all sources (native GSL brine, NaOH reagent, Na_2CO_3 reagent), and quantifies sodium added via reagents relative to process brine sodium content, and demonstrates that sodium addition represents a negligible impact on lake sodium inventory. The analysis confirms that trace impurities in sodium-bearing reagents result in minimal constituent loading.

Location in Revised Application: Section 3 (Project Scope); Section 4 (Commercial Facility Basis); Section 5 (Resource Sustainability & Environmental Compliance); Appendix D (Pilot-Commercial Materials Comparison); Appendix D (Reagent Certificates of Analysis); Appendix D (Impurity Impact Calculations)

As noted above, Waterleaf will submit the revised Operations Application by February 22, 2026. We appreciate FFSL's detailed feedback, which has been invaluable in helping us to strengthen our submission.

Please contact me if you have questions regarding this response or require additional information as we prepare the revised application.

Sincerely,

Steve Morrey

Steve Morrey

Senior Project Director